AGENDA
Glen Ellyn Plan Commission
Thursday, December 9, 2021 - 7:00 p.m.
Glen Ellyn Civic Center
Galligan Board Room
535 Duane Street

1. **Call to Order.**

2. **Public Comment (non agenda items).**

3. **Approval of Draft Minutes.**

   - November 4, 2021 Plan Commission Meeting

4. **New Business.**

   - 600 N. Main Street – Pre-Application Meeting - Daycare Center - The Petitioner, Chris Horney of NVS Properties XIII, LLC is requesting a pre-application meeting for approval of a Special Use for a Daycare Center and Zoning Code Variations.

   - 787 Harding Avenue, 138 IL Route 53, and 3 additional parcels (without addresses) – Public Hearing - Harding Glen Townhomes - The Petitioner, Marvin Ritter is requesting approval of a Special Use Permit for Preliminary and Final Planned Unit Development Plans with Zoning Deviations, Preliminary and Final Plats of Subdivision for a Major Subdivision, Subdivision Variations, a Zoning Map Amendment, and the Exterior Appearance for the construction of a 23-unit townhome development on the subject property.

5. **Trustee's Report.**

6. **Chairman's Report.**

7. **Staff Report.**

8. **Other Business and Adjourn.**

cc: Glen Ellyn Plan Commission
Liaison Trustee Thompson
Mark Franz, Village Manager
Emily Rodman, Assistant Village Manager
Staci Springer, Community Development Director
Kelly Purvis, Planning Manager
Atrian Fard, Planner
Taylor Gendel, Associate Planner
Meredith Hannah, Economic Development Manager
Megan Plahm, Communications Coordinator
Brian Baltudis, Facilities Manager

Dave Harris, Glen Ellyn Park District
Emily Tammaru, Community Consolidated School District 89
Seth Champan, Glenbard School District 87
Eric DePorter, Glen Ellyn School District 41
Dawn Bussey, Glen Ellyn Public Library
Barbara Dutton Thomas, Plan Commission Secretary
Lindsey Kaminsky, Executive Secretary
Lori Gloude, Administrative Assistant II

This note provides you with information regarding what happens to a petition after it has appeared before the Plan Commission. After the Commission makes a recommendation on a petition, a report of the meeting is prepared. Then, the petition, along with the summary report and all pertinent material, is scheduled for consideration by the Village Board. The Village Board meets on the second and fourth Mondays of each month at 7:00 p.m. in a meeting room on the third floor of the Civic Center, 535 Duane Street. Questions regarding petitions scheduled for review by the Village Board should be directed to the Planning and Development Department at (630) 547-5250.

Individuals with disabilities who plan to attend the hearing and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact the Village at least 24 hours before the meeting.

Glen Ellyn Plan Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 12/9/2021 7:00 PM
Department: Community Development
Department Head: Staci Springer
Category: Minutes
Prepared By: Kelly Purvis

AGENDA ITEM (ID # 2021-1717)

DOC ID: 2021-1717

Draft Minutes - November 4, 2021 Plan Commission Meeting

Statement of the Issue:
See attached Minutes

Analysis:
See attached Minutes

Budget Impact:
See attached Minutes

Action Requested:
See attached Minutes

Attachments:
1. 11-4-21 Plan Commission Meeting Minutes-DRAFT

DRAFT MINUTES
REGULAR PLAN COMMISSION MEETING
November 4, 2021

Call to Order and Roll Call

After asking all meeting participants to wear masks in accordance with Covid-19 pandemic requirements, Chairperson Tim Loftus called the meeting to order at 7:03 p.m. Chairperson Loftus and Plan Commissioners, Lloyd Berry, Angela Fanella, Mohammed Saeed and Jamie Vondruska were present; and Commissioners Laura Brown, Matt Halkyard and Peter Cooper absent. Chairperson Loftus explained the Plan Commission's advisory role and function, and reviewed the public hearing procedures including public comment protocol, and said proceedings would be recorded. He introduced Village Board Trustee Liaison Steve Thompson, Planning Manager Kelly Purvis, Associate Planner Taylor Gendel, Senior Civil Engineer Amy McKenna and Recording Secretary Barb Dutton.

Public Comment Non-Agenda Items

There was no public comment pertaining to non-agenda items.

Approval of Plan Commission Meeting Minutes

Commissioner Fanella moved to approve the draft minutes of the October 7, 2021 Plan Commission meeting; seconded by Commissioner Berry, the motion passed by voice vote.

Commissioner Fanella moved to approve the draft minutes of the October 14, 2021 Plan Commission meeting; seconded by Commissioner Berry, the motion passed by voice vote.

Public Hearing – 982-992 Hill Avenue – Patrick J. Murphy Major Subdivision request

A motion by Commissioner Fanella and seconded by Commissioner Vondruska to open the Public Hearing passed by voice vote.

Staff Introduction

Sworn in, Planning Manager Kelly Purvis, 535 Duane St., Glen Ellyn, stated that the Petitioner, Patrick J. Murphy of GE Hill Avenue Properties LLC, is the owner of the subject property. Mr. Murphy had proposed to the Plan Commission an eight-lot subdivision in March 2020, she continued, but is now proposing a seven-lot subdivision, reducing by three the number of variations previously sought. The Commission, related Planning Manager Purvis, is to consider Preliminary and Final Plats of Subdivision, and to allow lots within the subdivision to not meet the requirements of the R2 Zoning District. The Petitioner, she said, is looking to have a corner lot to not meet the minimum corner lot width, and sidewalks to be installed along the north side of Hill Avenue only. Additionally, she summarized, the Petitioner is requesting six variations from the Zoning Code to allow Lots 1-4 to have rear yard setback variations; Lot 7 to have corner side yard setback and lot width variations. She said the Petitioner is a lot coverage ratio (LCR) of 23 percent for all the lots in lieu of the 20 percent permitted.

The subject property, stated Planning Manager Purvis, is located on the north side of Hill Avenue between Cumnor and Golf, just northwest of Glen Oak Country Club, and is surrounded by land zoned for single-family residential, conservation-parking, and conservation-recreation uses. The wooded site, which has a 23-ft. drop in grade, is currently vacant, she said. Because a peak in Hill Avenue makes for site-line issues, redevelopment calls for lowering the profile of the street, she explained, adding that a review of the site-line analysis submitted by the developer has indicated that the proposed plan would be acceptable. The proposed subdivision complies with minimum lot area requirements, she said, however the developer is seeking approval of variations to allow Lot 1 to have a lot depth of 108.79 feet in lieu of the 110 feet required; Lot 7 to have a lot width of 72.3 feet in lieu of the 80 feet that is required; Lots 1-3 to have a rear yard setback of 30 feet in lieu of the 40 feet that is required; Lot 4 to have a rear yard setback of 35 feet in lieu of the 40 feet that is required; Lot 7 to have a corner side yard setback of 20 feet in lieu of the 30 feet that is required; and Lots 1-7 to have a maximum lot coverage ratio (LCR) of 23 percent.

In reviewing public improvements, Planning Manager Purvis stated that sidewalks would be installed on the east side of Cumnor, the north side of Hill and on and the west side of Golf. A variation from Code is needed for to not install sidewalk on the south side of Hill, she continued, stating that Staff is in support of this. Parkway trees would be planted and street lights installed, she added. The Subdivision, stated Ms. Purvis, would be served by Village water and sanitary sewer (noting that the sewer main would need to be extended from Cumnor Avenue to Lot 7 to serve the development). A storm-water detention basin is proposed, she said, explaining that a homeowners association would be established to maintain it. Utility wires will be placed underground, and portions of Golf and Cumnor reconstructed with asphalt curb and gutter (Hill will have concrete curb and gutter) she said. The demolition plan submitted, she noted, specifies all trees on the site to be removed. Ms. Purvis concluded her presentation by saying that Staff recommends two conditions for approval.

Chairperson Loftus asked if the original, six-lot annexation agreement has to go before the Village Board approval to be modified for seven lots, to which Ms. Purvis replied affirmatively. The Chair then wondered whether, if the Board didn't approve this, the project would not go through if the Plan Commission approves the seven-lot plan. Ms. Purvis said this is correct. Chairperson Loftus asked if there are any storm water easements on individual lots. Sworn in, Amy McKenna, project manager, Hampton, Lenzini and Renwick, 380 Shepard Drive, Elgin, Ill., said that there are storm water easements along the lot that has the retention basin, and that swales run through the rear yards and side property lines. Chairperson Loftus asked if the plan would restrict homeowner improvement plans. Ms. McKenna said that construction is generally not allowed on a storm water easement, and that homeowners wouldn't be allowed to build on the back 15 feet of the property.

Commissioner Vondruska asked who is to pay for lowering the profile of Hill Avenue. Planning Manager Purvis stated that the cost would be shared between the Village and the developer, as outlined in the 2006 annexation agreement. Commissioner Vondruska asked how the change would affect Glen Oak Country Club, to which Ms. McKenna replied that the profile of the road will have a crown, and curb and cutter, with drainage intercepted by the curb and not flowing over.

Chairperson Loftus asked if there are any pictures of the homes proposed. Planning Manager Purvis said that while the homes are being called 1 ½ story, for Village purposes (i.e., LCR) they are considered two-story. The homes are to be custom-built, she indicated, so buyers will decide floor plans and style. Commissioner Fanella asked for confirmation that all lots comply with the minimum area required by Code, to which Planning Manager Purvis responded affirmatively.

Petitioner's Presentation

Representing the applicant, Jon Green, Engineering Resource Associates, 3S701 West Avenue, Warrenville, Ill., was sworn in. Mr. Green, a civil engineer, stated that Petitioner Patrick J. Murphy has owned the subject property since approximately 2014, and at the time of the conceptual review hearing, had shared with neighbors the vision for the property. Mr. Green explained that, unlike the eight-lot concept earlier deliberated, the current, seven-lot plan presents an LCR of 23 percent with no deviations/variations on lot size. He identified road characteristics, topographic relief and lot geometry challenges. Because the site is only about 105 feet deep at its westerly side, he said, the lot areas have been "spread out" to make them comparable/compatible from a house size standpoint. He stated that a hardship is requested due to the property's "triple frontage" necessitating improvements not only to Hill Avenue, but to Golf and Cumnor.

Mr. Green stated that market research points to a demand for first-floor master bedrooms – a "luxury," he contended, not afforded by a traditional "in-town" lot. He said the proposed project "kind of completes this stretch of Hill Avenue," and stated that it would provide full, safe access for pedestrians, and bring all of the perimeter streets to the current Village standards. He added that the landscaped detention pond would provide a natural cleansing system and that its associated open space would be an amenity. Mr. Green asserted that the project would offer tax benefits to the School and Park Districts and to the Village, appeal to "empty nesters" looking to downsize, and be "a top-notch product."

Commissioner Questions

Chairperson Loftus asked why, if the homes are to be custom built and design requirements aren't known in advance, the site needs to be clear cut. Mr. Green responded that (while sample footprints are outlined) the builder will have to over-dig to accommodate driveways and utilities and manipulate grades for safety/drainage. He offered the assurance that each house will have a "nice landscaping package" and street trees that meet arborist specs will be plant. Chairperson Loftus observed that, regardless, the plan represents a net loss of 109 trees, to which Mr. Green noted that the tree preservation ordinance doesn't penalize for reasonable development, and execution will fully comply with arborist requirements. Mr. Loftus suggested some creativity might be applied to save trees. Mr. Green contended that with the present density of the site trees compete for sunlight and oxygen.

Commissioner Saeed asked whether, with a 23-ft. drop in elevation, development would entail a cut-and-fill approach. Mr. Green explained that most driveways would be on the high side of lots and that dwellings could have lower window wells, and said that the slope is only happening within the side yards. He stated that each house will step down 2 or 3 feet, and that terrain will be flat between them for safe drainage. Commissioner Saeed asked if roof level would be down. Mr. Green stated that they would comply with the maximum permitted by Code. Commissioner Saeed asked if the retention pond

retain water all year round. Mr. Green replied that only 6 or 8 inches of water in the water would be in the basin all year, and will contain plants that promote drainage. During "flood stage," he explained, the basin is expected to fill to the top for only one to three days until it drains naturally. Commissioner Saeed asked if a fence will be installed around the basin. Mr. Green said, no, because the plan meets county safety requirements, and suggested that the pond area would appear "park like" with a "gentle, rolling slope." Commissioner Fanella asked why in 2020 the subdivision concept did not feature an out lot. Mr. Green stated that the vision planned to address development differently, and was to include individual, underground dry wells that would retain water on each lot. The Commissioner asked the reason for the change. Mr. Green said the altered design stemmed from working with the Village's senior engineer, and the real estate allows this solution.

Observing that the builder's website features homes that are larger in size, Commissioner Berry asked if the design features of the subject property would resemble these. Mr. Green responded that the larger homes are generally on 150-ft.-wide lots, so the dwellings for the proposed subdivision might reflect the French Provincial style, presenting a steeper roofline profile while conforming to the LCR restrictions.

Patrick J. Murphy, 1N712 Bob-O-Link Drive, Winfield, Ill., was sworn in. He stated that the proposed homes will be custom-built and that each lot will have an architect and the layout will not be "cookie cutter." As to the out lot, he explained that subdivision configuration change came in at the "11th hour," reducing the homes from eight to seven lots, so a detention pond was required. Accommodating this addition "squeezed" the lots down some, hence, the reason for the variation request. Chairperson Loftus asked if the unit at the Golf end would have a Golf or Hill address, to which Mr. Murphy responded that he expects that all the houses will have a Hill Avenue address.

Expressing that she was comfortable with the LCR, Commissioner Fanella asked if the Petitioner was comfortable foregoing front porches attached garages. Mr. Green stated that the flexibility of having open air porches would be an amenity for the streetscape. Mr. Murphy said he thinks detached garages "doesn't work right" with the grade, and that "viewing the golf course is a must." And, although he is unsure yet of homeowner preferences, he values the flexibility a porch option offers.

Chairperson Loftus asked why, when in March 2020 the Petitioner was going to come in with a six-lot subdivision, the concept was changed to eight, then seven. Mr. Green cited economics, giving as an example the need to reconstruct Hill Avenue, and saying that the costs of construction have changed. Mr. Murphy related that the Petitioner started with six, priced it out, wanted to go to eight, and then reduced to seven with the detention pond. He stated that the cost to develop six "just doesn't work."

According to Planning Manager Purvis, who listed bonuses outlined, the front porch bonus affords a 22 percent LCR and a garage bonus allows for an additional 2 percent, by right. Remarking that detached garages are infeasible for the configuration proposed, Commissioner Vondruska said he thinks that idea is "kind of off the table." Mr. Green replied that the Petitioner would be shooting themselves in the foot by removing the porch bonus, saying that the site, with its proximity to the golf course, is "the right location to have porches." Ms. Purvis clarified that the additional 2 percent of bonus brings the LCR total to 25 percent, and suggested that restricting the ability to build detached garages on the property could be a condition of approval.

Public Comment

Planning Manager Purvis read into the record the following:

Pete Ladesic, 615 Scott Ave., Glen Ellyn: *"Dear Plan Commission members. As a long time resident and property developer in the community I can say that we sorely need some developments like the one being proposed this evening. Over the years I have met many residents who would like to stay in Glen Ellyn and live in a smaller single family ranch style homes on more compact lots and this development would meet that need. Many of the variations requested would not be necessary if we had a separate zoning class for these more compact types of developments. Prior Village Boards had discussed such a need for these types of developments but for many reasons it was never executed. Thank you for taking a moment to read this and for your service to our village Sincerely, Pete Ladesic."*

Sworn in, Terry Lind, 21W451 Fairway, asked if the Petitioner intends to install a fence. After Petitioner Murphy replied, "No," she asked who she needs to talk to about getting Golf Avenue redone. Planning Manager Purvis explained the piece of roadway of concern is unincorporated, so not under Village jurisdiction (but rather County or Township). Chairperson Loftus wondered what interaction between would be required for inter-jurisdiction action. Ms. Purvis was unsure. Ms. Lind recalls an intergovernmental agreement being put in place. Community Development Director Staci Springer, 535 Duane, was sworn in. She explained that when a portion of the Country Club was annexed, the Village took in an adjacent right of way: the east side of Golf Avenue, and that such a segment is not probably not programmed into the Village's Capital Improvement Plan (CIP), so encouraged the commenter to reach out to the Village Engineer to see about getting into a future CIP. Ms. Springer said the Village assesses usage in determining priorities.

Sworn in, Mark Susmark, 21W478 Fairway, stated that he has lived in the neighborhood for 41 years, and during that time has been encroached on. He described the wooded neighborhood was a "quiet conservation area," and expressing concern for wild life in the area, said he doesn't want to see "critters chased out." He added that he can't see the benefit to the Village of taking a small piece of property, fearing the hamlet is being turned into "just another subdivision with crammed-in homes." He stated that the Country Club serves as a needed flood plan. He wondered if for seven homes the community is giving up green space and privacy. "What's the benefit?" he asked.

Sworn in, Terran Salbego, 21W471 Fairway Ave., expressed concern about clear cutting the subject site without homes ready for purchase, and inquired about the schedule for these activities. He also wondered if adjustments would need to be made to his property, on which a shed had been built, to accommodate drainage.

Sworn in, Dennis Hogan, 459 Longfellow Ave., Glen Ellyn, said he is looking forward to the proposed development, calling it a "great concept." Saying that the property could have become a parking lot or a development of tract homes, he pronounced the vision presented as "good for Glen Ellyn." He stated that he is a member of Glen Oak Country Club, and that the members love the idea presented.

In response to Chairperson Loftus asking about any impact on the aforementioned shed (on unincorporated property), Planning Manager Purvis stated that relative to this project, the Village

wouldn't require any improvements on anyone else' property. With regard to the drainage pattern, Amy McKenna stated there would be no intention to impact that shed.

Concerning the timing of development activities, Mr. Murphy said he would have loved to have started the project about a year ago. He stated that upon approval, the Petitioner is "ready to roll," and that he hopes to have the project done in two years. He indicated that the market is hot and reported having buyers.

Mr. Green described a phasing approach for earthwork, which he said is constrained by topography, prompting road work at the outset. Phase I, he said, would be clearing trees in the front half of the lots, prior to the utilities and pond being installed. He expects trees would be left in the backyards since individual home designs will determine landscape plan. Commissioner Fanella pointed out that a developer can't clear cut until a subdivision plan is approved.

Motion to Close the Public Hearing

Commissioner Berry, seconded by Commissioner Saeed, moved to close the Public Hearing. The motion passed by voice vote.

Commissioner Discussion

Commissioner Fanella said she appreciates the reduced-lot plan and the improved LCR, and believes the development will be an improvement to the neighborhood, despite the potential regrettable loss of trees. She acknowledged the hardship associated with the parcel, as well as voiced a desire to prohibit detached garages. Expressing agreement, Commissioner Vondruska said "these types of homes are something people are asking for." He said he is "overall supportive," but would like to see as many trees saved as possible. Recognizing a need for housing, Commissioner Saeed he is in support of the project in spite of the variances requested. Commissioner Berry said that he is "definitely in support" of the project, calling it "a nice opportunity to create new product in the market and finish out that strip." He added that despite the tight lots, he doesn't feel the Commission is making a big exception here, and called the quality of workmanship demonstrated by the developer "outstanding."

Expressing that he is "on the fence" about the proposed project, Chairperson Loftus pointed to the difference in density from that of adjoining neighbors. He said while the proposed is compatible with development on Country Club Lane, it is incompatible with the unincorporated residences in terms of lot size and open space. Though he expressed concern about tree loss, he said he didn't see a lot of other options for developing the subject property. He said he could support the project with reservations, and with the caveat that all building be confined to the LCR as defined without detached garages. Commissioner Fanella said she didn't even know if detached garages are doable. Ms. McKenna explained that the equation assigning impervious surface renders detached garages infeasible. Commissioner Vondruska expressed admiration for the porch aesthetic.

Commissioner Fanella moved for the following:

After conducting a public hearing and deliberating on the requests of the petitioner, Patrick J. Murphy, for approval of Preliminary and Final Plats of Subdivision, Subdivision Regulations Code Variations and Zoning Code Variations all to allow the development of a 7-lot single-family subdivision known as Glen

Estates Subdivision to be located at 982-992 Hill Avenue in the R-2 Single Family Residential Zoning District, the Plan Commission hereby recommends approval based on the findings of fact in the petitioner's application packet, as discussed or amended at the Plan Commission public hearing on November 4, 2021, which are hereby incorporated into the Motion by reference as though fully set forth herein; a copy of which will be attached to the minutes of this meeting and kept on file as part of the permanent records of the Village. The Plan Commission makes this recommendation of approval with the following conditions:

1. That the project be constructed in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees; and
2. That the required impact fees for each home be paid prior to the issuance of a building permit for each home.

Seconded by Commissioner Berry, the motion carried 5-0 by roll call vote: Commissioners Fanella, Berry, Saeed and Vondruska and Chairperson Loftus all voted "yes."

Trustee's Report

Trustee Thompson reported that the Board was in the midst of reviewing budget items, and that he expects the Apex 400 variance to be on Monday night's meeting agenda. The Comprehensive Plan is being reviewed and debated, he continued, and related that the McKee House agreement passed. Outside street dining concluded November 1st, he said, but noted that sidewalk dining is still an option as conditions allow. Mr. Thompson reported that the Halloween parade was held, and that a Veteran's Day remembrance event is to be held at Lake Ellyn.

Chairman's Report

Chairperson Loftus reported that attempts are being made to schedule interviews for an additional Commission member.

Staff Report

Planning Manager Purvis introduced new Associate Planner Taylor Gandel. Ms. Purvis announced that Plan Commissioner training is being offered. She said there would be no additional meetings in November, but that one is scheduled for December to consider a 23-townhome subdivision.

Other Business

None.

Adjournment

Chairperson Loftus adjourned the meeting at 8:48 p.m. following a voice vote on a motion to adjourn by Commissioner Berry, seconded by Commissioner Fanella.

Respectfully submitted,

Barbara Dutton-Thomas
Recording Secretary

Glen Ellyn Plan Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 12/9/2021 7:00 PM
Department: Community Development
Department Head: Staci Springer
Category: Discussion Item
Prepared By: Atrin Fard, Kelly Purvis

AGENDA ITEM (ID # 2021-1715)

DOC ID: 2021-1715

600 N. Main Street - Daycare Center - The Petitioner, Chris Horney of NVS Properties XIII, LLC is requesting a pre-application meeting for approval of a Special Use for a Daycare Center and Zoning Code Variations.

Statement of the Issue:
Please see attached.

Analysis:
Please see attached.

Budget Impact:
Please see attached.

Action Requested:
Please see attached.

Attachments:
1. PC Pre-App Staff Report Final
2. 1. Petitioner's Pre-Application
3. 2. Applicant's Narrative Statement
4. 3. Proposed Aerial Concept Plan
5. 4. Plat of Survey, dated November 11, 2021
6. 5. Traffic Impact Study by BLA Consulting Engineers, dated September 23, 2021
7. 6. Signal Analysis Summary by BLA Consulting Engineers, dated November 18, 2021
8. 7. Proposed Sign Graphic
9. 8. Photo of Existing Monument Sign
10. 9. Proposed Fence Types
11. 10. Playground Surface Material Example
12. 11. Public Notice
13. 12. List of properties that received notice
14. 13. Public Notice Map
15. 14. Aerial Map
16. 15. Zoning Map
17. 16. 1-Foot Contour Map

18. 17. Letter of Opposition

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Kelly Purvis, Planning Manager
Atrian Fard, Village Planner

DATE: November 30, 2021

FOR: December 9, 2021 Plan Commission Meeting

SUBJECT: 600 N. Main Street – Daycare Center
Pre-application Meeting for a Special Use Permit and Zoning Code Variations

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PETITIONER: The petitioner is Mr. Chris Horney, owner of NVS Properties XIII, LLC, and contract purchaser for the subject property.

REQUEST: The petitioner is requesting a pre-application meeting regarding the proposed use of the existing Church at 600 N. Main Street as a Montessori School. To proceed with the project, the petitioner will need to receive approval of a Special Use Permit for a day care center in the R2 Residential District and variations from the Zoning Code.

LOCATION/ ZONING: The subject property is located at the northwest corner of Main Street and Hawthorne Boulevard, approximately 0.5 mile southwest of the Forest Glen Elementary School and approximately 0.4 miles northwest of the Glenbard West High School. The property is zoned R2 Residential District and is surrounded by R2 Residentially zoned properties improved with single-family homes.

HISTORY/ EXISTING CONDITIONS: The subject property has been owned and occupied by the First Church of Christ, Scientist, since 1956, when the building was constructed. The site is currently accessible via two driveway approaches: one on Main St. and one on Hawthorne Blvd., leading to an L-shaped asphalt parking lot with 47 parking spaces.

PUBLIC NOTICE: Although public notification is not statutorily required for a pre-application meeting, on November 24, 2021, staff mailed notifications to the property owners within 350 feet of the subject property.

COMP

PLAN: The 2001 Comprehensive Plan identifies the site as a public/semi-public land use. Similarly, the draft Comprehensive Plan currently under review indicates in the Future Land Use Plan that the property should remain public/semi-public. Public/semi-public land uses consist of institutions and community facilities that serve the residents of Glen Ellyn and contribute to quality of life and local culture. The Plan Commission unanimously recommended approval of the draft Comprehensive Plan on March 11, 2021, but the plan is yet to be officially adopted by the Village Board.

PROJECT SUMMARY: The site is approximately 33,460 square feet and is improved with a two-story brick building. According to the petitioner's narrative statement, the existing Church on the property has not generated much activity in recent years and intends to sell the property.

The petitioner is proposing to purchase the property and convert the existing 8,200 SF Church building into a daycare center. No expansion of the building footprint or changes to the exterior of the building are planned. The proposal calls for closure of the access driveway on Main Street and complete removal of the parking lot to the north of the building. In its place, two playground areas with peripheral "trike tracks" and additional landscaping are proposed. The two playground areas (approx. 1,196 SF and 841 SF) would be covered with a mixture of grass and wood chips and surrounded by 4-foot-wide concrete trike tracks. A 4-foot-tall aluminum fence would enclose the play areas from the eastern edge of the parking lot to the east, front property line. A white vinyl fence is proposed between the two play areas. More information about the project is provided below.

1. Operations. The proposed daycare center would operate Monday through Friday from 7:00 AM to 6:00 PM. At maximum capacity, the facility would serve up to 130 students, from infancy to school age. The day care would employ up to 18 staff, however 13 staff would typically be present at any given time.

2. Setbacks. Per Section 10-5-4(A)(4)(b) of the Zoning Code, an accessory structure (in this case, a playground) located less than ten feet from the principal building shall observe the same required setbacks as the principal structure on the zoning lot (minimum interior side yard setback of 25 feet for special uses in R2 Residential District). The proposed interior side yard setback for the playground areas including the trike tracks is 8 feet, which does not comply with Section 10-4-8(D)(6) of the Zoning Code and will require approval of a Variation.

   The building itself complies with the setback requirements of the

district.

3. Impervious Surfaces. As shown on the attached ALTA Survey, the existing asphalt parking lot covers most of the required rear yard where the Code permits only 50% or less of the rear yard to be impervious surface in the R2 zoning district. Furthermore, the existing parking lot does not meet the minimum impervious surface setback of 7.93' (5% of lot width for lots more than 90 feet in width) required on all sides of the site. The parking lot is considered legal nonconforming, but as part of the Special Use Permit process, it would be required to be brought into conformance with current Code requirements, or Zoning Variations would need to be granted to allow the existing conditions to remain. Variations for impervious surface coverage and impervious surface setback requirements would be needed.

4. Access and Circulation. Due to significant traffic issues in the site vicinity, the petitioner has commissioned BLA Consulting Engineers to conduct a traffic impact study (TIS), the results of which have been shared with the Village's Traffic Consultant.

   Internal
   Currently, access to the site is provided via one driveway on Main Street and one driveway on Hawthorne Boulevard, allowing for a two-way-in, two-way-out, L-shaped internal circulation. As noted above, the petitioner is proposing to eliminate the existing full driveway access to Main Street and use the Hawthorne Blvd. right-in, right-out as the main point of entry to the site. The TIS indicates that this is an effective access management strategy to improve safety, pedestrian mobility and traffic progression along corridors. This re-configuration will result in a dead-end parking lot that when completely occupied, would require vehicles to drive through the parking lot to the north end and use the stub of the former east-west drive aisle to turn around and proceed south to the exit. Based upon the information provided at this point, the Village's Traffic Consultant does not have an issue with this configuration. However, the petitioner will need to submit turning movement exhibits as part of the formal application, to confirm adequate space has been provided for vehicles to turn around if all parking spaces are occupied.

   External
   The Traffic Impact Study indicates that traffic operations on Main Street currently experience long delays during the peak hour periods. The Main Street and Hawthorne Boulevard intersection currently operates at a level of service (LOS) of "D" (operations where the influence of congestion becomes more noticeable, but delays are still

within an acceptable range) during the morning peak hour of 7:00 AM – 8:00 AM. In the evening peak hour of 4:30 PM – 5:30 PM the intersection currently operates at a LOS of "F" (considered unacceptable to most drivers with high delay values). By the year 2027, due to natural growth it is anticipated that the intersection will operate at an LOS of "E" (operating conditions with high delay values; the limit of acceptable delay) during the morning peak hour and a LOS of "F" in the evening peak hour. With natural growth and the proposed daycare center, the intersection is expected to operate at a LOS of "F" during the morning and evening peak hours.

The TIS indicates that the new daycare facility would generate an estimated 94 trips (into and out of the site) during the morning peak hour and would generate an estimated 95 trips (into and out of the site) during the evening peak hour.

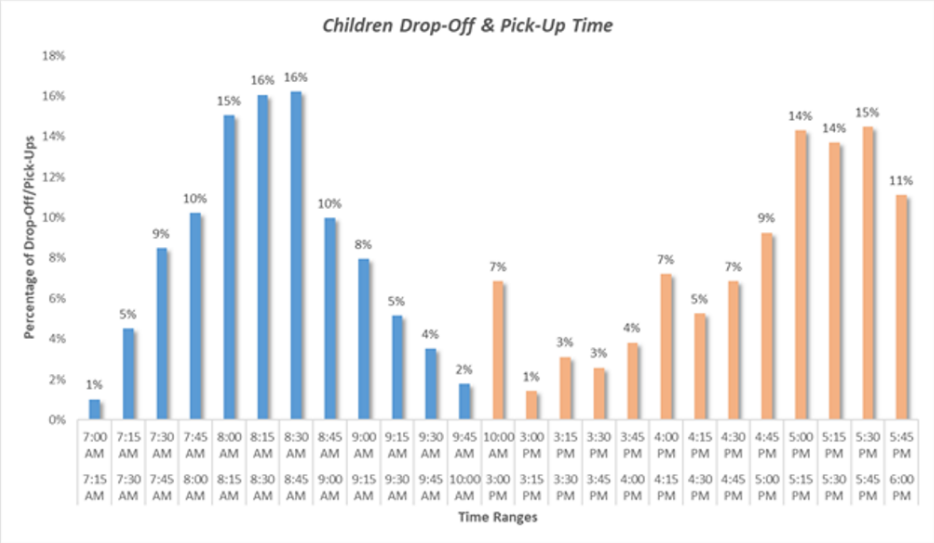
The intersection is currently controlled by all-way stop control (stop signs at each approach to the intersection). A traffic signal warrant analysis provided by BLA Consulting Engineers suggests that installing a traffic signal control at the intersection could improve the Main and Hawthorne intersection's operations during peak hours. However, the Village Engineer has reviewed the analysis and would not recommend the installation of a traffic control signal without a complete engineering study justifying the need for it. He has also indicated that the proposed development in and of itself will not be the driving factor for warranting the traffic signal.

5. Pick up/Drop off. Per the petitioner's narrative statement, the daycare's policy will require that all parents come into the facility to check-in and check-out their children. This means 95 cars will need to park to drop off/pick up children during the AM and PM peak hours.

6. Parking. Daycare centers in the R2 Residential District are required to provide 1 parking space for each 800 square feet of gross floor area, resulting in a minimum requirement of 12 parking stalls for this particular daycare. While the 29 proposed parking stalls would exceed the Village Zoning Code's parking requirement, the total parking supply would provide slightly less than the Institute of Transportation Engineers (ITE) projected peak parking demand of 30 spaces for the site (for a day care use in a building of this size, with this number of students and staff). Please note, the ITE projections are based upon a compilation of parking demand surveys from across the country for certain land uses.

   The petitioner has provided the below chart which shows the

distribution of arrivals and departures for their typical daycare. The chart indicates that the highest percentage of children dropped off in the morning within any 15-minute time range is 16% (or 21 children, assuming 130 children are enrolled). In the evening, the highest percentage of children being picked up within any 15-minutes time range is 15% (or 20 children). Assuming that there would be a maximum of 13 staff at any given time, that a single child is dropped off or picked up in each car, and that none of the children would arrive at the daycare walking, the number of stalls needed during peak times would be 33-34 parking stalls.



Because on-street parking is prohibited on Hawthorne Boulevard and Main Street, staff is concerned that the 29 parking stalls that are currently proposed will not meet the actual parking demand for the daycare facility. Also, the chart above may not be reflective of actual drop-off/pick-up schedules in Glen Ellyn and additional stalls may be necessary to avoid parents queuing/waiting for a space in the lot. Staff would suggest that a minimum of 35 parking stalls be provided or that the number of children enrolled be reduced so that the supply is adequate to serve the peak demand. It is important to note that the above chart may not be reflective of actual drop off/pick up schedules in Glen Ellyn and additional stalls may be necessary to avoid parents queuing/waiting for a space in the lot.

7. Parking Lot Dimensions. The minimum required dimensions for a surface parking lot with 90-degree parking stalls are 9-foot-wide by 19-foot-long stalls with a 25-foot-wide drive aisle and a total "wall to wall" module width of 63 feet (19 + 25 + 19 = 63). The dimensions of the existing parking lot are 8-foot-wide by 16.5-foot-long parking

stalls with a 26.5-foot-wide drive aisle and a total module width of 59.5 feet. Although the existing parking lot dimensions are considered pre-existing nonconforming conditions, as part of the special use process, the petitioner would need to either redevelop the parking lot to comply with these Code provisions or seek Zoning Variations to maintain the lot in its current configuration.

According to the Village Traffic Consultant, when the module width is reduced, turning into the parking spaces becomes more difficult. He also indicated that a reduced parking stall width can increase difficulty entering and exiting the parking space and may increase potential for minor dents to adjacent parked vehicles during turns to/from the parking space or while opening car doors.

While the parking lot dimensions have been this way for many years, because the parking lot will be more intensely used to serve the daycare, staff would suggest that the parking lot be restriped/redeveloped to conform to the current parking lot dimension requirements. It is estimated that the redevelopment of the parking lot to meet current Code required dimensions, would reduce the total parking supply to 25 spaces. A few more spaces would be lost to landscape islands, which are also required. In order to accommodate the recommended number of parking spaces previously noted, the parking lot will either need to be expanded or the number of students will need to be reduced so that the available supply is adequate to meet the demand.

8. Trash Enclosure. The proposed trash enclosure at the north end of the parking lot meets the Village setback requirements. However, at its proposed location, the enclosure occupies two parking spaces. Since the proposal lacks sufficient parking supply, it is recommended that the trash enclosure be relocated to an area on the site that does not reduce the number of parking spaces.

9. Landscaping and Lighting. While the Concept Plan illustrates the addition of several trees along Main Street to screen the playground area, a landscape plan has not been provided at this time. As part of the formal Special Use Permit application review process, a landscape plan and photometric plan will be required, and the project's landscaping and lighting will be evaluated for compliance with the Village's requirements.

10. Signage. The size, location, and design of the existing monument sign appears to be in conformance with the Sign Code. The petitioner intends to maintain the existing sign structure and reface it. It is not

anticipated that any variations will be needed for signage.

11. Stormwater. A grading plan will be required at the time of the formal application to be evaluated by the Village Stormwater Consultant.

Staff has received several inquiries from surrounding residents about the project with one letter submitted in opposition to the case (attached). Staff anticipates that a number of the surrounding property owners will be in attendance at the Pre-Application meeting. It appears that the neighbors are primarily concerned with the impacts they believe the project will have on traffic volumes and queue lengths along Hawthorne Boulevard.

REVIEW PROCESS:

Based upon the information provided at this time, to proceed with the project as proposed, the petitioner will need to receive approval of the following:

1. A Special Use Permit to allow a daycare center on the property at 600 N. Main Street in the R2 District [Section 10-4-8(B)(6)].

2. A Zoning Variation to allow an interior side yard setback of 8 feet along the northernmost lot line where a minimum setback of 25 feet is required for Special Uses in the R2 District [Section 10-4-8(D)(6)]. This variation is for the recreational equipment, including the playground areas and trike track, which are required to meet the same setback as the principal structure on the lot because they are within 10 feet of the principal structure.

3. Zoning Variations to maintain the location of the existing parking lot at approximately 2.3 feet from the north property line and 2.4 feet from the west property line in lieu of the minimum required impervious surface setback of 7.93 feet [Section 10-5-5(C)(1)].

4. A Zoning Variation to maintain the existing parking lot with more than the 50% maximum impervious surface coverage permitted in the required rear yard [Section 10-5-5(B)(4)].

5. Zoning Variations to maintain the existing parking lot with 8-foot-wide by 16.5-foot-long parking stalls with a total module width of 59.5 feet in lieu of the minimum required 9-foot-wide by 19-foot-long stalls with a total “wall to wall” module width of 63 feet [Section 10-5-8(I)].

PLAN COMMIS-SION ACTION:

The Plan Commission is being asked to conduct a Pre-Application Meeting for the project and provide comments that will assist the

petitioner in preparing a formal application. In reviewing the project, the Commission may wish to provide feedback or ask for clarification on the following:

1. Closure of driveway access on Main Street and internal traffic circulation;
2. The total number of parking spaces that should be provided;
3. Concerns about any variations that have been identified;
4. Concerns about operational details, including drop-off and pick-up procedures and/or the number of students and staff.
5. Clarify any concerns.

ATTACHMENTS:

1. Petitioner's Pre-Application
2. Applicant's Narrative Statement
3. Proposed Aerial Concept Plan
4. Plat of Survey, dated November 11, 2021
5. Traffic Impact Study by BLA Consulting Engineers, dated September 23, 2021
6. Signal Analysis Summary by BLA Consulting Engineers, dated November 18, 2021
7. Proposed Sign Graphic
8. Photo of Existing Monument Sign
9. Proposed Fence Types
10. Playground Surface Material Example
11. Public Notice
12. List of properties that received notice
13. Public Notice Map
14. Aerial Map
15. Zoning Map
16. 1-Foot Contour Map
17. Letter of Opposition

cc: Staci Springer, Community Development Director
Chris Horney, Petitioner

X:\Plandev\PLANNING\DEVELOPMENT PROJECTS\Main\Main 600 N., Daycare Center, SUP, EA, ZV\Staff Reports

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Application for Commission Pre-Application Meeting

The purpose of a pre-application meeting is to receive preliminary comments for a proposal before detailed plans are developed and a formal application is submitted.

I. APPLICATION INFORMATION:

A. Date Filed: **10/15/21**

B. Project Name: 600 N Main Street Daycare

C. Project Description: **Church to daycare conversion**

D. Address of Property: **600 N Main, Glen Ellyn, IL**

E. Permanent Index No: **05-11-123-019** Zoning: **R2**

F. Name of Applicant: NVS Properties XIII, LLC

G. Address of Applicant: **227 West Monroe St, Suite 5040, Chicago, IL 60606**

H. Phone No. (Business): **312-625-1417** (Home) _____

I. Fax No. (Business): _____ (Mobile) **248-721-7927**

J. E-mail Address of Applicant: **chorney@murphyres.com**

K. Name of Property Owner: First Church of Christ, Scientist Glen Ellyn, IL

L. Address of Property Owner: **600 N Main Street, Glen Ellyn, IL**

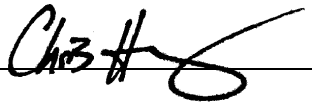
M. Phone No. (Business): _____ (Home) _____

N. Fax No. (Business): _____ (Mobile) **630-660-3158**

O. E-Mail Address of Property Owner: **j316cbpeacekeeper@gmail.com**

II. SUBMISSION REQUIRMENTS

1. Application Fee - $250.00
2. Application Form
3. Cover Letter describing the project.
4. Plats of Survey or Existing Conditions Plan showing any existing buildings and associated setbacks.
5. Concept Plan showing any proposed buildings and associated setbacks, parking lot dimensions and all landscape/impervious surface setbacks.
6. Preliminary Building Elevations
7. Preliminary Sign Plan and Elevations
8. Any other plans or information for which preliminary feedback is requested.

Signature:  Date: 10/15/2021

REIMBURSEMENT OF FEES AGREEMENT

CLEAR PAGE

Village of Glen Ellyn Acct: # _____
Initial Deposit Amount: _____

I. DESCRIPTION OF PROJECT: **600 N Main St, Daycare Development**

II. OWNER:

A. Owner of Property: **First Church of Christ, Scientist Glen Ellyn, IL**

B. Owner's Address: **600 N Main Street, Glen Ellyn, IL**

C. Owner's Home Phone Number: _____ Fax: _____

D. Owner's Work Phone Number: **630-660-3158**

E. Owner's E-mail: **j316cbpeacekeeper@gmail.com**

F. If Owner is a Land Trust or Corporation, the attached disclosures of interest should be filled out.

III. PERSON MAKING REQUEST (Petitioner):

A. Name of Petitioner: **NVS Properties XIII, LLC**

B. Petitioner's Address: **227 West Monroe St, Suite 5040, Chicago, IL 60606**

C. Petitioner's Home Phone Number: **312-625-1417**

D. Petitioner's Work Number: **248-721-7927**

E. Petitioner's E-mail: **chorney@murphyres.com**

IV. LOCATION OF PROPERTY:

A. General Location of Property: **600 N Main, Glen Ellyn, IL**

B. Acreage of Parcel: **0.79**

C. Permanent Index Number(s): **05-11-123-019**

D. Legal Description (Please attach)

V. REIMBURSEMENT OF FEES:

The Ordinances of the Village require the owners of property, or individuals seeking to utilize property, to receive approval by ordinance or the issuance of a permit to undertake various uses or improvements of property in the Village. These uses can include requests for textual or map changes in the Zoning Ordinance, applications for building permits, requests for zoning relief and other similar requests. The Village has established a fee schedule for the anticipated use of staff time in processing such petitions or applications. In many cases, however the Village cannot reasonably evaluate the validity or compliance of the petition or application with the Ordinances of the Village without the use of reports from various consultants. In some cases, the application or petition requires among other things, public hearings and associated public notice costs, preparation of minutes or transcripts from the public hearing or meeting, recording costs of Ordinances and

the preparation of reports by consultants whose services require the payment of out-of-pocket expenses by the Village. These expenses would not have been incurred but for the petition or application. The Village does not intend to seek to make a profit on its utilization of such consultants, but requires that the applicant, or the person receiving benefit, shall be obligated to reimburse the out-of-pocket expenses incurred by the Village. The Village shall seek to employ consultants who shall charge rates consistent with those paid by private parties who seek similar consulting services. The Village intends, through this Agreement, to cause the payment of out-of-pocket expenses and to require the creation of an escrow fund to guarantee that the petition or application will not result in the citizens of the Village being required to pay for costs incurred at the request of the owner or applicant.

This document shall constitute a contract when an application is made for a license, permit, request for zoning relief or other approval involving the use of real property. Should the Village, in its sole and exclusive discretion, determine that it is necessary or desirable for the Village to obtain professional services, including, but not limited to, attorneys, engineers, planners, architects, surveyors, court reporters, traffic, drainage or other consultants, including full and/or part time site inspection services during the actual construction of any required improvements, and/or to incur costs related to any required notices or recordations, in connection with any application or petition filed by the petitioner then the petitioner and owner shall be jointly and severally liable for the payment of such professional fees and costs, as shall actually be incurred by the Village. The Planning and Development Director is hereby authorized to assign the above described services to the Village staff or to consultants, as the Director deems appropriate and without prior notification to the petitioner.

Any application or petition to be reviewed by the Planning and Development Department or by the Plan Commission shall require the petitioner to establish an escrow account with the Village in an amount determined by the Planning and Development Director to reimburse the Village for all out of pocket costs associated with the request. These out of pocket costs will cover such things as services provided by the Village's consulting engineer, consulting attorney, consulting planner, traffic consultant, wetland consultant, landscape consultant, architectural consultant, appraiser and transcriber, among others, as well as reproduction costs, public hearing notice costs, recording costs, etc. Along with the application the petitioner shall also submit a signed copy of this agreement thereby acknowledging and agreeing to reimburse the Village for all out of pocket costs associated with the application or petition.

This agreement shall be accompanied by an initial deposit in an amount to be determined by the Director of Planning and Development but shall be no less than $500. The Village will provide an itemized list of Village expenses incurred related to any charge to the escrow account, and the petitioner shall deposit funds to reimburse the Village for those expenses upon notice from the Village that the deposit has dropped below $300. If the expenses are not reimbursed, then reviews meetings and permits associated with out of pocket costs will cease, and the request will not be moved forward through the review process. At the completion of the review process, and development of the project, if appropriate, any remaining balance from the deposit will be returned to the petitioner, without interest, after all expenses have been paid.

The Village shall deduct the incurred expenditures and costs from the funds deposited. If the remaining deposit balance falls below $300.00, the petitioner, upon notice by the Village, shall be required to replenish the deposit to its initial amount. The Village shall mail the petitioner regular invoices for the fees and costs incurred. The petitioner shall replenish the deposit amount within thirty (30) days of issuance of each such invoice directing replenishment of the deposit.

A petitioner who withdraws his or her petition may apply in writing to the Planning and Development Director for a refund of his or her remaining escrow balance. The Planning and Development Director may, at his or her discretion, approve such refund less any actual fees and costs, which the Village has already paid or incurred relative to the application.

Upon the failure of the petitioner or owner to reimburse the Village in accordance with this Agreement, no further action shall be undertaken on the application by the Village President and Board of Trustees, or by any other official or quasi-official individual or body thereunder, including the conduct of any hearings or deliberations, reviews of any plans or applications, the granting of any relief or approvals, issuance of any permits or occupancies, performance of inspections and the execution or recording of any documents, until all such outstanding fees are paid in full and/or the initial deposit is restored to its full amount. Upon any failure to reimburse the Village in accordance with this Section, the Village may in its discretion, apply any or all of the initial deposit to the outstanding balance due.

The remedies available to the Village as set forth hereinabove are non-exclusive and nothing herein shall be deemed to limit or waive the Village's right to seek relief of such fees against any or all responsible parties in a court of competent jurisdiction.

Any remaining balance of any funds deposited pursuant to this Agreement shall be refunded at such time as the completion of Village deliberation on the petition or application, recordation of all necessary documents associated with the petition or application, issuance of a building permit, approval of a final inspection, or issuance of a final certificate of occupancy upon the real property in question whichever occurs later.

BY SIGNING BELOW, THE PETITIONER AND OWNER ACKNOWLEDGE THAT EACH OF THEM HAS READ THE FOREGOING PARAGRAPHS AND EACH OF THEM FULLY UNDERSTANDS AND AGREES TO COMPLY WITH THE TERMS SET FORTH HEREIN. FURTHER, BY SIGNING BELOW, EACH SIGNATORY WARRANTS THAT HE/SHE/IT POSSESSES FULL AUTHORITY TO SO SIGN.

THE PETITIONER AND OWNER AGREE THAT PETITIONER AND OWNER SHALL BE JOINTLY AND SEVERALLY LIABLE FOR PAYMENT OF FEES REFERRED TO IN APPLICABLE SECTIONS OF THE ORDINANCES OF THE VILLAGE OF GLEN ELLYN, AND THE OBLIGATIONS FOR PAYMENT RELATING TO THE FILING OF PETITION OR APPLICATION, AS SET FORTH HEREIN.

_____	Village of Glen Ellyn
Petitioner	
NVS Properties XIII, LLC	By: _____
Owner	Planning and Development Director
Date: 10/27/2021	Date: _____

MDG MURPHY DEVELOPMENT GROUP, LLC

10/15/2021

Village of Glen Ellyn
Planning & Development Department
535 Duane Street
Glen Ellyn, IL 60137

RE: 600 N Main Daycare Development

Dear Plan Commission,

Thank you for taking the time to review this pre-application related to a Special Use for a daycare at the current First Church of Christ, Scientist that we would like to purchase and convert to a daycare. As a Glen Ellyn resident that lives only a block and a half away and has three children under seven, this project is near and dear to my heart and one that I believe will be a great use for the Village. As the Village is aware, Glen Ellyn is in need of additional daycare facilities to serve the surrounding families. One that is located nearby an elementary school (Forest Glen) is an added bonus, as it allows young growing families to have their children transition from one place to the other quite easily, and the drop-off/pick-up for the parents with children at both schools is also convenient. As some may remember, we brought a different site to this commission previously, and we were unsuccessful primarily because of traffic issues. Therefore, we have provided a traffic study as a part of our initial submission, as we know that is a critical part of making this use work in residential areas.

The site that is under contract is currently a church and has been since the late 1950's. Unfortunately the membership has dropped to a level that has the leadership of the church looking for smaller solutions for their membership. Given the successful other churches in downtown Glen Ellyn that either have a daycare (First Presbyterian on Main Street) or were converted to daycare (Diamante Montessori on Park), we believe while it is residential in current zoning, it is not a use that would change the current character of the area and there is precedent for this type of use within a fully residential neighborhood. Furthermore, the building footprint would remain the same, and we'd be improving it with all new windows, mechanical systems, tuck-pointing the brick, adding in additional landscaping and playground areas, and removing the entrance off of Main Street. While there would be traffic with the parents picking up and dropping off, the traffic study provided has suggested that the removal of the Main Street entrance satisfies the potential added traffic on Main Street by pushing it onto Hawthorne. We also don't have the rush of traffic like the daycare at First Pres., as there is a 2 hour pick-up and 2-hour drop-off with the tenant that would operate the property. Therefore, I would ask that the Planning Commission consider granting a Special

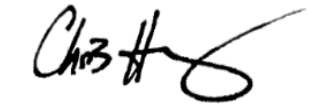
Use permit.

Some useful statistics and metrics about the proposed development are as follows:

Site Size – 34,412 SF
Building Size – ~8,200 SF
Daycare Operator – TBD
Parking Spaces – 31
Number of Employees – 18 at steady state* (only roughly 13 on site at one time)
Number of Students – 130
Kids per class – 9-24 depending on age (9 per infant room, 14 per toddler, and 24 per 3-6 child)
Hours of Operation – 7-6
% of students that are half-day vs. full-day – 100%

I have attached an initial site plan and traffic plan and look forward to having a conversation about the development in the near future, and addressing any concerns the Commission may have about the project at that time.

Sincerely,



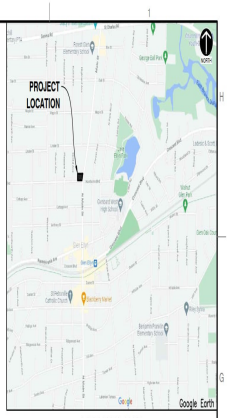
Chris Horney
Murphy Development Group
Managing Director

CONCEPT PLAN

600 NORTH MAIN STREET
GLEN ELLYN, ILLINOIS 60137

NORTH

BASIS OF BEARINGS:
NSRS 2011 ILLINOIS STATE PLANE - EAST ZONE

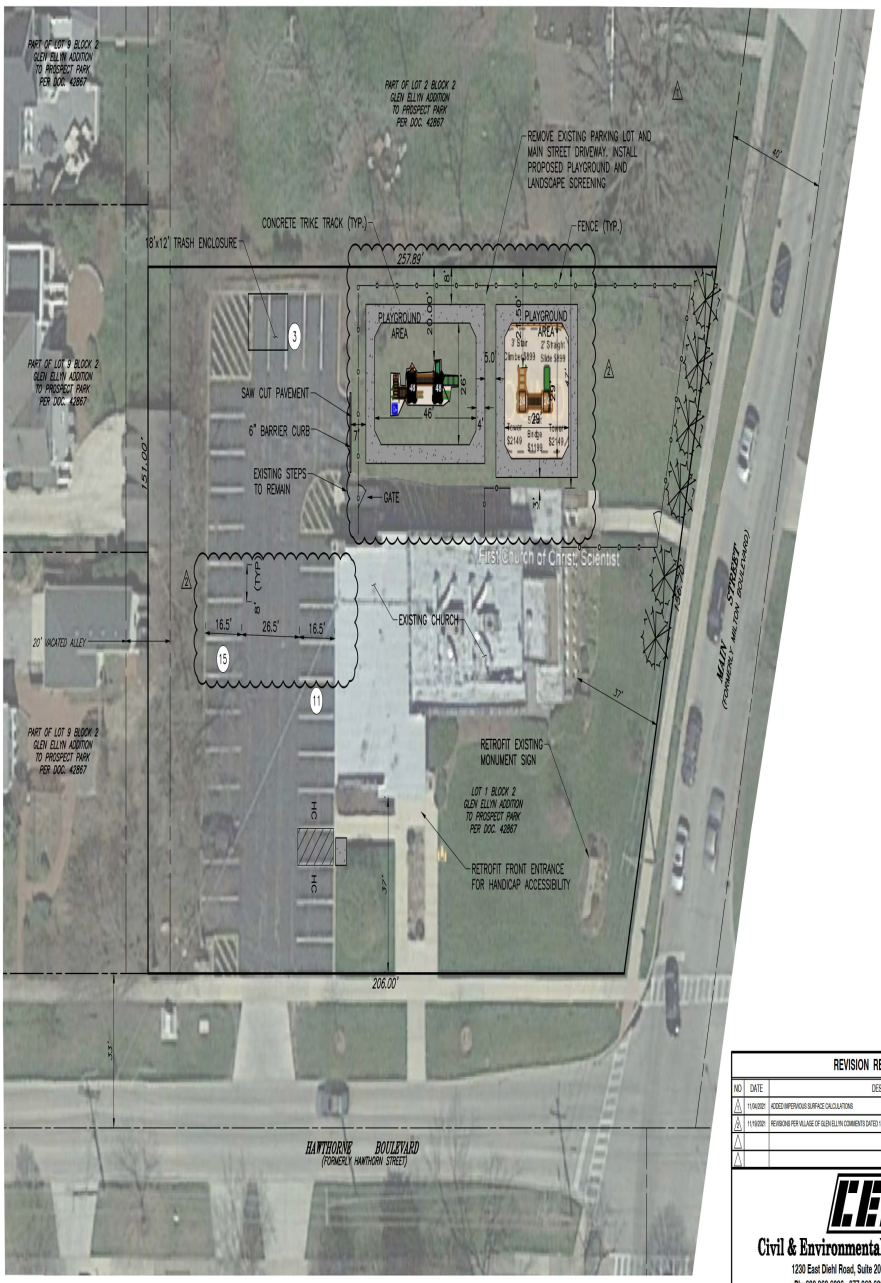


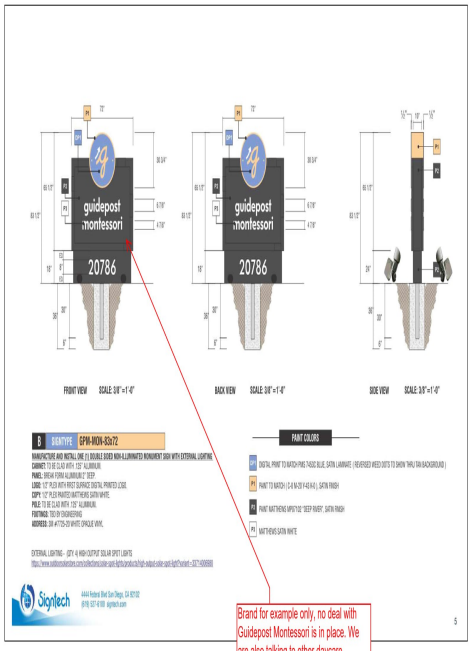
LOCATION MAP
N.T.S.

SITE DATA:

ADDRESS:	600 NORTH MAIN STREET, GLEN ELLYN, ILLINOIS 60137
OWNER:	FIRST CHURCH OF CHRIST
P.I.N.:	05-11-123-019
AREA:	34,412 SQ.FT. (0.79 AC.)
EXISTING ZONING:	R2-SINGLE FAMILY RESIDENTIAL
PROPOSED PARKING:	29 SPACES, INCLUDING 2 ACCESSIBLE SPACES

EXISTING IMPERVIOUS SURFACE TO BE REMOVED: 5,000 SQ.FT.
NEW IMPERVIOUS SURFACE: 1,240 SQ.FT.
NET IMPERVIOUS SURFACE: -3,760 SQ.FT.





Brand for example only, no deal with Guidepost Montessori is in place. We are also talking to other daycare operators we have leases with.

SCALE IN FEET
0 20 40

REVISION RECORD		
NO.	DATE	DESCRIPTION
1	11/4/2021	ADDED IMPERVIOUS SURFACE CALCULATIONS
2	11/15/2021	REVISIONS PER VILLAGE OF GLEN ELLYN COMMENTS DATED 10 NOV 2021
3		
4		
5		

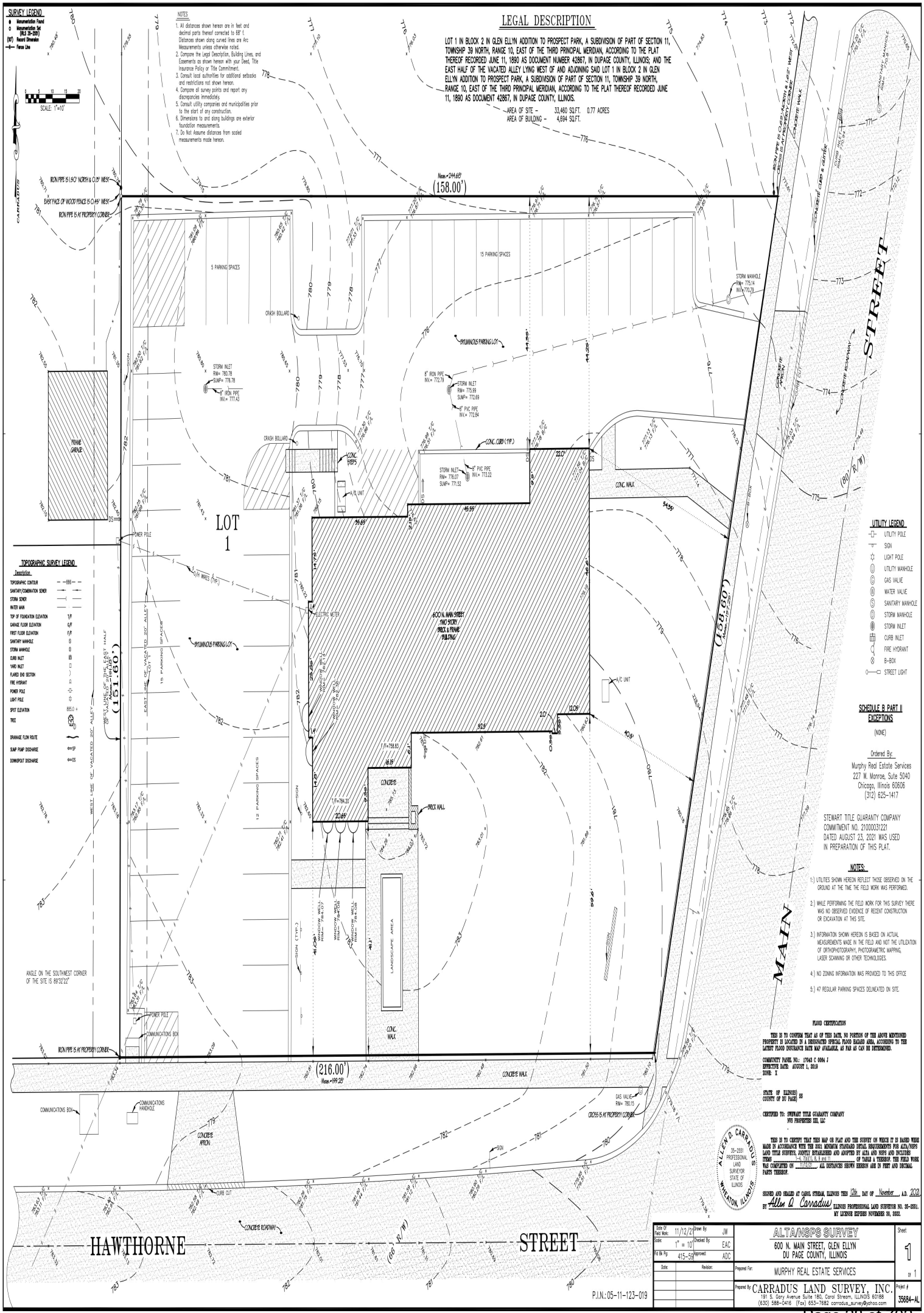
CEC
Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
Ph: 630.963.6026 · 877.963.6026 · Fax: 630.963.6027
www.ceoinc.com

PREPARED FOR:
GLOBAL POWER AND CONSTRUCTION, INC.
7S882 CAMP DEAN ROAD
BIG ROCK, IL 60511

DRAWN BY:	MAJ	CHECKED BY:	ARG
APPROVED BY:	*JGC	DATE:	SEPTEMBER 17, 2021
DWG SCALE:	1"=20'	PROJECT NO:	315-885

CONCEPT PLAN
600 NORTH MAIN STREET
GLEN ELLYN, ILLINOIS 60137

DRAWING NO.: 1
SHEET 1 OF 1



THIS IS AN ELECTRONICALLY TRANSMITTED DIGITAL REPRODUCTION OF AN ORIGINAL SIGNED AND SEALED PRINT

Traffic Impact Study

Daycare Development
600 N. Main Street
Glen Ellyn, Illinois

Prepared for:

MURPHY
REAL ESTATE SERVICES

September 23, 2021

Prepared by:

Lynn M. Means, P.E., PTOE
Senior Transportation Engineer

CONSULTING ENGINEERS

BLA, Inc.

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Future Conditions	9
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Parking Analysis	17
Conclusions and Recommendations	18

Appendix

Executive Summary

BLA, Inc. has conducted a Traffic Impact Study for the proposed daycare development located at 600 N. Main Street in Glen Ellyn, Illinois. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic operations and the impact of the planned development. Conclusions and recommendations are presented below:

1. The existing site currently contains an approximately 8,500 square-foot First Church of Christ, Scientist. Access to the site is provided via one full access driveway on Main Street and one full access driveway on Hawthorne Boulevard.
2. The project will include redeveloping the site to provide a daycare use. The development will be served by 31 parking spaces, including two (2) accessible spaces. Access to the site is proposed to be maintained via the existing access driveway on Hawthorne Boulevard; the existing access driveway on Main Street will be closed. This is an effective access management strategy to improve safety, pedestrian mobility and traffic progression along corridors.
3. Existing traffic conditions within the study area were established by performing weekday morning and evening traffic counts in September 2021 and included a 28 percent increase during the weekday evening peak hour to account for abnormal traffic conditions within the study area associated with school and business closures and remote learning / working due to COVID-19. *Note: No adjustment was made during the weekday morning peak period since existing (year 2021) conditions represented higher than normal, average conditions.*
4. Crash data was reviewed for the last five calendar years (2016-2020) from the Illinois Department of Transportation (IDOT) Division of Safety.
5. Future (non-site) traffic volume conditions were developed for the anticipated opening year of the development plus five years, year 2027, including a compounded annual growth rate of 0.5 percent along the study area roadways.
6. Trip generation for the proposed development was quantified for the weekday morning, evening and daily basis using the Institute of Transportation Engineers (ITE) trip generation rates contained in the 10th Edition of the Manual *Trip Generation*.
7. Analyses have been conducted for all study intersections under existing and future (2027 design year) traffic conditions to determine the impact from the planned development.
8. Our determination is the proposed development traffic can be accommodated on the adjacent streets and with the proposed site access.
9. Based on existing traffic conditions, the all-way stop controlled intersection of Main Street and Hawthorne Boulevard should be monitored and evaluated for future traffic control installation by the Village.
10. The proposed off-street parking supply will be adequate to accommodate the projected parking demand for the proposed development.

Introduction

BLA, Inc. has conducted a Traffic Impact Study for the proposed daycare development located at 600 N. Main Street in Glen Ellyn, Illinois. The site location is illustrated on ***Exhibit 1***.

As currently proposed, the development will include an approximately 8,500 square-foot Higher Ground daycare. The development will be served by 31 parking spaces, including two (2) accessible spaces. Access to the site is proposed via one driveway on Hawthorne Boulevard.

The following summarizes BLA's methodology, data collection, analyses and identifies improvements, as necessary, to mitigate the impacts the development's traffic may have on the adjacent roadway network.

Exhibit 1: Site Location Map

Existing Conditions

Looking NW from Main St and Hawthorne Blvd.

Area Land Use

The site is located at the northwest corner of Main Street and Hawthorne Boulevard in Glen Ellyn. The site currently contains an approximately 8,500 square-foot First Church of Christ, Scientist. Access is provided via one driveway on Main Street and one driveway on Hawthorne Boulevard. It is bound by Main Street to the east, Hawthorne Boulevard to the south and single-family residences to the north and west.

Street/Roadway Network

The existing traffic operations in the site area are illustrated on ***Exhibit 2***.

Looking south on Main St, north of Hawthorne Blvd.

Main Street

Main Street is a north-south minor arterial roadway, providing a two-lane cross section (one travel lane in each direction). At its all-way stop control (AWSC) intersection with Hawthorne Boulevard, Main Street provides a single approach lane with shared turning movements in both the northbound and southbound directions. On-street parking is prohibited on both sides of the roadway in the site vicinity. Main Street is under the jurisdiction of the Village of Glen Ellyn with a posted speed limit of 30 miles per hour (mph).

Looking east on Hawthorne Blvd, west of Main St.

Hawthorne Boulevard

Hawthorne Boulevard is an east-west local roadway providing a two-lane cross section. At its AWSC intersection with Main Street, Hawthorne Boulevard provides a single approach lane with shared turning movements in both the eastbound and westbound directions. On-street parking is prohibited on both sides of the roadway in the site vicinity. Hawthorne Boulevard is under the jurisdiction of the Village of Glen Ellyn with a posted speed limit of 30 mph.

Pedestrian / Bicycle Facilities

The site is well served by an adequate network of sidewalks along the study area streets and established crosswalks at the study area intersection. Sidewalks are provided on both sides of Main Street and Hawthorne Boulevard. Crosswalks are provided along all four approaches of the Main Street and Hawthorne Boulevard intersection.

Public Transportation

The site is also well served by public transportation. Pace operates bus route #715 – Central DuPage along Main Street in the site vicinity. Metra provides commuter rail service along the Milwaukee Union Pacific West Line that begins in Elburn and ends at Ogilvie Transportation Center in Chicago. The Glen Ellyn Station is located on Pennsylvania Avenue, approximately 0.5-mile south of the proposed site.

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SCALE: 1" = 175'

Exhibit 2
Existing Traffic Operations

Existing Traffic

Traffic turning movement counts were conducted on Wednesday, September 8, 2021, during the weekday morning (7:00 to 9:00 AM) and weekday evening (4:00 to 6:00 PM) peak periods at the intersection of Main Street and Hawthorne Boulevard.

The results indicate that the peak hour existing traffic during the weekday morning and weekday evening peak hours occurred from 7:00 to 8:00 AM and 4:30 to 5:30 PM, respectively.

Table 1 summarizes the annual average daily traffic (AADT) volumes obtained from IDOT (www.getttingaroundillinois.com) near the site:

Table 1: Summary of IDOT AADT Volumes

Location	IDOT AADT (Year 2020)
Main Street	
Between Geneva Rd and Pennsylvania Ave	7,000

In addition, the 2021 intersection volumes were compared to the IDOT roadway segment peak hour volumes, as available, to determine and appropriate adjustment factor to account for abnormal traffic conditions within the study area associated with school and business closures and remote learning / working due to COVID-19. The 2021 volumes were also compared to historical intersection turning movement counts conducted by the DuPage County Division of Transportation (DuDOT) at the nearby intersection of Main Street and St. Charles Road, located approximately 0.6 miles north of the site.

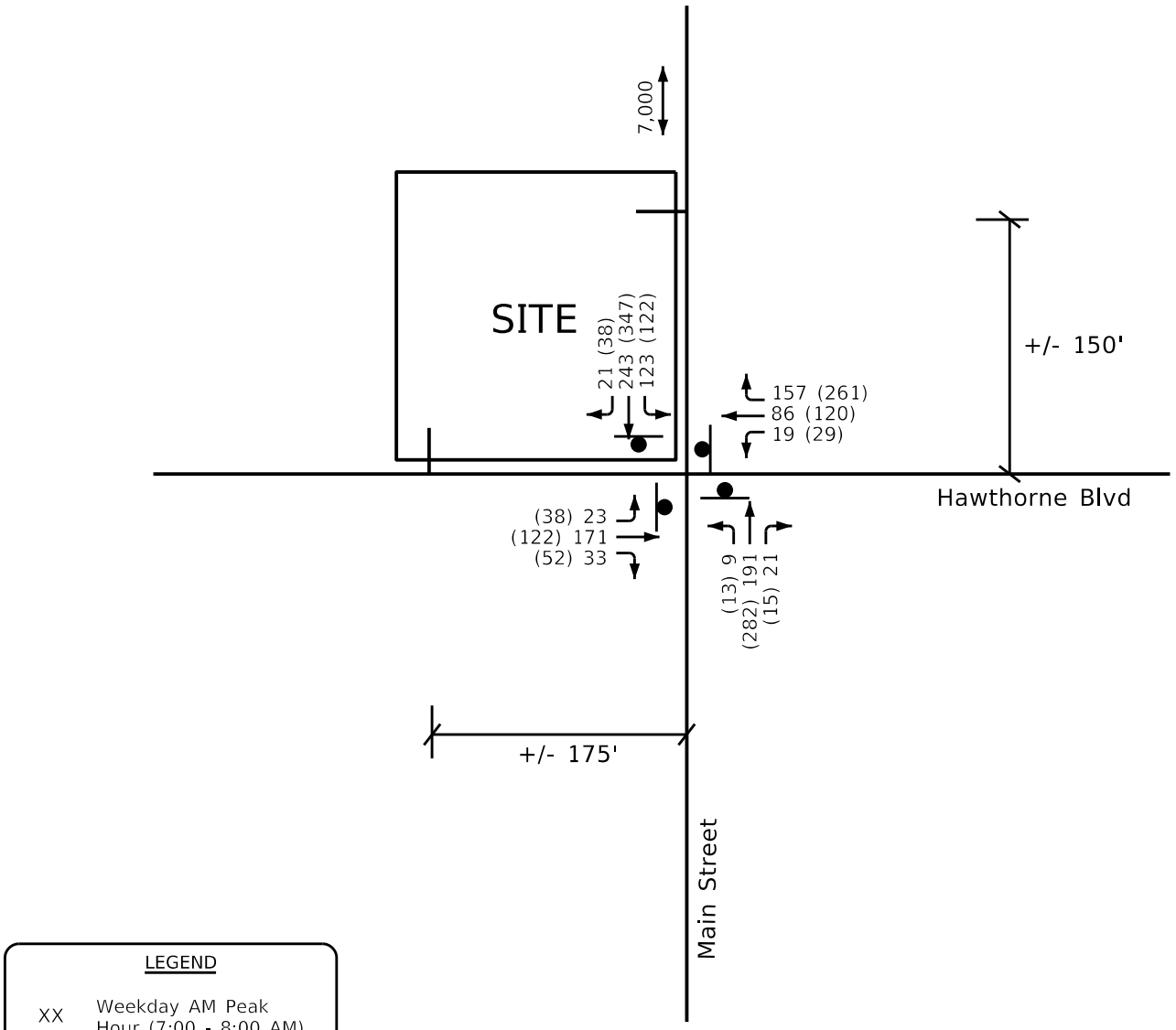
Table 2 summarizes the comparison along with the adjustment assumed. *Note: The highest adjustment realized during each peak period (highlighted in gray in Table 2) was assumed in the analysis to provide a conservative analysis scenario. However, no adjustment was made during the weekday AM peak period, since existing (year 2021) represented higher than normal, average conditions.*

Table 2: Traffic Volume Comparison: COVID-19 Adjustment

	IDOT Volumes (2020)		DuDOT Volumes (2015)		Intersection Volumes (2021)		COVID Adjustment Factor					
							Calculated				Assumed	
							IDOT		DuDOT			
Location / Timeframe	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
Main Street, Between Geneva Road and Pennsylvania Ave												
North of Hawthorne Blvd	411	740	715	929	763	850	0.54	0.87	0.94	1.09	**1.0**	**1.28**
South of Hawthorne Blvd			--	--	521	577	0.79	1.28	--	--		

The adjusted existing peak hour and IDOT AADT volumes along Main Street are illustrated on ***Exhibit 3***.

Summaries of the intersection turning movement, IDOT and DuDOT traffic count data are contained in ***Appendix A***. *It should be noted, the IDOT traffic volumes presented in Appendix A represent "raw", unadjusted data. These volumes are adjusted based on day of week and month of year factors, resulting in an AADT (as presented in Table 1) which is lower than the raw total.*



LEGEND

XX	Weekday AM Peak Hour (7:00 - 8:00 AM)
(XX)	Weekday PM Peak Hour (4:30 - 5:30 PM)
XX	Annual Average Daily Traffic (AADT)
	Existing Stop Sign

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SCALE: NTS

Exhibit 3
Existing Traffic

Crash Summary

To evaluate and address potential safety issues at the study area intersections, crash data was obtained from the IDOT Division of Transportation Safety for the last five calendar years available, 2016 through 2020. A summary of the crash data is provided in ***Table 3***.

Table 3: Crash Summary (2016-20)

Location / Year	No. of Crashes	Severity [A]					Crash Type [C]						Percent During Wet/Icy Conditions
		PD	PI [B]			F	CM	RE	SS	HO	FO	Ped	
			A	B	C								
Intersections (Crashes within 250' of Intersection)													
Main Street and Hawthorne Boulevard													
2016	3	2	--	1	--	--	--	2	--	--	1	--	33%
2017	3	3	--	--	--	--	2	1	--	--	--	--	33%
2018	0	--	--	--	--	--	--	--	--	--	--	--	--
2019	1	1	--	--	--	--	1	--	--	--	--	--	100%
2020	0	--	--	--	--	--	--	--	--	--	--	--	--
Total (2016-20)	**7**	**6**	**0**	**1**	**0**	**0**	**3**	**3**	**0**	**0**	**1**	**0**	**43%**

[A] PD = property damage only; PI = personal injury; F = fatality.
[B] Type A (incapacitating injury); Type B (non-incapacitating injury); Type C (possible injury).
[C] CM = cross movement/angle; RE = rear end; SS = Sideswipe; HO = head on; FO = fixed object/animal/parked car; Ped = pedestrian/bicyclist.

As shown in Table 3, the signalized intersection of Main Street and Hawthorne Boulevard experienced a total of 7 crashes over the 5-year study period, approximately 1.5 crashes per year. Approximately 86 percent (6 of 7) of the crashes involved property damage only, and approximately 43 percent (3 of 7) were rear-end type collisions.

There were no reported fatalities at the study area intersections over the five-year analysis period and no crashes that involved a pedestrian or bicyclist.

Future Conditions

Traffic Growth

Construction and occupancy of the proposed daycare development is anticipated to occur by the end of the year, 2022. Future traffic volumes were developed for the year 2027, anticipated build-out year of the development plus five years. Traffic growth in the area is a function of expected land development in the region. Based on a review of historical traffic volumes and the Chicago Metropolitan Agency for Planning (CMAP) 2050 projections (see ***Appendix B***), traffic volumes along Main Street are assumed to experience an annual, compounded growth rate of 0.27 percent. However, to provide a conservative analysis scenario, a 0.5 percent per year compounded growth rate was applied along the study area roadways.

2027 No-Build (Non-Site) Conditions

The 2027 No-Build peak hour traffic volumes were accordingly developed by applying a 0.5 percent compounded, annual growth rate to the existing traffic (Exhibit 3). The 2027 No-Build traffic volume networks are graphically depicted on ***Exhibit 4***.

Proposed Development Plan

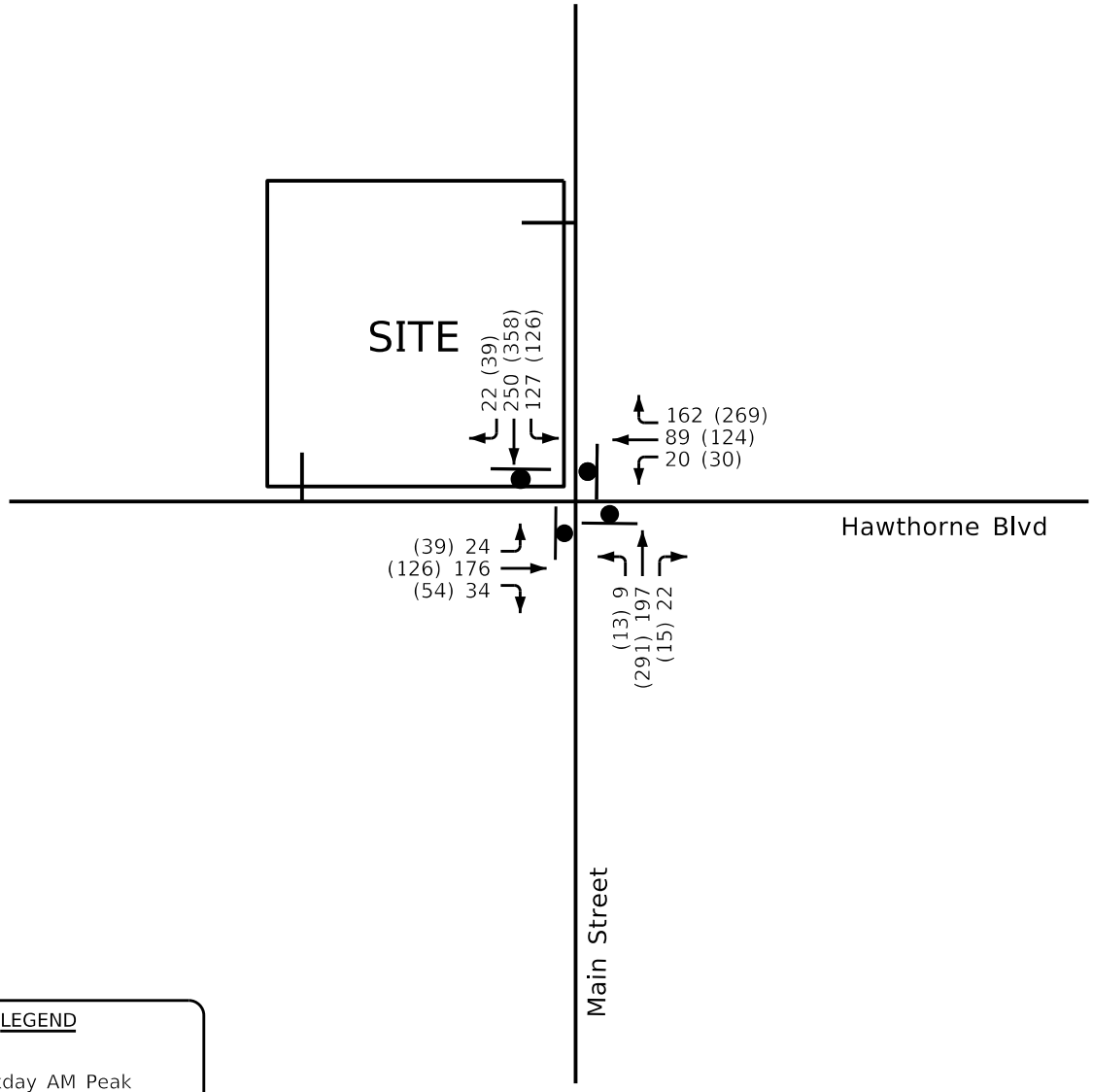
The Site Plan prepared by Civil & Environmental Consultants, Inc. (CEC) is provided in ***Appendix C***. As currently proposed, the project includes redeveloping the approximately 8,500 square-foot church to provide a daycare use. The facility will hold a maximum of 125 children, served by 17 full-time staff. Its anticipated hours of operation are 7:00 AM to 6:00 PM, Monday through Friday. The development will be served by 31 parking spaces, including 2 accessible spaces. Access to the site is proposed to be maintained via the existing access driveway on Hawthorne Boulevard; the existing access on Main Street will be closed. This is an effective access management strategy to improve safety, pedestrian mobility and traffic progression along corridors.

Trip Generation

The amount of traffic generated by a development depends on the type and density of the land use. Trip generation estimates for the development were calculated based on information published in the Institute of Transportation Engineers (ITE) Manual *Trip Generation*, 10th Edition (see ***Appendix D***). The ITE manual is a compilation of national traffic data surveys used to estimate traffic volumes for various land uses.

The ITE data does not represent locations with measurable transit, walking and other non-auto trips. Based on the US Census Bureau, 2015-2019 America Community Survey Data, Mode of Transportation (Journey to Work) for Census Tract 8420, approximately 69 percent use auto (personal vehicles and/or taxi/rideshare carpool) to commute to/from work (see ***Appendix E***). However, to provide a conservative scenario, test the maximum site impacts, the ITE trip generation estimates were *not* discounted for residents that carpool and/or use alternative modes to travel to/from work (bike, walk and/or transit) that may also choose to do so for the proposed daycare use, as well.

Table 4 provides a summary of the total trips to be generated by the proposed development. The trip generation for the daycare component of the development was estimated using three different variables for land use code (LUC) 565, Daycare: staff (17 maximum), students (125 maximum) and building footprint (approximately 8,500 square-feet of gross floor area). To provide a conservative analysis scenario, the highest trip generation was assumed, based on the building footprint (highlighted in gray in *Table 4*).



LEGEND

XX	Weekday AM Peak Hour (7:00 - 8:00 AM)
(XX)	Weekday PM Peak Hour (4:30 - 5:30 PM)
	Existing Stop Sign

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SCALE: NTS

Exhibit 4
2027 No Build Traffic

Table 4: Estimated Trip Generation

Land Use / Size	ITE Land Use Code	Weekday								
		AM Peak Hour			PM Peak Hour			Daily		
		In	Out	Total	In	Out	Total	In	Out	Total
Daycare										
8,500 SF	565	**50**	**44**	**94**	**44**	**51**	**95**	**203**	**203**	**406**
125 Students		48	43	91	42	47	89	246	246	492
17 Staff		40	36	76	35	39	74	177	177	354

Note: The existing site formerly contained the First Church of Christ, Scientist. Thus, the trips as presented above in Table 4 provide a conservative analysis scenario (do not discount for the former site use).

Directional Distribution

The anticipated trip distribution of new site traffic is summarized in ***Table 5***. This was based on current travel patterns, the operational characteristics of the street system and site access.

Table 5: Trip Distribution

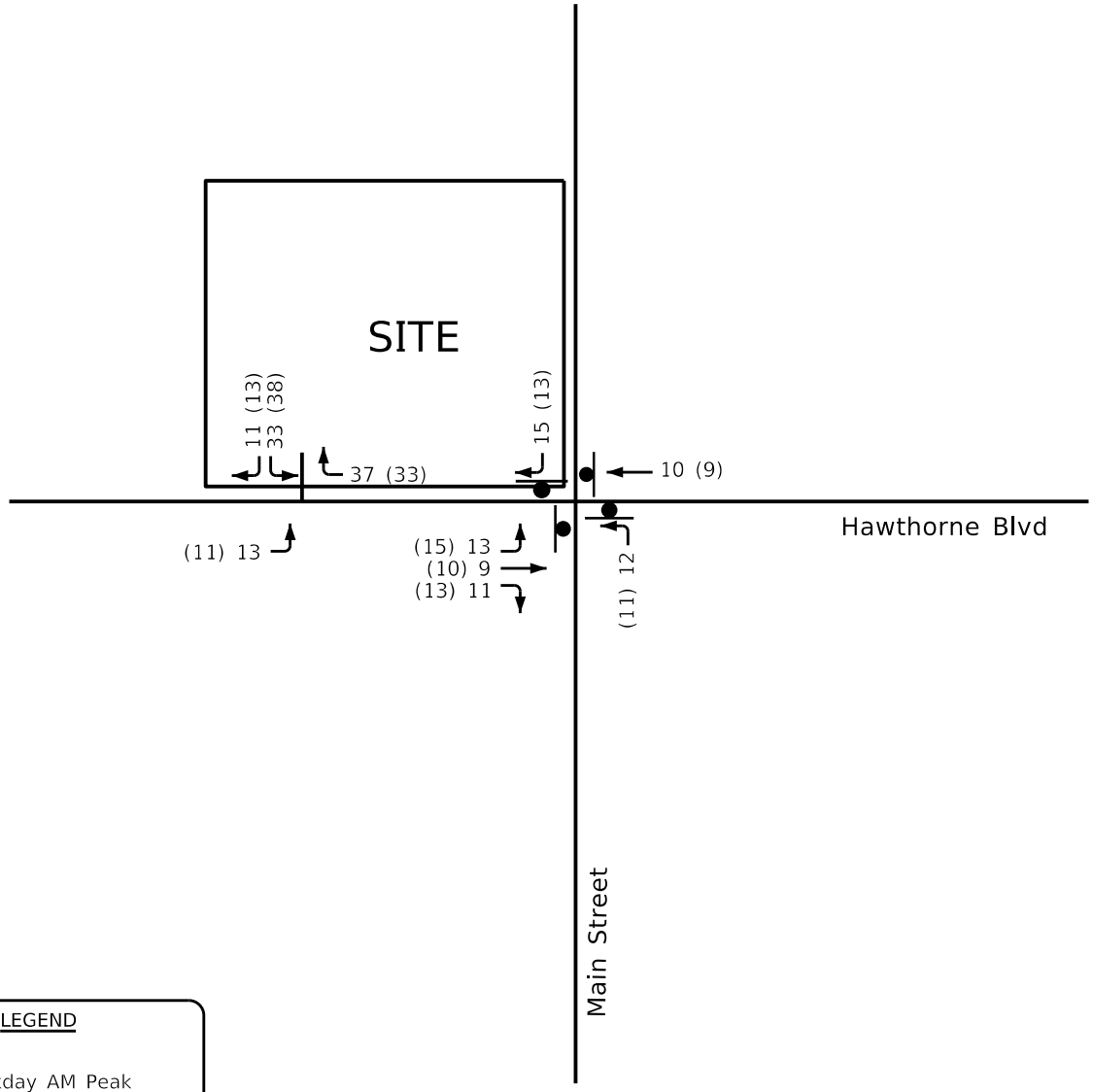
Route & Direction	Percent Route (To/From)
Main Street	
North of Hawthorne Boulevard	35%
South of Hawthorne Boulevard	25%
Hawthorne Boulevard	
West of Main Street	15%
East of Main Street	25%
Total	**100%**

Site Traffic Assignment

Based on the direction of travel, the site-generated trips were assigned to the roadway network using the site estimated trips listed in Table 4 and the anticipated directional distribution outlined in Table 5. The site vehicular traffic assignment is illustrated on ***Exhibit 5***.

2027 Total Traffic Conditions

The site-generated traffic volumes (Exhibit 5) were then added to the 2027 No-Build traffic volumes (Exhibit 4) to develop the 2027 Total traffic volumes. The Total traffic volumes for the year 2027 are shown on ***Exhibit 6***.



LEGEND

XX	Weekday AM Peak Hour (7:00 - 8:00 AM)
(XX)	Weekday PM Peak Hour (4:30 - 5:30 PM)
	Existing Stop Sign

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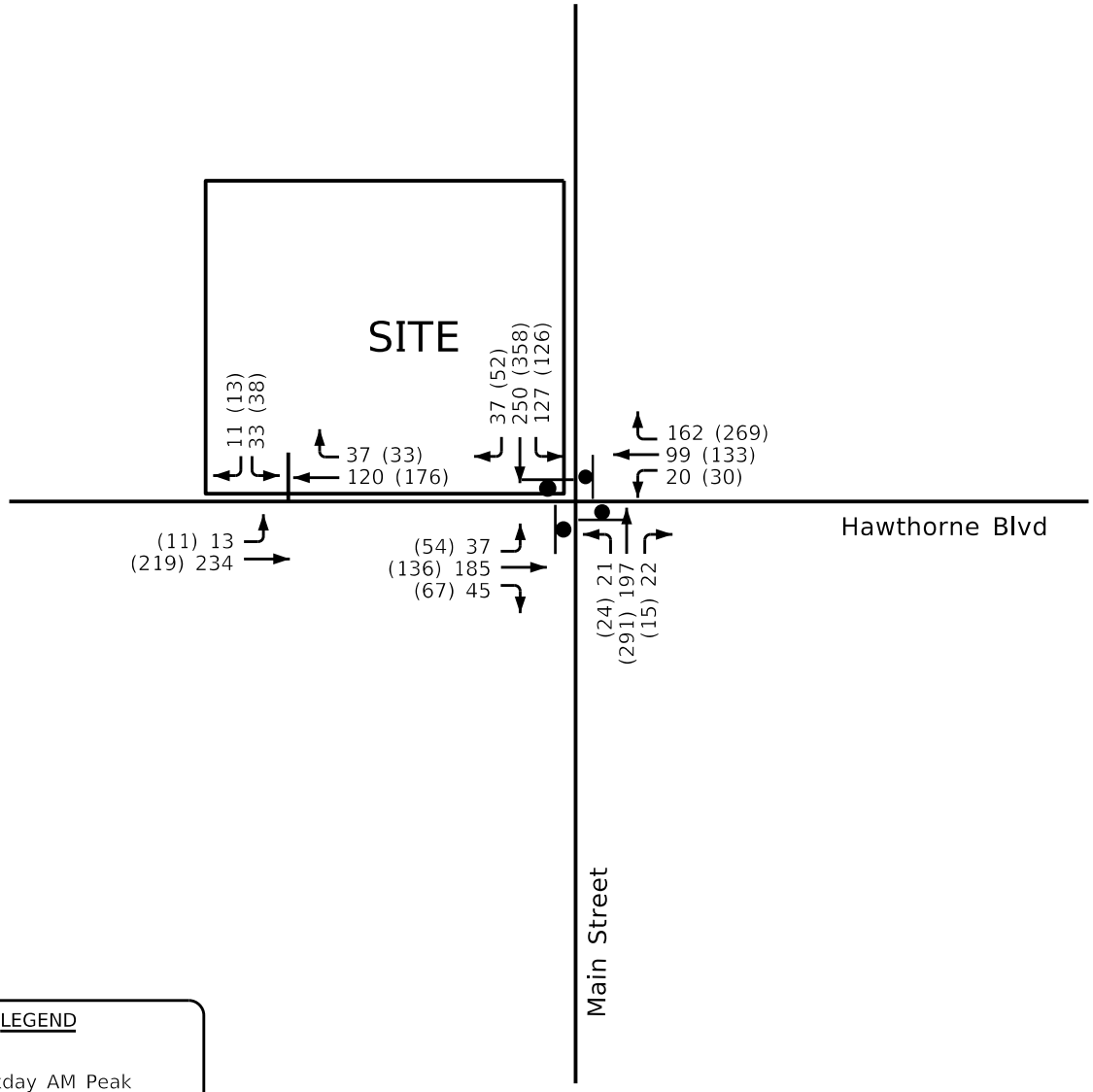
N

SCALE: NTS

Exhibit 5
Site Traffic



LEGEND

XX	Weekday AM Peak Hour (7:00 - 8:00 AM)
(XX)	Weekday PM Peak Hour (4:30 - 5:30 PM)
	Existing Stop Sign

BLA, Inc.
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N

SCALE: NTS

Exhibit 6
2027 Total Traffic

Traffic Analysis

Capacity and Queue Analysis

A primary result of capacity analysis is the assignment of levels of service to traffic facilities under various traffic flow conditions. The capacity analysis methodology is based on the concepts and procedures in the Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM), 6th Edition. The concept of level of service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service is provided in ***Table 6.***

Table 6: Level of Service (LOS) Summary

LOS	Description	Average Control Delay (sec/veh)	
		Signalized	Unsignalized
A	Describes conditions with little to no delay to motorists.	≤ 10	≤ 10
B	Represents a desirable level with relatively low delay to motorists.	>10 and ≤ 20	>10 and ≤ 15
C	Describes conditions with average delays to motorists.	>20 and ≤ 35	>15 and ≤ 25
D	Describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.	>35 and ≤ 55	>25 and ≤ 35
E	Represents operating conditions with high delay values. This level is often considered within urban settings or for minor streets intersecting major arterial roadways to be the limit of acceptable delay.	>55 and ≤ 80	>35 and ≤ 50
F	Is considered unacceptable to most drivers with high delay values that often occur when arrival flow rates exceed the capacity of the intersection.	>80	>50

Capacity and queue analyses were conducted at all study intersections through application of the procedures described above. These analyses were conducted under Existing, 2027 No-Build and 2027 Total traffic-volume conditions. The impact of site-generated traffic can be measured by comparing 2027 No-Build conditions to 2027 Total conditions.

The results of the intersection analyses are discussed below and are summarized in ***Table 7***. All analysis worksheets are provided in ***Appendix F***.

Table 7: Level-of-Service and Queue Analysis Summary

Intersection/Peak Hour/Movement	Existing			2027 No-Build			2027 Total		
	Delay[1]	LOS[2]	Queue[3]	Delay	LOS	Queue	Delay	LOS	Queue
Main Street and Hawthorne Boulevard									
Weekday AM									
Hawthorne Boulevard EB approach	21.2	C	92	23.3	C	105	30.3	D	148
Hawthorne Boulevard WB approach	22.6	C	112	25.5	D	130	30.4	D	155
Main Street NB approach	20.4	C	88	22.6	C	100	26.7	D	120
Main Street SB approach	53.5	F	290	72.4	F	348	101.7	F	428
Overall Intersection	**32.8**	**D**	--	**41.0**	**E**	--	**54.2**	**F**	--
Weekday PM									
Hawthorne Boulevard EB approach	20.9	C	75	22.5	C	85	29.3	D	122
Hawthorne Boulevard WB approach	47.8	E	252	57.5	F	286	77.5	F	342
Main Street NB approach	30.7	D	150	34.9	D	168	44.0	E	202
Main Street SB approach	118.3	F	482	148.1	F	555	183.7	F	635
Overall Intersection	**65.0**	**F**	--	**79.4**	**F**	--	**99.0**	**F**	--
Hawthorne Boulevard and Site Access									
Weekday AM									
Hawthorne Boulevard EB left-turns	--	--	--	--	--	--	7.6	A	--
Site SB approach	--	--	--	--	--	--	11.7	B	8
Weekday PM									
Hawthorne Boulevard EB left-turns	--	--	--	--	--	--	7.7	A	--
Site SB approach	--	--	--	--	--	--	11.4	B	8

[1] Average control delay in seconds per vehicle.
[2] Level of service.
[3] 95th percentile queue length in feet per lane.

Main Street and Hawthorne Boulevard

Under existing conditions during the weekday morning and evening peak periods, the Main Street southbound movements at Hawthorne Boulevard, as well as the Hawthorne Boulevard westbound movements and overall intersection during the weekday evening peak period operate at LOS E/F. Under future conditions, these movements will continue to operate with capacity constraints during these timeframes, as well as the overall intersection during the weekday morning peak hour and the northbound approach during the evening peak hour. The proposed site traffic has minimal impact to the intersection operations.

However, to facilitate both existing and future traffic, BLA evaluated a potential traffic control improvement for this intersection: traffic signal control. The traffic signal warrant analysis was based on the Manual of Uniform Traffic Control Devices (MUTCD) criteria as described below.

Signal Warrant Analysis

A traffic signal warrant analysis was performed for the intersection of Main Street and Hawthorne Boulevard. The analysis was based on the MUTCD criteria for installation of a traffic control signal. The warrant analysis considers peak hour traffic volumes at the intersections and makes comparisons to minimum traffic volume thresholds to determine if the installation of a traffic signal should be considered. The MUTCD is the standard reference application of traffic signals and contains eight different warrant types for the justification of traffic signals. It is stated that if one or more of the warrants are satisfied, a traffic signal is justified and could be installed. However, several factors are involved in determining if traffic signal control should be installed, including intersection operations, safety, and engineering judgment.

Section 4C.04, Warrant 3 - Peak Hour of the MUTCD, was examined to determine whether a traffic signal was warranted due to the amount of delay that a minor street suffers when entering a major street. For a traffic signal to be warranted under this condition, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor street approach (one direction only) for 1 hour of an average day must fall above the applicable curve on Figure 4C-3 of the MUTCD for the existing combination of approach lanes. The graphical representation and the application of the estimated traffic volumes are shown on Figure 4C-3 provided in ***Appendix G***, which includes a reduction for right-turn on red (RTOR), consistent with IDOT requirements for new traffic signal installation.

As shown on the graph present in the Appendix, it can be concluded that the signal warrant is satisfied under existing year (2021) traffic conditions during the evening peak hour. The spacing from this intersection to the existing traffic signal located to the north (St. Charles Road / Geneva Road) exceeds a desirable spacing of ¼-mile, which would permit acceptable progression along Main Street.

Note: The existing traffic volumes conservatively included an adjustment factor of 1.28 to account for abnormal traffic conditions within the study area associated with the COVID-19 pandemic. Accordingly, this intersection should be monitored and evaluated for future traffic control installation by the Village.

Site Access Driveway

All movements at the site acess intersection with Hawthorne Boulevard are anticipated to operate at acceptable levels of service (at LOS "B" or better) during both peak hours studied. The 95th-percentile queue lengths for exiting movements onto Hawthorne Boulevard, as well as left-turn entering movements from eastbound Hawthorne Boulevard are not expected to exceed one vehicle, which will not impact operations on- or off-site.

Parking Analysis

Parking Demand Requirements

Based on the parking requirements outlined in the Village of Glen Ellyn Code of Ordinance, 11 parking spaces are required for the proposed site. The Village's parking requirements are summarized in ***Table 8***.

Table 8: Village Parking Requirements

Use	Size	Parking Requirement	Parking Spaces	
			Required	Provided
Daycare	8,500 SF	1 space per 800 SF GFA	11	**31**

Parking Demand Projections

The ITE *Parking Generation, 5th Edition* publication provides a compilation of parking demand surveys from across the country for a wide variety of land uses. ***Table 9*** presents a summary of the projected peak parking demand for the proposed development.

ITE LUC 565, Daycare, was referenced for the proposed daycare using three different variables: building footprint, students and staff (see ***Appendix H***). Again, to provide a conservative analysis scenario, the highest parking demand for the daycare component was assumed based on the building footprint (highlighted in gray in *Table 9*).

Table 9: Projected Peak Parking Demand: ITE-Parking Generation

Use	ITE LUC	Size	Average Peak Parking Demand	
			Weekday	
			Rate/Unit	Spaces
Daycare	565	8,500 SF	2.47	21
		125 Students	0.24	30
		17 Staff	1.22	21

As shown in Table 9, the projected peak parking demand for the proposed development is anticipated to be 30 spaces.

Accordingly, the proposed parking supply of 31 spaces is anticipated to be adequate to accommodate the project parking demand for the proposed development.

Conclusions and Recommendations

A Traffic Impact Study was performed for the proposed daycare development located at 600 N. Main Street in Glen Ellyn, Illinois. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic operations and the planned development.

Conclusions:

1. The existing site currently contains an approximately 8,500 square-foot First Church of Christ, Scientist. Access to the site is provided via one full access driveway on Main Street and one full access driveway on Hawthorne Boulevard.
2. The project will include redeveloping the site to provide a daycare use. The development will be served by 31 parking spaces, including 2 accessible spaces. Access to the site is proposed to be maintained via the existing access driveway on Hawthorne Boulevard; the existing access driveway on Main Street will be closed. This is an effective access management strategy to improve safety, pedestrian mobility and traffic progression along corridors
3. The site traffic impacts on the existing street system will be minimal. No improvements are required to accommodate the development traffic.
4. The proposed off-street parking supply will be adequate to accommodate the projected parking demand for the proposed development.

Recommendations:

1. The existing Main Street full access driveway should be closed.
2. The existing Hawthorne Boulevard driveways should be maintained as a full access driveway.
3. Based on existing traffic conditions, the all-way stop controlled intersection of Main Street and Hawthorne Boulevard should be monitored and evaluated for future traffic control installation by the Village.

Appendices

Appendix A

Traffic Count Summaries

Main Street & Hawthorne Boulevard - TMC

Wed Sep 8, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 869701, Location: 41.881177, -88.066751

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Hawthorne						Hawthorne						Main						Main						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-08 7:00AM	4	44	5	0	**53**	2	5	12	33	0	**50**	0	4	40	12	0	**56**	3	51	53	4	0	**108**	1	**267**
7:15AM	7	78	13	0	**98**	4	5	32	43	0	**80**	1	0	58	4	0	**62**	3	42	50	5	0	**97**	16	**337**
7:30AM	6	32	7	0	**45**	1	5	27	61	0	**93**	1	4	55	0	0	**59**	2	22	69	3	0	**94**	0	**291**
7:45AM	6	17	8	0	**31**	1	4	15	20	0	**39**	3	1	38	5	0	**44**	5	8	76	9	0	**93**	4	**207**
Hourly Total	23	171	33	0	**227**	8	19	86	157	0	**262**	5	9	191	21	0	**221**	13	123	248	21	0	**392**	21	**1102**
8:00AM	8	17	6	0	**31**	4	8	39	13	0	**60**	9	6	62	2	0	**70**	6	14	63	11	0	**88**	9	**249**
8:15AM	13	32	25	0	**70**	3	6	23	25	0	**54**	3	2	47	1	0	**50**	1	20	73	12	0	**105**	4	**279**
8:30AM	8	13	8	0	**29**	7	6	6	22	0	**34**	7	3	37	4	0	**44**	4	10	69	3	0	**82**	5	**189**
8:45AM	6	13	7	0	**26**	3	5	9	20	0	**34**	3	4	39	1	0	**44**	8	9	66	4	0	**79**	4	**183**
Hourly Total	35	75	46	0	**156**	17	25	77	80	0	**182**	22	15	185	8	0	**208**	19	53	271	30	0	**354**	22	**900**
4:00PM	3	24	1	0	**28**	2	4	24	47	0	**75**	0	0	53	2	0	**55**	0	10	64	6	0	**80**	1	**238**
4:15PM	4	13	5	0	**22**	0	4	21	41	0	**66**	2	3	57	2	0	**62**	1	18	69	3	0	**90**	1	**240**
4:30PM	7	20	8	0	**35**	5	7	35	41	0	**83**	1	3	58	3	0	**64**	2	19	66	12	0	**97**	5	**279**
4:45PM	10	20	12	0	**42**	1	5	22	51	0	**78**	3	3	50	1	0	**54**	2	32	80	5	0	**117**	4	**291**
Hourly Total	24	77	26	0	**127**	8	20	102	180	0	**302**	6	9	218	8	0	**235**	5	79	279	26	0	**384**	11	**1048**
5:00PM	3	24	9	0	**36**	0	0	10	69	0	**79**	0	3	52	3	0	**58**	2	25	61	7	0	**93**	2	**266**
5:15PM	10	31	12	0	**53**	1	11	27	43	0	**81**	1	1	60	5	0	**66**	1	19	64	6	0	**89**	4	**289**
5:30PM	8	19	6	0	**33**	3	3	29	40	0	**72**	0	2	53	5	0	**60**	0	26	73	9	0	**108**	2	**273**
5:45PM	0	22	7	0	**29**	0	2	26	50	0	**78**	1	2	46	1	0	**49**	1	25	58	4	0	**87**	3	**243**
Hourly Total	21	96	34	0	**151**	4	16	92	202	0	**310**	2	8	211	14	0	**233**	4	95	256	26	0	**377**	11	**1071**
Total	103	419	139	0	**661**	37	80	357	619	0	**1056**	35	41	805	51	0	**897**	41	350	1054	103	0	**1507**	65	**4121**
% Approach	15.6%	63.4%	21.0%	0%	**-**	-	7.6%	33.8%	58.6%	0%	**-**	-	4.6%	89.7%	5.7%	0%	**-**	-	23.2%	69.9%	6.8%	0%	**-**	-	-
% Total	2.5%	10.2%	3.4%	0%	**16.0%**	-	1.9%	8.7%	15.0%	0%	**25.6%**	-	1.0%	19.5%	1.2%	0%	**21.8%**	-	8.5%	25.6%	2.5%	0%	**36.6%**	-	-
Lights	100	412	139	0	**651**	-	79	352	588	0	**1019**	-	39	773	50	0	**862**	-	328	1023	101	0	**1452**	-	3984
% Lights	97.1%	98.3%	100%	0%	**98.5%**	-	98.8%	98.6%	95.0%	0%	**96.5%**	-	95.1%	96.0%	98.0%	0%	**96.1%**	-	93.7%	97.1%	98.1%	0%	**96.4%**	-	96.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	3	1	0	**4**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0.3%	1.0%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	3	7	0	0	**10**	-	1	5	31	0	**37**	-	2	29	1	0	**32**	-	22	28	1	0	**51**	-	130
% Buses and Single-Unit Trucks	2.9%	1.7%	0%	0%	**1.5%**	-	1.3%	1.4%	5.0%	0%	**3.5%**	-	4.9%	3.6%	2.0%	0%	**3.6%**	-	6.3%	2.7%	1.0%	0%	**3.4%**	-	3.2%
Pedestrians	-	-	-	-	-	37	-	-	-	-	-	35	-	-	-	-	-	41	-	-	-	-	-	65	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main Street & Hawthorne Boulevard - TMC

Wed Sep 8, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 869701, Location: 41.881177, -88.066751

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Hawthorne Eastbound						Hawthorne Westbound						Main Northbound						Main Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-08 7:00AM	4	44	5	0	**53**	2	5	12	33	0	**50**	0	4	40	12	0	**56**	3	51	53	4	0	**108**	1	**267**
7:15AM	7	78	13	0	**98**	4	5	32	43	0	**80**	1	0	58	4	0	**62**	3	42	50	5	0	**97**	16	**337**
7:30AM	6	32	7	0	**45**	1	5	27	61	0	**93**	1	4	55	0	0	**59**	2	22	69	3	0	**94**	0	**291**
7:45AM	6	17	8	0	**31**	1	4	15	20	0	**39**	3	1	38	5	0	**44**	5	8	76	9	0	**93**	4	**207**
Total	23	171	33	0	**227**	8	19	86	157	0	**262**	5	9	191	21	0	**221**	13	123	248	21	0	**392**	21	**1102**
% Approach	10.1%	75.3%	14.5%	0%	**-**	-	7.3%	32.8%	59.9%	0%	**-**	-	4.1%	86.4%	9.5%	0%	**-**	-	31.4%	63.3%	5.4%	0%	**-**	-	**-**
% Total	2.1%	15.5%	3.0%	0%	**20.6%**	-	1.7%	7.8%	14.2%	0%	**23.8%**	-	0.8%	17.3%	1.9%	0%	**20.1%**	-	11.2%	22.5%	1.9%	0%	**35.6%**	-	**-**
PHF	0.821	0.548	0.635	-	**0.579**	-	0.950	0.672	0.643	-	**0.704**	-	0.563	0.823	0.438	-	**0.891**	-	0.603	0.816	0.583	-	**0.907**	-	0.818
Lights	23	168	33	0	**224**	-	19	86	155	0	**260**	-	9	184	20	0	**213**	-	106	234	20	0	**360**	-	1057
% Lights	100%	98.2%	100%	0%	**98.7%**	-	100%	100%	98.7%	0%	**99.2%**	-	100%	96.3%	95.2%	0%	**96.4%**	-	86.2%	94.4%	95.2%	0%	**91.8%**	-	95.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	3	1	0	**4**	-	5
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	1.2%	4.8%	0%	**1.0%**	-	0.5%
Buses and Single-Unit Trucks	0	3	0	0	**3**	-	0	0	2	0	**2**	-	0	6	1	0	**7**	-	17	11	0	0	**28**	-	40
% Buses and Single-Unit Trucks	0%	1.8%	0%	0%	**1.3%**	-	0%	0%	1.3%	0%	**0.8%**	-	0%	3.1%	4.8%	0%	**3.2%**	-	13.8%	4.4%	0%	0%	**7.1%**	-	3.6%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	5	-	-	-	-	-	13	-	-	-	-	-	21	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main Street & Hawthorne Boulevard - TMC

Wed Sep 8, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 869701, Location: 41.881177, -88.066751

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Hawthorne						Hawthorne						Main						Main						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-08 4:30PM	7	20	8	0	**35**	5	7	35	41	0	**83**	1	3	58	3	0	**64**	2	19	66	12	0	**97**	5	**279**
4:45PM	10	20	12	0	**42**	1	5	22	51	0	**78**	3	3	50	1	0	**54**	2	32	80	5	0	**117**	4	**291**
5:00PM	3	24	9	0	**36**	0	0	10	69	0	**79**	0	3	52	3	0	**58**	2	25	61	7	0	**93**	2	**266**
5:15PM	10	31	12	0	**53**	1	11	27	43	0	**81**	1	1	60	5	0	**66**	1	19	64	6	0	**89**	4	**289**
Total	30	95	41	0	**166**	7	23	94	204	0	**321**	5	10	220	12	0	**242**	7	95	271	30	0	**396**	15	**1125**
% Approach	18.1%	57.2%	24.7%	0%	**-**	-	7.2%	29.3%	63.6%	0%	**-**	-	4.1%	90.9%	5.0%	0%	**-**	-	24.0%	68.4%	7.6%	0%	**-**	-	-
% Total	2.7%	8.4%	3.6%	0%	**14.8%**	-	2.0%	8.4%	18.1%	0%	**28.5%**	-	0.9%	19.6%	1.1%	0%	**21.5%**	-	8.4%	24.1%	2.7%	0%	**35.2%**	-	-
PHF	0.750	0.766	0.854	-	**0.783**	-	0.523	0.671	0.739	-	**0.967**	-	0.833	0.917	0.600	-	**0.917**	-	0.742	0.847	0.625	-	**0.846**	-	0.966
Lights	29	94	41	0	**164**	-	23	94	195	0	**312**	-	10	218	12	0	**240**	-	94	268	30	0	**392**	-	1108
% Lights	96.7%	98.9%	100%	0%	**98.8%**	-	100%	100%	95.6%	0%	**97.2%**	-	100%	99.1%	100%	0%	**99.2%**	-	98.9%	98.9%	100%	0%	**99.0%**	-	98.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	1	1	0	0	**2**	-	0	0	9	0	**9**	-	0	2	0	0	**2**	-	1	3	0	0	**4**	-	17
% Buses and Single-Unit Trucks	3.3%	1.1%	0%	0%	**1.2%**	-	0%	0%	4.4%	0%	**2.8%**	-	0%	0.9%	0%	0%	**0.8%**	-	1.1%	1.1%	0%	0%	**1.0%**	-	1.5%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	5	-	-	-	-	-	7	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Volume Count Report

LOCATION INFO	
Location ID	022 3619
Type	LINK
Fnct'l Class	4
Located On	Main St
From Road	Geneva Rd
To Road	Pennsylvania Ave
Direction	2-WAY
County	Dupage
Community	GLEN ELLYN
MPO ID	
HPMS ID	
Agency	Illinois DOT

COUNT DATA INFO	
Count Status	Accepted
Start Date	Wed 6/3/2020
End Date	Thu 6/4/2020
Start Time	12:00:00 PM
End Time	12:00:00 PM
Direction	2-WAY
Notes	
Station	MAIN ST
Study	
Speed Limit	
Description	
Sensor Type	
Source	CombineVolumeCountsIncremental
Latitude,Longitude	

INTERVAL:60-MIN	
Time	**Hourly Count**
0:00-1:00	39
1:00-2:00	17
2:00-3:00	7
3:00-4:00	17
4:00-5:00	29
5:00-6:00	85
6:00-7:00	214
7:00-8:00	398
8:00-9:00	411
9:00-10:00	513
10:00-11:00	547
11:00-12:00	579
12:00-13:00	652
13:00-14:00	654
14:00-15:00	657
15:00-16:00	690
16:00-17:00	740
17:00-18:00	623
18:00-19:00	476
19:00-20:00	443
20:00-21:00	348
21:00-22:00	246
22:00-23:00	133
23:00-24:00	83
Total	8,601
AM Peak	11:00-12:00 579
PM Peak	16:00-17:00 740

DuPage County Division of Transportation

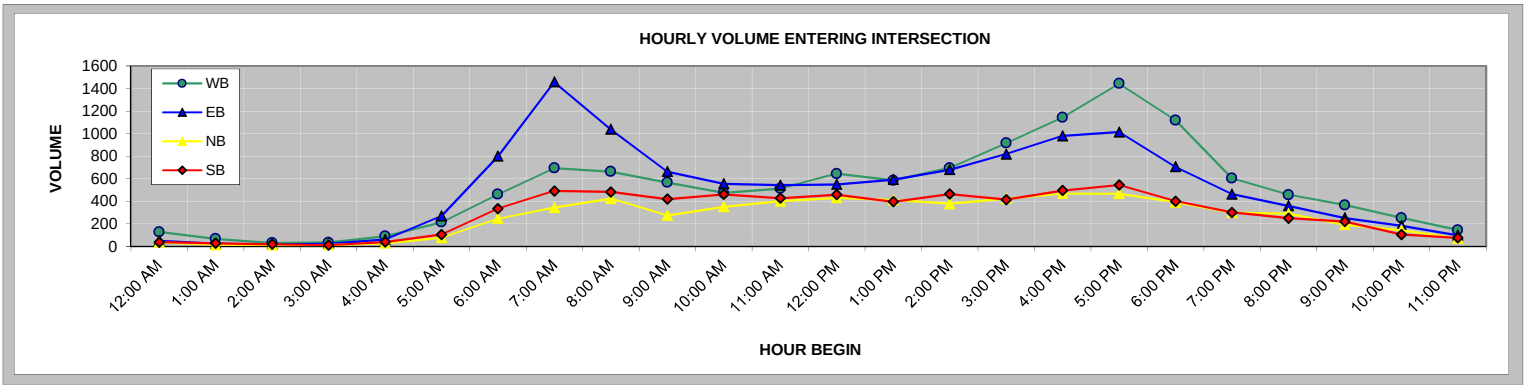
Compiled Intersection Count from Machine Source

Intersection counted: *MAIN (G.E.)* N/S @ *ST. CHARLES* E/W

Station: *5005*

		MAIN (G.E.)				ST. CHARLES				MAIN (G.E.)				ST. CHARLES				
		SOUTHBOUND				WESTBOUND				NORTHBOUND				EASTBOUND				VOLUME
Date	Hr Begin	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	ENTERING
07/16/15	12:00 AM	11	19	8	38	10	85	33	128	10	21	5	36	7	39	5	51	253
07/16/15	1:00 AM	10	14	3	27	5	55	8	68	3	8	4	15	7	11	5	23	133
07/16/15	2:00 AM	4	11	4	19	1	18	11	30	4	6	1	11	2	11	4	17	77
07/16/15	3:00 AM	5	4	2	11	0	28	7	35	4	8	1	13	4	17	4	25	84
07/16/15	4:00 AM	12	15	12	39	5	75	10	90	1	7	19	27	11	47	2	60	216
07/16/15	5:00 AM	35	56	14	105	12	170	33	215	17	36	24	77	42	217	11	270	667
07/16/15	6:00 AM	114	175	47	336	41	347	74	462	56	122	68	246	87	653	59	799	1843
07/16/15	7:00 AM	159	234	99	492	58	525	111	694	75	158	111	344	156	1222	79	1457	2987
07/16/15	8:00 AM	131	287	65	483	71	480	112	663	118	193	113	424	103	825	110	1038	2608
07/16/15	9:00 AM	129	208	82	419	75	404	88	567	64	136	74	274	80	499	84	663	1923
07/16/15	10:00 AM	113	248	100	461	55	330	89	474	96	188	67	351	76	399	80	555	1841
07/16/15	11:00 AM	125	219	84	428	72	347	94	513	132	205	64	401	75	410	58	543	1885
07/16/15	12:00 PM	125	239	95	459	77	434	133	644	135	222	74	431	87	377	85	549	2083
07/16/15	1:00 PM	147	189	61	397	52	428	105	585	132	214	66	412	81	431	80	592	1986
07/16/15	2:00 PM	127	246	91	464	81	522	93	696	100	211	67	378	103	512	65	680	2218
07/16/15	3:00 PM	169	201	45	415	82	689	144	915	111	239	74	424	85	665	68	818	2572
07/16/15	4:00 PM	183	229	84	496	103	883	158	1144	166	221	82	469	107	742	131	980	3089
07/16/15	5:00 PM	178	230	137	545	111	1159	173	1443	120	266	81	467	112	781	121	1014	3469
07/16/15	6:00 PM	134	198	69	401	111	849	159	1119	117	221	54	392	64	575	67	706	2618
07/16/15	7:00 PM	104	189	9	302	65	436	102	603	74	175	51	300	72	337	54	463	1668
07/16/15	8:00 PM	79	142	29	250	34	341	82	457	94	155	41	290	57	247	55	359	1356
07/16/15	9:00 PM	74	112	34	220	39	243	84	366	39	134	19	192	44	184	24	252	1030
07/16/15	10:00 PM	44	58	3	105	16	191	46	253	33	92	19	144	15	151	18	184	686
07/16/15	11:00 PM	34	38	4	76	15	110	20	145	8	57	6	71	6	82	11	99	391
24HR TOTALS		2246	3561	1181		1191	9149	1969		1709	3295	1185		1483	9434	1280		37683
			6988				12309				6189				12197			

ADT STATISTICS	MAIN (G.E.)	ST. CHARLES	MAIN (G.E.)	ST. CHARLES
	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
	13735	25174	12221	24236
	INTERSECTION ADT	37683		

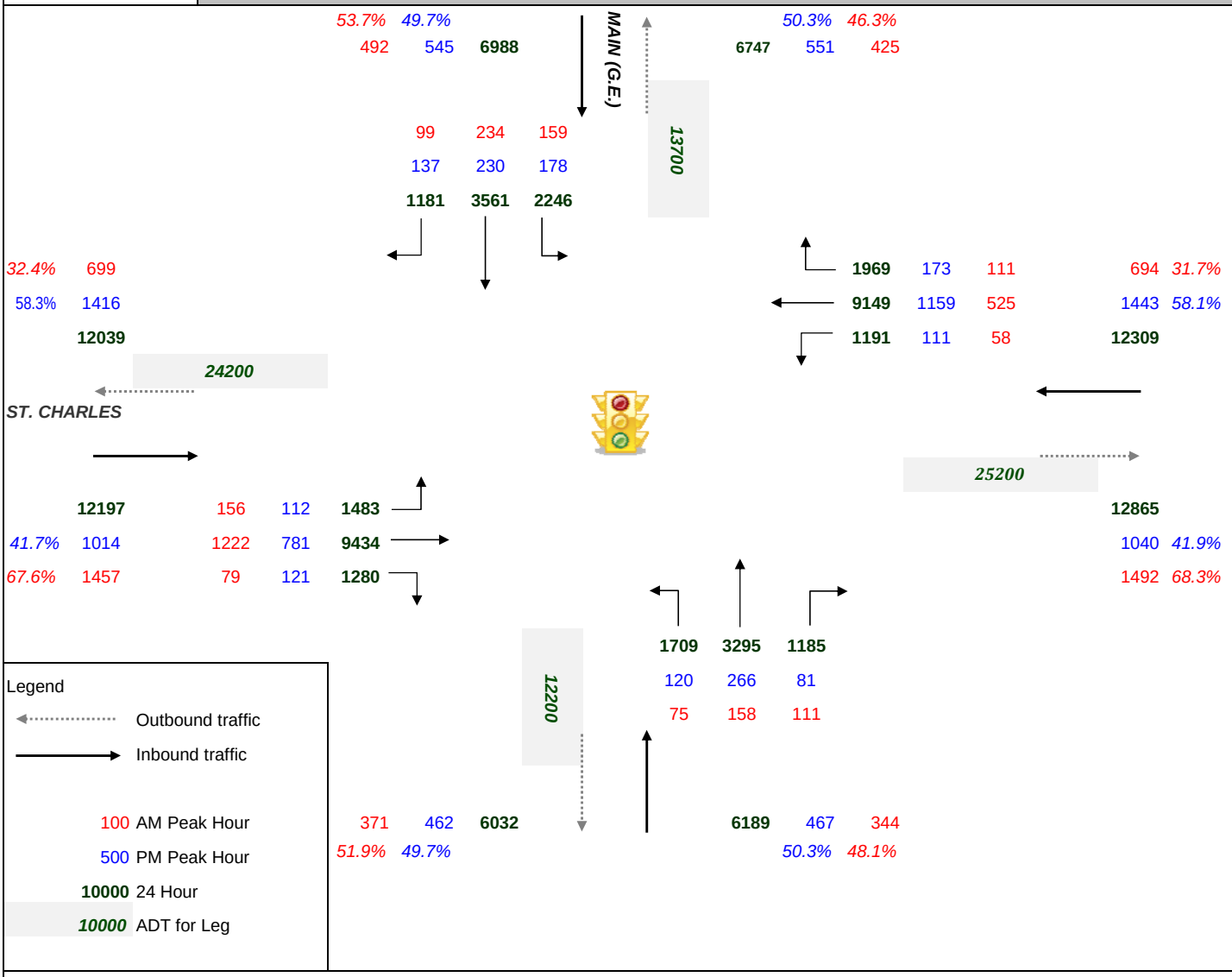


DuPage County Division of Transportation

Compiled Intersection Count from Machine Source

Intersection counted: *MAIN (G.E.)* @ *ST. CHARLES*

Station: *5005*



	MAIN (G.E.) SOUTHBOUND				ST. CHARLES WESTBOUND				MAIN (G.E.) NORTHBOUND				ST. CHARLES EASTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
07:00 AM - 08:00 AM	159	234	99	492	58	525	111	694	75	158	111	344	156	1222	79	1457	2987
% OF TOTAL ENTERING	32.3%	47.6%	20.1%	16.5%	8.4%	75.6%	16.0%	23.2%	21.8%	45.9%	32.3%	11.5%	10.7%	83.9%	5.4%	48.8%	
12:00 PM - 01:00 PM	125	239	95	459	77	434	133	644	135	222	74	431	87	377	85	549	2083
% OF TOTAL ENTERING	27.2%	52.1%	20.7%	22.0%	12.0%	67.4%	20.7%	30.9%	31.3%	51.5%	17.2%	20.7%	15.8%	68.7%	15.5%	26.4%	
05:00 PM - 06:00 PM	178	230	137	545	111	1159	173	1443	120	266	81	467	112	781	121	1014	3469
% OF TOTAL ENTERING	32.7%	42.2%	25.1%	15.7%	7.7%	80.3%	12.0%	41.6%	25.7%	57.0%	17.3%	13.5%	11.0%	77.0%	11.9%	29.2%	

Appendix B

CMAP Traffic Volume Projections

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

September 3, 2021

Lynn M. Means, P.E., PTOE
Senior Transportation Engineer
BLA-Inc.
333 Pierce Road
Suite 200
Itasca, IL 60143

Subject: ***Main Street from Geneva Road to Pennsylvania Avenue***
IDOT

Dear Ms. Means:

In response to a request made on your behalf and dated September 2, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Main St fr Geneva Rd to Pennsylvania Ave	7,000	7,600

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2021_CY_TrafficForecast\GlenEllyn\du-41-21\du-41-21.docx

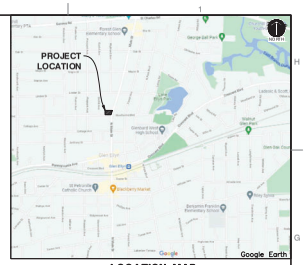
Appendix C

Site Plan

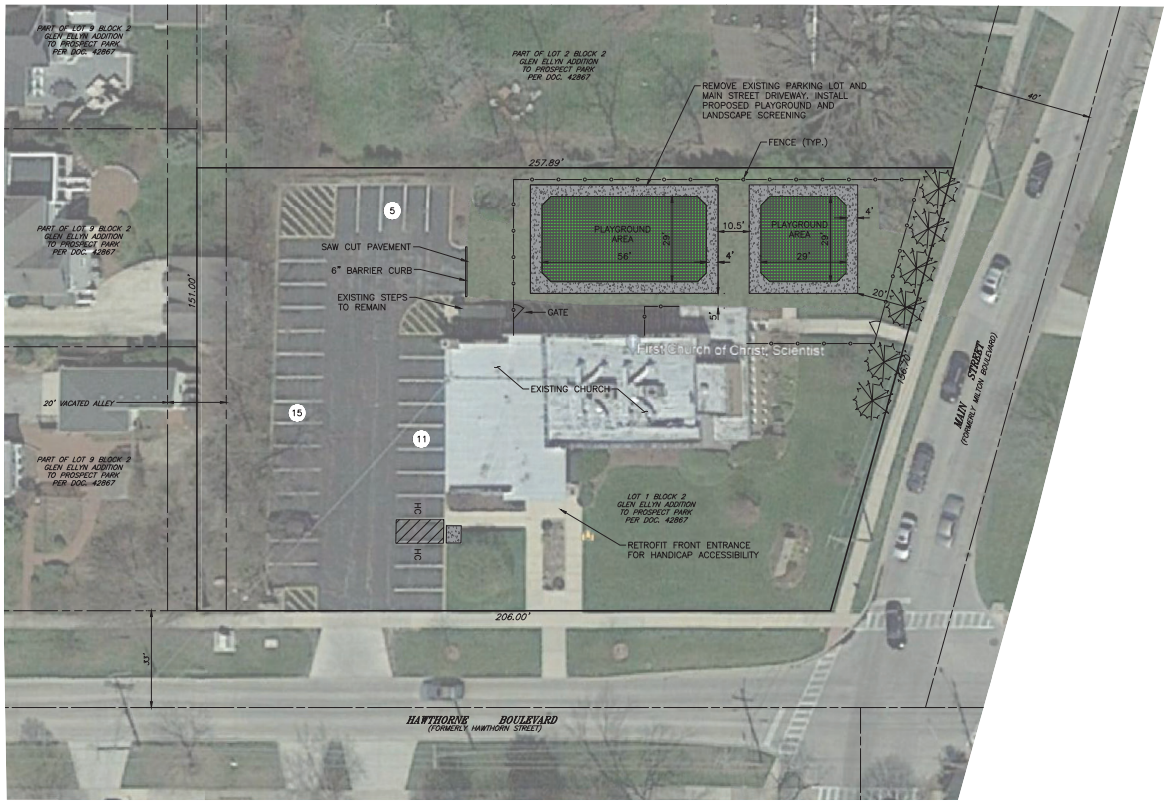
CONCEPT PLAN
600 NORTH MAIN STREET
GLEN ELLYN, ILLINOIS 60137

NORTH

BASIS OF BEARINGS:
NSRS 2011 ILLINOIS STATE PLANE – EAST ZONE



LOCATION MAP
N.T.S.



SITE DATA:	
ADDRESS:	600 NORTH MAIN STREET, GLEN ELLYN, ILLINOIS 60137
OWNER:	FIRST CHURCH OF CHRIST
P.I.N.:	05-11-123-019
AREA:	34,412 SQ.FT. (0.79 AC.)
EXISTING ZONING:	R2-SINGLE FAMILY RESIDENTIAL
PROPOSED PARKING:	31 SPACES, INCLUDING 2 ACCESSIBLE SPACES

SCALE IN FEET
0 20 40

REVISION RECORD

NO	DATE	DESCRIPTION
1		
2		
3		
4		

Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
Ph: 630.963.6026 · 877.963.6026 · Fax: 630.963.6027
www.ceinc.com

PREPARED FOR:
GLOBAL POWER AND CONSTRUCTION, INC.
7S882 CAMP DEAN ROAD
BIG ROCK, IL 60511

DRAWN BY:	MAJ	CHECKED BY:	JGC	APPROVED BY:	*JGC
DATE:	SEPTEMBER 17, 2021	DWG SCALE:	1"=20'	PROJECT NO:	315-885

CONCEPT PLAN
600 NORTH MAIN STREET
GLEN ELLYN, ILLINOIS 60137

DRAWING NO.: 1
SHEET 1 OF 1

Appendix D

ITE Trip Generation Excerpts

Day Care Center
(565)

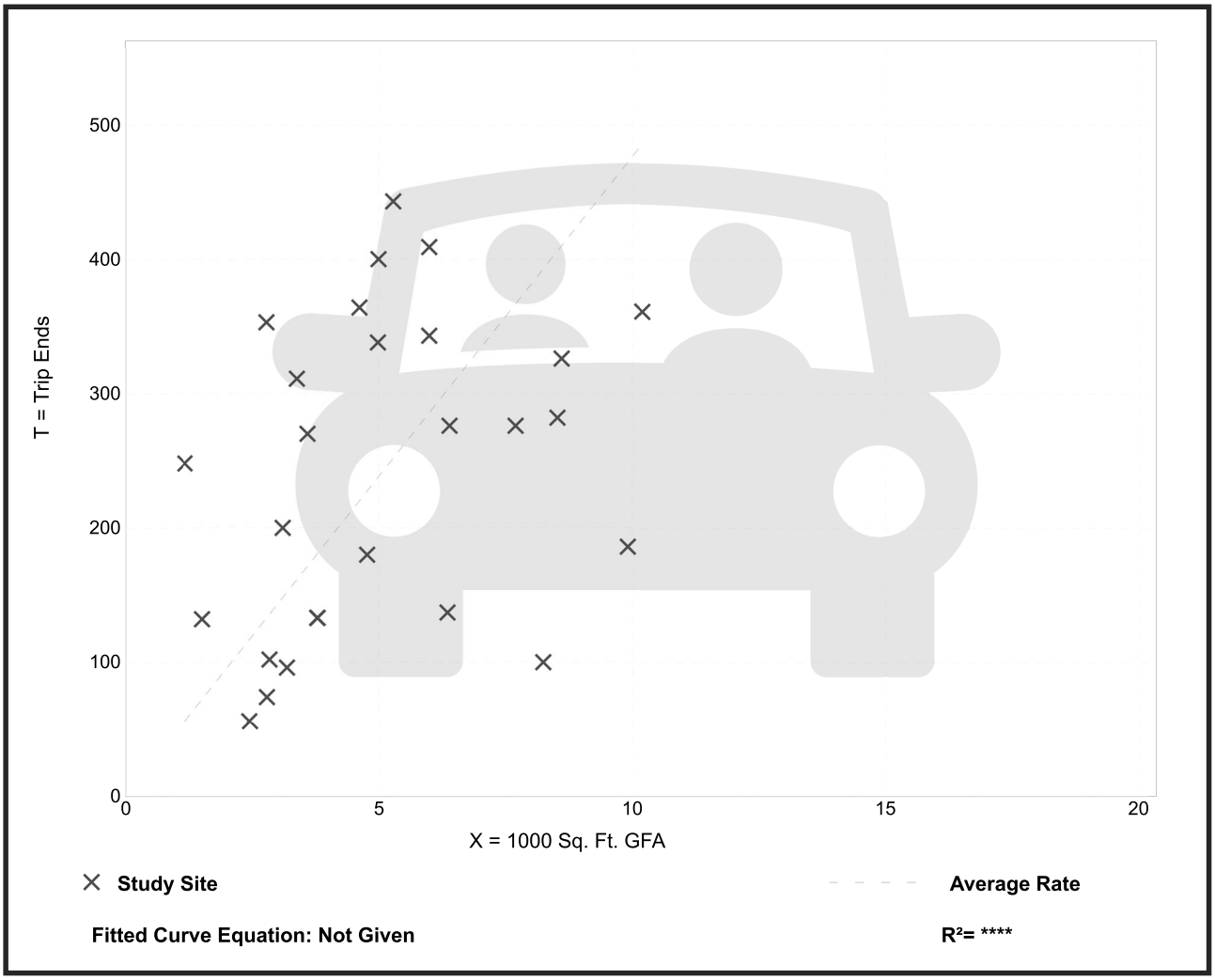
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
47.62	12.12 - 211.06	29.78

Data Plot and Equation



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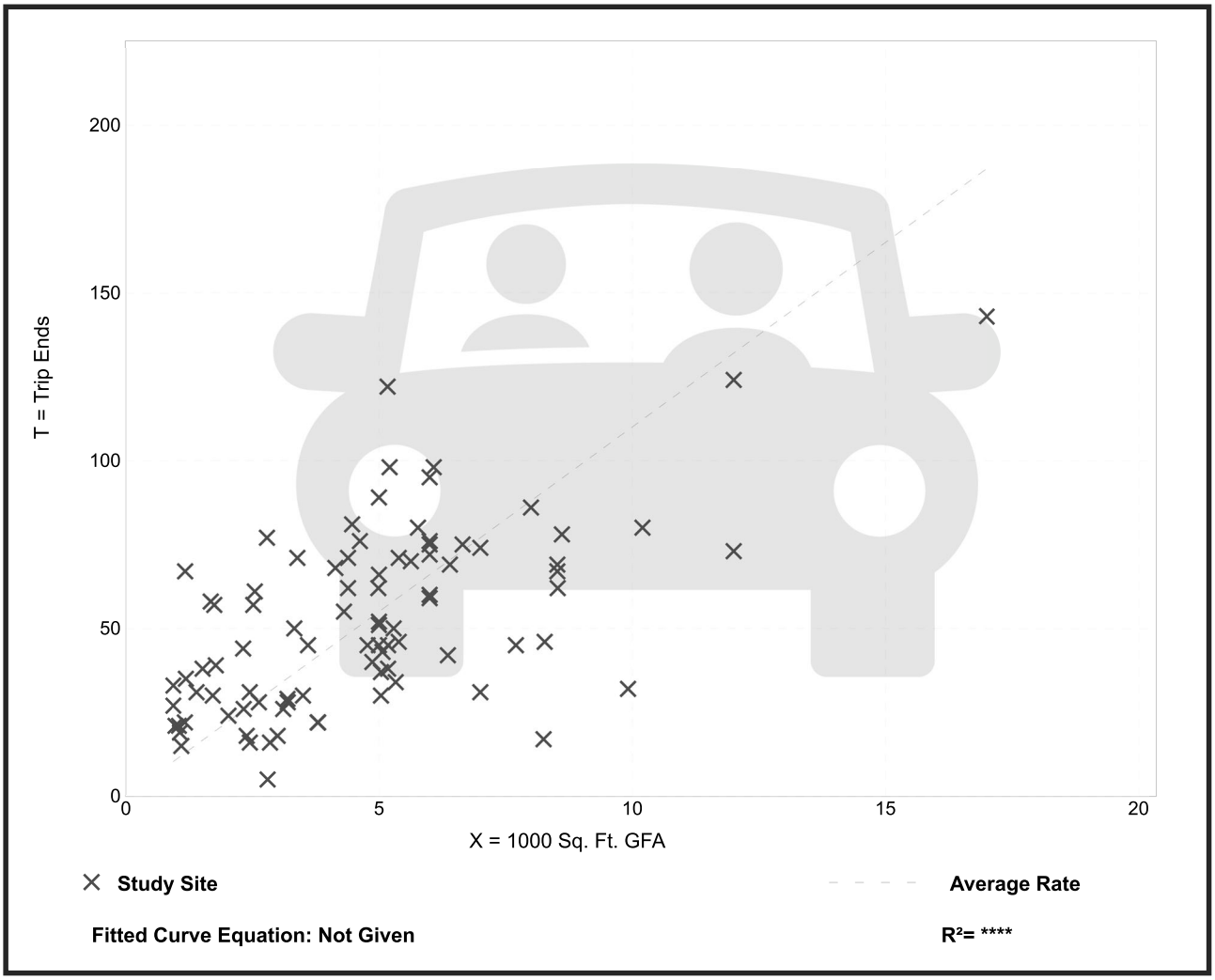
Day Care Center
(565)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 89
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.00	1.79 - 57.02	6.08

Data Plot and Equation



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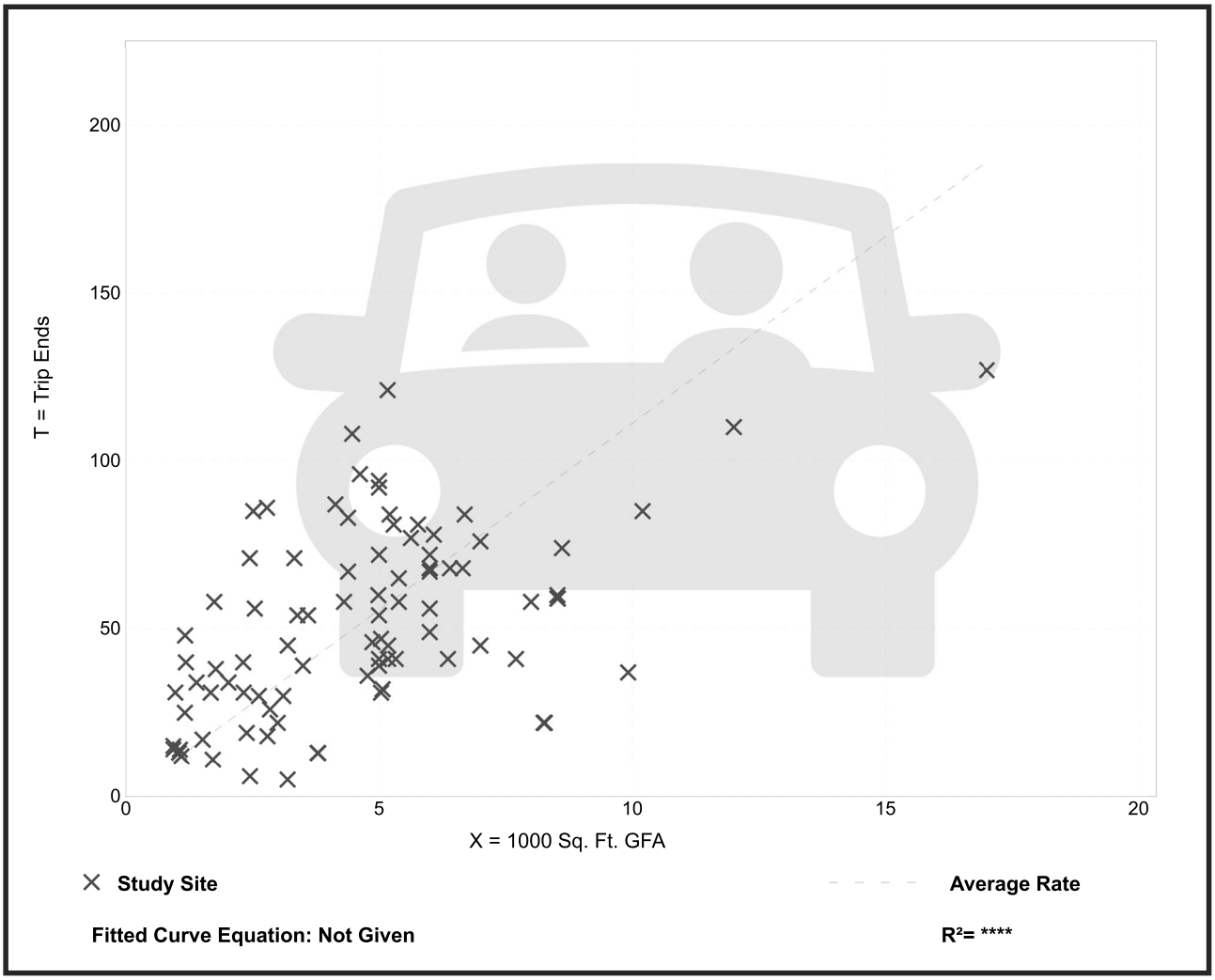
Day Care Center
(565)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 90
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.12	1.56 - 40.85	6.28

Data Plot and Equation



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Day Care Center
(565)

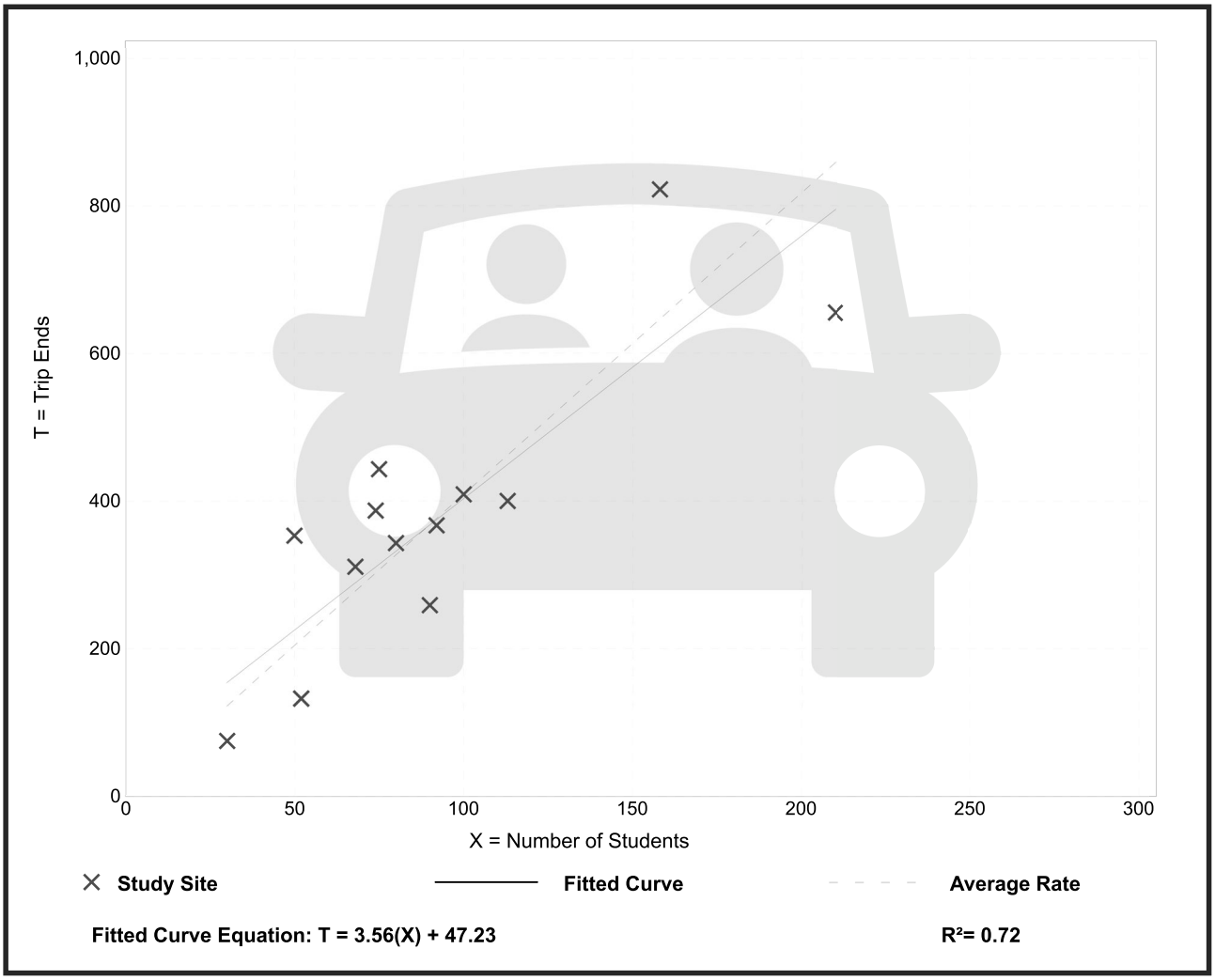
Vehicle Trip Ends vs: **Students**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Students: 89
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



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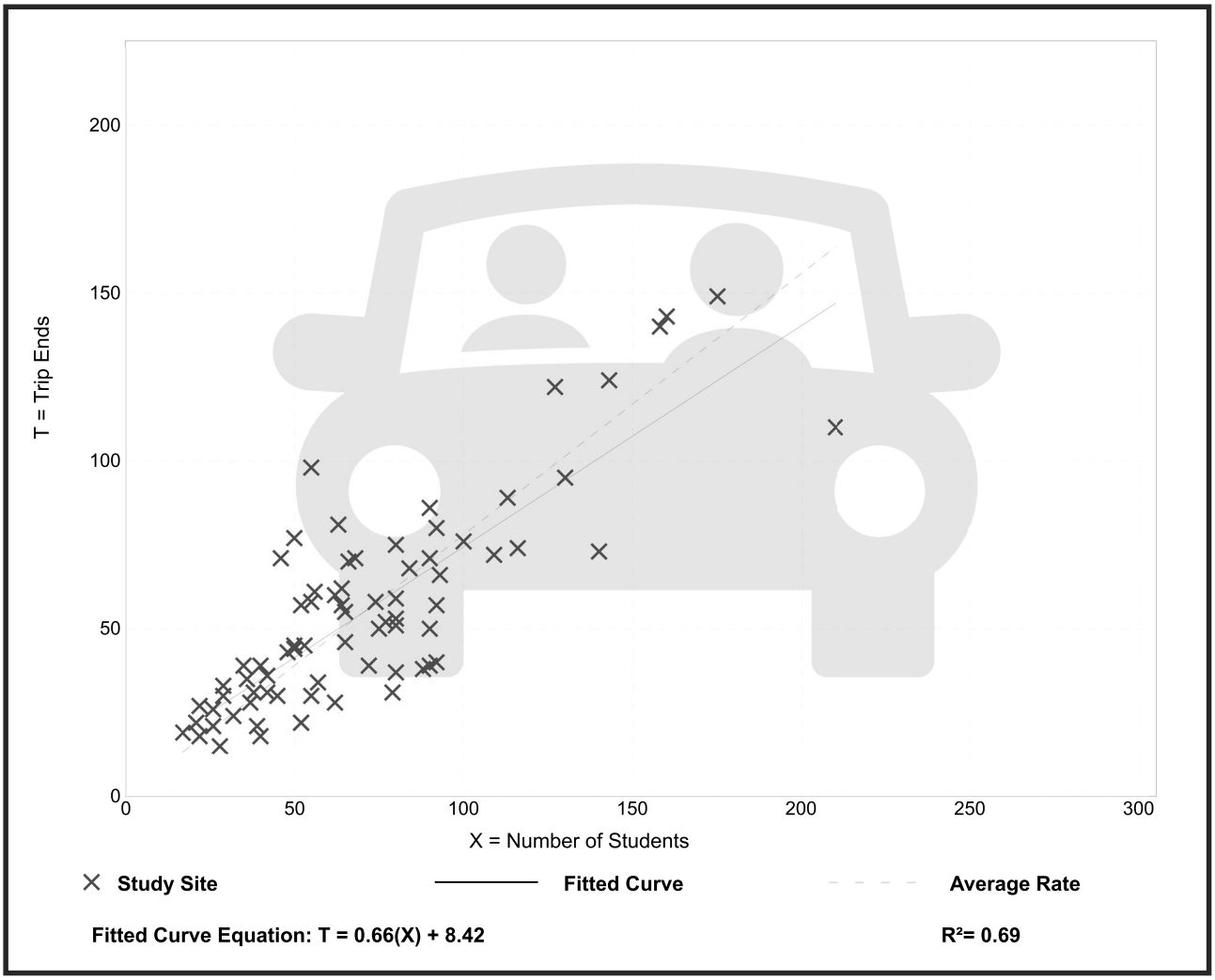
Day Care Center
(565)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 75
Avg. Num. of Students: 71
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



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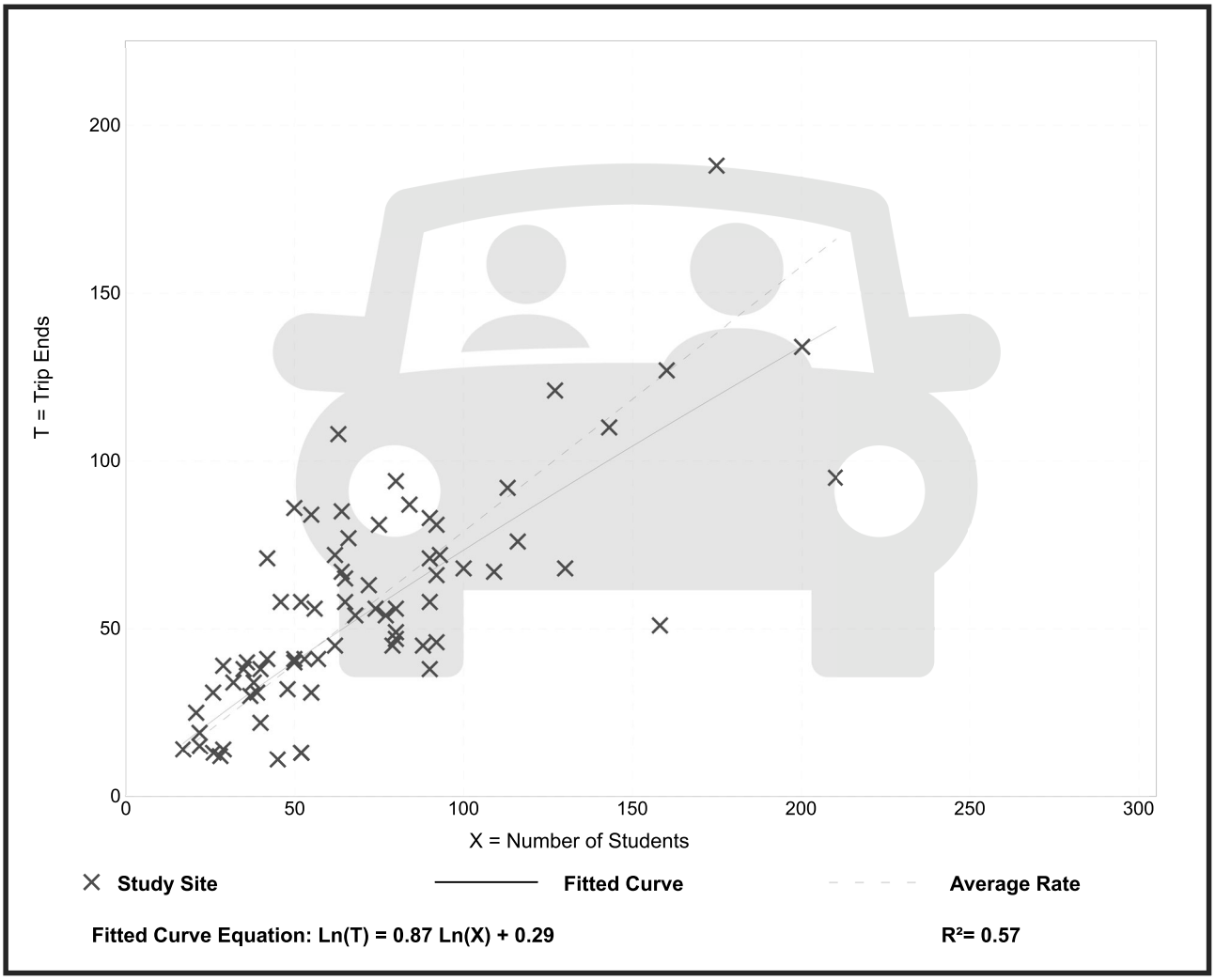
Day Care Center
(565)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 75
Avg. Num. of Students: 72
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



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Day Care Center
(565)

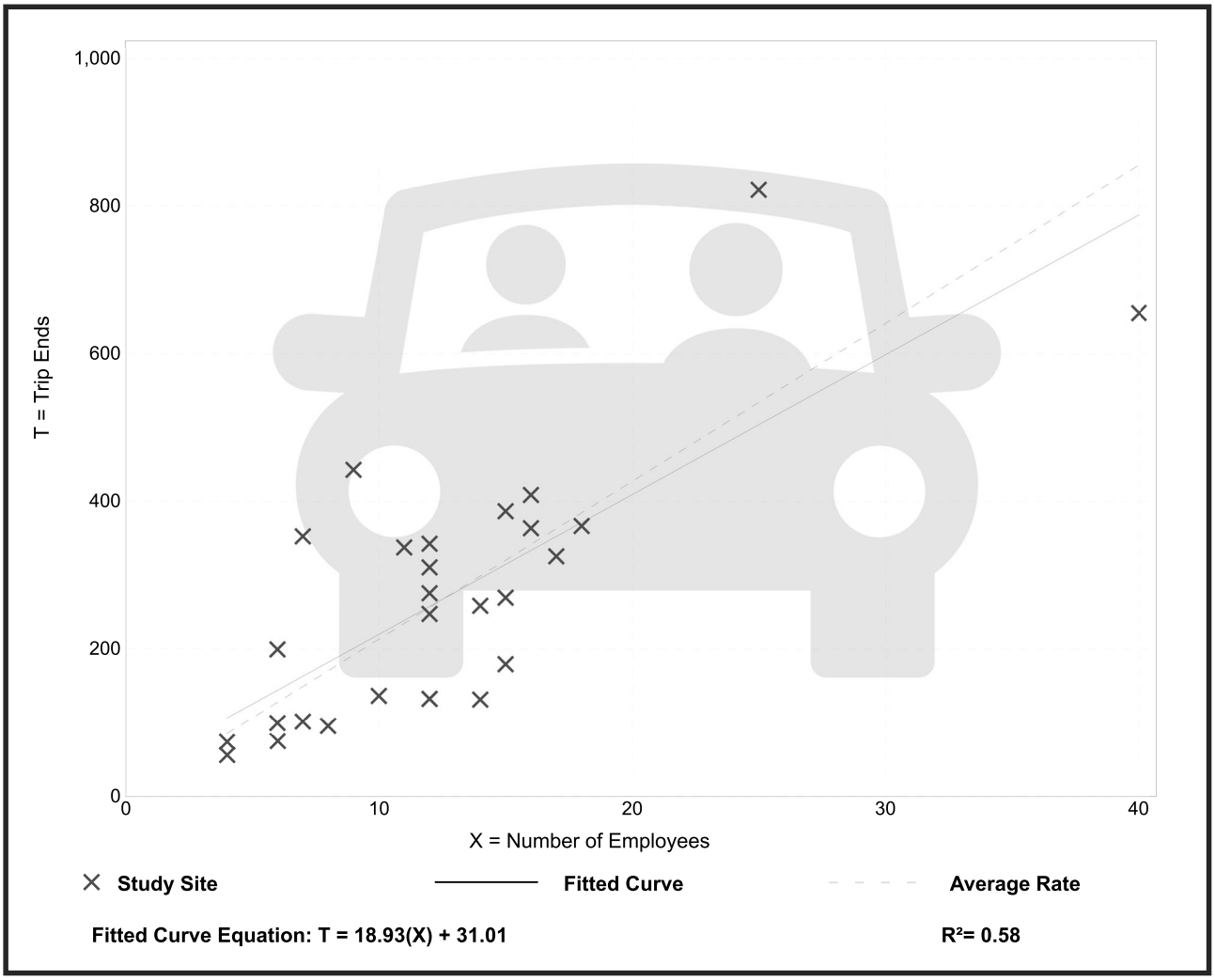
Vehicle Trip Ends vs: **Employees**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. Num. of Employees: 13
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
21.38	9.43 - 50.43	9.24

Data Plot and Equation



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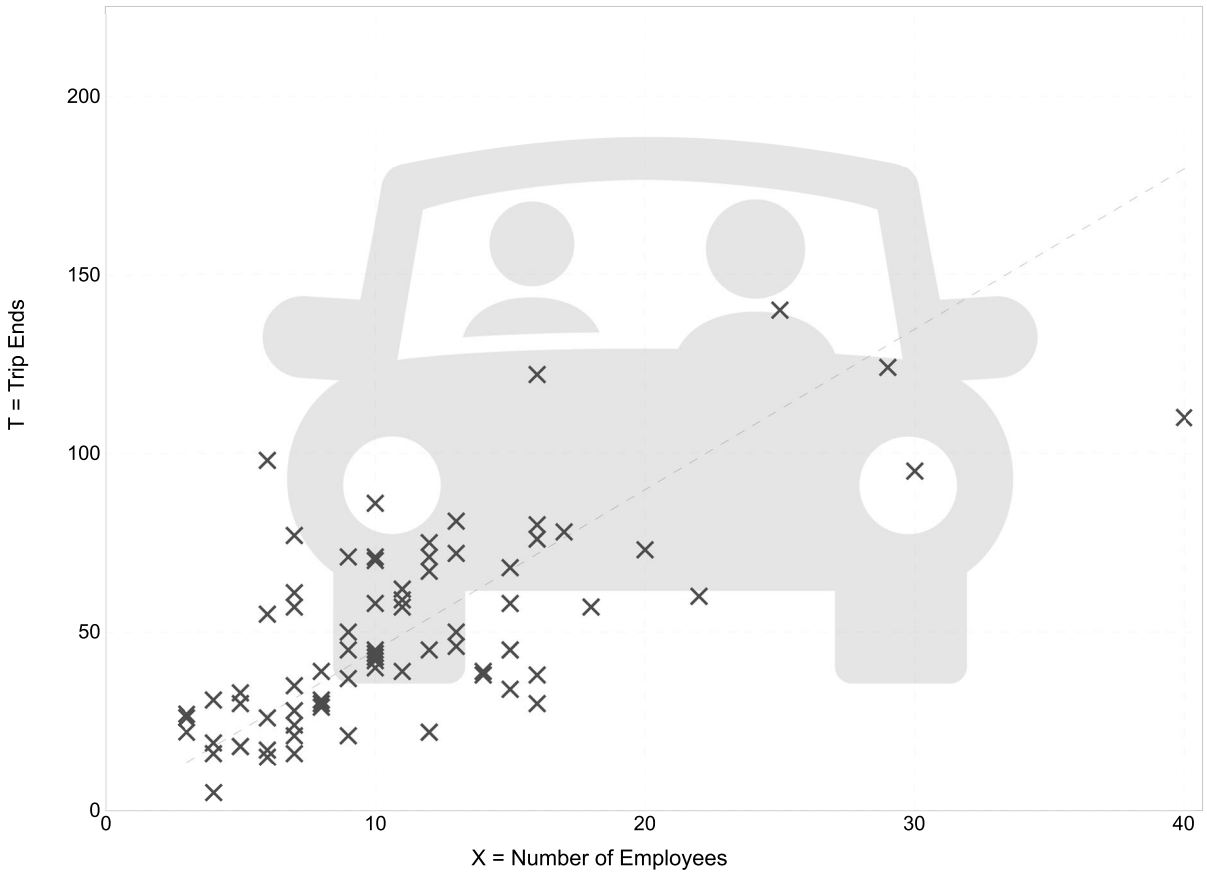
Day Care Center
(565)

Vehicle Trip Ends vs:	**Employees**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	79
Avg. Num. of Employees:	11
Directional Distribution:	53% entering, 47% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.49	1.25 - 16.33	2.04

Data Plot and Equation



Trip Gen Manual, 10th Ed + Supplement ● Institute of Transportation Engineers

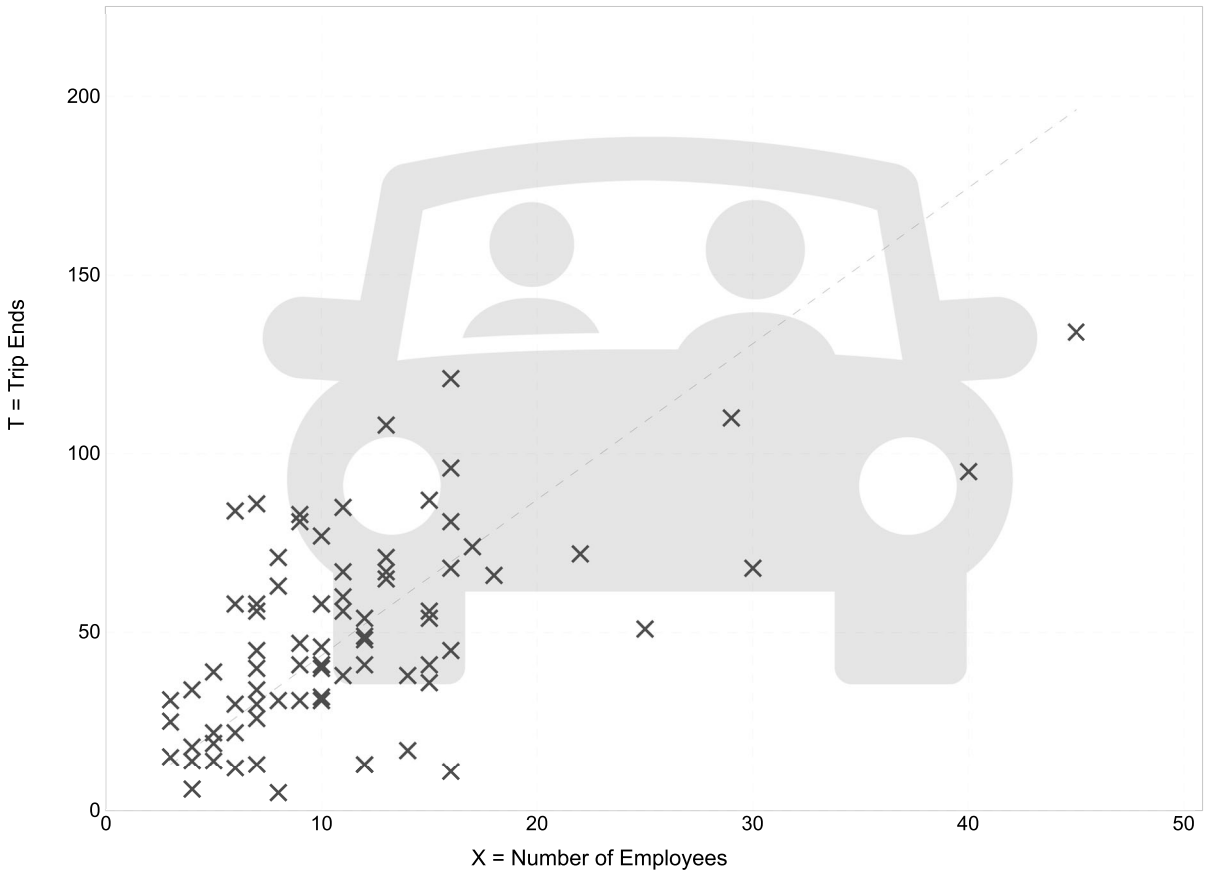
Day Care Center
(565)

Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 79
Avg. Num. of Employees: 12
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.36	0.63 - 14.00	2.32

Data Plot and Equation



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Appendix E

US Census Data

MEANS OF TRANSPORTATION TO WORK

United States Census Bureau

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Census Tract 8420, DuPage County, Illinois		
Label	**Estimate**	**Margin of Error**
Total:	1,922	±192
Car, truck, or van:	1,324	±198
Drove alone	1,297	±193
Carpooled:	27	±24
In 2-person carpool	17	±20
In 3-person carpool	0	±11
In 4-person carpool	10	±16
In 5- or 6-person carpool	0	±11
In 7-or-more-person carpool	0	±11
Public transportation (excluding taxicab):	274	±89
Bus	0	±11
Subway or elevated rail	0	±11
Long-distance train or commuter rail	274	±89
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±11
Ferryboat	0	±11
Taxicab	0	±11
Motorcycle	0	±11
Bicycle	0	±11
Walked	39	±33
Other means	15	±19
Worked from home	270	±79

Table Notes

MEANS OF TRANSPORTATION TO WORK

Survey/Program: American Community Survey
Universe: Workers 16 years and over
Year: 2019
Estimates: 5-Year
Table ID: B08301

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

2019 ACS data products include updates to several categories of the existing means of transportation question. For more information, see: Change to Means of Transportation.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

The 2015-2019 American Community Survey (ACS) data generally reflect the September 2018 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

An "**" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.
An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.
An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.
An "***" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
An "*****" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
An "(X)" means that the estimate is not applicable or not available.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

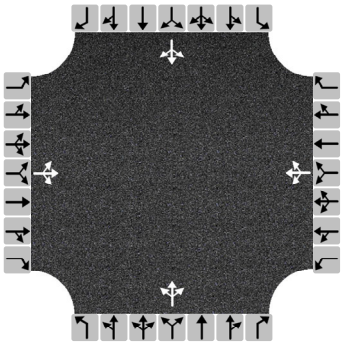
Appendix F

Capacity Analysis Worksheets

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	LMM	Intersection	Main St/Hawthorne Blvd
Agency/Co.	BLA	Jurisdiction	Local
Date Performed	9/15/2021	East/West Street	Hawthorne Boulevard
Analysis Year	2021	North/South Street	Main Street
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.82
Time Analyzed	AM Peak		
Project Description	028-000		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	23	171	33	19	86	157	9	191	21	123	243	21
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	277			320			270			472		
Percent Heavy Vehicles	1			1			4			8		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.246			0.284			0.240			0.420		
Final Departure Headway, hd (s)	7.68			7.28			7.66			7.18		
Final Degree of Utilization, x	0.591			0.647			0.573			0.941		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	5.68			5.28			5.66			5.18		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	277			320			270			472		
Capacity	469			494			470			502		
95% Queue Length, Q_{95} (veh)	3.7			4.5			3.5			11.6		
Control Delay (s/veh)	21.2			22.6			20.4			53.5		
Level of Service, LOS	C			C			C			F		
Approach Delay (s/veh)	21.2			22.6			20.4			53.5		
Approach LOS	C			C			C			F		
Intersection Delay, s/veh | LOS	32.8						D					

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HCS7 All-Way Stop Control Report

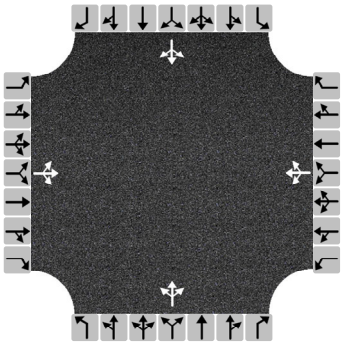
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2021
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	028-000

Site Information

Intersection	Main St/Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Boulevard
North/South Street	Main Street
Peak Hour Factor	0.95

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	38	122	52	29	120	261	13	282	15	122	347	38
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	223			432			326			534		
Percent Heavy Vehicles	1			3			1			1		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.198			0.384			0.290			0.474		
Final Departure Headway, hd (s)	8.57			7.52			8.13			7.79		
Final Degree of Utilization, x	0.531			0.901			0.737			1.155		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.57			5.52			6.13			5.79		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	223			432			326			534		
Capacity	420			479			443			462		
95% Queue Length, Q_{95} (veh)	3.0			10.1			6.0			19.3		
Control Delay (s/veh)	20.9			47.8			30.7			118.3		
Level of Service, LOS	C			E			D			F		
Approach Delay (s/veh)	20.9			47.8			30.7			118.3		
Approach LOS	C			E			D			F		
Intersection Delay, s/veh | LOS	65.0						F					

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HCS7 All-Way Stop Control Report

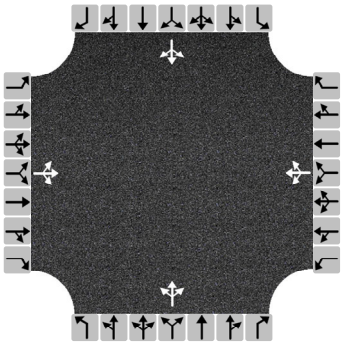
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak - NoBuild
Project Description	028-000

Site Information

Intersection	Main St/Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Boulevard
North/South Street	Main Street
Peak Hour Factor	0.82

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	24	176	34	20	89	162	9	197	22	127	250	22
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	285			330			278			487		
Percent Heavy Vehicles	1			1			4			8		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.254			0.294			0.247			0.433		
Final Departure Headway, hd (s)	7.91			7.50			7.92			7.51		
Final Degree of Utilization, x	0.627			0.689			0.612			1.014		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	5.91			5.50			5.92			5.51		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	285			330			278			487		
Capacity	455			480			455			480		
95% Queue Length, Q_{95} (veh)	4.2			5.2			4.0			13.9		
Control Delay (s/veh)	23.3			25.5			22.6			72.4		
Level of Service, LOS	C			D			C			F		
Approach Delay (s/veh)	23.3			25.5			22.6			72.4		
Approach LOS	C			D			C			F		
Intersection Delay, s/veh | LOS	41.0						E					

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HCS7 All-Way Stop Control Report

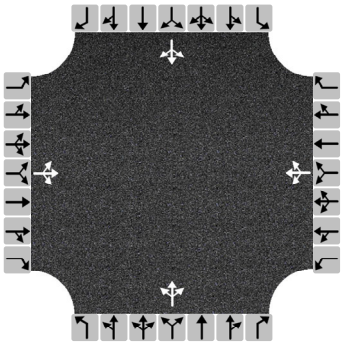
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak - NoBuild
Project Description	028-000

Site Information

Intersection	Main St/Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Boulevard
North/South Street	Main Street
Peak Hour Factor	0.95

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	39	126	54	30	124	269	13	291	15	126	358	39
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	231			445			336			551		
Percent Heavy Vehicles	1			3			1			1		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.205			0.396			0.298			0.489		
Final Departure Headway, hd (s)	8.78			7.67			8.33			8.06		
Final Degree of Utilization, x	0.563			0.949			0.777			1.232		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.78			5.67			6.33			6.06		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	231			445			336			551		
Capacity	410			469			432			447		
95% Queue Length, Q_{95} (veh)	3.4			11.5			6.7			22.2		
Control Delay (s/veh)	22.5			57.5			34.9			148.1		
Level of Service, LOS	C			F			D			F		
Approach Delay (s/veh)	22.5			57.5			34.9			148.1		
Approach LOS	C			F			D			F		
Intersection Delay, s/veh | LOS	79.4						F					

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HCS7 All-Way Stop Control Report

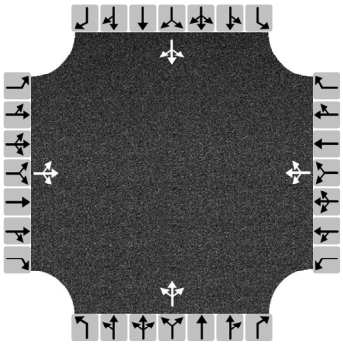
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak - Total
Project Description	028-000

Site Information

Intersection	Main St/Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Boulevard
North/South Street	Main Street
Peak Hour Factor	0.82

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	37	185	45	20	99	162	21	197	22	127	250	37
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	326			343			293			505		
Percent Heavy Vehicles	1			1			4			8		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.289			0.305			0.260			0.449		
Final Departure Headway, hd (s)	8.11			7.83			8.28			7.88		
Final Degree of Utilization, x	0.733			0.745			0.673			1.106		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.11			5.83			6.28			5.88		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	326			343			293			505		
Capacity	444			460			435			457		
95% Queue Length, Q_{95} (veh)	5.9			6.2			4.8			17.1		
Control Delay (s/veh)	30.3			30.4			26.7			101.7		
Level of Service, LOS	D			D			D			F		
Approach Delay (s/veh)	30.3			30.4			26.7			101.7		
Approach LOS	D			D			D			F		
Intersection Delay, s/veh | LOS	54.2						F					

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HCS7 All-Way Stop Control Report

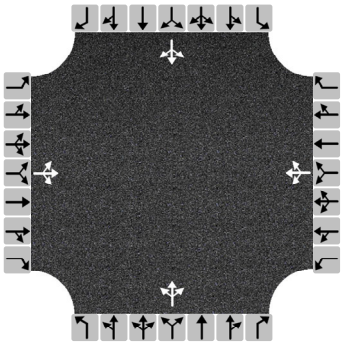
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak - Total
Project Description	028-000

Site Information

Intersection	Main St/Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Boulevard
North/South Street	Main Street
Peak Hour Factor	0.95

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	54	136	67	30	133	269	24	291	15	126	358	52
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	271			455			347			564		
Percent Heavy Vehicles	1			3			1			1		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.240			0.404			0.309			0.502		
Final Departure Headway, hd (s)	9.06			8.10			8.74			8.41		
Final Degree of Utilization, x	0.681			1.023			0.843			1.318		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	7.06			6.10			6.74			6.41		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	271			455			347			564		
Capacity	397			445			412			428		
95% Queue Length, Q_{95} (veh)	4.9			13.7			8.1			25.4		
Control Delay (s/veh)	29.3			77.5			44.0			183.7		
Level of Service, LOS	D			F			E			F		
Approach Delay (s/veh)	29.3			77.5			44.0			183.7		
Approach LOS	D			F			E			F		
Intersection Delay, s/veh | LOS	99.0						F					

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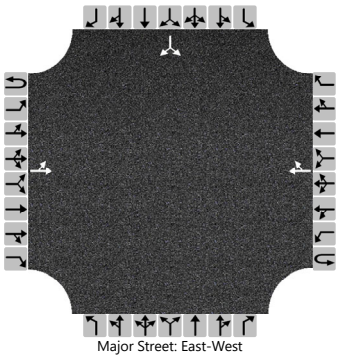
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	LMM	Intersection	Hawthorne Blvd
Agency/Co.	BLA	Jurisdiction	Local
Date Performed	9/15/2021	East/West Street	Hawthorne Blvd
Analysis Year	2027	North/South Street	Site Access
Time Analyzed	AM Peak - Total	Peak Hour Factor	0.82
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	028-000		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		13	234				120	37						33		11
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16													54	
Capacity, c (veh/h)		1394													595	
v/c Ratio		0.01													0.09	
95% Queue Length, Q_{95} (veh)		0.0													0.3	
Control Delay (s/veh)		7.6													11.7	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.5												11.7		
Approach LOS														B		

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HCS7 Two-Way Stop-Control Report

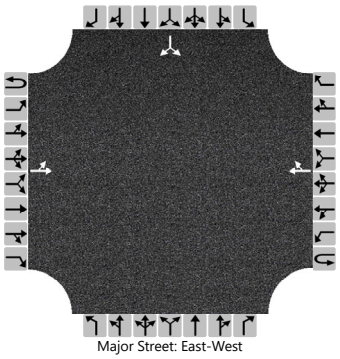
General Information

Analyst	LMM
Agency/Co.	BLA
Date Performed	9/15/2021
Analysis Year	2027
Time Analyzed	PM Peak - Total
Intersection Orientation	East-West
Project Description	028-000

Site Information

Intersection	Hawthorne Blvd
Jurisdiction	Local
East/West Street	Hawthorne Blvd
North/South Street	Site Access
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		11	219				176	33						38		13
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12													54	
Capacity, c (veh/h)		1361													613	
v/c Ratio		0.01													0.09	
95% Queue Length, Q_{95} (veh)		0.0													0.3	
Control Delay (s/veh)		7.7													11.4	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.4												11.4		
Approach LOS														B		

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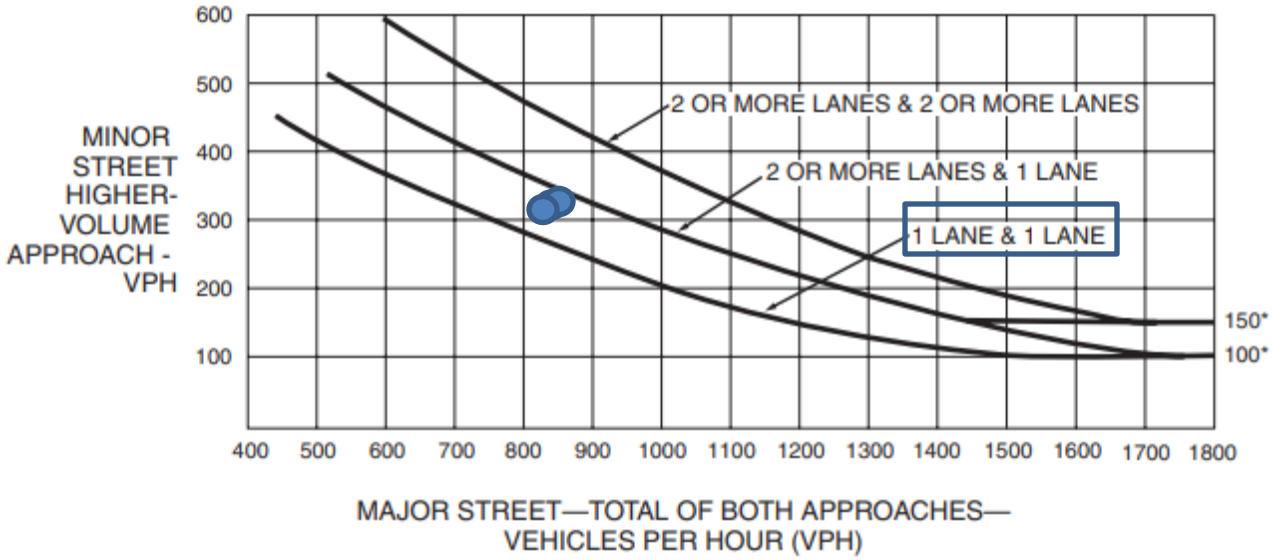
Appendix G

MUTCD Signal Warrant Analysis

Main Street and Hawthorne Boulevard

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Alternative / Timeframe	Major Street (Combined)	Minor Street (Westbound Approach)[1]	Satisfied?
2021 Existing Traffic			
PM Peak	817	306	Yes
2027 No-Build Traffic			
PM Peak	842	315	Yes
2027 Total Traffic			
PM Peak	866	324	Yes

[1] Includes RTOR reduction factor (Pagones' Theorem).

Appendix H

ITE Parking Generation Data

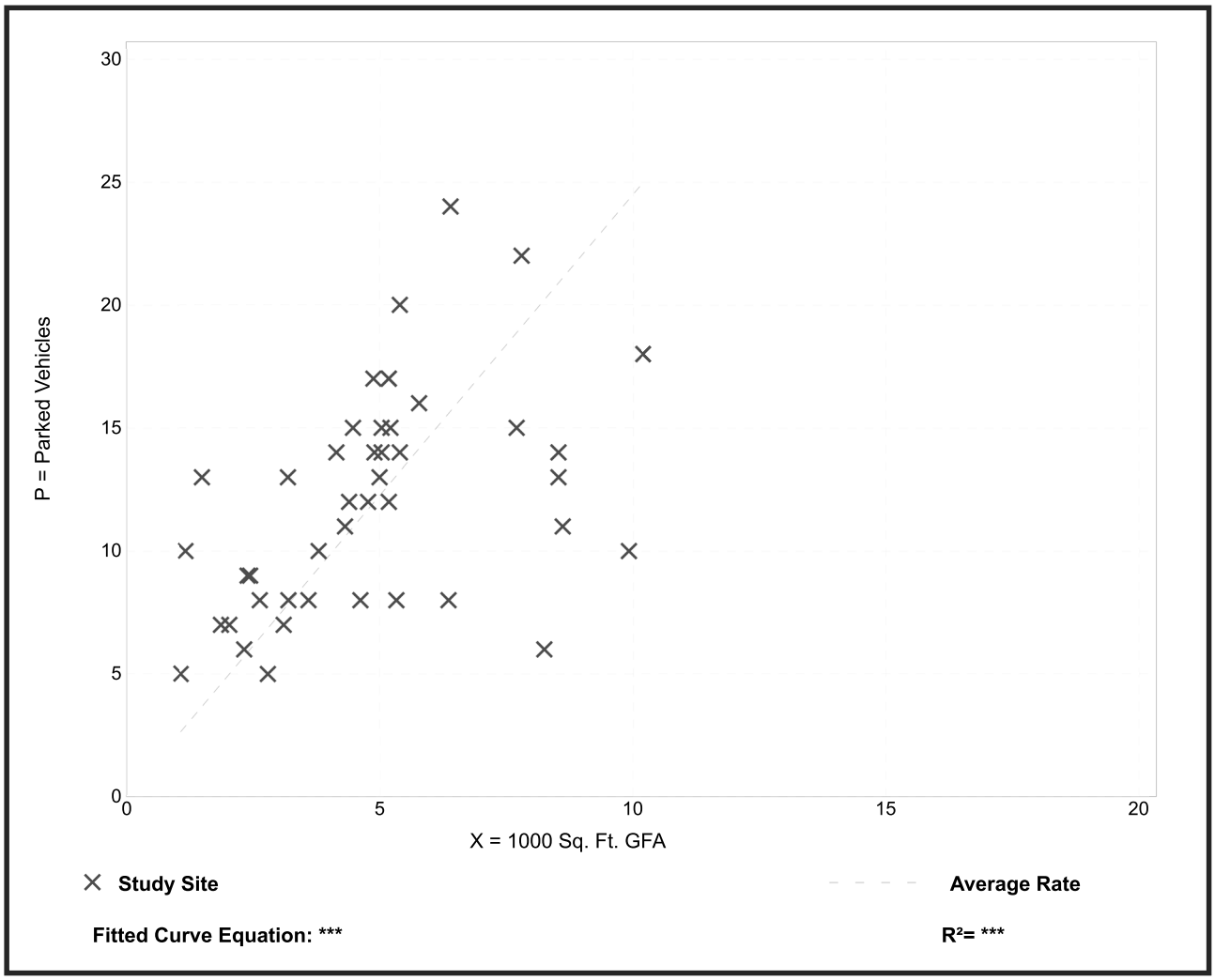
Day Care Center
(565)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **8:00 a.m. - 6:00 p.m.**
Number of Studies: 45
Avg. 1000 Sq. Ft. GFA: 4.9

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.45	0.73 - 8.67	2.35 / 3.74	2.12 - 2.78	1.12 (46%)

Data Plot and Equation



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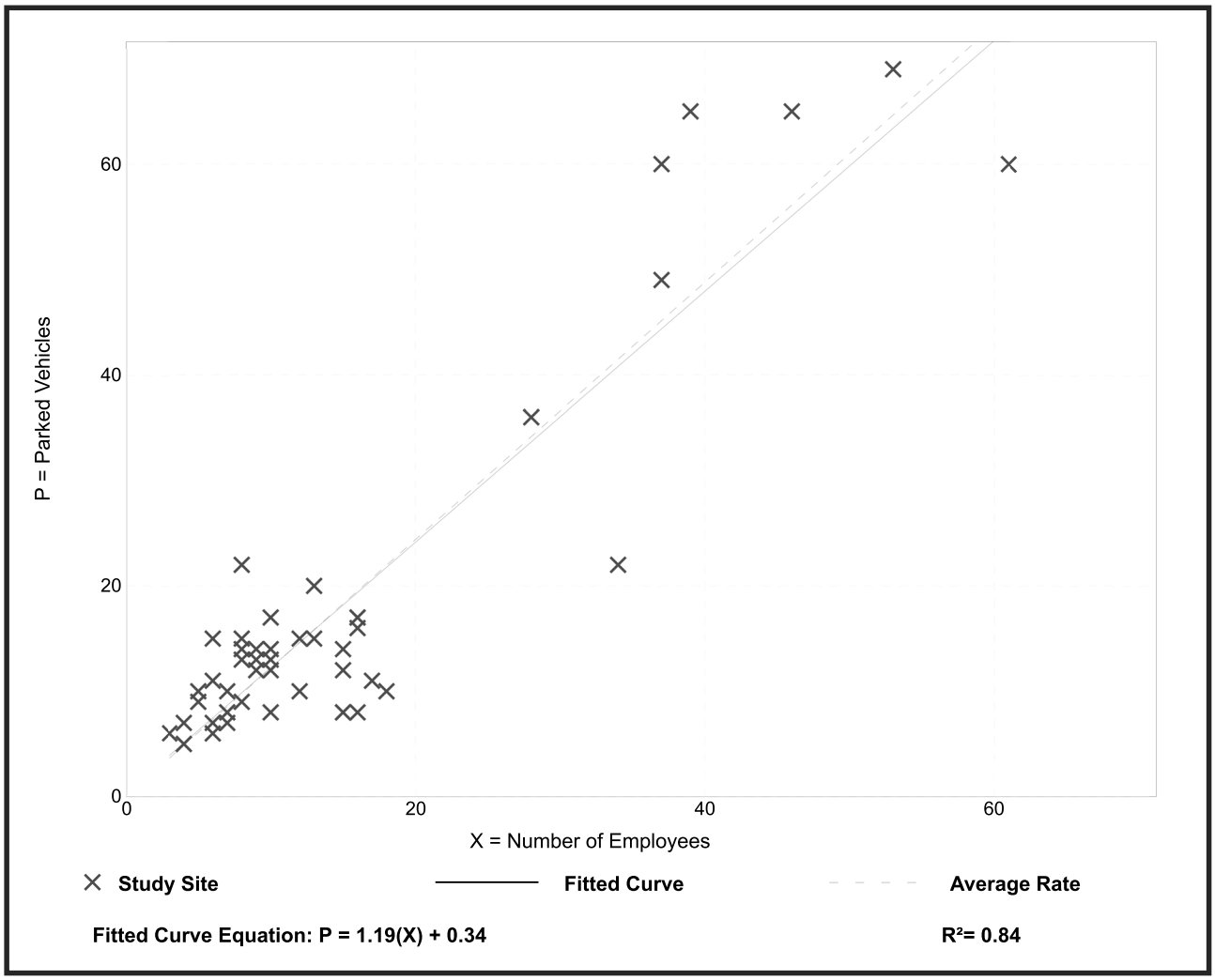
Day Care Center
(565)

Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **8:00 a.m. - 6:00 p.m.**
Number of Studies: 49
Avg. Num. of Employees: 15

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.22	0.50 - 2.75	1.09 / 1.78	1.10 - 1.34	0.42 (34%)

Data Plot and Equation



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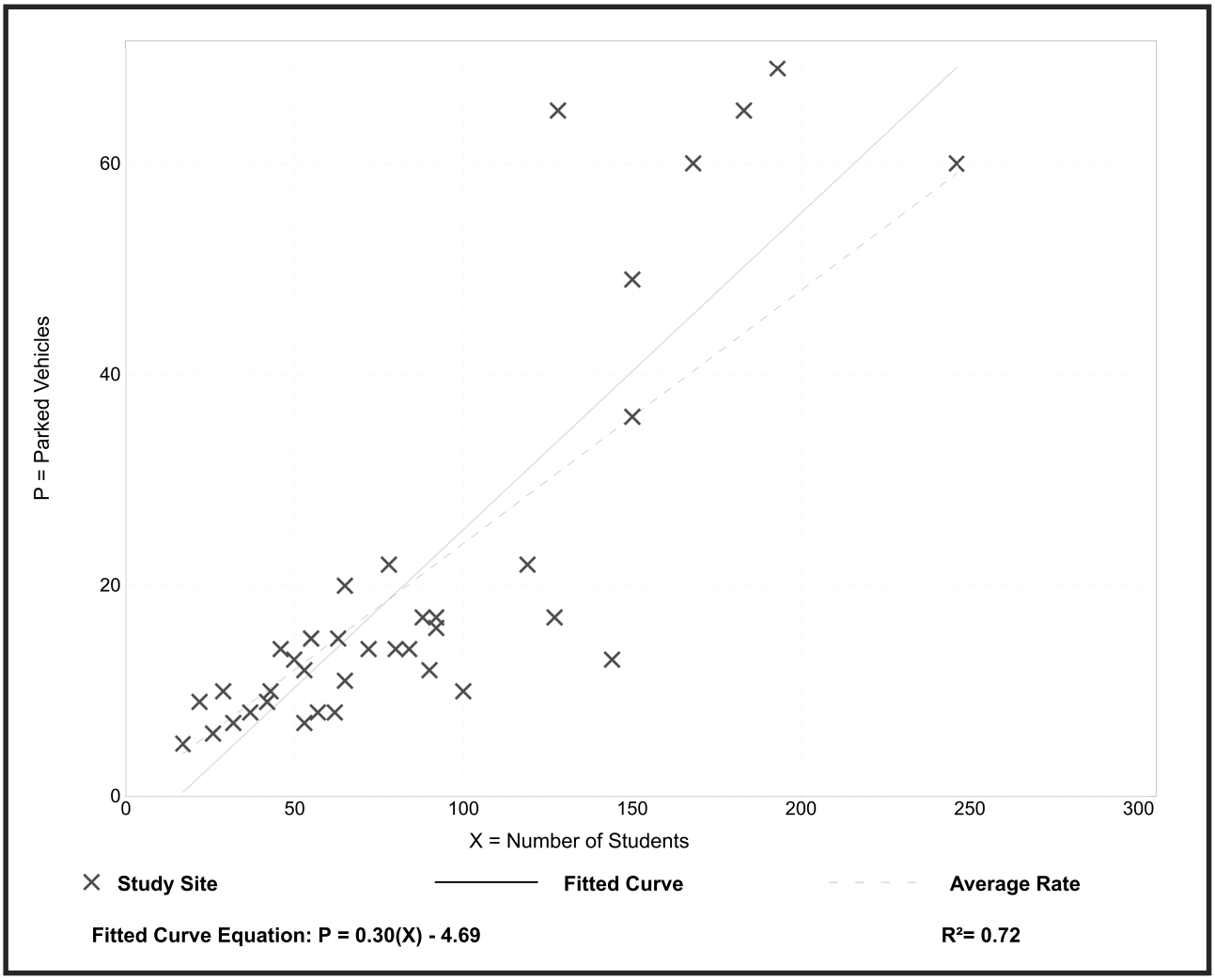
Day Care Center
(565)

Peak Period Parking Demand vs:	**Students**
On a:	**Weekday (Monday - Friday)**
Setting/Location:	**General Urban/Suburban**
Peak Period of Parking Demand:	**8:00 a.m. - 6:00 p.m.**
Number of Studies:	39
Avg. Num. of Students:	85

Peak Period Parking Demand per Student

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.24	0.09 - 0.51	0.19 / 0.34	0.21 - 0.27	0.10 (42%)

Data Plot and Equation



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Fax 317-842-4506

Table 1: Level-of-Service and Queue Analysis Summary

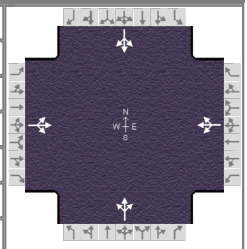
Intersection/Peak Hour/Movement	AWSC									Traffic Signal		
	Existing			2027 No-Build			2027 Total					
	Delay[1]	LOS[2]	Queue[3]	Delay	LOS	Queue	Delay	LOS	Queue	Delay	LOS	Queue
Main Street and Hawthorne Boulevard												
Weekday AM												
Hawthorne Boulevard EB approach	21.2	C	92	23.3	C	105	30.3	D	148	22.5	C	175
Hawthorne Boulevard WB approach	22.6	C	112	25.5	D	130	30.4	D	155	23.5	C	190
Main Street NB approach	20.4	C	88	22.6	C	100	26.7	D	120	8.0	A	81
Main Street SB approach	53.5	F	290	72.4	F	348	101.7	F	428	10.8	B	178
Overall Intersection	**32.8**	**D**	--	**41.0**	**E**	--	**54.2**	**F**	--	**15.8**	**B**	--
Weekday PM												
Hawthorne Boulevard EB approach	20.9	C	75	22.5	C	85	29.3	D	122	21.7	C	191
Hawthorne Boulevard WB approach	47.8	E	252	57.5	F	286	77.5	F	342	25.8	C	331
Main Street NB approach	30.7	D	150	34.9	D	168	44.0	E	202	16.4	B	206
Main Street SB approach	118.3	F	482	148.1	F	555	183.7	F	635	23.5	C	377
Overall Intersection	**65.0**	**F**	--	**79.4**	**F**	--	**99.0**	**F**	--	**22.3**	**C**	--

[1] Average control delay in seconds per vehicle.
[2] Level of service.
[3] 95th percentile queue length in feet per lane.

As requested, capacity analyses were performed under future year, 2027 Total traffic conditions assuming traffic signal control at the intersection of Main Street and Hawthorne Boulevard. The results of the analysis are summarized in *Table 1* and the analysis worksheets are attached. As shown, with the installation of a traffic signal, overall intersection operations can be improvement from a LOS "F" to a LOS "B" and LOS "C" during the weekday morning and evening peak hours, respectively. All approaches are also anticipated to operate at acceptable LOS "C" or better during both peak hours with the installation of a traffic signal. Accordingly, the intersection of Main Street and Hawthorne Boulevard should be monitored and evaluated for future traffic control installation by the Village.

HCS7 Signalized Intersection Input Data

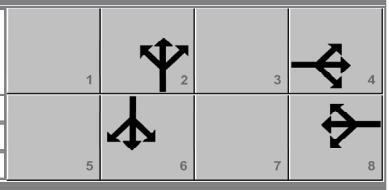
General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	AM Peak	PHF	0.90
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 7:00
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne AM.xus		
Project Description	028-000				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	185	45	20	99	162	21	197	22	127	250	37

Signal Information			
Cycle, s	63.7	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	35.3	16.4	0.0	0.0	0.0	0.0	
Yellow	4.5	4.5	0.0	0.0	0.0	0.0	
Red	1.5	1.5	0.0	0.0	0.0	0.0	



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	185	45	20	99	162	21	197	22	127	250	37
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		1			1			4			8	
Ped / Bike / RTOR, /h	8	0	0	5	0	0	13	0	0	21	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		12.0			12.0			12.0			12.0	
Turn Bay Length, ft		0			0			0			0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0		45.0		45.0
Yellow Change Interval (*Y*), s		4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s		1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s		8		8		15		15
Start-Up Lost Time (*l1*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s		4.0		4.0		7.0		7.0
Recall Mode		Off		Off		Min		Min
Dual Entry		Yes		Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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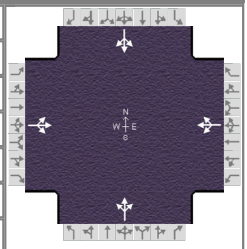
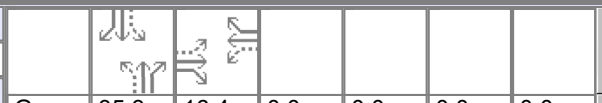
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	AM Peak	PHF	0.90
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 7:00
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne AM.xus		
Project Description	028-000				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	185	45	20	99	162	21	197	22	127	250	37

Signal Information			
Cycle, s	63.7	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



							1	2	3	4
Green	35.3	16.4	0.0	0.0	0.0	0.0	5	6	7	8
Yellow	4.5	4.5	0.0	0.0	0.0	0.0				
Red	1.5	1.5	0.0	0.0	0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		22.4		22.4		41.3		41.3
Change Period, ($Y+R_c$), s		6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s		5.2		5.2		12.3		12.3
Queue Clearance Time (g_s), s		11.4		12.6		6.9		13.8
Green Extension Time (g_e), s		3.8		3.7		25.0		21.6
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.02		0.03		0.61		0.70

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		297			312			267			460	
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1736			1675			1749			1497	
Queue Service Time (g_s), s		0.0			1.2			0.0			6.9	
Cycle Queue Clearance Time (g_c), s		9.4			10.6			4.9			11.8	
Green Ratio (*g/C*)		0.26			0.26			0.55			0.55	
Capacity (*c*), veh/h		511			492			1031			904	
Volume-to-Capacity Ratio (*X*)		0.580			0.635			0.259			0.509	
Back of Queue (*Q*), ft/ln (95 th percentile)		174.8			190.2			81			177.5	
Back of Queue (*Q*), veh/ln (95 th percentile)		6.9			7.5			3.1			6.7	
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00			0.00			0.00	
Uniform Delay (d_1), s/veh		21.0			21.5			7.4			8.8	
Incremental Delay (d_2), s/veh		1.5			1.9			0.6			2.0	
Initial Queue Delay (d_3), s/veh		0.0			0.0			0.0			0.0	
Control Delay (*d*), s/veh		22.5			23.5			8.0			10.8	
Level of Service (LOS)		C			C			A			B	
Approach Delay, s/veh / LOS	22.5		C	23.5		C	8.0		A	10.8		B
Intersection Delay, s/veh / LOS	15.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.69	B	1.69	B	1.65	B	1.65	B
Bicycle LOS Score / LOS	0.98	A	1.00	A	0.93	A	1.25	A

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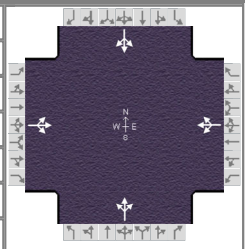
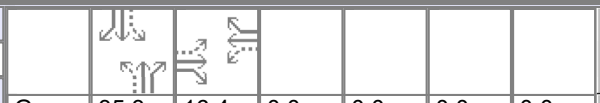
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	AM Peak	PHF	0.90
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 7:00
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne AM.xus		
Project Description	028-000				

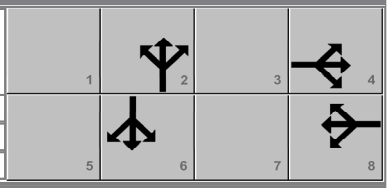


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	185	45	20	99	162	21	197	22	127	250	37

Signal Information			
Cycle, s	63.7	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	35.3	16.4	0.0	0.0	0.0	0.0						
Yellow	4.5	4.5	0.0	0.0	0.0	0.0						
Red	1.5	1.5	0.0	0.0	0.0	0.0						



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	0.992	1.000	1.000	0.992	1.000	1.000	0.969	1.000	1.000	0.938	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.942	0.921		0.977	0.889		0.966	0.950		0.853	0.840	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.921		0.000	0.889		0.000	0.950		0.000	0.840
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	0.996			0.992			0.990			0.992		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			0.984			0.990			0.988			0.981
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	241	1203	293	119	590	966	153	1435	160	459	904	134
Proportion of Vehicles Arriving on Green (P)	0.26	0.26	0.26	0.26	0.26	0.26	0.55	0.55	0.55	0.55	0.55	0.55
Incremental Delay Factor (k)		0.15			0.15			0.50			0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)		6.0		6.0		6.0		6.0
Green Ratio (g/C)		0.26		0.26		0.55		0.55
Permitted Saturation Flow Rate (s_p), veh/h/ln		1102		1133		1067		1146
Shared Saturation Flow Rate (s_{sh}), veh/h/ln		1711		1797		1720		1477
Permitted Effective Green Time (g_p), s		16.4		16.4		35.3		35.3
Permitted Service Time (g_u), s		5.8		7.0		23.6		30.4
Permitted Queue Service Time (g_{ps}), s		0.0		1.2		0.0		6.9
Time to First Blockage (g_f), s		6.1		8.2		16.7		4.5
Queue Service Time Before Blockage (g_{fs}), s		6.1		8.2		4.2		4.5
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	0.972	0.000	0.972	0.000	0.972	0.000	0.972	0.000
Pedestrian F_s / F_{delay}	0.000	0.115	0.000	0.115	0.000	0.074	0.000	0.074
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	514.57	17.57	514.57	17.57	1108.79	6.33	1108.79	6.33
Bicycle F_w / F_v	-3.64	0.49	-3.64	0.52	-3.64	0.44	-3.64	0.76

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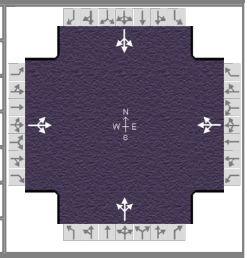
HCS7 Signalized Intersection Results Graphical Summary

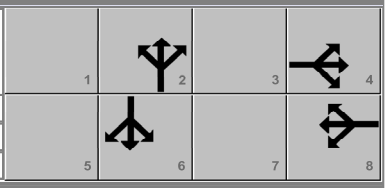
General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	AM Peak	PHF	0.90
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 7:00
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne AM.xus		
Project Description	028-000				



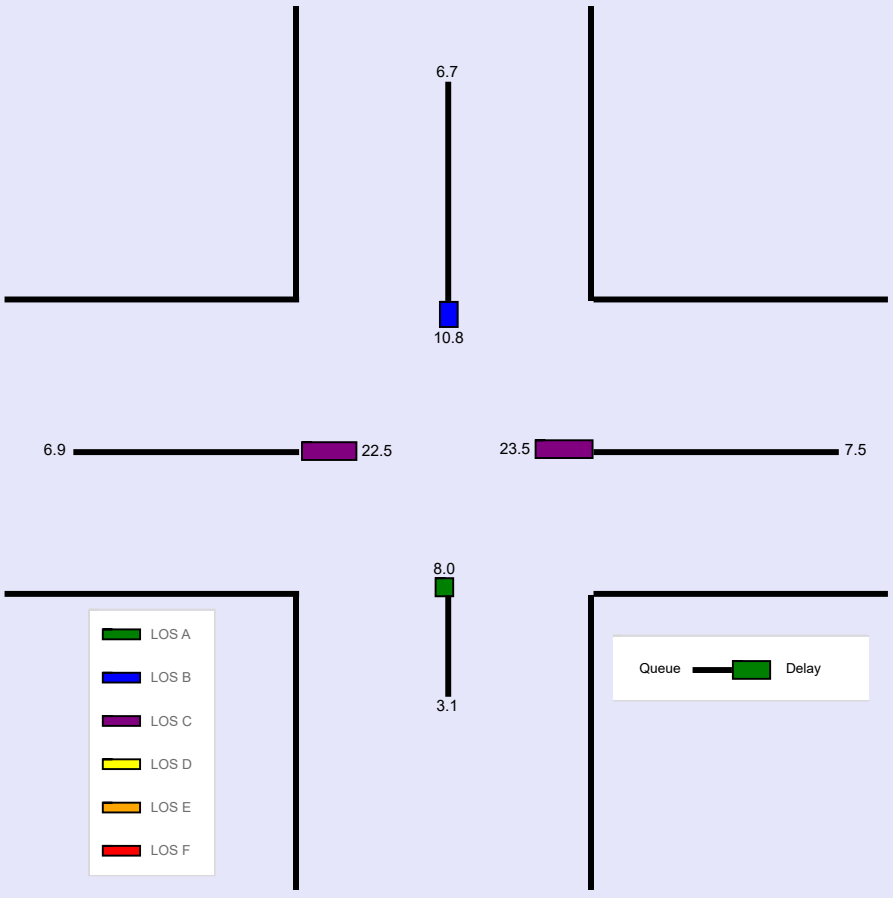
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	185	45	20	99	162	21	197	22	127	250	37

Signal Information			
Cycle, s	63.7	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	35.3	16.4	0.0	0.0	0.0	0.0	
Yellow	4.5	4.5	0.0	0.0	0.0	0.0	
Red	1.5	1.5	0.0	0.0	0.0	0.0	



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)		174.8			190.2			81			177.5	
Back of Queue (*Q*), veh/ln (95 th percentile)		6.9			7.5			3.1			6.7	
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00			0.00			0.00	
Control Delay (*d*), s/veh		22.5			23.5			8.0			10.8	
Level of Service (LOS)		C			C			A			B	
Approach Delay, s/veh / LOS	22.5	C		23.5	C		8.0	A		10.8	B	
Intersection Delay, s/veh / LOS	15.8						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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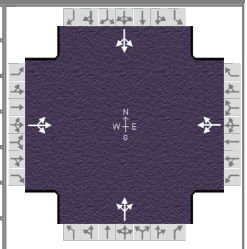
HCS7 Signalized Intersection Input Data

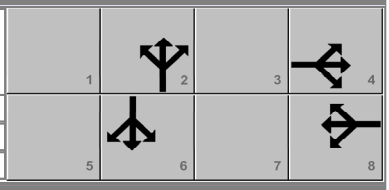
General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	PM Peak	PHF	0.95
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 16:30
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne PM.xus		
Project Description	028-000				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	136	67	30	133	269	24	291	15	126	358	52

Signal Information			
Cycle, s	89.5	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	42.5	35.0	0.0	0.0	0.0	0.0	
Yellow	4.5	4.5	0.0	0.0	0.0	0.0	
Red	1.5	1.5	0.0	0.0	0.0	0.0	



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	136	67	30	133	269	24	291	15	126	358	52
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		1			3			1			1	
Ped / Bike / RTOR, /h	7	0	0	5	0	0	7	0	0	15	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		12.0			12.0			12.0			12.0	
Turn Bay Length, ft		0			0			0			0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0		45.0		45.0
Yellow Change Interval (*Y*), s		4.5		4.5		4.5		4.5
Red Clearance Interval (R_c), s		1.5		1.5		1.5		1.5
Minimum Green (G_{min}), s		8		8		15		15
Start-Up Lost Time (*l1*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s		4.0		4.0		7.0		7.0
Recall Mode		Off		Off		Min		Min
Dual Entry		Yes		Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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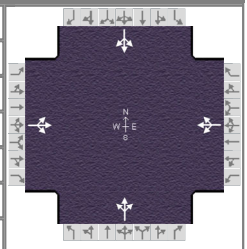
HCS7 Signalized Intersection Results Summary

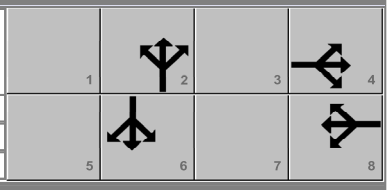
General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	PM Peak	PHF	0.95
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 16:30
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne PM.xus		
Project Description	028-000				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	136	67	30	133	269	24	291	15	126	358	52

Signal Information			
Cycle, s	89.5	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	42.5	35.0	0.0	0.0	0.0	0.0	
Yellow	4.5	4.5	0.0	0.0	0.0	0.0	
Red	1.5	1.5	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		41.0		41.0		48.5		48.5
Change Period, ($Y+R_c$), s		6.0		6.0		6.0		6.0
Max Allow Headway (*MAH*), s		5.3		5.3		12.3		12.3
Queue Clearance Time (g_s), s		14.8		37.0		12.7		26.9
Green Extension Time (g_e), s		4.6		0.0		26.1		15.6
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.08		1.00		0.82		0.94

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		271			455			347			564	
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1096			1626			1807			1604	
Queue Service Time (g_s), s		0.0			6.1			0.0			14.2	
Cycle Queue Clearance Time (g_c), s		12.8			20.9			10.7			24.9	
Green Ratio (*g/C*)		0.39			0.39			0.48			0.48	
Capacity (*c*), veh/h		477			679			902			812	
Volume-to-Capacity Ratio (*X*)		0.567			0.670			0.385			0.695	
Back of Queue (*Q*), ft/ln (95 th percentile)		191			331.2			206.1			376.8	
Back of Queue (*Q*), veh/ln (95 th percentile)		7.6			12.9			8.2			15.0	
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00			0.00			0.00	
Uniform Delay (d_1), s/veh		19.8			22.9			15.2			18.6	
Incremental Delay (d_2), s/veh		2.0			2.9			1.2			4.9	
Initial Queue Delay (d_3), s/veh		0.0			0.0			0.0			0.0	
Control Delay (*d*), s/veh		21.7			25.8			16.4			23.5	
Level of Service (LOS)		C			C			B			C	
Approach Delay, s/veh / LOS	21.7		C	25.8		C	16.4		B	23.5		C
Intersection Delay, s/veh / LOS	22.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.68	B	1.68	B	1.67	B	1.67	B
Bicycle LOS Score / LOS	0.93	A	1.24	A	1.06	A	1.42	A

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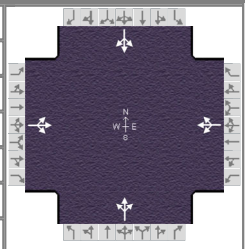
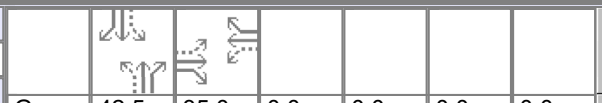
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	PM Peak	PHF	0.95
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 16:30
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne PM.xus		
Project Description	028-000				

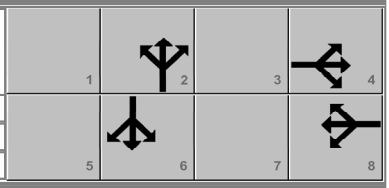


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	136	67	30	133	269	24	291	15	126	358	52

Signal Information			
Cycle, s	89.5	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	42.5	35.0	0.0	0.0	0.0	0.0						
Yellow	4.5	4.5	0.0	0.0	0.0	0.0						
Red	1.5	1.5	0.0	0.0	0.0	0.0						



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	0.992	1.000	1.000	0.977	1.000	1.000	0.992	1.000	1.000	0.992	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.591	0.581		0.976	0.876		0.966	0.959		0.863	0.851	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.581		0.000	0.876		0.000	0.959		0.000	0.851
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	0.998			0.995			0.994			0.996		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			0.991			0.994			0.993			0.984
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	230	580	286	113	501	1013	131	1593	82	377	1071	156
Proportion of Vehicles Arriving on Green (P)	0.39	0.39	0.39	0.39	0.39	0.39	0.48	0.48	0.48	0.48	0.48	0.48
Incremental Delay Factor (k)		0.20			0.27			0.50			0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)		6.0		6.0		6.0		6.0
Green Ratio (g/C)		0.39		0.39		0.48		0.48
Permitted Saturation Flow Rate (s_p), veh/h/ln		978		1180		966		1070
Shared Saturation Flow Rate (s_{sh}), veh/h/ln		908		1779		1760		1592
Permitted Effective Green Time (g_p), s		35.0		35.0		42.5		42.5
Permitted Service Time (g_u), s		0.0		22.2		17.6		31.8
Permitted Queue Service Time (g_{ps}), s		0.0		6.1		0.0		14.2
Time to First Blockage (g_f), s		7.4		14.7		20.4		4.9
Queue Service Time Before Blockage (g_{fs}), s		6.0		14.7		9.9		4.9
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	0.972	0.000	0.972	0.000	0.972	0.000	0.972	0.000
Pedestrian F_s / F_{delay}	0.000	0.113	0.000	0.113	0.000	0.101	0.000	0.101
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	781.87	16.61	781.87	16.61	950.06	12.34	950.06	12.34
Bicycle F_w / F_v	-3.64	0.45	-3.64	0.75	-3.64	0.57	-3.64	0.93

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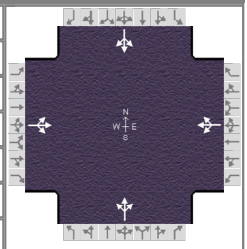
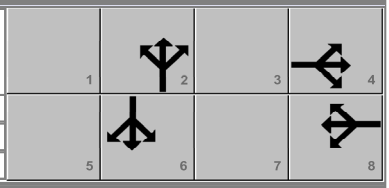
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency	BLA			Duration, h	0.250
Analyst	LMM	Analysis Date	Nov 18, 2021	Area Type	Other
Jurisdiction	Village of Glen Ellyn	Time Period	PM Peak	PHF	0.95
Urban Street	Main Street	Analysis Year	2027 Total	Analysis Period	1> 16:30
Intersection	Main St / Hawthorne Blvd	File Name	27T Main Hawthorne PM.xus		
Project Description	028-000				

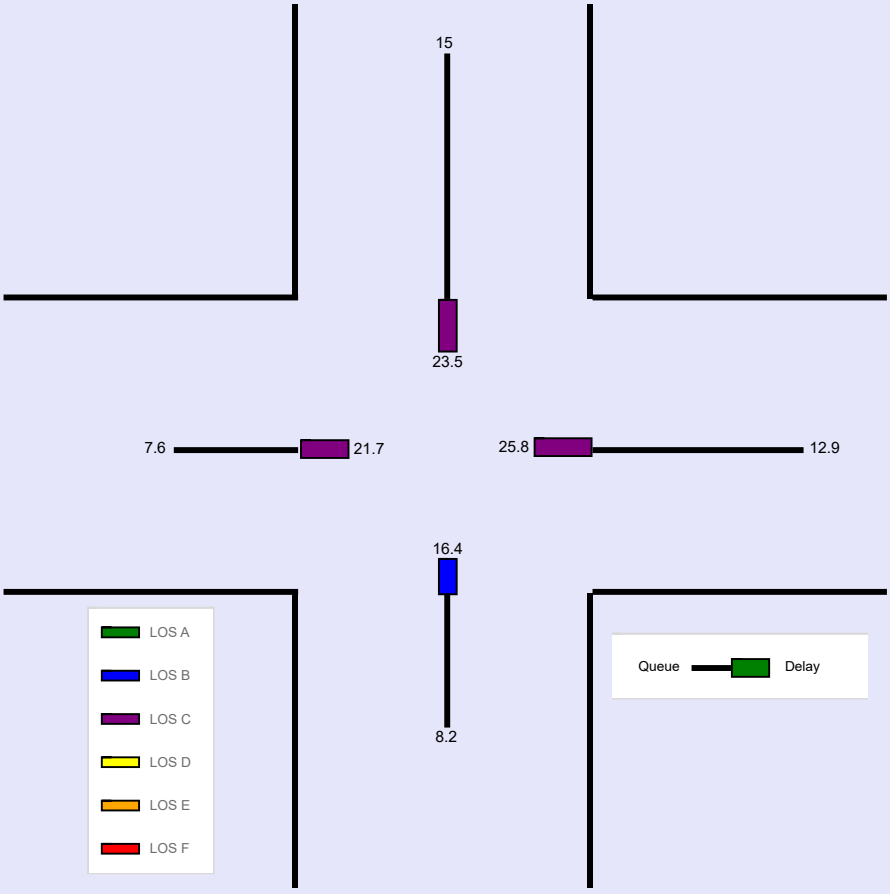


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	136	67	30	133	269	24	291	15	126	358	52

Signal Information					EB		WB			
Cycle, s	89.5	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	42.5	35.0	0.0	0.0	0.0	0.0
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.5	4.5	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	1.5	0.0	0.0	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)		191			331.2			206.1			376.8	
Back of Queue (*Q*), veh/ln (95 th percentile)		7.6			12.9			8.2			15.0	
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00			0.00			0.00			0.00	
Control Delay (*d*), s/veh		21.7			25.8			16.4			23.5	
Level of Service (LOS)		C			C			B			C	
Approach Delay, s/veh / LOS	21.7	C		25.8	C		16.4	B		23.5	C	
Intersection Delay, s/veh / LOS	22.3						C					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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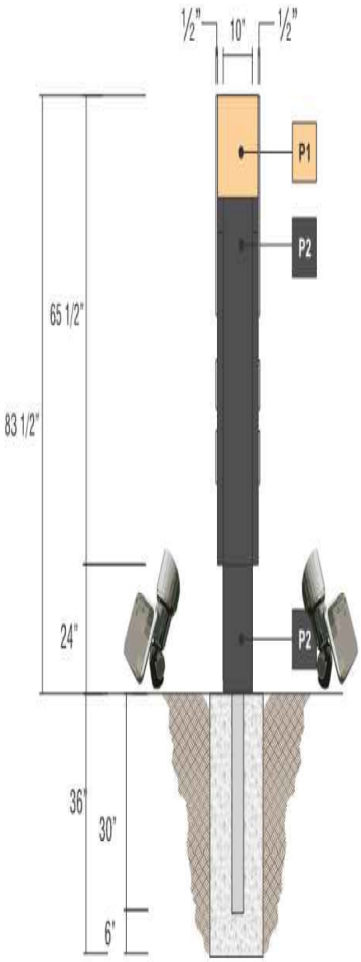
FRONT VIEW SCALE: 3/8" = 1'-0"

BACK VIEW SCALE: 3/8" = 1'-0"



SIDE VIEW SCALE: 3/8" = 1'-0"

B | **SIGNTYPE** | **GPM-MON-83x72**

MANUFACTURE AND INSTALL ONE (1) DOUBLE SIDED NON-ILLUMINATED MONUMENT SIGN WITH EXTERNAL LIGHTING

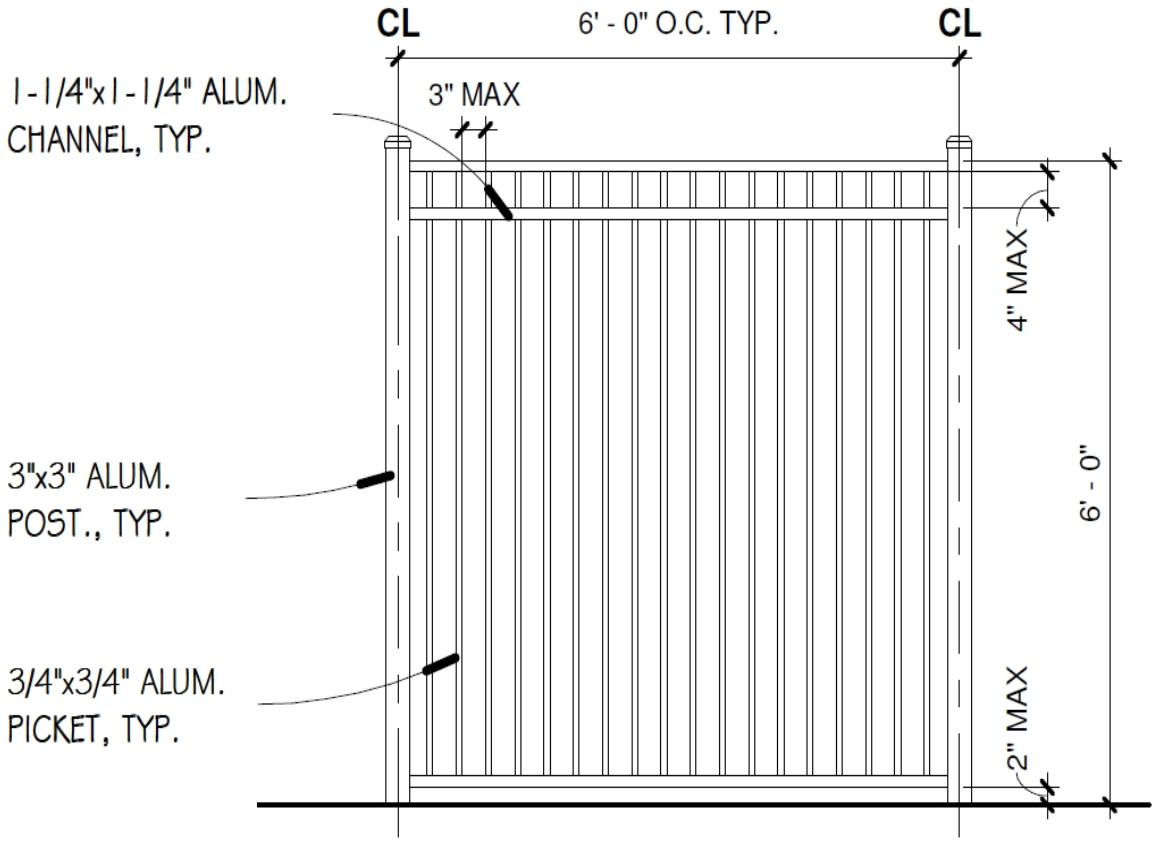
CABINET: TO BE CLAD WITH .125" ALUMINUM.
PANEL: BREAK FORM ALUMINUM 2" DEEP.
LOGO: 1/2" PLEX WITH FIRST SURFACE DIGITAL PRINTED LOGO.
COPY: 1/2" PLEX PAINTED MATTHEWS SATIN WHITE.
POLE: TO BE CLAD WITH .125" ALUMINUM.
FOOTINGS: TBD BY ENGINEERING
ADDRESS: 3M #7725-20 WHITE OPAQUE VINYL

PAINT COLORS

- DP1 — DIGITAL PRINT TO MATCH PMS 7453C BLUE, SATIN LAMINATE (REVERSED WEED DOTS TO SHOW THRU TAN BACKGROUND)
- P1 — PAINT TO MATCH (C-0 M-20 Y-43 K-0), SATIN FINISH
- P2 — PAINT MATTHEWS MP07102 "DEEP RIVER", SATIN FINISH
- P3 — MATTHEWS SATIN WHITE

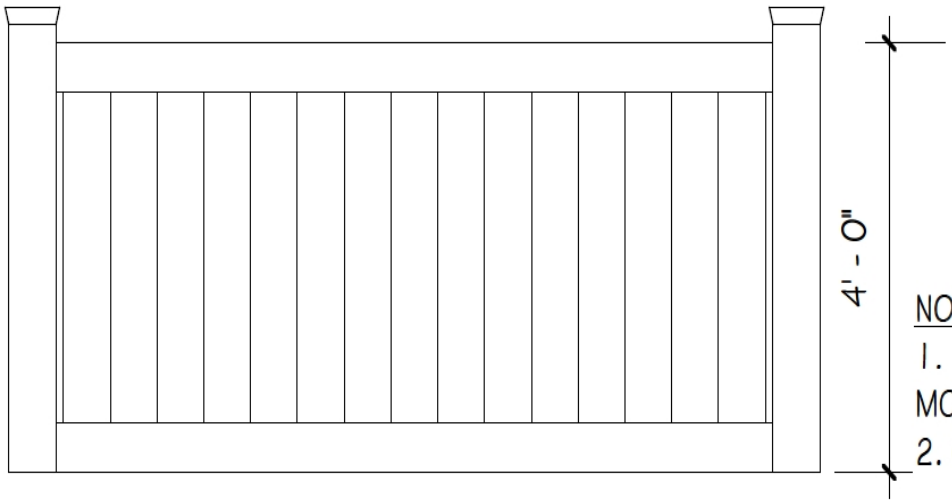
EXTERNAL LIGHTING - (QTY. 4) HIGH OUTPUT SOLAR SPOT LIGHTS
https://www.outdoorsolarstore.com/collections/solar-spot-lights/products/high-output-solar-spot-light?variant=33714006980

600 N.MAIN
FIRST CHURCH OF CHRIST, SCIENTIST
We Welcome You
SUNDAY SERVICE 10 AM
SUNDAY SCHOOL 10 AM
WEDNESDAY MEETING 7:30 PM
CHRISTIAN SCIENCE
READING ROOM INSIDE



NOTE:
1. CONCRETE FOOTINGS SHOULD BE 24" DEEP, 6" DIA. OR AS REQ'D BY CODE.

2 ALUMINUM FENCE
3/8" = 1'-0"



NOTE:
1. ILLUSIONS VINYL PRIVACY FENCE, MODEL #CG1550
2. COLOR: TBD

3 VINYL PRIVACY FENCE
3/8" = 1'-0"

Sincerely,

Chris Horney
Murphy Development Group
Managing Director

NOTICE OF PRE-APPLICATION MEETING

Chris Horney of NVS Properties XIII, LLC is requesting a pre-application meeting with the Glen Ellyn Plan Commission to obtain preliminary feedback on a concept plan to convert an existing church known as First Church of Christ Scientist to a daycare center for the property located at 600 North Main Street. The applicant is proposing to remodel the existing 8,200 square-foot church building and modify the site to operate a daycare facility. The subject property is zoned R2 Single Family Residential District. The Glen Ellyn Plan Commission will conduct a pre-application meeting on **Thursday, December 9, 2021 at 7:00 p.m.,** in the Galligan Board Room on the third floor of the Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois.

No formal application for this project has been submitted to the Village and the purpose of the pre-application meeting is to give the petitioner an opportunity to receive informal feedback from the Plan Commission on a conceptual proposal prior to designing detailed plans for formal review by the Village. After hearing the input of the Plan Commission on the concept plans, the developer will decide whether or not to proceed with preparing a full, formal application requesting consideration of their prospective development by the Village.

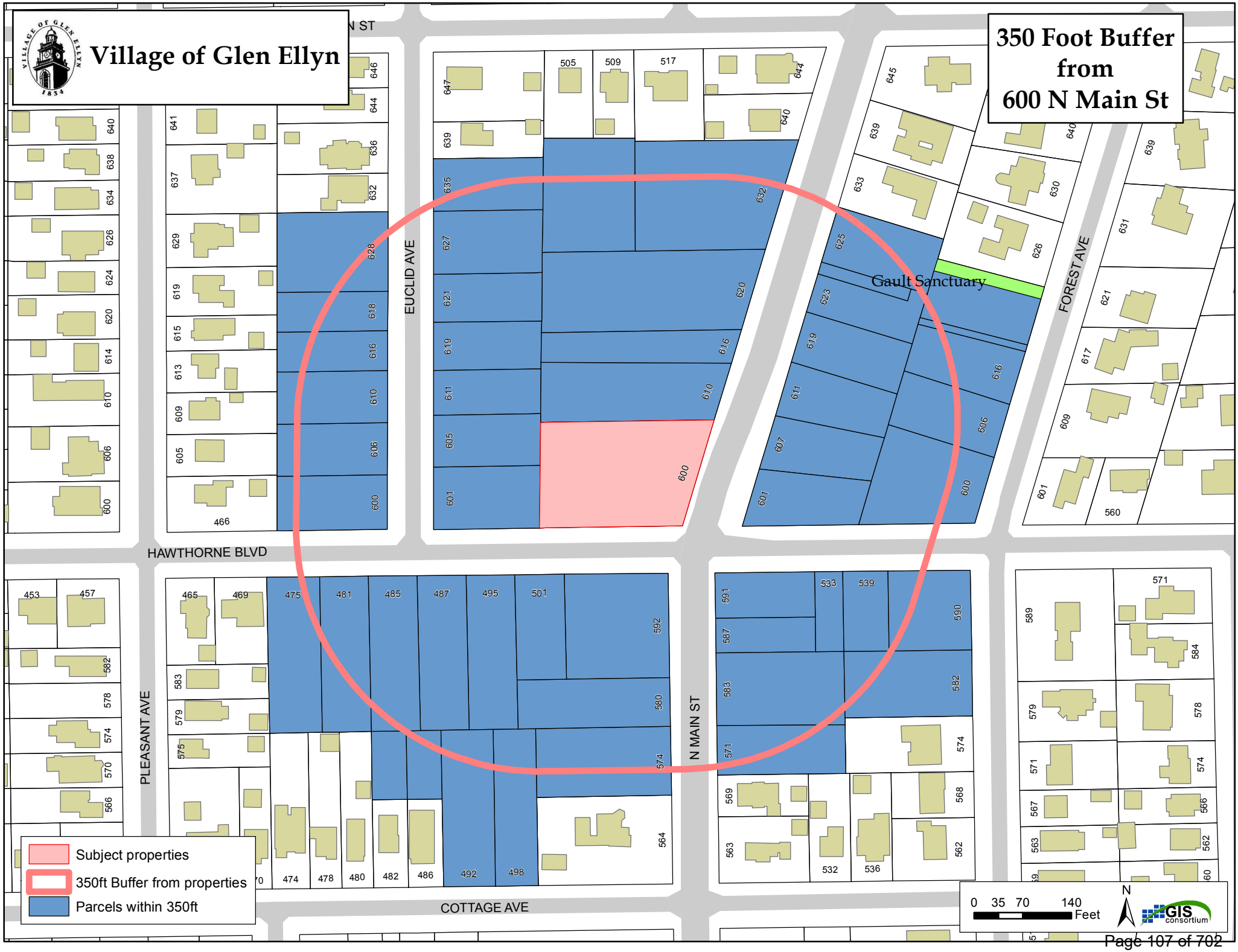
All persons who are interested are invited to attend the pre-application meeting to listen and be heard. Plans related to the proposed development are available for public review at any time prior to or after the Plan Commission meeting in the Community Development Department of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois. Questions related to the project should be directed to Atrian Fard, Planner, (630) 547-5249.

Individuals with disabilities who plan to attend the meeting and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact Brian Baltudis at (630) 547-5209 at least 24 hours in advance of the meeting.

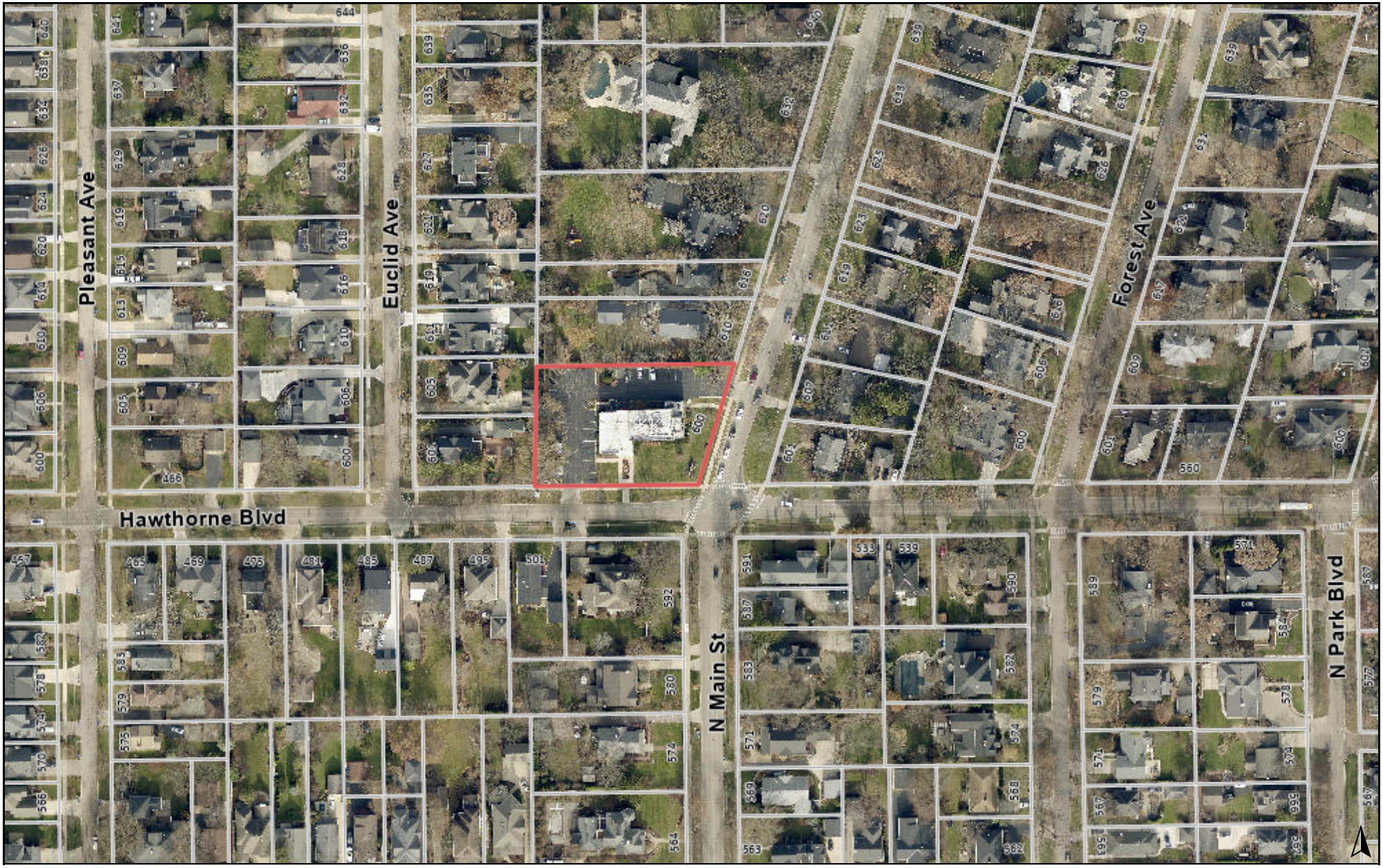
Atrian Fard
Planner
Village of Glen Ellyn

List of Addresses for Public Notice
600 N. Main Street

Name	Street #	Street Dir.	Street Name	City	State	Zip
Anderson, Cory & Leslie	616		Forest Ave	Glen Ellyn	IL	60137
Bednarz, F & L Scariano	632	N	Main St	Glen Ellyn	IL	60137
Boczkowski, Brian & Julie	606		Euclid Ave	Glen Ellyn	IL	60137
Boltz, Andrew & Rebecca	501		Hawthorne Blvd	Glen Ellyn	IL	60137
Broschka, David & C	635		Euclid Ave	Glen Ellyn	IL	60137
Choi, Kellen K	610		Euclid Ave	Glen Ellyn	IL	60137
Collingwood, James & A	627		Euclid Ave	Glen Ellyn	IL	60137
Daly, G & L Micheli	620	N	Main St	Glen Ellyn	IL	60137
Dardi, Alexander & Gina	601	N	Main St	Glen Ellyn	IL	60137
Erickson, Jane M Tr	623	N	Main St	Glen Ellyn	IL	60137
First Church Of Christ	600	N	Main St	Glen Ellyn	IL	60137
Glen Ellyn Park Dist	185		Spring Ave	Glen Ellyn	IL	60137
Graham, Robt & Ann	605		Euclid Ave	Glen Ellyn	IL	60137
Harazin, Robert & Emily	610	N	Main St	Glen Ellyn	IL	60137
Hartweg, Phillip C	487		Hawthorne St	Glen Ellyn	IL	60137
Hohulin, Timothy & Amy	486		Cottage Ave	Glen Ellyn	IL	60137
Hood, Ian & Stefanie	616	N	Main St	Glen Ellyn	IL	60137
Hutzler, Robert & Alison	611	N	Main St	Glen Ellyn	IL	60137
Jarrett, Jeffrey & V	600	N	Forest Ave	Glen Ellyn	IL	60137
Keogh, Stephen & Kelly	606		Forest Ave	Glen Ellyn	IL	60137
Kern, Shane & Nicola	621		Euclid Ave	Glen Ellyn	IL	60137
Kitun, Jennifer & Scott	601		Euclid	Glen Ellyn	IL	60137
Knapp, David M & Brenda S	495		Hawthorne	Glen Ellyn	IL	60137
Kurtz, John & Suzanna	583	N	Main St	Glen Ellyn	IL	60137
Lamkey, Courtney & Nathan	600		Euclid Ave	Glen Ellyn	IL	60137
Lando, Lydia & W Heller	618		Euclid Ave	Glen Ellyn	IL	60137
Latta, Blake M & Nancy	591	N	Main St	Glen Ellyn	IL	60137
Lee, Ryan C	619	N	Main St	Glen Ellyn	IL	60137
Low, James & Juliet	498		Cottage Ave	Glen Ellyn	IL	60137
Marks, Leland F	475		Hawthorne	Glen Ellyn	IL	60137
Mc Cormack, D & J Boler	582		Forest Ave	Glen Ellyn	IL	60137
Mc Donnell, Thomas &Ellen	481		Hawthorne Blvd	Glen Ellyn	IL	60137
Miekina, Danl & Margaret	607	N	Main St	Glen Ellyn	IL	60137
Monti, Dean & Julie	533		Hawthorne Blvd	Glen Ellyn	IL	60137
Morley, Mark A & Helen K	539		Hawthorne Blvd	Glen Ellyn	IL	60137
Mulvihill, Jill E	574	N	Main St	Glen Ellyn	IL	60137
Murphy, Stephen	571	N	Main St	Glen Ellyn	IL	60137
Notter, Peter & Colleen	611		Euclid Ave	Glen Ellyn	IL	60137
Pasterz, Paul & Tania	492		Cottage Ave	Glen Ellyn	IL	60137
Phillips, Todd	616		Euclid Ave	Glen Ellyn	IL	60137
Pitts, Craig R & Laura	628		Euclid Ave	Glen Ellyn	IL	60137
Polakoff, Ian & Laurie	590		Forest Ave	Glen Ellyn	IL	60137
Remelius, Steven & S	482		Cottage Ave	Glen Ellyn	IL	60137
Snyder, Timothy & Kaci	485		Hawthorne	Glen Ellyn	IL	60137
Stephan, William & Renee	592	N	Main St	Glen Ellyn	IL	60137
Wagner, Joseph & Amanda	587		Main St	Glen Ellyn	IL	60137
Weber, Robert & Anne	619		Euclid Ave	Glen Ellyn	IL	60137
Zumbrook, Paul R	580	N	Main St	Glen Ellyn	IL	60137


Village of Glen Ellyn
350 Foot Buffer from 600 N Main St
EUCLID AVE
FOREST AVE
HAWTHORNE BLVD
PLEASANT AVE
N MAIN ST
COTTAGE AVE
Gault Sanctuary
Subject properties
350ft Buffer from properties
Parcels within 350ft
0 35 70 140
Feet
N
GIS consortium

GISConsortium | 600 N. Main Street Aerial Map



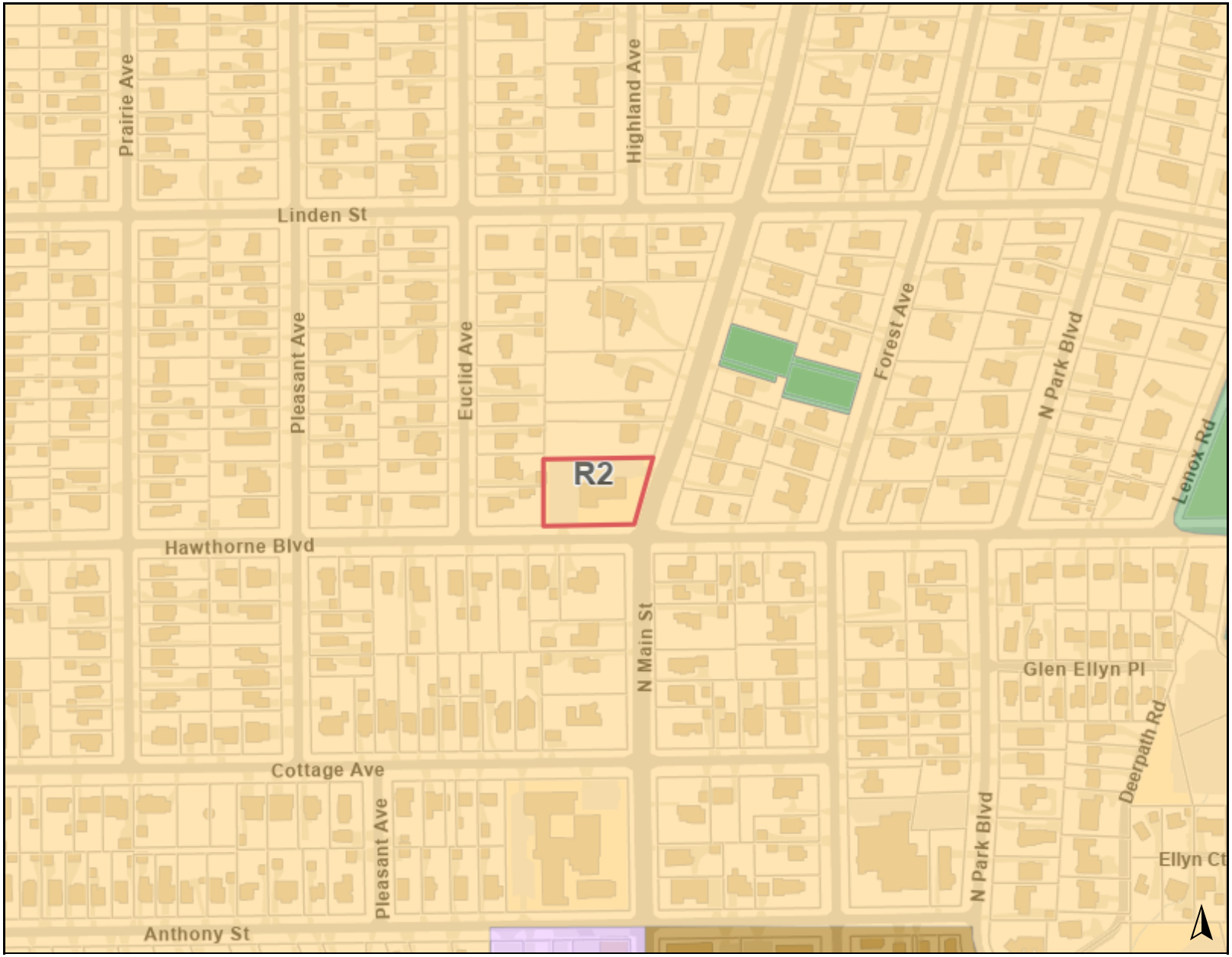
0 300 600 ft

Print Date: 12/2/2021

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

GISConsortium | 600 N. Main Street Zoning Map



Legend

Zoning and Development

Zoning

- C5B: Central Business District (Service)
- CR: Conservation/Recreation District
- R2: Single Family Residential District
- R4: Multi-Family Residential District

0 500 1000 ft

Print Date: 12/2/2021

Notes

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GISConsortium | 600 N. Main Street 1' Contour Map

Legend

DuPage County

DuPage County 1' 2017 Contours

Contour Line, Intermediate

Contour Line, Major

0 150 300 ft

Print Date: 12/2/2021

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Atrin Khodadadi Fard

From: Jeffrey Jarrett <j2jg10@gmail.com>
Sent: Tuesday, November 30, 2021 12:17 PM
To: Atrin Khodadadi Fard
Subject: Re: First Church of Christ Scientist Conversion

[EXTERNAL EMAIL]

Hi Atrian,
Thank you for returning my call yesterday. As discussed, we are homeowners living at 600 Forest Ave, Glen Ellyn, IL 60137, and we have concerns about the plan to convert the subject church to a daycare center. Our primary concern is the impact this would have on the quality of life in the neighborhood from additional traffic congestion and noise pollution. In addition, we think this would have a negative impact on property values in the neighborhood.

Both Hawthorne and Main Street are very busy thoroughfares and during peak times during the day they are highly congested. Hawthorne is constantly backed-up from train traffic routed from Park, and from school buses and cars dropping off and picking up students at GBW high school. It is virtually impossible to get out of our driveway (on Hawthorne) during these peak periods. Main street is also highly congested. As the only North/South thoroughfare through the village, the congestion and noise pollution from cars and trucks during peak periods feels as if we live on a major highway.

In summary, we are against moving forward with this plan to convert the church to a daycare center for the reasons cited above and wanted to voice our opinion for the Glen Ellyn Planning Commission.

Thank you for the opportunity to share,

Jeffrey & Virginia Jarrett
600 Forest Avenue
Glen Ellyn, IL 60137
(312) 344-0168 Jeff's Cell

On Tue, Nov 30, 2021 at 10:06 AM Jeffrey Jarrett <j2jg10@gmail.com> wrote:

> Hi Atrian,
> Thank you for returning my call yesterday. As discussed, we are homeowners living at 600 Forest Ave, Glen Ellyn, IL 60137, and we have concerns about the plan to convert the subject church to a daycare center. Our primary concern is the impact this would have on the quality of life in the neighborhood from additional traffic congestion and noise pollution. In addition, we think this would have a negative impact on property values in the neighborhood.
>
> Both Hawthorne and Main Street are very busy thoroughfares and during peak times during the day they are highly congested. Hawthorne is constantly backed-up from train traffic routed from Park, and from school buses and cars dropping off and picking up students at GBW high school. It is virtually impossible to get out of our driveway (on Hawthorne) during these peak periods. Main street is also highly congested. As the only North/South thoroughfare through the village, the congestion and noise pollution from cars and trucks during peak periods feels as if we live on a major highway.
>
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>
> Thank you for the opportunity to share,

Jeffrey & Virginia Jarrett
600 Forest Avenue
Glen Ellyn, IL 60137
(312) 344-0168 Jeff's Cell

Glen Ellyn Plan Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 12/9/2021 7:00 PM
Department: Community Development
Department Head: Staci Springer
Category: Public Hearing
Prepared By: Kelly Purvis

AGENDA ITEM (ID # 2021-1716)

DOC ID: 2021-1716

787 Harding Avenue, 138 IL Route 53, and 3 additional parcels (without addresses) - Harding Glen Townhomes - The Petitioner, Marvin Ritter is requesting approval of a Special Use Permit for Preliminary and Final Planned Unit Development Plans with Zoning Deviations, Preliminary and Final Plats of Subdivision for a Major Subdivision, Subdivision Variations, a Zoning Map Amendment, and the Exterior Appearance for the construction of a 23-unit townhome development on the subject property.

Statement of the Issue:
See attached Staff Report

Analysis:
See attached Staff Report

Budget Impact:
See attached Staff Report

Action Requested:
See attached Staff Report

Attachments:
1. Staff Report - PC Public Hearing
2. Aerial Image
3. Location and Zoning Map
4. Public Hearing Notice PC
5. Properties Notified of Public Hearing
6. Map of Properties to Receive Notice
7. Certificate of Publication
8. 2001 Comprehensive Plan Excerpts
9. 2021 Draft Comp Plan Excerpts
10. Pre-application Meeting Minutes - March 10, 2016
11. Pre-application Minutes - May 25, 2017

12. Pre-application Minutes - July 27, 2017
13. Application - Exterior Appearance Review
14. Application - Major Subdivision Preliminary
15. Application - Major Subdivision Final
16. Application - Planned Unit Development Preliminary
17. Application - Planned Unit Development Final
18. Application - Zoning Map Amendment
19. Supplementary Application Information
20. Narrative Use Statement
21. Supporting - Quantitative Summary
22. Subdivision Plat - Preliminary
23. Subdivision Plat - Final
24. Plan - PUD
25. Plans - Architectural
26. Plans - Engineering
27. Plans - Landscaping
28. Survey - Tree Identification
29. Plan - Tree Action
30. Tree Action Plan Review Letter
31. Plan - Proposed Sign
32. Plan - Photometrics
33. Light Cut Sheet
34. Construction Phasing Schedule
35. Supporting - Evidence of Experience
36. Supporting Report - Market Analysis
37. Supporting - Public Improvements List
38. Supporting - Fire Department Letter
39. Alternate Site Plan Exhibit – IL Route 53 Connection
40. Letter in Support of Current Design - Brentwood Neighbors
41. Supporting Report - Traffic Study
42. Supporting - Truck Turn Exhibits
43. Stormwater - Drainage Report
44. Stormwater - Drainage Report Exhibits
45. Declaration of Maintenance Agreement
46. Declaration of Maintenence Agreement - Exhibits
47. Town Home Association CCR
48. Supporting Report - IDNR EcoCAT
49. Supporting Report - Land Use Opinion
50. Supporting Report - Geotechnical Report
51. Draft Findings of Fact
52. Draft Motion to Approve

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Kelly Purvis, Planning Manager

DATE: December 1, 2021

FOR: December 9, 2021 Plan Commission Meeting

SUBJECT: 787 Harding Avenue, 138 IL State Route 53, two vacant parcels (without addresses) and a 33-foot Village right-of-way
Public Hearing to consider the proposed 23-unit townhome development

---

PETITIONER: The petitioner is Harding Custom Homes, represented by Marvin Ritter.

REQUEST: The petitioner is requesting approval of a proposed 23-unit townhome development on property commonly known as 787 Harding Avenue, 138 IL Route 53, two vacant parcels (without addresses) and a 33-foot unimproved Village right-of-way (Harding Avenue). In order to proceed with the project as proposed, the petitioner will need approval of the following:

1. A Special Use Permit for a Preliminary and Final Planned Unit Development Plan in accordance with Section 10-10-15 of the Glen Ellyn Zoning Code.

2. The following deviations from the Glen Ellyn Zoning Code:
   Lot Dimensions
   a. Section 10-4-11(D)(9)(b)(2) to allow a width on a corner lot of 19.45 feet where 90 feet is required on Lot 1;
   b. Section 10-4-11(D)(9)(b)(2) to allow a width on a corner lot of 66.05 feet where 90 feet is required on Lot 3;
   Bulk Setbacks
   c. Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required;
   d. Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3;
   e. Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5;
   Accessory Structures
   f. Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5;
   g. Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4

inches into the required front yard where decks are not a permitted encroachment on Lot 5;

h. Section 10-5-5(B)(4) #11 to allow a completely closed, 6-foot-tall fence to be closer to the street than the principal structures on Lots 3, 4 and 5 where a 4-foot fence, 33.3 percent open is permitted;

Impervious Surfaces

i. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway;
j. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway;
k. Section 10-5-5(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to be covered by impervious surface where no more than 35 percent is permitted on Lot 2;
l. Section 10-5-5(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to be covered by impervious surface where no more than 35 percent is permitted on Lot 3;
m. Section 10-5-5(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to be covered by impervious surface where no more than 35 percent is permitted on Lot 4;

Other

n. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4;
o. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6;
p. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8;
q. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17;
r. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.

3. Preliminary and Final Major Subdivision Plats in accordance with Section 11-3-4 and 11-3-5 of the Glen Ellyn Subdivision Regulations Code.

4. The following variations from the Glen Ellyn Subdivision Regulations Code:
   a. Section 11-4-2(G) to allow Lots 1, 3, 4, and 5 to have two frontages to the public right-of-way where only one frontage per lot is permitted;

b. Section 11-4-4(E) to allow a right-of-way width of 55 feet for a local street where 66 feet is required (Harding Avenue, Harding Court);
c. Section 11-4-4(E) to allow a right-of-way width of 30 feet for a local street where 66 feet is required (Kohler property connection).
d. Section 11-4-4(J)(1), to allow a cul-de-sac length of approximately 1,375 feet where cul-de-sacs are limited to 300 feet;
e. Section 11-4-8, to allow 3 out of 8 existing utility poles to not be buried, where burying of electric, communication, and other facilities both within the subdivided property and adjacent rights-of-way is required;
f. Section 11-4-7, to not install approximately 438 linear feet of sidewalk along IL Route 53, where sidewalk along all public rights-of-way is required.

5. A Zoning Map Amendment in accordance with Section 10-10-13 of the Glen Ellyn Zoning Code.

6. A Right-of-Way Vacation.

7. The Exterior Appearance.

The Right-of-Way Vacation will be reviewed by the Village Board and is not part of the Plan Commission's consideration.

LOCATION: The subject site is comprised of five parcels totaling 3.367-acres. It is located on the south side of Harding Avenue and borders Route 53 to the east. The property is currently zoned R2 Residential zoning district. As part of the project, the petitioner is requesting that the property be rezoned to the R4 Residential zoning district. The surrounding zoning and land uses are as follows:

Surrounding Land Uses	Surrounding Zoning
North: Single-Family/Condos	R2 and R4 Residential
South: Single-Family	R2 Residential
East: Single-Family	R1 Residential
West: Single-Family	R2 Residential
Northwest: Townhomes	R4 Residential

PUBLIC NOTICE: Notice of the public hearing was published on November 24, 2021 in the Daily Herald. A placard was placed at the site in 2 locations and owners within 250 feet were notified of the public hearing by mail.

COMP PLAN: The 2001 Comprehensive Plan recommends low-density attached residential on the property with a density of 5-10 units per acre. The proposed project has a density of approximately 7-units per acre.

The Comprehensive Plan further designates the lots as potential development site #14 and recommends *"Low-density attached residential* [use of the property]*"*. The plan suggests that this portion of the site is a *"Possible location for small townhome development similar in scale to the existing development to the north. Single-family homes may also be acceptable.*" (Page 25)

The 2021 draft Comprehensive Plan identifies this site as appropriate for single-family attached development in the Future Land Use Plan (Page 11), and as a site for residential infill in the Residential Areas Framework (Page 12). On Page 15 of the draft plan the site is highlighted as residential development site #12. The plan indicates that "… the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the north".

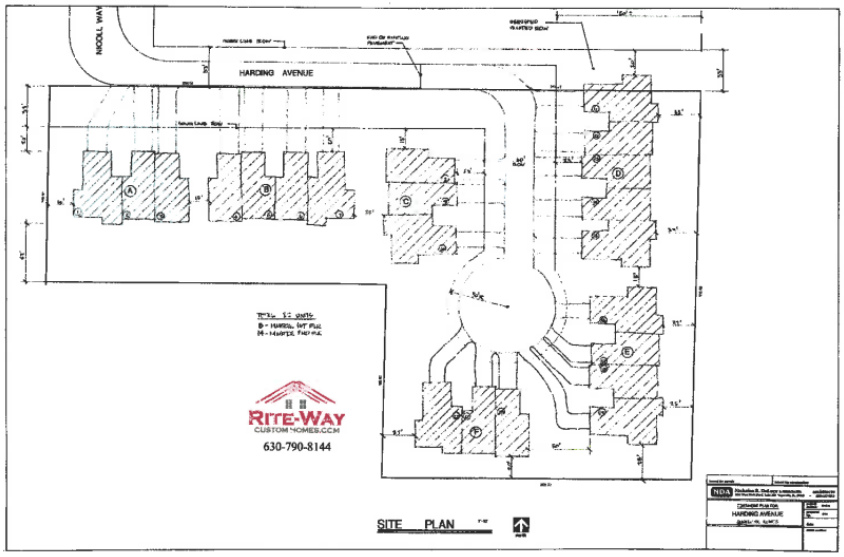
The Plan Commission unanimously recommended approval of the draft Comprehensive Plan on March 11, 2021, but the plan is yet to be officially adopted by the Village Board. Noted sections of the 2001 Comprehensive Plan and the 2021 draft Comprehensive Plan are attached.

PROJECT HISTORY:

The petitioner has come before the Plan Commission on 3 different occasions at pre-application meetings to discuss this townhome development. Below is a brief summary of the issues discussed at each of the pre-application meetings. Minutes from each of the meetings are attached for the Plan Commission's review.

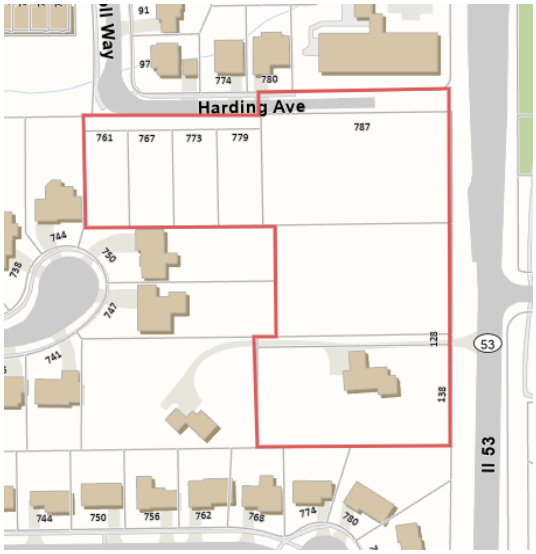
<u>Original Proposal – March 10, 2016 – 22 Units</u>
In March of 2016, the petitioner presented a concept plan for a 22-unit townhome development with a different site boundary and configuration. The below image depicts the original site boundary.

The Plan Commission asked the developer to incorporate the property to the south into the development (138 IL Route 53). The Commission thought it was important for the westerly portion of the site to remain R2 Residential District and indicated that they would not support the rezoning of that parcel for townhomes. At the time, a smaller cul-de-sac was proposed; the Commission indicated a desire to see a conforming bulb for the cul-de-sac. This proposal also lacked sufficient spacing between buildings. The Plan Commission requested that this be corrected in the formal application submittal. Below is the original site plan presented for the development which included a total of 22 units with 3-5 attached single family homes in each of the 6 buildings.

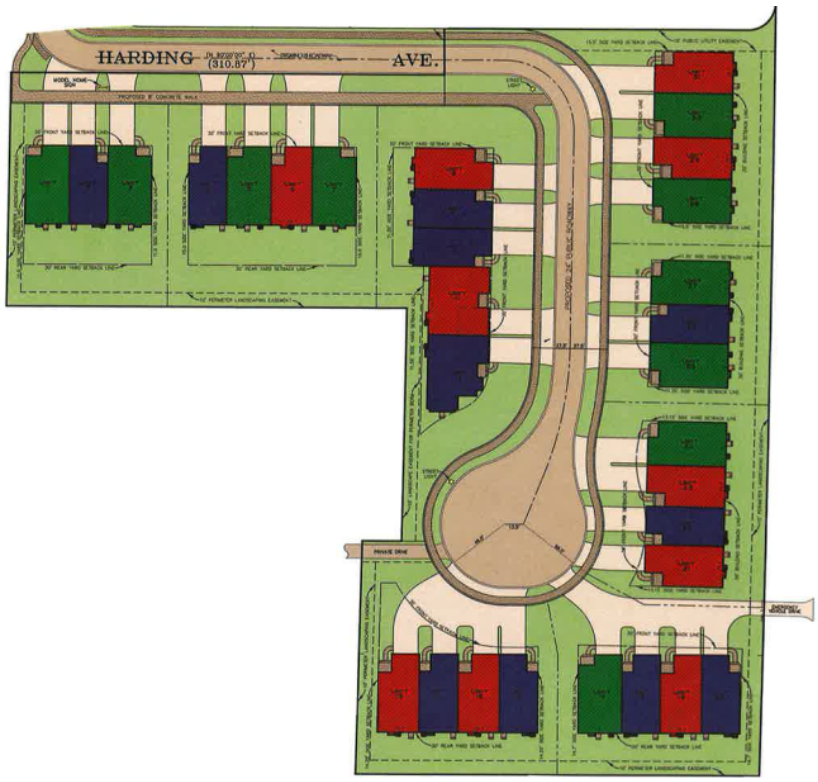


Pre-application Meeting #2 – May 25, 2017 – 31 Units

At the May 25, 2017 pre-application meeting, the petitioner presented a concept plan for a 31-unit townhome development. Based upon the Commission's original feedback, the developer incorporated the properties to the south into the site. The site boundary presented at the second pre-application meeting is shown below.

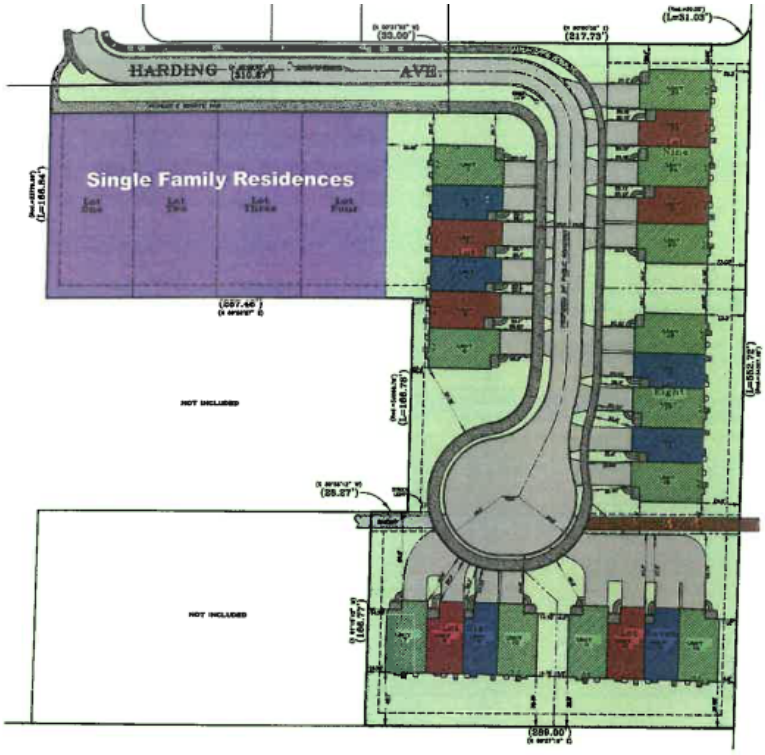


The Commission reiterated that the westerly portion of the site is most appropriate for detached single-family residential development. The Commission deliberated on whether there should be an access drive created onto IL Route 53; most Commissioners agreed that an emergency exit should be provided. Stormwater management was discussed and the Commission indicated that a comprehensive stormwater study would need to be done as part of the formal submittal. The Commission indicated that sidewalk should be installed along IL Route 53, and that all overhead utility wires should be buried in comformace with the Village Codes. Below is a depiction of the site plan from the second pre-application meeting.



Pre-application Meeting #3 – July 27, 2017 – 24 Units

At the July 27, 2017 pre-application meeting, the petitioner presented a concept plan for a 24-unit townhome development. The site boundary remained the same for the second the third concept plan submittals. Based upon feedback at the prior 2 pre-application meetings, the updated proposal showed single family residential units on the westerly portion of the site and townhomes to the east. The Plan Commission was appreciative of this change. The main topics of discussion at this meeting were whether the overhead wires should be buried, and sidewalks should be installed along IL Route 53. The petitioner indicated that these two requirements are very costly and have an impact on the feasibility of the project. The Plan Commission's direction was that all overhead wires should be buried, and the sidewalk should be installed along IL Route 53. Further discussion about the access onto IL Route 53 took place. Several Commissioners deferred this decision to staff and IDOT. The Commissioners remained supportive of the emergency access onto IL Route 53. An image of the site plan presented at the third pre-app is below.



EXISTING CONDITIONS: The site is 3.367 acres and is an assemblage of 5 properties. Two of the properties are currently vacant; 1 of the properties is the unimproved Harding Avenue right-of-way (requested to be vacated); 1 property is improved with a driveway, which provides the property to the west access to IL Route 5; and 1 property is improved with a single-family home that will be demolished as part of the project. A total of 74 trees have been identified on the site (see attached tree survey and tree action plan).

PROJECT SUMMARY: The petitioner is proposing the construction of a 23-unit townhome development on the site. As part of the project, a new cul-de-sac would be constructed. The individual townhome units range in size from 2,174 square feet to 2,362 square feet with 4-6 attached units per building. A total of 5 buildings are proposed. All of the townhome units would have 3 bedrooms and 10 of the 23 proposed units are anticipated to incorporate first floor master bedrooms. To staff's knowledge, the only other townhome development in the Village that currently offers first floor masters is the Kingsbrook Glen development at the southwest corner of Nicoll and Taft. A summary of the project and the deviation/variation requests are below.

1. Residential PUD Standards. A summary of how the project complies with the Residential PUD Regulations is below.

    a. Lot Area per Family Dwelling. The Code allows one unit for every 4,950 square feet of net developable area on the site. Net developable

area is determined by subtracting the areas set aside for non-residential uses from the gross development area and deducting 20 percent of the remainder for streets. In this case, the net developable area is 117,334 square feet. However, the project is eligible for density bonuses for providing designated open space of at least 25 percent of the site, for site amenities and for enclosing at least 50 percent of the required parking.

These bonuses would allow for an additional 4.26 units on the property totaling 27.96 maximum units allowed. The project complies with the requirement with 23 units proposed.

b. FAR. The permitted FAR for residential Planned Unit Developments is .4. However, the total floor area permitted may be increased by 2 square feet for every 1 square foot of open space in excess of 25 percent of the total lot area. The project has approximately 44 percent open space and would therefore be eligible for an increased FAR of .77. The proposed FAR for the project is .54 which is Code compliant.

c. Yards. The yards and open spaces adjoining the boundaries of the development shall not be less than the yard requirements of the adjoining residential districts. All yards sharing a lot line with another residential district (in this case, R2 Residential District) meet the minimum requirements of the R2 District for the adjacent yard.

d. Landscape Buffer. The Residential PUD standards require a 10-foot landscape buffer along all peripheral lot lines. The proposal exceeds the 10-foot buffer requirement along all lot lines.

e. Building Separation. All buildings are required to be separated by a minimum of 18 feet. The proposed project design is in compliance with this requirement.

f. Common Open Area. The Code requires 20 percent of the site to be developed as common open area and/or recreational facilities that can be used by the residents of the development and/or the area, and which is to either to be maintained by the HOA or dedicated to the Village, Park District or other similar entity. The petitioner has indicated that the development will have 49,982 square feet of common open space which includes the rear and side yards of the development and which is 34 percent of the total site area and 44% of the gross development area (minus area set aside for streets) satisfying the requirement.

The common open area will be maintained by the HOA as outline in the attached HOA covenants (attached).

2. Harding Avenue. The adjacent Harding Avenue right-of-way is a non-conforming 33-foot-wide right-of-way. The petitioner is proposing a 22-foot-wide dedication along Harding Avenue to create a 55-foot right-of-way. The 55-foot right-of-way for both this portion of Harding Avenue as well as the north south portion of Harding Court would be less than the required 66-foot right-of-way of a local street and would require a variation from the Subdivision Regulations Code. This right-of-way width is supported by staff. In exchange for the right-of-way dedication along Harding Avenue and for the dedication of the new cul-de-sac, Harding Court (approximately 31,100 square feet), the petitioner is requesting the vacation of the eastern unimproved end of Harding Avenue (roughly 7,900 square feet) which would become part of the project site. The right-of-way vacation request will be reviewed by the Village Board at a subsequent meeting.

3. Cul-de-Sac. Section 11-4-4 of the Subdivision Regulations Code states that cul-de-sac streets shall not be more than 300 feet in length, measured along their centerline from the centerline of the street of origin to the end of the cul-de-sac right-of-way. Staff considers the nearest intersection, Pershing Avenue, to be the street of origin of the cul-de-sac street. As proposed, the 1,375-foot (approximate) cul-de-sac street will require a variation from the Subdivision Regulations Code.

4. Emergency Access. The petitioner is proposing a gated permeable paver emergency vehicle drive at the south end of the cul-de-sac between Lot 3 and Lot 4 to connect to IL Route 53. Attached to this report is letter from the Volunteer Fire Company indicating that they approve of the proposed emergency access.

5. Subdivision Access. The developer is proposing a cul-de-sac arrangement that results in a long single access roadway system. While acknowledging the competing interest associated with this issue, Public Works staff does not support the proposed roadway access arrangement. Public Works supports and strongly recommends access from Harding Avenue with a supplemental right-in/right-out access-way to IL Route 53 near Abbey Drive (see attached Alternate Site Plan Exhibit – IL Route 53 Connection). This configuration is preferred in that it provides redundant, balanced, and convenient access for the residents, and offers less restrictive emergency access from IL Route 53 than the proposed gated access. Staff notes that the adjacent neighbors on Brentwood Court prefer the cul-de-sac design (see attached letter from the neighbors), while neighbors in the Water's Edge townhome development would prefer that an access be created to IL Route 53 to reduce traffic on Nicoll Way.

   The Village's traffic consultant has offered the following benefits of the right-in/right-out configuration:

a. Improved flexibility of access for residents by providing a more direct route to access southbound IL Route 53. This will eliminate the need to travel north on Nicoll Way, then east on Pershing Avenue to reach IL Route 53. Trip lengths between the Nicoll Way/Wilson Avenue intersection and the IL Route 53/Abbey Drive would be reduced about 45 percent. Those residing south of Nicoll/Wilson, will experience trip length to southbound IL Route 53 reductions of up to ½ a mile.
b. A through street can be plowed more efficiently. A cul-de-sac has more pavement surface, and more snow to clear and store in the parkways.
c. Improved access for emergency vehicles due to the provision of continuous paved street access, rather than the proposed permeable paver emergency vehicle driveway, which will require special accommodations for snow removal.
d. The length of the cul-de-sac of about 1,375 feet greatly exceeds the maximum 300 feet specified in the Village Code.
e. The centerline pavement markings through the Nicoll/Pershing intersection, the "to IL Route 53" sign with left arrow on the southbound Nicoll Way approach, and free flow traffic from southbound Nicoll to eastbound Pershing provide direction to southbound drivers to turn left at Pershing Avenue. The signage would likely prevent drivers intending to access IL Route 53 from continuing south to the Harding Avenue connection to IL Route 53.

The Village's traffic consultant has noted the following benefit to the proposed cul-de-sac design:

a. It eliminates the potential for vehicles to use the Harding Avenue extension to IL Route 53 to proceed south rather than traveling to IL Route 53 via Pershing Avenue during the peak hour periods.

6. Traffic. The Village's consulting traffic engineer has reviewed the Traffic Impact Study (attached) that was submitted by the petitioner. He has indicated that the development generated traffic will not materially impact the operation at the intersection of Pershing Avenue and IL Route 53. Similarly, the addition of the new site traffic is not expected to have a significant impact on traffic operations at the intersection of Nicoll Way and Pershing Avenue.

7. Circulation. An autoturn analysis for emergency and refuse truck vehicles in and out of the cul-de-sac was provided. The Village's consulting traffic engineer reviewed the analysis and found it to be acceptable.

8. Parking. Each townhome unit has a 2-car garage and a driveway which provides room for at least 2 additional cars to park. Additionally, there are 8 guest parking stalls (two of which are accessible stalls) included in the project design. The Zoning Code requires 2 parking spaces per unit (46 spaces) and there is accommodation for over 100 cars to park in the development.

9. Sidewalks. No sidewalks currently exist adjacent to this property along the IL Route 53 right-of-way. A sidewalk is required to be installed along all public rights-of-way by the Subdivision Code. The petitioner is requesting a variation from this requirement, to not install approximately 438 linear feet of sidewalk along IL Route 53. Staff is supportive of this variation request, due to the difficulty of installing sidewalks along this stretch of IL Route 53.

   A sidewalk will be installed along the emergency vehicle access and will connect to the sidewalk at the southeast part of the site (adjacent to the Rolling Hedge Subdivision). The sidewalk along Rolling Hedge Subdivision (to the south of the site) runs all the way to the intersection of Sheehan Avenue and IL Route 53. Sidewalks will also be installed on both sides of the right-of-way along Harding Court and will connect to existing sidewalks on Harding Avenue.

10. Overhead Utilities. As part of the project, all overhead utility lines located within the subdivision limits and within the adjacent rights-of-way would be required to be placed underground. The petitioner is requesting a variation from the Subdivision Regulations Code to allow 3 of the 8 existing utility poles to not be buried. The 3 poles that are proposed to remain are 12,000-volt utility poles on the north side of Lot 5. All electric utilities running from these utility lines to individual units will be undergrounded. Village staff is in support of requiring the undergrounding of these utility lines as other developments of a similar size have been required to do so.

11. Water and Sanitary Services. Village water and sanitary sewer mains are currently located in the vicinity of the site and would be extended by the developer to serve the site.

12. Stormwater. Stormwater detention for the 100-year storm event is being provided in the regional detention basin in Panfish Park, to which the development is tributary. The developer will pay a fee to the Village of Glen Ellyn based on the required volume of detention storage. The developer is installing storm sewer in the proposed/existing Harding Avenue and Harding Court right-of-way that will convey the 100-year runoff to Panfish Park. The storm sewer discharges into the wetland area south and west of the Water's Edge development that is directly

connected to Panfish Park. The developer provided the required indirect wetland impact analysis to show that there are no significant impacts to this wetland complex as a result of the development.

In addition to 100-year stormwater detention, the developer is providing Post-Construction Best Management Practices (PCBMPs) in the common backyard areas of the development. These PCBMPs are drywells, or stone beds below the grassy areas that allow storage and infiltration of the runoff from the 2-year, 24-hour storm events. These PCBMPs both reduce runoff and improve water quality from 90 percent of storms that occur in a given year. Overflow from the PCBMPs will flow to the 100-year storm sewer and on to Panfish Park.

Consulting Engineer, Amy McKenna will attend the Plan Commission hearing to answer any questions related to the stormwater management plan for the project. The Stormwater Management Report for the development is attached.

13. Landscaping. The petitioner has submitted a landscape and hardscape plan for the project. The proposed landscaping exceeds the Village's Code requirements. A total of 226 trees are proposed (10 of which are parkway trees). All trees will have a minimum caliper of 2.5 inches. A variety of shrubs, grasses and conifers are also proposed. As previously noted, a 10-foot landscape buffer around the property is provided. Adequate tree/plant height is provided for screening purposes along the property lines as well.

14. Tree Survey & Tree Action Plan. As previously indicated, 74 trees have been identified on the site. Of the 74 trees identified, 6 were highlighted as worthy of preservation by the Village's consulting arborist. The petitioner was asked to provide justification for the removal of each tree in the Tree Action Plan (attached). An explanation for each removal was provided to the satisfaction of the Village's consulting arborist, who has approved the Tree Action Plan. For more information, the Tree Action Plan Review Letter dated January 28, 2021 is attached.

15. Lighting. The petitioner is proposing 1 type of outdoor LED wall sconce for the project (cut sheet attached). The light fixture is shielded on the top and sides and does not allow projection of light to adjacent properties. As indicated in the attached photometric plan, the illumination levels at the property lines do not exceed .5 foot-candles. The proposed lighting is compliant with Village Code requirements.

16. Signage. One residential development sign is proposed to be installed on the northeast corner of Lot 1 at the entrance to the development. The proposed sign is code compliant.

17. Building Height. The R4 Residential District allows a maximum building height of 35 feet. However, special uses may be constructed up to 45 feet in height. The Residential PUD standards also allow a maximum building height of 45 feet. Each of the 5 proposed buildings would be well within the permitted height limitation. The tallest building proposed is 36 feet 4 inches. It is incorrectly indicated in the public notice and in the petitioner's application packet that a deviation is needed for this requirement.

18. Deviations. The petitioner provides justification for each of the deviation requests listed below and in their attached Application for Approval of a Preliminary Planned Unit Development. Some of the deviations requested require further explanation, which is provided below.

Lot Dimensions

Deviations are requested for 2 corner lots, which are required to have a lot width of 90 feet. The following deviations are required.

a. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 19.45 feet where 90 feet is required on Lot 1;
b. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 66.05 feet where 90 feet is required on Lot 3;

Bulk Setbacks

Deviations are requested from one of the setback requirements on Lot 3, 4, and 5. The following deviations are required.

c. Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required;
d. Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3;
e. Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5;

Accessory Structures

Deviations for accessory structures encroaching in the front yard on Lot 5 are due to a strict reading of the Zoning Code. Lot 5 has a shorter frontage along IL Route 53, and therefore that is considered the "front yard" for that lot. The deviations to allow mechanical equipment and decks to encroach into the required front yard on Lot 5 are reasonable, since it would not be appropriate for them to be in the Code defined "rear yard" on the Harding Court side of the property.

The deviation requested to allow a 6-foot fence along IL Route 53 is consistent with past approvals for other developments where through-lots have frontage on a busy road. The following deviations are required.

f. Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5;
g. Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4 inches into the required front yard where decks are not a permitted encroachment on Lot 5;
h. Section 10-5-5(B)(4) #11 to allow a completely closed, 6-foot-tall fence to be closer to the street than the principal structures on Lots 3, 4 and 5 where a 4-foot fence, 33.3 percent open is permitted;

Impervious Surfaces

The impervious surface deviations requested below are largely due to the proposed shared driveways for the lots and the emergency access between Lot 3 and Lot 4. Staff is in supportive of the proposed driveway configuration which balances the need for parking and maneuverability. The following deviations are required.

i. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway;
j. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway;
k. Section 10-5-5(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 2;
l. Section 10-5-5(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 3;
m. Section 10-5-5(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 4;

Other

The driveway width deviations listed below are due to the shared driveway configuration. Staff is in support of the driveway layout for the project. Staff believes that the driveway have been minimized as appropriate. The following deviations are required.

n. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4;
o. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6;

p. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8;
q. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17;
r. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.

For ease of review, a complete list of the requested deviations is provided in the below chart.

Lot #	Deviation	Code Section	Required	Proposed
1	Corner lot width	10-4-11(D)(9)(b)(2)	90 feet	19.45 feet
3	Corner lot width	10-4-11(D)(9)(b)(2)	90 feet	66.05 feet
5	Rear yard setback	10-4-11(D)(1)	30 feet	24 feet
5	Mechanical Structure in the required front yard	10-5-5-(B)(4) #19	Not permitted	Encroaching
5	Decks in the required front yard	10-5-5(B)(4) #8	Not permitted	Encroaching
3, 4, 5	Fence in areas closer to the street than the principal structure	10-5-5(B)(4) #11	4-foot-tall and 33% open	6-foot-tall solid
4	Impervious surface setback for the emergency access driveway	10-5-5(C)(1)	8.8 feet	0 feet
3	Impervious surface setback for the emergency access driveway	10-5-5(C)(1)	1.98 feet	0 feet
2	Impervious surface coverage in the required front yard	10-5-5(B)(4) #18.a.2	Maximum 35%	36.05%
3	Impervious surface coverage in the required front yard	10-5-5(B)(4) #18.a.2	Maximum 35%	56.26%
4	Impervious surface coverage in the required front yard	10-5-5(B)(4) #18.a.2	Maximum 35%	58.4%
1	Curb cut width to accommodate the shared driveway for units 3 and 4	10-5-11(F)(1)(a)	Maximum 24 feet	34 feet
2	Curb cut width to accommodate shared driveway for units 5 and 6	10-5-11(F)(1)(a)	Maximum 24 feet	34 feet
2	Curb cut width to accommodate shared driveway for units 7 and 8	10-5-11(F)(1)(a)	Maximum 24 feet	30 feet
4	Curb cut width to accommodate shared driveway for units 16 and 17	10-5-11(F)(1)(a)	Maximum 24 feet	33 feet

5	Curb cut width to accommodate shared driveway for units 22 and 23	10-5-11(F)(1)(a)	Maximum 24 feet	30 feet

19. Construction Schedule. Upon approval of the project, the petitioner plans to file a building permit to demolish the uninhabited single-family home on the south part of the site. Permits would then be acquired for the roadway and site development portions of the project. Construction of the townhome buildings will be phased, starting with Lots 2 and 3. As these buildings near completion, permits will be obtained for the remaining buildings. A building permit must be issued for the first lot within 2 years of zoning approval. All lots for which a building permit has not been issued will be graded, seeded and sodded. All lots must be fully developed within 5 years of zoning approval. If the project is not substantially complete within 7 years, an extension can be requested by the developer.

20. Exterior Appearance.
The petitioner incorporated many of the architectural design suggestions that were requested during the project review phase. The following changes were made at staff's request:

    a. In concert with the elevation changes, pairs of units were off-set to break up the rooflines, to create terminations of like materials, improve scale and add shadow lines.

    b. The stone along the front elevations was wrapped around to the side elevation to allow for a better transition.

    c. Bay windows and dormers were added to the rear of the building to break up the long flat elevations.

    After reviewing the submitted applications and plans for the proposed exterior appearance, staff finds the project to be in substantial conformance with the Village's Appearance Review Guidelines. The project specifically complies with the following guidelines:

    Guideline 1.1 - The proposed development is compatible with the character of the site, adjacent development, and the adjacent streetscape.
    Guideline 1.1.2 – The site grading has been minimized to preserve the character of the site and the buildings will fit the contours of the land.
    Guideline 1.1.4 - The architectural style does not harshly conflict with adjacent buildings.
    Guideline 1.1.5 - The project maintains the rhythm of the street (in terms of building setback and massing) and continuity of its landscaping.

Guideline 1.2 – Brick and stone with natural and earth tone colors are used in the project design.
Guideline 1.4 – The project design is not arbitrary or a fad design that will soon become outdated.
Guideline 1.5 – The roofs of the buildings are scaled to the building which they cover.
Guideline 1.5.1 – The roof's architectural shingles are a color and texture appropriate to the building structure and use.
Guideline 1.5.4 – The pitched roof has overhangs which define the roof wall interface.
Guideline 1.6 – Entrances are readily identifiable from parking areas and pedestrian approaches.
Guideline 1.7 – The architectural character of all sides of the buildings relate to the principal elevation.
Guideline 1.8 – Colors are muted and complement each other.
Guideline 1.9 – The apparent mass and bulk of the buildings are reduced by the structural articulation and building off-sets.
Guideline 2.1.3 - The project has a center island at the bulb of the cul-de-sac.
Guideline 2.1.4 – The overall project landscape plan provides color throughout the growing season.
Guideline 2.1.5 – Landscaping of more than 5 feet in width has been employed along the sides of the buildings.
Guideline 2.2 – The design of the light fixtures compliments the architecture and function of the buildings.
Guideline 2.2.1 – The fixtures do not directly allow light projection to the sky.
Guideline 2.4.3 – The structure, materials, colors and detailing for the freestanding residential development sign relates to the design of the townhome buildings.
Guideline 2.4.4 – Landscaping is proposed around the sign base.
Guideline 7.1 – Masonry is used on the ground floor of all buildings.
Guideline 7.5 – The townhomes do not create a monotonous or garage dominated streetscape.
Guideline 7.5.2 – The garage doors are varied. Some of the garages are individual garage doors, to reduce their dominance of the front elevation.
Guideline 7.5.3 – The garage doors are decorative and provide architectural detail and enhancement.
Guideline 7.5.4 – There is space between driveways which is adequate to maintain grass or other landscape treatments.

Staff therefore suggests that the Plan Commission make a recommendation to approve the Exterior Appearance for the development.

PLAN COMMISSION ACTION:

The Plan Commission is requested to conduct a public hearing to consider the requests for approval of a Special Use Permit for Preliminary and Final Planned Unit Development Plans with Zoning Deviations, Preliminary and Final Plats of Subdivision for a Major Subdivision, Subdivision Variations, a Zoning Map Amendment, and the Exterior Appearance for the construction of a 23-unit townhome development on the subject property. The Plan Commission should make a recommendation to the Village Board for approval, approval with conditions, or denial. In deliberating this recommendation, the Plan Commission should consider the criteria in Sections 10-7-7, Section 10-10-13(E), 10-10-14(E) of the Zoning Code, Section 11-3-10 and 11-3-11 of the Subdivision Regulations Code and the Village's Appearance Review Guidelines. Staff has prepared draft findings of fact for a recommendation of approval of the requests (attached). Plan Commissioners should feel free to modify the findings based upon information provided at the public hearing. If Commission members wish to recommend denial of any of the requests and would like staff to prepare a motion to deny, please contact staff in advance of the meeting. A draft motion to approve has been attached for the Plan Commission's review and use.

Staff would recommend the Plan Commission consider the following conditions of approval:

1. That the petitioner construct, maintain, and operate the development in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees;

2. That the developer shall install, maintain, and replace all landscape materials per the approved landscape plan until the common areas are turned over to the HOA;

3. That the HOA shall maintain the landscaping within the common open areas in substantial conformance with the approved landscape plan in perpetuity;

4. That the Declaration of Maintenance and Easement Agreement for Harding Custom Townhomes Subdivision Unit 2 shall be recorded against all 5 Lots with the Document No. referenced on the Plat prior to recordation of the Plat;

5. That the developer must post performance security as required by the DuPage County stormwater ordinance and by the Village Code for stormwater management elements and public improvements;

6. That a fee for stormwater detention in the regional detention basin in Panfish Park in the amount of $132,900.00 per acre foot of required storage shall be submitted prior to the issuance of a building permit;

7. That a soils analysis for each building shall be provided with final permit plans for the project;

8. That a stormwater Pollution Prevention Plan and a copy of the IEPA Notice of Intent shall be submitted with permit plans for the project;

9. That the public improvements list be revised to the satisfaction of the Village Engineer prior to Village Board review;

10. That an updated EcoCat be submitted prior to the issuance of a building permit for the project;

11. That any required clearing or sidewalk repair adjacent to the Rolling Hedge Subdivision be included in the scope of work covered by the IDOT permit and that the developer assist with the actual work (with reimbursement by the Village);

12. That no work on the project should commence until an IDOT right-of-way permit has been issued for the project;

13. That the petitioner prepare a construction management plan for review at a pre-construction meeting with the Police, Fire, Public Works, and Community Development Departments and that said Village staff approve the construction management plan prior to the issuance of a building permit;

ATTACHMENTS:

- Aerial Image
- Location and Zoning Map
- Public Hearing Notice
- List of Properties Notified
- Buffer Map for Public Hearing Notice
- Certificate of Publication
- Excerpts from 2001 Comprehensive Plan
- Excerpts from the 2021 Draft Comprehensive Plan
- Pre-application Meeting Minutes – March 10, 2016
- Pre-application Meeting Minutes – May 25, 2017
- Pre-application Meeting Minutes – July 27, 2017
- Petitioner's Application Packet including:
    - Application for Exterior Appearance Review
    - Application for Preliminary Approval of a Major Subdivision
    - Application for Final Approval of a Major Subdivision

  - Application for Preliminary Approval of a Planned Unit Development
  - Application for Final Approval of a Planned Unit Development
  - Application for Approval of a Zoning Map Amendment
  - Supplementary Application Information
  - Narrative Use Statement
  - Quantitative Summary
  - Preliminary Subdivision Plat
  - Final Subdivision Plat
  - PUD Plan
  - Renderings: 4-unit front and rear, 6-unit front and rear
  - Architectural Plans
  - Engineering Plans
  - Landscape & Hardscape Plans
  - Tree identification Survey
  - Tree Action Plan
  - Tree Action Plan Review Letter
  - Sign Plan
  - Photometric Plan
  - Light Fixture Cut Sheet
  - Construction Phasing Schedule
  - Evidence of Experience
  - Market Study
  - Public Improvements List
  - Fire Department Approval Letter
  - Alternate Site Plan Exhibit – IL Route 53 Connection
  - Letter is Support of Current Design – Brentwood Neighbors
  - Traffic Study
  - Auto-Turn Exhibits
  - Stormwater Report
  - Exhibits to Stormwater Report
  - Declaration of Maintenance Agreement
  - Exhibits to Maintenance Agreement
  - Townhome HOA CCRs
  - IDNR EcoCat
  - Land Use Opinion
  - Geotechnical Report
- Draft Findings of Fact
- Draft Motion to Approve

Cc: Staci Springer, Community Development Director
Rich Daubert, Professional Engineer
Bob Minix, Part-Time Professional Engineer
Amy McKenna, Consulting Civil Engineer
Marvin Ritter, Petitioner

X:\Plandev\PLANNING\DEVELOPMENT PROJECTS\Harding 787 - Multi-Family\6. Meeting Materials\Plan Commission\Staff Report - PC Public Hearing.doc

GISConsortium | Property Aerial

0 500 1000 ft

Print Date: 12/3/2021

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

GISConsortium | Zoning Map

Legend

Zoning and Development

Zoning

- C3: Service Commercial District
- C4: Office District
- CR: Conservation/Recreation District
- R1: Single Family Residential District
- R2: Single Family Residential District
- R3: Multi-Family Residential District
- R4: Multi-Family Residential District

0 500 1000 ft

Print Date: 12/3/2021

Notes

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NOTICE OF PUBLIC HEARING

Marv Ritter on behalf of the property owner, Harding Custom Homes, LLC, is requesting approval of a Special Use for a Preliminary and Final Planned Unit Development Plan with Deviations, Preliminary and Final approval of a Major Subdivision Plat with Subdivision Variations and a Zoning Map Amendment. The requests are associated with the proposed construction of a 23-unit townhome development to be located on the properties at 787 Harding Avenue, 138 IL State Route 53, a Village owned right-of-way and two vacant parcels (no addresses). The subject properties are located west of IL State Route 53 between Harding Avenue and Glenbard Road in the R2 Residential District. As part of the project, the petitioner is requesting that the property be rezoned to R4 Residential District.

Before the Glen Ellyn Village Board can consider the application, the Plan Commission must conduct a public hearing. The Plan Commission will consider the requests on **Thursday, December 9, 2021 at 7:00 p.m.**, in the Galligan Board room on the third floor of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois.

The Plan Commission will consider the petitioner's request for approval of the following:

1. A Special Use Permit for a Preliminary and Final Planned Unit Development Plan in accordance with Section 10-10-15 of the Glen Ellyn Zoning Code.

2. The following deviations from the Glen Ellyn Zoning Code:
   Lot Dimensions
   - **a.** Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 19.45 feet where 90 feet is required on Lot 1;
   - **b.** Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 66.05 feet where 90 feet is required on Lot 3;

   Bulk Setbacks
   - **c.** Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required;
   - **d.** Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3;
   - **e.** Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5;
   - **f.** Section 10-4-11(E)1 to allow a building height of approximately 36 feet 4 inches on Lot 1 where a maximum height of 35 feet is permitted;
   - **g.** Section 10-4-11(E)1 to allow a building height of approximately 35 feet 1 inch on Lot 2 where a maximum height of 35 feet is permitted;
   - **h.** Section 10-4-11(E)1 to allow a building height of approximately 35 feet 8 ½ inches on Lot 5 where a maximum height of 35 feet is permitted;

   Accessory Structures
   - **i.** Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5;

j. Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4 inches into the required front yard where decks are not a permitted encroachment on Lot 5;

k. Section 10-5-5(B)(4) #11 to allow a completely closed, 6-foot tall fence to be closer to the street than the principal structures on Lots 3, 4 and 5 where a 4 foot fence, 33.3% open is permitted;

Impervious Surfaces

l. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway;

m. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway;

n. Section 10-5-5(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 2;

o. Section 10-5-5(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 3;

p. Section 10-5-5(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 4;

Other

q. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4;

r. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6;

s. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8;

t. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17;

u. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.

3. A Preliminary and Final Major Subdivision Plat in accordance with Section 11-3-4 and 11-3-5 of the Glen Ellyn Subdivision Regulations Code.

4. The following variations from the Glen Ellyn Subdivision Regulations Code:
   a. Section 11-4-2(G) to allow Lots 1, 3, 4, and 5 to have two frontages to public right-of-way where only one frontage per lot is permitted;
   b. Section 11-4-4(E) to allow a right-of-way width of 55 feet for a local street where 66 feet is required (Harding Avenue, Harding Court);

c. Section 11-4-4(E) to allow a right-of-way width of 30 feet for a local street where 66 feet is required (Kohler property connection).
d. Section 11-4-4(J)(1), to allow a cul-de-sac length of approximately 1,375 feet where cul-de-sacs are limited to 300 feet;
e. Section 11-4-8, to allow 3 out of 8 existing utility poles to not be buried, where burying of electric, communication, and other facilities both within the subdivided property and adjacent rights-of-way is required;
f. Section 11-4-7, to not install approximately 438 linear feet of sidewalk along IL-53, where sidewalk along all public rights-of-way is required.

5. A Zoning Map Amendment in accordance with Section 10-10-13 of the Glen Ellyn Zoning Code.

The subject properties are legally described as follows:

PARCEL 1: 787 HARDING AVENUE
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY ILLINOIS.

P.I.N.: 05-23-223-020; and

PARCEL 2: VACANT LOT, NO ADDRESS
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS

P.I.N.: 05-23-223-005; and

PARCEL 3: 138 IL STATE ROUTE 53
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

P.I.N.: 05-23-223-008; and

PARCEL 4: VACANT LOT, NO ADDRESS

THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

P.I.N.: 05-23-223-025; and

PARCEL 5: 33-FOOT HARDING AVENUE RIGHT-OF-WAY
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

P.I.N.: NONE

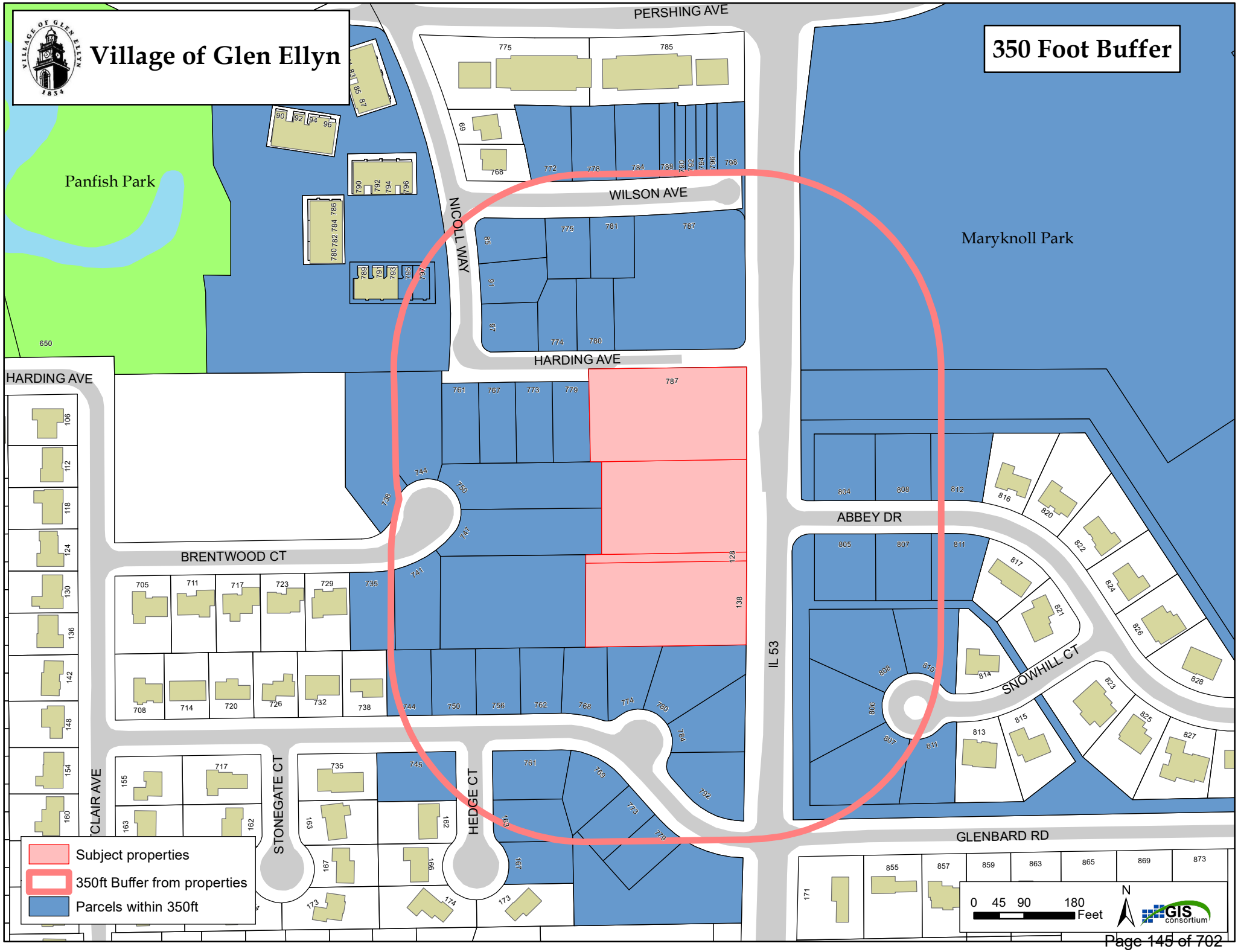
All persons who are interested are invited to attend the public hearing to listen and be heard. Plans related to the proposed development are available for public review at any time prior to or after the Plan Commission meeting in the Community Development Department of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois, and will also be on the Village's website at: http://glenellyn.org (Agendas & Minutes/ Plan Commission) by Friday December 3, 2021. Questions related to the project should be directed to Kelly Purvis, Planning Manager, (630) 547-5371.

Individuals with disabilities who plan to attend the meeting and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact Brian Baltudis at (630) 547-5209 at least 24 hours in advance of the meeting.

Kelly Purvis
Planning Manager, Village of Glen Ellyn

Name	St Num	St Dir	St Name	Apt	City	State	ZIP
ALEKSI, ZANA & MINELLA	787		WILSON AVE	17	GLEN ELLYN	IL	60137
ANDERSON, DONALD & P E	778		WILSON AVE		GLEN ELLYN	IL	60137
BOLKAN, DAICY	787		WILSON AVE	105	GLEN ELLYN	IL	60137
BULWAN, THOMAS & MAUREEN	744		GLENBARD RD		GLEN ELLYN	IL	60137
CEKAL, PATRICIA A	797		PARKVIEW CT		GLEN ELLYN	IL	60137
COBO, ANIL & D PAPUCIU	787		WILSON AVE	1	GLEN ELLYN	IL	60137
COCONATE, ANTHONY & TRACY	767		HARDING AVE		GLEN ELLYN	IL	60137
COMM HOUSING ADVOCACY	531	E	ROOSEVELT RD	200	WHEATON	IL	60187
COMMUNITY HOUSING ASSOC	531	E	ROOSEVELT RD		WHEATON	IL	60187
COMMUNITY HOUSING DU PAGE	35C	W	ST CHARLES RD		VILLA PARK	IL	60181
D ASARO, CAROL A	787		WILSON AVE	16	GLEN ELLYN	IL	60137
DANLEY JR, LE VERNE & S	806		SNOWHILL CT		GLEN ELLYN	IL	60137
DAY III, JOHN E & LYNN S	750		GLENBARD RD		GLEN ELLYN	IL	60137
DE VOS, HERBERT & MARY	787		WILSON	2	GLEN ELLYN	IL	60137
DESCHAMPS. DAVID & ANNE	774		GLENBARD RD		GLEN ELLYN	IL	60137
DONAT, JOSEPH	744		BRENTWOOD CT		GLEN ELLYN	IL	60137
DULAJ, ELVIRA	787		WILSON AVE	5	GLEN ELLYN	IL	60137
DVORNIK, ARIANA	787		WILSON AVE	13	GLEN ELLYN	IL	60137
EGAN, SEAN & NICOLE	779		GLENBARD RD		GLEN ELLYN	IL	60137
ENINI, SKENDER	787		WILSON AVE	3	GLEN ELLYN	IL	60137
FORD, THOMAS & SHANNON	768		GLENBARD RD		GLEN ELLYN	IL	60137
GERWEN, RONALD &GERALDINE	745		GLENBARD RD		GLEN ELLYN	IL	60137
GFESSER, BARBARA A	773		GLENBARD RD		GLEN ELLYN	IL	60137
GIRLING, JEFFREY HRW & A	762		GLENBARD RD		GLEN ELLYN	IL	60137
GLEN ELLYN PARK DISTRICT	185		SPRING AVE		GLEN ELLYN	IL	60137
GRATTON, DAN & ERENN	163		HEDGE CT		GLEN ELLYN	IL	60137
HARDING CUSTOM HOMES	227		7TH AVE NE		ST PETERSBURG	FL	33701
HARDING CUSTOM HOMES LLC	540		DUANE ST	2ND	GLEN ELLYN	IL	60137
HAYES, THOMAS M & JULIE G	808		SNOWHILL CT		GLEN ELLYN	IL	60137
HEMESATH, ERIC & MICHELLE	780		GLENBARD RD		GLEN ELLYN	IL	60137
HULL, THOMAS J & NANCY D	741		BRENTWOOD CT		GLEN ELLYN	IL	60137
HUSNICK, CHAD & STEPHANIE	747		BRENTWOOD CT		GLEN ELLYN	IL	60137
JANO, THANAS & MARINA	775		WILSON AVE		GLEN ELLYN	IL	60137
JOHNSON, JEREMY R	774		HARDING AVE		GLEN ELLYN	IL	60137
JORGENSEN, ROBT & ANNE	738		BRENTWOOD CT		GLEN ELLYN	IL	60137
KING, JOHN E & BRIDGET M	772		WILSON AVE		GLEN ELLYN	IL	60137
KOGUT, CHARLES & MARYBETH	805		ABBEY DR		GLEN ELLYN	IL	60137
KOHLER JR, JOHN C	101	W	22ND ST	109	LOMBARD	IL	60148
KOLLING, M & S FONDA	780		HARDING AVE		GLEN ELLYN	IL	60137
KUDRNA, CHRISTOPHER & M B	807		SNOWHILL CT		GLEN ELLYN	IL	60137
LABUTINA, TATIANA	787		WILSON AVE	4	GLEN ELLYN	IL	60137
LE, HIEP MINH & LINDA BUI	787		WILSON	104	GLEN ELLYN	IL	60137
M/S LLC	300	E	ROOSEVELT RD		WHEATON	IL	60187
MALONE, ANDREW M & P J	795		PARKVIEW CT		GLEN ELLYN	IL	60137
MARYKNOLL ESTATES OWNERS			PO BOX 2540		GLEN ELLYN	IL	60138
MAY, WILLIAM	91		NICOLL WAY		GLEN ELLYN	IL	60137
MAYO, JOSEPH	792		GLENBARD RD		GLEN ELLYN	IL	60137
MURPHY, CIARAN	810		SNOWHILL CT		GLEN ELLYN	IL	60137
MURPHY, S & K POPOWSKI	167		HEDGE CT		GLEN ELLYN	IL	60137
NELSON, NICOLAS & REBECCA	750		BRENTWOOD CT		GLEN ELLYN	IL	60137
NESYPOR, CHRISTOPHER J	2322		WORTHING DR		NAPERVILLE	IL	60565
OLSON, MATTHEW K	787		WILSON AVE	7	GLEN ELLYN	IL	60137
PERE, VALENTIN R	784		GLENBARD RD		GLEN ELLYN	IL	60137
POORE, PAUL & M TAYLOR	787		WILSON AVE	12	GLEN ELLYN	IL	60137
REICHERT, TED & KATIE	85		NICOLL WAY		GLEN ELLYN	IL	60137
ROSEBERRY, DAVID	787		WILSON AVE	6	GLEN ELLYN	IL	60137
RYNIEC, ALLEN W & DONNA L	811		SNOWHILL CT		GLEN ELLYN	IL	60137
SAMMARCO, BRIAN &KIMBERLY	735		BRENTWOOD CT		GLEN ELLYN	IL	60137

SCHAEFER, WILLIAM D & K M	756		GLENBARD RD		GLEN ELLYN	IL	60137
SCHARAGA, ERIC & SARA	97		NICOLL WAY		GLEN ELLYN	IL	60137
SCHULZ, RUSSELL & KAREN	761		GLENBARD		GLEN ELLYN	IL	60137
SHAMIM, MUHAMMAD S	787		WILSON AVE	11	GLEN ELLYN	IL	60137
SOTO, JOSE J	787		WILSON	9	GLEN ELLYN	IL	60137
SPIERS, STEVEN A & ANN T	811		ABBEY DR		GLEN ELLYN	IL	60137
STROHBUSCH, M & L BRYSON	808		ABBEY DR		GLEN ELLYN	IL	60137
TAROUSA, STERGIO	1N080		WEST ST		CAROL STREAM	IL	60188
THORNTON, STEVEN & SANDRA	807		ABBEY DR		GLEN ELLYN	IL	60137
TODHUNTER, WM & AMANDA	769		GLENBARD RD		GLEN ELLYN	IL	60137
VILLAGE OF GLEN ELLYN	535		DUANE ST		GLEN ELLYN	IL	60137
VILLAGE OF GLEN ELLYN	30	S	LAMBERT RD		GLEN ELLYN	IL	60137
VILLASENOR, ANTONIO & M	784		WILSON AVE		GLEN ELLYN	IL	60137
VILLASENOR, SERGIO & T	781		WILSON AVE		GLEN ELLYN	IL	60137
WATERS EDGE TOWNHOME ASS	40		WRIGHT CT		BOLINGBROOK	IL	60440
WIDMER, EILEEN	812		ABBEY DR		GLEN ELLYN	IL	60137
WILLIAMS, T & J HOWARD II	804		ABBEY DR		GLEN ELLYN	IL	60137
ZAGORCANI, ARTHUR	787		WILSON AVE	8	GLEN ELLYN	IL	60137


Village of Glen Ellyn
350 Foot Buffer
PERSHING AVE
WILSON AVE
NICOLL WAY
HARDING AVE
BRENTWOOD CT
ABBEY DR
SNOWHILL CT
GLENBARD RD
IL 53
STONEGATE CT
HEDGE CT
CLAIR AVE
Panfish Park
Maryknoll Park
Subject properties
350ft Buffer from properties
Parcels within 350ft
0 45 90 180
Feet
N
GIS consortium

NOTICE OF PUBLIC HEARING

Marv Ritter on behalf of the property owner, Harding Custom Homes, LLC, is requesting approval of a Special Use for a Preliminary and Final Planned Unit Development Plan with Deviations, Preliminary and Final approval of a Major Subdivision Plat with Subdivision Variations and a Zoning Map Amendment. The requests are associated with the proposed construction of a 23-unit townhome development to be located on the properties at 787 Harding Avenue, 138 IL State Route 53, a Village owned right-of-way and two vacant parcels (no addresses). The subject properties are located west of IL State Route 53 between Harding Avenue and Glenbard Road in the R2 Residential District. As part of the project, the petitioner is requesting that the property be rezoned to R4 Residential District.

Before the Glen Ellyn Village Board can consider the application, the Plan Commission must conduct a public hearing. The Plan Commission will consider the requests on **Thursday, December 9, 2021 at 7:00 p.m.,** in the Galligan Board room on the third floor of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois.

The Plan Commission will consider the petitioner's request for approval of the following:

1. A Special Use Permit for a Preliminary and Final Planned Unit Development Plan in accordance with Section 10-10-15 of the Glen Ellyn Zoning Code.
2. The following deviations from the Glen Ellyn Zoning Code:
   Lot Dimensions
   a. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 19.45 feet where 90 feet is required on Lot 1;
   b. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 66.05 feet where 90 feet is required on Lot 3;
   Bulk Setbacks
   c. Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required;
   d. Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3;
   e. Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5;
   f. Section 10-4-11(E)1 to allow a building height of approximately 36 feet 4 inches on Lot 1 where a maximum height of 35 feet is permitted;
   g. Section 10-4-11(E)1 to allow a building height of approximately 35 feet 1 inch on Lot 2 where a maximum height of 35 feet is permitted;
   h. Section 10-4-11(E)1 to allow a building height of approximately 35 feet 8 ½ inches on Lot 5 where a maximum height of 35 feet is permitted;
   Accessory Structures
   i. Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5;
   j. Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4 inches into the required front yard where decks are not a permitted encroachment on Lot 5;
   k. Section 10-5-5(B)(4) #11 to allow a completely closed, 6-foot tall fence to be closer to the street than the principal structures on Lots 3, 4 and 5 where a 4 foot fence, 33.3% open is permitted;
   Impervious Surfaces
   l. Section 10-5-5(C)(1) to allow an impervious surface set back of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway;
   m. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway;
   n. Section 10-5-5(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 2;
   o. Section 10-5-5(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 3;
   p. Section 10-5-5(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 4;
   Other
   q. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4;
   r. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6;
   s. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8;
   t. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17;
   u. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.
3. A Preliminary and Final Major Subdivision Plat in accordance with Section 11-3-4 and 11-3-5 of the Glen Ellyn Subdivision Regulations Code.
4. The following variations from the Glen Ellyn Subdivision Regulations Code:
   a. Section 11-4-2(G) to allow Lots 1, 3, 4, and 5 to have two frontages to public right-of-way where only one frontage per lot is permitted;
   b. Section 11-4-4(E) to allow a right-of-way width of 55 feet for a local street where 66 feet is required (Harding Avenue, Harding Court);
   c. Section 11-4-4(E) to allow a right-of-way width of 30 feet for a local street where 66 feet is required (Kohler property connection).
   d. Section 11-4-4(J)(1), to allow a cul-de-sac length of approximately 1,375 feet where cul-de-sacs are limited to 300 feet;
   e. Section 11-4-8, to allow 3 out of 8 existing utility poles to not be buried, where burying of electric, communication, and other facilities both within the subdivided property and adjacent rights-of-way is required;
   f. Section 11-4-7, to not install approximately 438 linear feet of sidewalk along IL-53, where sidewalk along all public rights-of-way is required.
5. A Zoning Map Amendment in accordance with Section 10-10-13 of the Glen Ellyn Zoning Code.

The subject properties are legally described as follows:

PARCEL 1: 787 HARDING AVENUE
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY ILLINOIS.
P.I.N.: 05-23-223-020; and

PARCEL 2: VACANT LOT, NO ADDRESS
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS
P.I.N.: 05-23-223-005; and

PARCEL 3: 138 IL STATE ROUTE 53
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 3, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS
P.I.N.: 05-23-223-008; and

PARCEL 4: VACANT LOT, NO ADDRESS
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 3, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS
P.I.N.: 05-23-223-025; and

PARCEL 5: 33-FOOT HARDING AVENUE RIGHT-OF-WAY
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS
P.I.N.: NONE

All persons who are interested are invited to attend the public hearing to listen and be heard. Plans related to the proposed development are available for public review at any time prior to or after the Plan Commission meeting in the Community Development Department of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois, and will also be on the Village's website at: http://glenellyn.org (Agendas & Minutes/ Plan Commission) by Friday December 3, 2021. Questions related to the project should be directed to Kelly Purvis, Planning Manager, (630) 547-5371.

Individuals with disabilities who plan to attend the meeting and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact Brian Battudis at (630) 547-5209 at least 24 hours in advance of the meeting.

Kelly Purvis
Planning Manager, Village of Glen Ellyn
Published in Daily Herald November 24, 2021 (4574019)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

DuPage County

Daily Herald

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County(ies) of DuPage

and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and is of general circulation throughout said Village(s), County(ies) and State.

I further certify that the DuPage County DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 11/24/2021
in said DuPage County DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, this authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY Paula Baltz
Designee of the Publisher and Officer of the Daily Herald

Control # 4574019

Residential Area Policies

The Community-Wide Plan strives to maintain and protect existing neighborhoods, improve and strengthen residential properties that are beginning to decline, and promote high-quality new residential development that enhances existing neighborhood character.

Map Legend:

***Single-Family Detached Residential**, reflecting densities up to 5 units per acre.*

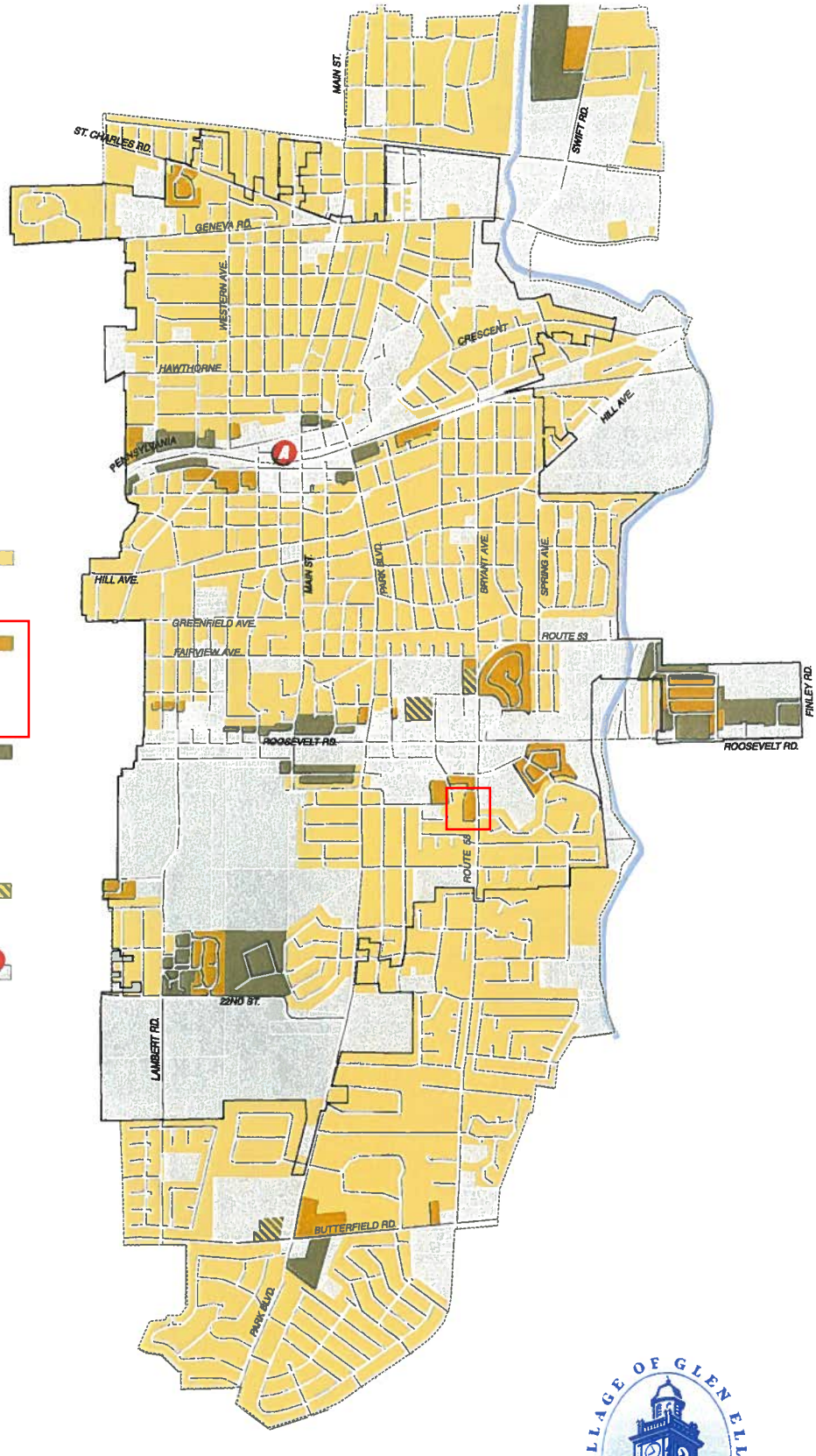
***Low-Density Attached Residential**, including town-homes and cluster homes, reflecting densities of 5 to 10 units per acre.*

***Medium-Density Residential**, including walk-up and elevator multiple-family developments, reflecting densities of 10 to 18 units per acre.*

***Senior Residential**, including senior housing, assisted living, and extended care.*

***Downtown Glen Ellyn**: Somewhat higher densities may be considered, but height and density should be reevaluated as a part of updating the Zoning Ordinance. Residential units are also appropriate on the upper floors of Downtown commercial buildings.*

***NOTE:** Residential densities are used in the Comprehensive Plan for overall guidance only. Zoning will continue to govern densities on specific parcels. When the Zoning Ordinance is updated following adoption of the Plan, allowable densities within zoning districts should be reviewed.*



Residential Area Policies

Glen Ellyn is primarily a residential community. The Village is comprised of several distinct neighborhood areas, each with somewhat different physical characteristics such as street configuration, landscaping, lot sizes and housing construction. Much of the Village's special image and identity is due to the unique character of its neighborhoods, and these distinguishing features should be preserved and enhanced.

The Community-Wide Plan builds upon Glen Ellyn's established neighborhood structure and promotes improvements and developments that will maintain and strengthen this traditional structure in the future.

Since Glen Ellyn is a built-up community, most new residential development will consist of new homes constructed on vacant lots and new housing occurring as the result of the redevelopment of existing uses.

Improvement Guidelines:

Several principles should guide neighborhood improvement and development within Glen Ellyn.

Neighborhoods should be designed primarily for residential use. Shopping and services, elementary schools, and parks and playgrounds should be easily accessible by pedestrians and bicycles as well as vehicles. The boundaries between neighborhoods and adjoining land-use areas should be clearly defined, and screening and buffering should be provided as required.

Through-traffic should be routed around residential neighborhoods, along either "village arterial" or collector streets. Pedestrian walkways and bikeways should connect homes with schools and neighborhood facilities. The Village should strive to maintain a neighborhood atmosphere in which all residents feel safe and secure.

Glen Ellyn should continue to offer a diverse housing stock that will accommodate a diverse population. The current balance of single-family and multi-family units should be essentially maintained in the future.

on the edge of single-family neighborhoods and near major activity areas. Sufficient parking should be provided to serve all multi-family development.

All new residential development, including additions and remodelings, should be characterized by high-quality design and construction and should be compatible with the scale and character of the surrounding neighborhood.

Stormwater management should be addressed on a comprehensive basis within all residential areas.

New residential developments of over one acre in size should continue to be developed as planned unit developments. The PUD technique, which gives the Village maximum control over residential area design and development, is particularly useful in situations where normal zoning may not be sufficient to promote desirable new development.

Single-Family Neighborhoods:

Existing single-family neighborhoods should be strengthened where necessary through community facility and infrastructure improvements. Improvement and rehabilitation of older housing should be promoted. Housing rehabilitation and code enforcement activities should continue to be undertaken. Historic homes, tree-lined streets and other distinguishing neigh-borhood characteristics should be protected. Neighborhoods throughout the Village should feel "open" because of the layout and relationships of homes on properties and adjoining lots.

Several of Glen Ellyn's neighborhoods are experiencing pressure due to "teardowns" of existing homes and new construction. The Plan recognizes the value and importance of Glen Ellyn's older existing housing stock in terms of image, character, stability and affordability. While the replacement of some older housing is both normal and desirable, the Village should continue to monitor this situation to ensure that changes are sensitive to and reflective of existing neighborhood character.

Although Glen Ellyn's neighborhoods are essentially "built-out," several vacant lots and land parcels are scattered throughout the planning jurisdiction

velopment could occur in the future.

Low-Density Attached Residential:

Low-density residential development, including townhouses, attached single-family homes, cluster homes and similar developments, should be located along major streets and near activity centers. For example, existing low-density developments are located near Downtown, the Roosevelt Road corridor, and the College of DuPage.

Low-density residential development should be located on small sites occupying locations between commercial areas and single-family neighborhoods. These sites are intended to provide for small-scale townhouse or similar development as a "transition" between the commercial and neighborhood areas. New development in these locations should be of a scale and character compatible with nearby existing single-family homes. New low-density development should reinforce and enhance overall neighborhood quality rather than detract from it.

Medium-Density Residential:

Medium-density residential development should be located near major activity centers. Existing medium-density residential, including walk-up and elevator multiple-family developments, are located adjacent to the Downtown, in the Surrey Drive area, near the Roosevelt Road corridor, north of the College of DuPage, west of Swift Road, and at the intersection of Butterfield Road and Park Boulevard.

The design and development of all new multi-family residential development should be carefully controlled to ensure compatibility with surrounding uses, adequate screening and buffering, and a quality living environment.

Senior Residential:

Senior residential, including senior housing, assisted living and extended care facilities, should be provided in convenient locations to accommodate the needs of senior citizens within Glen Ellyn. Compatibly scaled new senior housing would also be acceptable in the areas designated for low- and medium-density residential.

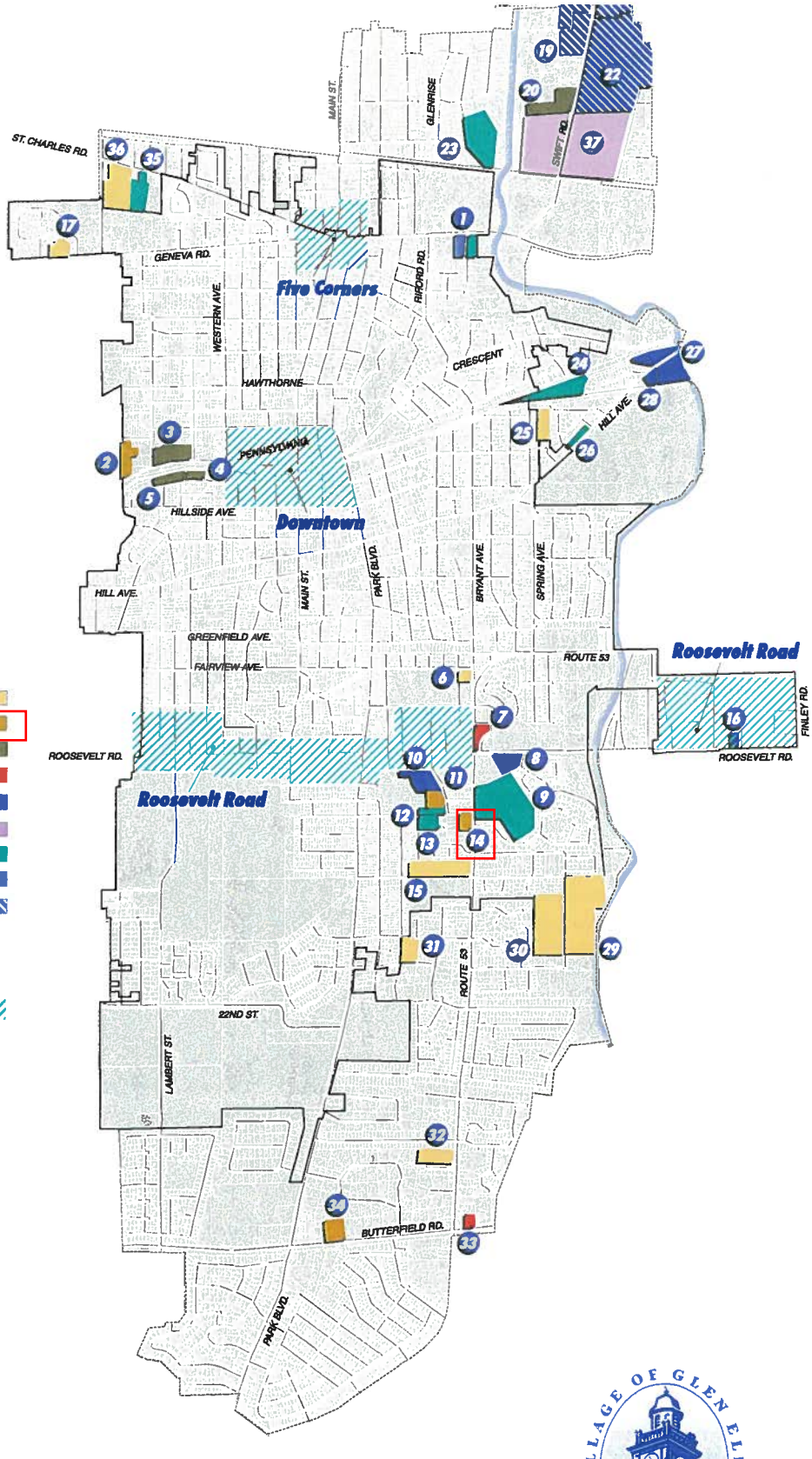
Figure 6

Potential Development Sites

Even though Glen Ellyn is a mature, built-up community, there are several vacant properties scattered throughout the planning jurisdiction where new development might occur in the future. In addition, a few developed areas are characterized by underutilization and may be subject to intensification or redevelopment. Potential development sites within the planning jurisdiction are highlighted in Figure 6.

Map Legend:

- Single-Family Residential
- Low-Density Residential
- Medium-Density Residential
- Commercial
- Office and Business
- Commonwealth Edison
- Parks and Open Space
- Public/Institutional
- Mixed-Use Development Area
- Potential Development Site (see **Table 1**)
- "Target Areas" (see **Section 3**)



Note:

*The characteristics of the **Potential Development Sites** are presented in Table 1. The table also indicates the land-use recommendation for each site.*

Area Number	Existing Use	Surrounding Uses	Current Zoning	1986 Comp. Plan	Vehicular Accessibility	Utility Service
10	Predominantly vacant; a few older single-family homes	North: Commercial South: Panfish Park East: Office West: Panfish Park	Glen Ellyn: C-4	Office	Frontage on Taft Avenue (minor collector) and Nicoll Way (major collector)	Currently served by Glen Ellyn water and sewer facilities
11	Vacant land	North: Vacant land South: Vacant land East: SF - MF residential West: Panfish Park	Glen Ellyn: R-3	Low-density multi-family residential	Frontage on Nicoll Way (a local street south of Wilson)	Currently served by Glen Ellyn water and sewer facilities
12	Vacant land	North: Vacant land South: Vacant land East: SF - MF residential West: Panfish Park	Glen Ellyn: CR	Park/open space	Frontage on Nicoll Way (a local street south of Wilson)	Currently served by Glen Ellyn water and sewer facilities
13	Vacant land	North: Panfish Park South: SF residential East: SF residential West: SF residential	Glen Ellyn: R-2	Park/open space; single-family residential	Frontage on Montclair Avenue and Brentwood Court (local streets)	Currently served by Glen Ellyn water and sewer facilities
14	Vacant land	North: MF residential South: SF residential East: SF / Park West: SF residential	Glen Ellyn: R-2	Single-family residential	Frontage on Route 53 (major arterial)	Currently served by Glen Ellyn water; sewer service could be extended
15	Vacant land; one single-family property	North: SF residential South: Glen Crest School East: SF residential West: SF residential	Glen Ellyn: R-2	Single-family residential	Frontage on Sheehan Avenue (minor collector) and Route 53 (major arterial)	Currently served by Glen Ellyn water and sewer facilities
16	Vacant bank building	North: MF residential South: Lombard East: Office West: Commercial	Glen Ellyn: C-3	Office	Frontage on Roosevelt Road (major arterial)	Currently served by Glen Ellyn water and sewer facilities
17	Vacant land	North: SF residential South: SF residential East: SF residential West: SF residential	Glen Ellyn: R-2	Outside the 1986 planning area	Frontage on Geneva Road (minor arterial)	Currently served by Wheaton Sanitary District and Citizens Utilities Water
Sites within unincorporated DuPage County:						
18	Mix of residential and commercial uses; vacant land	North: Glendale Heights South: SF residential East: Commercial West: MF residential	County: B-1 (west) B-2 (east)	Outside the 1986 planning area	Frontage on North Avenue (major arterial) and Swift Road (minor arterial)	Currently served by DuPage County water and sewer collection system; Glenbard Wastewater Authority treatment

Environmental Considerations	Future Development Potential	Preliminary Consultant Recommendation
Includes wetland area; lightly wooded site	*Good. Site with relatively good accessibility and attractive frontage on Panfish Park.*	***Office.** Good location for small-scale office development, as suggested in the 1986 Plan. As an alternative, this site might be suitable for townhomes or similar multi-family development.*
Floodplain and poor soils in western portion; lightly wooded site	*Good. Small site occupying a "transitional" location between commercial to the north and residential to the south. Townhomes have already been discussed for this site.*	***Low-density attached residential.** Good location for small townhome development of a scale and character compatible with the existing homes to the south and east.*
Floodplain and poor soils in western portion; lightly wooded site	*Poor. Floodplain and poor soils make this a difficult site for building development.*	***Park and open space.** This site could be used as an open space entrance to Panfish Park from Nicoll Way. Alternatively, it might become part of the townhome development at Site 11.*
Low, "marshy" area; poor soils; possible wetland; lightly wooded site	*Poor. Deed restrictions preclude building development on this property.*	***Park and open space.** This site should be retained as open space.*
Wooded site	*Fair. Good accessibility, although small site size will be a constraint for new development.*	***Low-density attached residential.** Possible location for small townhome development similar in scale to the existing development to the north. Single-family homes may also be acceptable.*
Wooded site; existing stormwater detention/retention area on east side of site	*Fair. Relatively good size and accessibility, although this site contains a stormwater management facility and may be characterized by additional environmental concerns.*	***Single-family detached residential.** If this site cannot be developed, it should be maintained as open space; possible site for a consolidated stormwater management facility.*
No known environmental concerns	*Good. Good accessibility and visibility. Existing vacant building appears to be in good condition and may have reuse potential.*	***Service commercial/office.** Suitable location for small, freestanding office or service use, perhaps utilizing the existing building.*
Lightly wooded site	*Good. Good accessibility and visibility. Other than small site size, no apparent constraints.*	***Single-family detached residential.** New housing development is currently under review by the Village.*
Redevelopment of commercial uses would likely require environmental investigation	*Potentially good. Good accessibility and visibility; could become a highly desirable development site, particularly if combined with Site 19; land assembly and clearance would be required.*	***Mixed-use development area.** Suitable for office, commercial and perhaps hotel development. If possible, this site should be combined with Site 19 to create a more attractive mixed-use development parcel.*

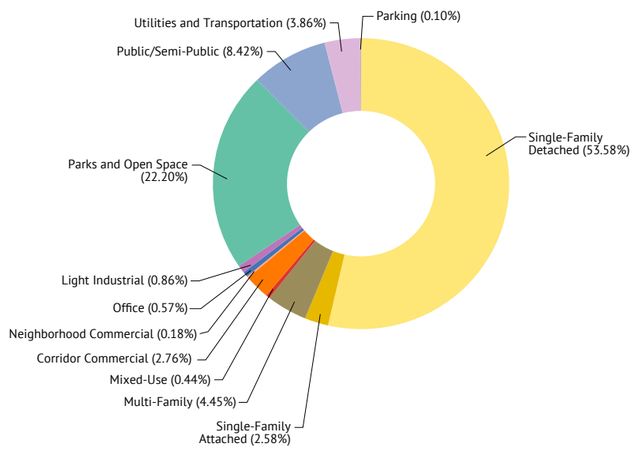
Future Land Use Plan Distribution

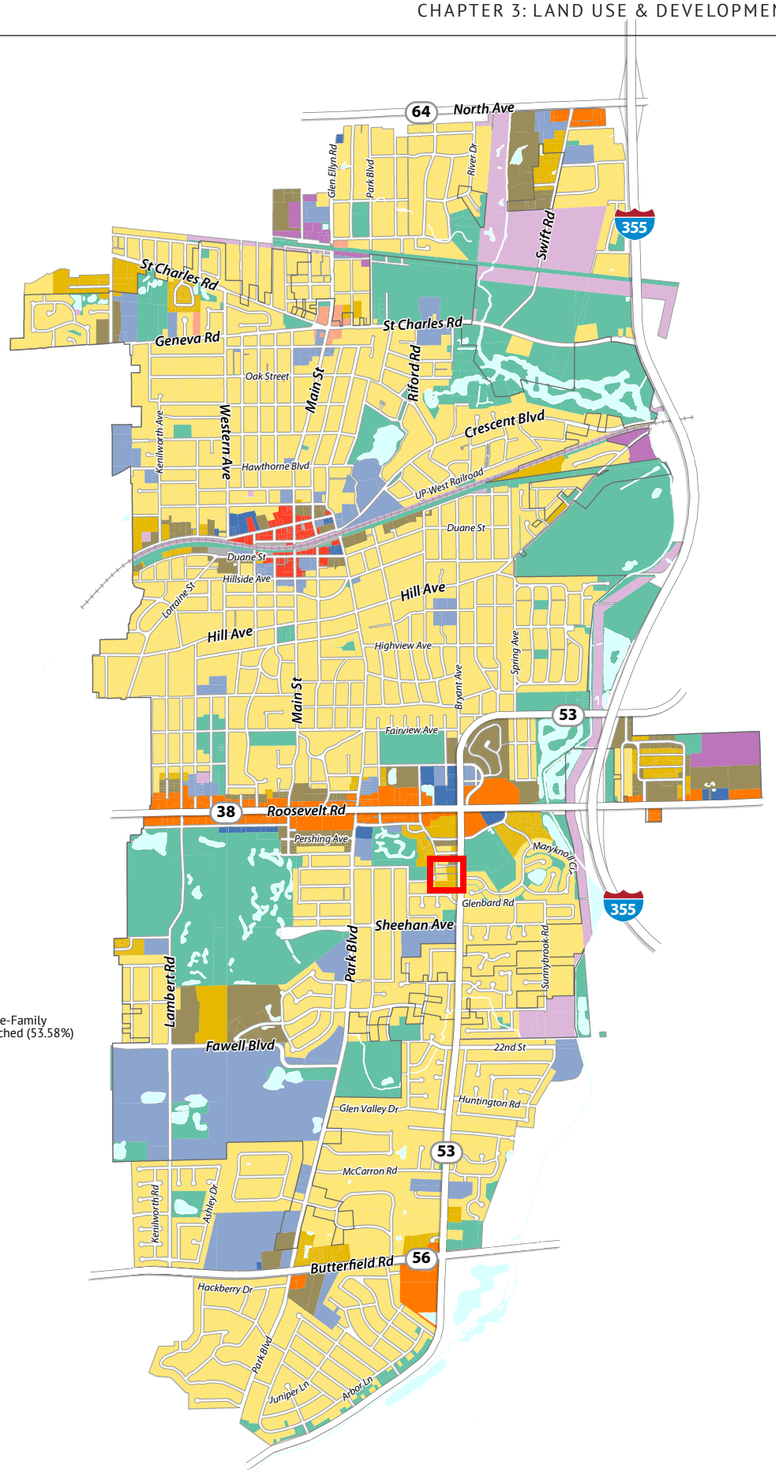
The recommendations outlined in the Land Use Plan focuses on the diversification of housing options by increasing single-family attached and multi-family uses. The accompanying Future Land Use Distribution graph displays the projected composition of future land use based on the Plan. Like the existing land use distribution, single-family detached housing will continue to be the predominant use within Glen Ellyn, comprising over 50 percent of the Village's land area (51 percent existing compared to 54 percent proposed). Commercial uses are projected to make up approximately three percent of the Village's area, and mixed-use development is expected to increase through the intensification of Downtown as a mixed-use district. Other land use categories are projected to remain relatively the same.

Future Land Use Plan

- Single-Family Detached
- Single-Family Attached
- Multi-Family
- Mixed-Use
- Neighborhood Commercial
- Corridor Commercial
- Office
- Light Industrial
- Parks and Open Space
- Public/Semi-Public
- Utilities and Transportation
- Parking

Future Land Use Plan Distribution





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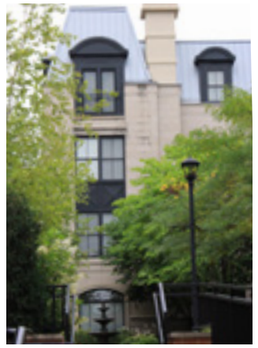
FOR PUBLIC HEARING

Residential Areas Framework



Glen Ellyn is known for high quality housing, with a strong reputation as a great place to live and raise a family. The Residential Areas Framework addresses key issues affecting the Village's neighborhoods and identifies strategies to diversify the housing stock. The primary goal of the Residential Areas Framework is to provide policies to maintain and enhance existing neighborhoods while expanding housing opportunities and diversity.

Context Sensitive Infill

Largely impacted by the 2008 recession, reduced investment left a handful of vacant or underutilized properties within Glen Ellyn that exist in prime development locations. The following vignette identifies infill opportunities for both underutilized lots and vacant lots outside of the 100-year floodplain. Opportunities for single-family detached development are scattered as mostly individual lots throughout the Village and within its ETJ. Vacant lots appropriate for single-family attached units are located along higher trafficked roads including St. Charles Road, Butterfield Road, and IL Route 53.

In addition to vacant infill sites, there are several areas where redevelopment of existing properties could accommodate more intense residential development. These include the following:

- The ten sparse single-family detached properties located directly outside of the Village limits along St. Charles Road should be developed into higher density single-family detached units.
- Existing single-family detached properties along Swift Road in the northern ETJ should be redeveloped into single-family attached units to establish a higher density residential neighborhood off North Avenue.

These properties should be prioritized for high quality infill development that complements the character and use of surrounding buildings. Infill can be used as an effective tool for maximizing the use of available land in the Village as well as existing resources and infrastructure in established neighborhoods. Any development adjacent to Churchill Park should be sensitive to potential runoff impacts to the park's wetland areas.

Transition Areas

Single-family attached and multi-family housing should be used as a transition between more intense commercial areas and single-family residential areas. This also allows a greater number of residents to be located close to desirable retail, services, and offices while still maintaining the residential nature of the adjacent neighborhoods. Such transition areas are particularly important surrounding Glen Ellyn's main commercial areas, Downtown, Roosevelt Road, and Stacy's Corners, which are discussed in further detail in *Chapter 4: Subareas*.

Quality Architecture

As reinvestment in existing neighborhoods occurs, the Village must ensure new developments complement surrounding single-family homes with high-quality architecture. Attention should be given to design elements such as building material, fenestration, detailing, and façade articulation to support the development of attractive housing that enhances the Village's character.

DRAFT
FOR PUBLIC HEARING

Presently, residents can file a complaint regarding code enforcement violations through the Village website by filling out an online form. The Village should raise awareness of the form to residents through promotion on water bills, property tax forms, and the social media platforms. In addition, the Village currently uses YourGOV but is transitioning to another application. The application allows residents to report non-emergency issues, such as potholes, graffiti, and sidewalk condition. The Village should consider expanding topics covered by the platform to address property maintenance issues.

Appearance Review Guidelines

The Appearance Review Guidelines, adopted in 2006, provide recommendations for desirable architecture and landscape design within the Village. The guide should be evaluated to ensure recommendations are still reflective of community appearance priorities. Including some local architects in the review group would be beneficial. Updates should also be considered such as providing guidelines to remove invasive species.

Residential Areas Framework

The following items identify key residential infill areas of focus where future higher-density residential development should be encouraged.

1. **Swift Road.** Currently semi-rural detached single family housing occupies areas on the east side of Swift Road. Provided that infrastructure can be enhanced to accommodate additional density, the area is appropriate for additional single-family attached and smaller lot single-family detached housing, with higher density along Swift Road frontage.

2. **Ice Arena.** Located within the Village's planning area, the properties surrounding the Center Ice of DuPage ice arena are currently composed of single-family detached homes or open space. There is opportunity to develop this area into higher density residential uses, such as single-family attached units.

3. **Bloomingdale Road.** The large lot single-family detached properties and vacant, wooded areas at the southeast corner of Bloomingdale and St. Charles Road have the potential to be redeveloped into single-family attached units. Such development should be mindful of the wetlands in the adjacent Churchill Park. The aging single-family detached properties along Trails End Road also present an opportunity to be comprehensively redeveloped into single-family attached units.

4. **Stacy's Corners.** The vacant lots and large lot single-family detached property along Forest Avenue should be considered for single-family attached units that fit the character of the surrounding residential neighborhood. This would benefit the diversification of housing types and provide a buffer from the adjacent neighborhood commercial uses fronting Main Street. Properties along the north side of St. Charles Road between Main Street and Forest Avenue could be commercial.

5. **Union Pacific Railroad and Illinois Prairie Path.** Currently a vacant, wooded site. If issues related to access, topography, and stormwater management can be addressed, attached single-family or detached single-family development is recommended.

6. **Hill and Golf Avenue.** Currently a vacant, wooded site, this site would be appropriate for attached or detached single-family development.

7. **West Downtown.** Currently a mix of multi-family. Although some of the housing is dated and may be subject to replacement, potential exists to renovate existing multi-family. Multi-family development that matches the character of nearby development would be appropriate.

8. **Western Duane Street.** Aging homes and multi-family development currently exist that are susceptible to replacement. Encourage single-family attached and multi-family housing that would compliment the Downtown. New housing should be of a similar scale and character to nearby development.

9. **Scripture Press Property.** This area includes part of a Wheaton College former Scripture Press facility and adjacent vacant land. The property should be designated for single-family detached or attached housing in the event it becomes available in the future.

10. **Western Roosevelt Road**. In line with the Roosevelt Road Subarea Framework, if expansion of the nearby auto dealership does not occur, properties along Lambert Road that are currently used for commercial parking and outdoor storage could either remain commercial or be considered for multi-family housing. This would be desired to further diversify the housing stock and act as a buffer between Roosevelt Road and the adjacent residential neighborhood.

11. **Nicoll Way and Roosevelt Road.** Currently inhabited by an aging office building complex, this site's generous lot depth should be leveraged to develop a mix of single-family attached and multi-family units while preserving Roosevelt Road frontage for commercial development. For further discussion of this catalyst site, see the Nicoll Way and Roosevelt Road section in *Chapter 4: Subarea Plans.*

12. **Nicoll Way and Abbey Drive.** This site is currently made up of vacant and single-family detached properties. With close proximity to Roosevelt Road and its amenities, the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the north. Single-family homes may also be acceptable.

13. **Sunnybrook Road.** Single-family residential that is generally sound and well maintained currently exists. Larger lots in this area may be subject to resubdivision or redevelopment. The neighborhood should continue to consist of detached single-family development with compatible new single-family development. Stormwater management should be monitored and improved.

14. **Butterfield Road.** Currently made up of a vacant lot, a single-family lot, and an older townhome development. Annexation agreements are in place with the single-family lots fronting on Butterfield Road that guarantee large lot single-family zoning. Single-family attached redevelopment should be encouraged to provide as a buffer between the Butterfield Road commercial corridor and the single-family detached properties to the north.

Legend

Note: The below items present future land uses and not zoning.

- Historic District
- Residential Infill
- Single-Family Detached
- Single-Family Attached
- Multi-Family
- Residential Infill Area

DRAFT
FOR PUBLIC HEARING

Motion

Plan Commissioner Fanella moved, seconded by Plan Commissioner Allen, to continue the meeting to April 14, 2016. The motion carried unanimously by voice vote.

PRE-APPLICATION MEETING – 765-787 HARDING AVENUE

PRE-APPLICATION CONFERENCE REGARDING A PROPOSED 22-UNIT TOWNHOME DEVELOPMENT ON PROPERTY COMMONLY KNOWN AS 765-787 HARDING AVENUE. THE SUBJECT PROPERTY IS LOCATED ON THE SOUTH SIDE OF HARDING AVENUE AND BORDERS ROUTE 53 TO THE EAST. THE SITE IS ZONED R2 RESIDENTIAL ZONING DISTRICT. AS PART OF THE PROJECT, THE PETITIONER WOULD BE REQUESTING THAT THE PROPERTY BE REZONED TO THE R4 RESIDENTIAL ZONING DISTRICT.
(Rite-Way Custom Homes, represented by Marvin Ritter)

Staff Presentation

Village Planner Michele Stegall stated that Rite-Way Homes would like to potentially develop 22 townhomes on the property known as 765-787 Harding Avenue which is east of Panfish Park and near the intersection of Harding Avenue and Route 53. She indicated the three parcels that make up this property on a map and added that there is a mix of uses in the surrounding area. She stated that immediately to the south are a couple of large single-family lots, to the west is single-family, to the northwest are a couple of townhome developments and to the north is a mix of multi-family and single-family homes. Ms. Stegall stated that one of the main reasons for the pre-application meeting is to discuss the rezoning of the property and she also stated that all three lots are zoned R2 Residential District which is a single-family zoning district. She added that as part of this project, the petitioners would be requesting that the property be re-zoned to the R4 District which is a multi-family district. Ms. Stegall stated that the Comprehensive Plan recommends that the eastern lots be used for multi-family purposes and that the western lot be used for single-family.

Ms Stegall stated that in order to move forward, the petitioner would need approval of a map amendment, a special use permit for a planned unit development, variations to the PUD section of the code and a major subdivision and that other reviews would be required by other bodies. Ms. Stegall displayed and described a preliminary site plan of the subject project and indicated that a new cul-de-sac will be constructed with six townhome buildings. She added that the townhomes would have first-floor master bedrooms which she feels there is a need for in the community. She also stated that Harding Avenue is a half-right-of-way that is 33 feet wide and the Village standard is 66 feet. She stated that with the preliminary plans, there would be a dedication of property to the Village along the south side of Harding Avenue and the exact amount of that dedication would be worked on as the project moves forward. She also stated that the petitioner would be requesting that a portion of the unimproved Harding Avenue be vacated to them in exchange for dedicating additional right-of-way to the Village. She also

noted that the Code would require the petitioner to bury the overhead utilities in the area. She added that sidewalks would be required along Harding Avenue and Route 53 per the subdivision code.

Ms. Stegall stated that the project in its conceptual form meets the permitted lot area per dwelling unit and is within the density recommended by the Comprehensive Plan. She also stated that the project does not comply with the FAR as what is permitted is .14 and they are currently at .517. (Ms. Stegall added that the Village eliminated FAR approximately 15 years ago in favor of using a LCR, however, FAR remained in this one section of the code). Ms. Stegall stated that with a residential PUD, 20% of the land area is to be set aside for common open area, and a variation request from this standard is expected if the project moves forward. She also noted the location of the site with two community parks nearby. She noted that the petitioner would be willing to make the sidewalk that would go in along Harding wider than required so that it could be a multi-use path that could connect to Panfish Park. She also stated that the development committee had discussed the idea that the multi-use path connect to Route 53 and increase to 10 feet which once out to Route 53 would allow it to serve as a secondary emergency access. Ms. Stegall added that she believes the petitioner would be significantly short of 20% requirement for the common open area.

Ms. Stegall stated that the petitioner plans to pay a fee-in-lieu-of detention regarding stormwater. She stated that Panfish Park is a regional stormwater facility so the stormwater would be accommodated in the park.

Responses to Questions to Staff from the Plan Commission

Plan Commissioner Girling asked if there was flexibility regarding stormwater fee-in-lieu-of and Ms. Stegall responded yes because it was a Village-owned facility and the Stormwater Engineer did some research after staff met with the petitioner and found that there is storage capacity available that the petitioner could use as there is excess capacity in the pond. Plan Commissioner Lannen stated there are other townhome multi-tenant communities along Nicoll Way and asked if they adhered to the 20% rule. Ms. Stegall responded that she did not believe so. Ms. Stegall responded to Plan Commissioner Whiston that the maximum number of units per acre is used in multi-family districts and lot coverage ratio is used mostly for single family homes. Plan Commissioner Girling asked how school population factors in with overcrowding due to new development. Ms. Stegall responded that developers are required to pay developer's donations, therefore, there is an impact to the schools and that is a large reason that those donations are required when new developments come on line. Plan Commissioner Allen asked for comments regarding access to Route 53. Ms. Stegall responded that an

additional vehicular access point to Route 53 would not be desirable in this area and she did not know if IDOT would allow it.

Petitioner's Presentation

Marv Ritter, one of two founders of Rite-Way Custom Homes, stated that the developer of the subject property is Diane White who is the owner of the property. Mr. Ritter stated that Ms. White grew up on the subject property which now consists of woods on three acres. He stated that there were previously some homes on the property that have been demolished. Mr. Ritter stated that Ms. White and her husband conferred with an appraiser regarding this property who believes that a townhome development might be the highest and best use for this property.

Mr. Ritter stated that the petitioners engaged an architect, Nick DeLuca, who designed two different floor plans for townhomes for the subject site. He stated that there are 22 townhomes laid out on the plat and that 8 townhomes are first floor master plans and the other 14 townhomes have the master on the second floor. He added that he believes that all of the units have three bedrooms.

Mr. Ritter displayed some photos of the subject neighborhood. He displayed a map of the subject which he stated is roughly a quarter mile south of Roosevelt Road. He also indicated the two properties on which Ms. White grew up and another property that her father later acquired. Mr. Ritter then described other properties in the area.

Mr. Ritter stated that in the Village Comprehensive Plan, the subject site has been recommended to be multi-family properties of 10-18 units per acre and up to 36 units at 45 feet high. He stated that he did not believe that would be Mr. and Mrs. White's preference, however, as Ms. White has a great love for the subject property because she grew up there. He stated that she currently lives out of state and would like to see it developed in a way that is friendly to the neighborhood.

Mr. Ritter displayed and described various photos of the intersection of Nicoll and Harding and stated that Harding then turns into a gravel road. He also displayed and described other photos of the subject area.

Mr. Ritter displayed two types of buildings that have been contemplated. He stated that in a building of four units, two units would have second floor master bedrooms and he displayed and described units in the proposed buildings. He also displayed a layout of how the buildings would be envisioned on particular parcels. He indicated a 33-foot wide area of land that they are talking about dedicating to the Village to meet the right-of-way requirements. He also described the setbacks of the subject buildings. He indicated the location of a cul-de-sac that would be located at the subject site.

Responses to Questions to the Petitioner from the Plan Commissioners

Plan Commissioner Allen asked about the petitioner potentially acquiring property to the south and Mr. Ritter stated it is not a part of their plan. Plan Commissioner Girling asked about the feasibility of single-family homes to the west, and Mr. Ritter responded it is a possibility although he does not believe it is the Whites' preference as they would like enough volume to have a large homeowner's association there to properly maintain the subject property. Plan Commissioner Girling also wondered if scale could be gained by going up higher on the site and also stated that he is unsure whether the western site should be single-family or townhomes.

Persons in Favor of or in Opposition to the Proposed Request

Stephanie Husnick, 747 Brentwood Court, Glen Ellyn, Illinois stated she has a brand new residence in the subject area and that she was attracted to the lot and surroundings because of the wooded area. She stated when she was looking at purchasing the home, she had no idea that the subject development was in the works. Ms. Husnick stated that her child has illnesses that make him extremely noise sensitive and she would never have purchased her property had she realized a development would be built at that location.

Chad Husnick, 747 Brentwood Court, Glen Ellyn, Illinois stated that the subject area is already well developed with nice single-family homes. He stated that what is seeking to be done here is to dump 22 homes into a 3-acre parcel. Mr. Husnick asked that the Plan Commission exercise the discretion afforded to them regarding the variances being requested by the petitioner by rejecting such efforts. He felt that the Whites' were more interested in money than in what would be built on their property. He asked that the Plan Commission reject the proposed plan and require the petitioner to adhere to the codes.

Tom Hull, 741 Brentwood Court, Glen Ellyn, Illinois stated he is speaking for one of his neighbors, Marc Asselmeier, 750 Brentwood Court, who is a doctor who was called to the hospital. Mr. Hull read from a prepared statement by Dr. Asselmeier who stated that counsel will be involved regarding this project in the future. Dr. Asselmeier had grown up in Glen Ellyn, currently works in Glen Ellyn and his home borders the subject property. He also stated that he lived through a prior attempt to rezone this property 15 years ago. He stated that he realizes and accepts that this land will not remain vacant forever and his desire is to maintain the spirit, feel and safety of the neighborhood. He stated he was shocked at the scope, congestion and density of the proposed development. His concerns were: The request to rezone seems completely misdirected as rezoning would change the feel of the neighborhood. The request for variances are unnecessary and based on the developer's desire to allow more units to be developed which would create unsightly aesthetics. Stormwater is a current problem and water retention is already full. Neighbors in the area have several sump pumps and all have had flooding. Water run-off and re-directing has been directed to Panfish Park. Additional stormwater from three acres of development could be catastrophic. Increased traffic

congestion on 2-lane streets with children would be dangerous. Cars, congestion and public access vehicles in this area are a potential nightmare. Landscape buffers were not discussed and the back of these units would look directly into their yards. There is minimal common space on the property. The property is zoned R2 and could be single-family.

Don Carlson, 1S138 Illinois Route 53, Glen Ellyn, Illinois stated that the subject property is problematic. He stated that his main objection for the site plan is that they cut off any access coming down from Harding to his property south of the site. He added there are 2 acres there. Mr. Carlson understood the position the Whites' are in as the property is landlocked and access is difficult. He stated that single-family becomes less affordable for development when roads, for example, are required to be built. He felt that the entire 5 acres needs to be looked at together. He stated he is against the site plan as he sees it because he does not feel it looks to the future.

Comments from the Plan Commission

Plan Commissioner Whiston preferred not to re-zone the western parcel as R2 and single family homes. He stated that he would accept the two eastern parcels as R4 and he would accept both units there. He stated he would encourage the owners of the property to the south to talk to the Whites to see if they could get a development that would work with all 5 properties. He also stated that he is not comfortable with all of the variations proposed or having the buildings so close together. He also stated he would like to see the cul-de-sac remain the standard size.

Plan Commissioner Hartweg stated that he likes the plan except for the ability for the two lots to be accessed by any means to the south which disturbs him and causes him not to be in favor of this project. He stated he believes the variances could be worked out, the cul-de-sac should be larger and there should be more space between the properties.

Plan Commissioner Allen stated he would prefer the spacing and cul-de-sac to comply and likes the path access for connectivity between the parks. He stated he would be in favor of R4 zoning along Route 53 but prefers the split between the Route 53 lots and the westernmost lots, adding that his preference is R2 zoning. He added that stormwater is another main issue and that detailed stormwater remediation will be necessary.

Plan Commissioner Girling stated he would like the property to remain R2 zoning and echoed the Plan Commissioners' comments.

Plan Commissioner Whalen stated he agreed with what has been said by the other Plan Commissioners.

Plan Commissioner Fanella also agreed with what has been said by the other Plan Commissioners.

Chairperson Loch stated she is comfortable with the rezoning. She also was in favor of the single-family home on the west lot and multi-family on the east lot. She felt it would be good for consistency's sake to see it flow. She was in favor of the development although it might landlock the lot to the south.

Trustee Report

No Trustee report was given.

Chairperson's Report

No Chairperson Report was given.

Staff Report

No Staff Report was given.

Plan Commissioner Girling moved, seconded by Plan Commissioner Fanella, to adjourn the meeting at 10:35 p.m. The motion carried unanimously by voice vote.

Prepared by:
Barbara Utterback
Recording Secretary

Reviewed by:
Michele Stegall
Village Planner

The motion carried unanimously with seven (7) yes votes and zero (0) no votes as follows: Plan Commissioners Ozog, Vondruska, Fanella, Girling, Rodemann, Whiston and Chairperson Loch voted yes.

PRE-APPLICATION MEETING – 765-787 HARDING AVENUE

PRE-APPLICATION CONFERENCE REGARDING A PROPOSED 31-UNIT TOWNHOME DEVELOPMENT ON PROPERTY COMMONLY KNOWN AS 765-787 HARDING AVENUE. THE SUBJECT PROPERTY IS LOCATED ON THE SOUTH SIDE OF HARDING AVENUE AND BORDERS ROUTE 53 TO THE EAST. THE SITE IS ZONED R2 RESIDENTIAL ZONING DISTRICT. AS PART OF THE PROJECT, THE PETITIONER WOULD BE REQUESTING THAT THE PROPERTY BE REZONED TO THE R4 RESIDENTIAL ZONING DISTRICT.
(Harding Custom Homes, LLC, represented by Marvin Ritter)

Staff Report

Village Planner John Sterrett stated this is the second pre-application meeting for the proposed project at 765-787 Harding Avenue. He added that the first pre-application meeting took place in March of 2016, however, after significant changes to the plans were made and additional property was added, staff recommended that the petitioner return for a second pre-application meeting.

Mr. Sterrett stated that the subject project is the Harding Glen Townhomes and the petitioner is Harding Custom Homes LLC represented by Marv Ritter. The subject project is for a proposed 31-unit single-family attached townhome development at 765-787 Harding Avenue. He stated that the site consists of four (4) parcels and one (1) narrow strip of land currently serving as a driveway for the house that is located at 128 South Route 53 which has a very long access drive from the single-family home to Route 53. Mr. Sterrett stated that the subject property is approximately 4.38 acres in size and is located on the south side of Harding Avenue west of Route 53 approximately ¼ mile south of the Roosevelt Road and Nicoll Way intersection. He displayed a map and indicated the location of the four (4) parcels on the subject property. He also stated that access to the property is from Nicoll Way down to Harding Avenue. Mr. Sterrett stated that the subject property is currently zoned R2 which is a single-family residential district and stated that there are also single-family detached residential properties on the west, south and east sides with a mix of single-family attached townhomes and multi-family residential to the north. He added that the R2 District is on the south and west sides with a mix of R4 which is a multiple-family residential district, R2 to the north and R1 which is also a single-family residential district located on the east side of Route 53. He displayed a map and indicated the location of the various zoning districts in the area.

Mr. Sterrett stated that the Village Comprehensive Plan indicates a portion of the subject area to be single-family detached residential which would reflect five (5) units per acre and a portion of the property located on Route 53 to be low density attached residential. He displayed a map

indicating how the subject property differentiates with the Comprehensive Plan in that it is split between the single-family detached residential indicated on the Comprehensive Plan and the low-density attached residential for townhomes. Mr. Sterrett stated that the 2016 proposal was for a 22-unit townhome development with six (6) buildings and 3-5 attached units per building. He added that several variations were going to be required for what was proposed in 2016, however, the Plan Commission at that time had recommended trying to eliminate some of those variations and to seek the property to the south to enlarge the development to potentially eliminate some of the variations being requested.

Mr. Sterrett stated that the current proposal is a 31-unit townhome development with eight (8) buildings with 3-5 attached units per building and each unit would range from 2,252 square feet to 2,405 square feet. He stated it is his understanding that it is anticipated that ten (10) units would have first floor master bedrooms and a cul-de-sac would be part of the development. He stated that staff has determined that the nearest intersection with access from Harding Avenue and Nicoll Way would be Nicoll Way and Pershing Avenue. He stated there is also a proposed emergency access at the end of the cul-de-sac on Route 53. Mr. Sterrett stated that the requested proposals for this proposed development would be a zoning map amendment from R2 Single Family Residential development to R4 Multiple Family Residential, a Planned Unit Development with potential deviations and variations, a major subdivision with potential variations, a right-of-way vacation of the unimproved portion of Harding Avenue which would account for slightly over 300 square feet and a right-of-way dedication of 22 square feet on the south side of the improved portion of Harding Avenue which would account for the lower 6,800 square feet. Mr. Sterrett stated that the petitioner will also be seeking a fee-in-lieu-of storm-water detention which has been preliminarily approved for Panfish Park by the Village Stormwater Engineer. Mr. Sterrett stated that variations and deviations preliminarily found by staff in the proposed plans would be a 66-foot lot width for the southeastern lot in lieu of the required 75-foot lot width and also a potential deviation for potential fencing that might be located along Route 53. He also stated that four (4) deviations to the Residential PUD section of the Zoning Code would be to allow a front yard setback of 25-feet in lieu of 30 feet as the petitioner has indicated he would like to have a greater buffer between the development and the surrounding properties. He also stated that some subdivision variations would be to permit a cul-de-sac in a multi-family residential district, however, as Public Works had concerns regarding the length of the cul-de-sac, it is suggested that access out from Harding Avenue be improved near Route 53 and then a right-in/right-out access be added onto Route 53. Mr. Sterrett also stated that variations would be requested to allow three (3) lots to front on two non-intersecting streets, to allow existing aboveground utilities which are now located along Harding Avenue north of the proposed development in the adjacent right-of-way to be buried, to allow a right-of-way width of 55-feet in lieu of 66 feet and a potential variation to not install the required sidewalks along the west side of the Route 53 right-of-way which would be required for the subdivision regulations.

Questions for Staff from the Plan Commission

Mr. Sterrett responded to Plan Commissioner Girling that the Fire Department and Public Works Department suggested a right-in/right-out access. He also stated that the Harding Avenue right-of-way exists in an unimproved area and extends to Route 53. Mr. Sterrett responded to Plan Commissioner Whiston that IDOT would need to improve the access to Route 53, however, the Village can make a recommendation to IDOT. Mr. Sterrett responded to Chairperson Loch that the driveway to the nearby house is existing but on the proposed plan the driveway would have access off of the cul-de-sac rather than off of Route 53. Mr. Sterrett responded to Plan Commissioner Girling that at the previous Plan Commission pre-application meeting, the Plan Commission was in favor of incorporating that property as part of the development. Since the driveway, however, would eventually bisect the new part of the development and what they were originally incorporating, the petitioner would be incorporating that driveway and providing that access to the house on the cul-de-sac. Mr. Sterrett explained for Chairperson Loch that all new utility lines would be underground. Plan Commissioner Rodemann asked how the right-of-way reduction from 66 feet to 55 feet is impacting the roadway. Mr. Sterrett responded that the Harding Avenue pavement width of 21 feet will not be changed and, therefore, Public Works feels 55 feet would be adequate. He added that the petitioner is proposing to make a portion of Harding Avenue 24 feet wide. Mr. Sterrett responded to Plan Commissioner Vondruska that a sidewalk is required along Route 53 because the Route 53 right-of-way is adjacent to the property and any right-of-way adjacent to a subdivided piece of property must have improvements made. Plan Commissioner Vondruska asked if there are any existing sidewalks along the west side of Route 53 currently, and Mr. Sterrett responded there are portions of sidewalk in that area. Mr. Sterrett explained for Plan Commissioner Fanella that common open space is an area that is basically set aside for the inhabitants of the townhomes to have open area outdoors. Mr. Sterrett responded to Plan Commissioner Ozog that the emergency 10-foot strip on the south end would be the only restricted gated emergency access. Plan Commissioner Ozog stated that Harding Avenue would need to be opened up in order for him to vote for this project and added he did not understand why there could not be an access point on the south end. Mr. Sterrett responded that could be difficult because there is not an existing right-of-way in this area. Mr. Sterrett responded to Plan Commissioner Rodemann that the route the water will take to Panfish Park will be to the northwest.

Petitioner's Presentation

Marv Ritter, the petitioner, stated that he has been a Glen Ellyn resident since 1981 and co-founded Riteway Custom Homes. He stated they have been building custom homes in Glen Ellyn and the surrounding areas since 1990, adding that Riteway has built over 80 custom homes in Glen Ellyn.

Mr. Ritter stated he is at this meeting on behalf of Harding Custom Homes which is a corporation owned by a family who lives out of state that has owned a bulk of the subject property since 1952. He stated that residents of Glen Ellyn whose children have moved out of their homes have nowhere to live in Glen Ellyn when they downsize and added that they also are not interested in going up and down stairs in their homes.

Mr. Ritter stated they met with the Plan Commission approximately one year ago regarding this project which at that time was a development of 22 townhomes on roughly 3.3 acres. He stated that many of the Plan Commissioners as well as one of the neighbors encouraged them to acquire the property to the south because it would be landlocked without being incorporated. He stated they now have contracts with two property owners to acquire those properties and incorporate them. Mr. Ritter stated they are now asking to change the zoning from the R2 District to an R4 District as they did one year ago which is consistent with the Village Comprehensive Plan. He stated last time they had fourteen (14) variances for zoning changes that they were looking for. He stated they have worked on acquiring the land and have addressed the floor area ratio and the common open area. He added that the front yard setback, the rear yard setback and all of the side yard setbacks conform. He stated that one year ago, they had issues with distance between the buildings, however, that issue is now resolved. He stated one year ago the cul-de-sac was roughly 100 feet and the minimum required is 116 feet which they exceed at this point. He also stated that one year ago they were asked to create a 10-foot wide multi-path and connect it across Harding Avenue for emergency vehicles and added that many of the Plan Commissioners were in support of that multi-path. He stated that they now have been asked to take Harding Avenue out up to Illinois Route 53 which will be time-consuming and expensive and Mr. Ritter stated he has a letter from IDOT which states they are not in favor of this extension. Mr. Ritter stated that the cul-de-sac on Harding Avenue is 400-450 feet from its base at Harding to the end of the bulb. He added if a 10-foot path is put at Harding and there is some type of blockage, an emergency vehicle would not be able to pass through there. He added that if the emergency access is put on the south end coming into the bulb, you could get through.

Mr. Ritter stated that they are asking for the subject property to be rezoned from R2 to R4. He also stated they would like the dedication of the portion of Harding Avenue that would not be utilized and the plan as they presented it; it is roughly 3,900 square feet and they are going to donate roughly 39,000 square feet to the Village (the new street and cul-de-sac and the 22-foot strip). He added that Harding right now at the back side of the curb to the south is their property which is the 22-foot strip. Mr. Ritter stated that to install the sidewalk along Route 53, which is 552 feet long and typically 5 feet wide, all of the trees would have to be removed and it would cost approximately $30,000 to remove the trees and put a sidewalk in. He added that he would not like his children walking to school on that sidewalk. Regarding stormwater, Mr. Ritter stated they will need to create a design that keeps the stormwater on their property from going onto another property. Mr. Ritter stated that one of the electrical lines will be in the Illinois Route 53 setbacks and the other two electrical lines are in the non-developed portion of

Harding Avenue. He stated that because there are so many electrical lines in the area, removing the last 2 or 3 will not make any significant difference in the aesthetics of the neighborhood nor the service to the neighborhood. He stated he feels the cost to remove the electrical lines is a fairly large hardship at $190,000 which he does not feel is appropriate for the size of this development.

Mr. Ritter stated that the front yard setbacks will be reduced 25 feet which is not an unusual request. He displayed the property and stated there are three (3) different unit styles of the luxury high-end townhomes. He stated they anticipate these townhomes to go on the market for $550,000 to $650,000. He anticipates they will have stone and brick on the outside with cedar shake. He added they will be high-end units with hardwood floors, custom cabinetry, granites and high-end appliances. He stated these units meet the 30-foot front yard and 30-foot rear yard setback as well as all of the other setbacks. He stated they would like the 25-foot variance so they can pull the buildings further off of Route 53, move them further away from the homes on Brentwood and move them further back from the homes on Glenbard Road. Mr. Ritter stated that the subject neighborhood is more of a townhome/multi-family neighborhood than it is a single-family neighborhood as it is 62 percent multi-family. He stated that other non-compliant projects in the area were approved by the Village. He also stated that he would need Plan Commission and Village Board approval to have their road be private. Mr. Ritter stated that several properties in the area have nonconforming setbacks.

Mr. Ritter felt that taking Harding Avenue out to Route 53 would be dangerous as it shrinks down in size. He stated that 31 townhomes could have 62 cars going to work every day which would mean there would be no traffic there because all of the cars are at work. He asked if they would want the traffic to have access to Harding and Route 53 to bring more traffic through there or would they want to limit it to 31 townhomes.

Mr. Ritter stated that the proposed project is four (4) acres and that there are not many opportunities like that in Glen Ellyn. He stated that the Village has stated they need townhomes and units with first floor master bedrooms. He also stated that they would like to provide an alternative for people who have grown up and lived in Glen Ellyn for many years to continue to live here.

Additional Questions from the Plan Commission

Mr. Ritter explained for Plan Commissioner Girling that R4 zoning is being requested in lieu of the current R2 zoning because of all of the multi-family units in the area and because they want to have the subject townhomes in an association in order for them to be kept up. Mr. Ritter responded to Plan Commissioner Girling that they will not have single-family homes in the association because they are two completely different animals—single family homeowners will not want a monthly association fee and the allocation for two different types of housing would be difficult. Mr. Ritter responded to Plan Commissioner Girling that they have two of the

properties but not the third. He added that they have to acquire the nearby driveway in order to acquire the third parcel. Mr. Ritter indicated for Plan Commissioner Girling where the sidewalks would be located in the subject area. He also stated that a plan was suggested by staff that he really likes which is to take the 8-foot wide multi-path being developed that connects to Panfish Park and which connects to the 8-foot wide path that was approved for the Police Department, run it through the proposed development and have it come out at Route 53, adding that parts of Route 53 are quite dangerous.

Persons in Favor of or in Opposition to the Requests

Mark Adare, 782 Parkview Court, Glen Ellyn, Illinois stated he had sent a letter to the Plan Commission expressing some of his concerns which included traffic and the character of the neighborhood. He also stated he had questions about water. Mr. Adare stated that those who live in his neighborhood expected the addition of two to five single-family homes on Harding. He stated no one expected additional traffic that would go to 32 homes (31 townhomes plus the one existing single-family home that would be accessed through the project) that would be significant and have a major impact on this quiet, low traffic neighborhood. He stated the proposed project would create unexpected and unwanted noise as well as a safety issue for everyone and, most significantly, the children who are riding their bikes, walking and playing ball along their quiet streets. He added that the character of the neighborhood will change significantly if the project is built as proposed. He stated that the neighborhood is already out of balance in terms of townhomes, however, he realized that when he purchased his home. He stated that the addition of 31 townhomes throws the balance in favor of townhomes rather than single-family homes. He stated that his neighborhood will now become a multi-family community which is not consistent with the character of the neighborhood they bought into, not consistent with the homeowners' expectations, not consistent with the Comprehensive Plan, not consistent with current zoning and not consistent with some of the Commissioners' comments expressed in the March, 2016 meeting. Mr. Adare stated that the subject site drains to Panfish Park and to the natural wetlands. He stated that the proposed project adds impervious surfaces over a high percentage of the site, resulting in an increase in water to the park and the wetlands where at least one walking trail is already frequently under water. He asked what will happen to other areas and homeowners' properties when more water is introduced. Mr. Adare stated that his strong recommendation is that the site remain single-family, adding that Mr. Ritter had stated that was not practical and does not use the property efficiently. He stated that if it is proven that single-family homes on this property are not achievable, then the only reasonable way to go is to retain the current zoning over the western portion of the site which accesses Harding Avenue and four (4) homes could be built there. He also suggested re-zoning the easternmost portion of the site along Route 53 to multi-family which would allow townhomes to be built. He stated that portion would be accessed by a well lit, well marked safe access point and the Glen Ellyn Comprehensive Plan is retained, the expectations of the current homeowners regarding traffic and character are retained and the developer is able to build a successful project. He stated that Harding Avenue connecting to

Route 53 will create a race track from Roosevelt Road to Route 53 and he feels there will be resistance to that idea.

Chad Hoosnick, 747 Brentwood Court, Glen Ellyn, Illinois stated that he and other homeowners (9 total) have organized in advance and are represented by an attorney. He stated he was at another pre-application meeting last year at which the Plan Commission voiced concern about zoning, however, the petitioner has done nothing about changing the zoning. He added that they also tore down all the trees in the area. Mr. Hoosnick stated that the most troubling aspect of this development for the homeowners in his group is the zoning. He stated that the Village planner and the developer completely ignored the prior concerns raised by the Plan Commission and they would urge the Plan Commission to reject their proposal. He stated that the two reasons they provide for rezoning is that there are other R4 development properties nearby and that it is consistent with the Comprehensive Plan. He stated that unlike the other multi-family developments in the area, each of these properties is contiguous to existing single-family homes. He added that Harding Avenue has single-family homes to the north, Brentwood Court has homes to the west, Glenbard Road homes are on the south and the Maryknoll Homes are across the street at Route 53. He stated these would be the first townhomes contiguous to this property. He added that changing the zoning in the area and adding 31 townhomes will drive property values down for the homes in this area. Mr. Hoosnick stated that this project is not consistent with the Comprehensive Plan and added that only two of the five parcels are identified as potential multi-family. Mr. Hoosnick also stated that the Plan Commission previously denied a similar proposal in 1993 for the exact same reasons as identified by the previous homeowner which were that the townhome project was not harmonious with the zoning code or the Comprehensive Plan, that the project would not be harmonious with the character of the neighborhood, that the project would overstress the public streets and that flood hazards would result. He stated that the Water's Edge project was made to be single-family and Mr. Hoosnick feels the subject project should also be made to be single-family. He also was unhappy with Mr. Ritter's response that a homeowner's association is incorrect for this project. Mr. Hoosnick stated that he and his neighbors intend to retain an engineer to review this situation as the water situation has worsened and flows like a river in the last two months since the forest was clearcut. He also added that the flowage into Panfish Park needs to be examined very closely and significant engineering needs to be done before any further steps are taken. Mr. Hoosnick asked that the setbacks be increased although the number of units would then need to be decreased and also asked for additional landscape buffers. Mr. Hoosnick asked that the Plan Commission stop the developers from preparing the subject site for the Plan Commission's approval of the project.

Brian Mildemill, 729 Brentwood Court, Glen Ellyn, Illinois stated he is one of the newer homeowners in the area and was especially impressed with the reputation of the schools. He stated that an unanticipated consequence of the neighborhood popularity is the current over-population of Parkview Elementary School and they have no guarantee that their son will be admitted to that school. He added that children are currently being bussed outside their

neighborhoods due to overcrowding. Mr. Mildemill stated that the Harding development diminishes their reasons for moving into the community which are diminishing the harmonious character of the area and the addition of so many new residents will contribute to the overcrowding in the schools and the property. He added that the Village not grant the zoning change as requested.

Drew Malone stated he has lived in the townhomes of Water's Edge at 795 Harding Court, Glen Ellyn, Illinois, for ten (10) years. Mr. Malone suggested that, as a whole, Mr. Adare's letter represents the attitude and character of their neighborhood as well as their expectations. He stated that the traffic hazard will be great with the proposed project. He stated that the engineer for the Village does not believe there are water issues in the subject area, however, Mr. Malone stated that the path will be closed 30 percent of the time due to stormwater issues in that area and added that the addition without retention will increase that amount. Mr. Malone stated that when Water's Edge was built, the developer responsible for the wetland for a period of five (5) years. He added that an environmental company now takes care of that area which is paid for by the residents' homeowners' association dues. He stated that residences in that area are currently sheltered from one another with landscaping which cannot be done with 31 units.

Don Carlson, 138 S. Route 53, Glen Ellyn, Illinois, has lived in this area for 26 years and stated that Harding Avenue would be a very dangerous access point. He stated that he has seen games people play in their cars during difficult traffic situations and does not feel that access into and out of Harding Avenue would be a wise idea. Mr. Carlson also stated that he has a joint driveway with an easement owned by the person who lives behind him, adding that at one time their two (2) lots were one lot. He added that in the 1970's, the flag lot with the driveway was put in. He stated that when the Brentwood Court subdivision was built, the developer did not give access to that road or to the back lot which landlocked the acreages along Route 53. He added that almost requires that this land should be developed with a higher density than single-family homes, adding that putting in a road to get access to all of this property is expensive. He stated that he approves of this concept for townhome development at this site.

Christina Morrison, an attorney with Day, Robert and Morrison in Naperville, Illinois, stated she has been retained by nine (9) families who live in single-family homes that are abutting or near the subject property. Ms. Morrison stated that they will be seeking a private meeting with the developer to work through some of the concerns before the application package is put together. She stated that specifically they would like to see detailed information from the developer as to whether a single-family home development would be a viable option.

Comments from the Plan Commission

Plan Commissioner Ozog stated that he liked Mr. Adare's compromised proposal with respect to single-family homes on the west and limited townhomes on the east. He stated that he

mentioned before that he feels this project must have access to Route 53, adding that another street on the other side of Route 53 has access to Route 53. He stated he felt the developer made a good point when he stated that the new office/commercial development in the area will increase traffic if Harding Avenue is opened up so it makes a lot of sense to build that access road on the south side. Plan Commissioner Ozog felt it was a good idea for the homeowners to meet with the developer to see if something can be worked out. He also stated he is a proponent of townhomes in Glen Ellyn and wished the development was on Main Street where there are currently vacant stores. He stated he is in favor of developing the subject property but is not in favor of the current proposal—especially if there is no access to Route 53. He added that he feels keeping single-family residential on the west side is a good idea.

Plan Commissioner Vondruska stated he has heard many times that people want to downsize yet stay in the same community, adding that land available for development in Glen Ellyn is minimal. He stated that the land that is left consists of odd-shaped properties that could require buildings that are constructed close to each other. He stated overall he is not supportive of the proposed project. He stated that driving south to the merge at Harding Avenue is not a logical or safe place to build an access to Route 53. He stated he can live with the fire access off of Route 53, however, it is a tough project due to the distance it has to travel (the length of the cul-de-sac) and he does not feel this is a safe area for children to walk in. He stated that at the least there needs to be a very comprehensive water study done as there appears to be problems with wetlands in the area.

Plan Commissioner Whiston stated he does not agree with the idea of changing the zoning from R2 to R4 for the west portion of the property. He stated he can live with the townhouses on the eastern portion of the property, however, given the single-family homes on the other side of the street, he was not in favor of having townhouses on the western portion of the property. He stated he likes the logic of the emergency exit at the south end in the event of a blockage. He also did not feel there should be general access to Route 53 simply as a safety matter. He stated he is ambivalent about putting the wires underground and about the sidewalks, stating that he would rather have trees than sidewalks on a busy street. He stated he was disappointed that the property was clear-cut but has heard comments about water being a river in the area. He stated that stormwater and traffic study information will be necessary regarding this site.

Plan Commissioner Fanella stated that older residents would want homes downtown near the Metra or within walking distance to the downtown, however, the proposed townhomes are not near the downtown area. She also stated she has a problem with the requested rezoning because she feels that the people in this area bought their homes with the R2 zoning district behind them. She stated that she would trust staff's and Public Works' expertise regarding access from Harding Avenue and the cul-de-sac length. Plan Commissioner Fanella stated she is fine with the 55-foot right-of-way but does not agree with the elimination of the sidewalk on

Route 53 for safety reasons. She did not feel that the petitioner met the intent of the code for the common open area as far as the PUD standards go. She felt that the intent of that code is intended for green space in the neighborhood. She felt that the building setbacks are fine and that she was also fine with reducing the front yard setbacks and bringing the townhomes a bit further from their neighbors. She added she did not have a problem with the smaller lot width on Lot 5. Plan Commissioner Fanella also felt that the overhead lines should be buried. Plan Commissioner Rodemann stated his comments are consistent with the other commissioners. He felt that the western parcel should remain as R2 Residential to keep the properties contiguous. He stated he likes the townhouse use in this area that has been designated by the master plan. He stated he is not in favor of connecting to Route 53 as new paths for drivers would be promoted to find their way to Route 53 which he feels would not be good for the development or people in the neighborhood. He stated he would be in favor of the plan fairly close to how it is shown with the cul-de-sac and the emergency road to Route 53.

Plan Commissioner Girling stated he turns right onto Route 53 almost every morning and agrees that it is not safe and he, therefore, feels that having Route 53 access is not a good idea. He felt that the property should be kept to the Comprehensive Plan which is R2 zoning. He also felt he could be supportive of multi-family, R4, along Route 53. He stated that he was supportive of the front yard setbacks. He also stated he would like to see the sidewalks along Route 53 and if they decide not to have the sidewalks, he does not like the idea of having the schools pay for it because that means that everyone who pays taxes are paying for the petitioners' sidewalk. He also felt that the utility wires should be buried wherever possible. He stated that if the property goes farther south, he would be in favor of emergency access onto Route 53.

Chairperson Loch stated she liked the proposal for the east side with the townhouses as proposed with the emergency access on the south side. She stated she liked the concept of putting Harding Avenue through to Route 53 if a traffic study shows that would be safe. She did not know if it would be considered safe but feels it must be done as does Public Works. She felt it would be nice if the west part of the lot was single-family homes and the north-south property on Route 53 could be multi-family. She stated she was struggling as to why the sidewalk was being asked for as she did not know what the use for it was. She also stated that she is a proponent of undergrounding utility poles and would trade off the sidewalk to underground the three (3) utility pole wires.

Trustee Report

Trustee Liaison Craig Pryde reviewed the electrical aggregation program that has been in effect for the last 4 to 5 years. He also stated that two new police cars were recently purchased by the Village.

AGENDA
Glen Ellyn Plan Commission
Thursday, July 27, 2017 - 7:00 p.m.
Glen Ellyn Civic Center
Galligan Board Room
535 Duane Street

1. **Call to Order.**

2. **Public Comment (non-agenda items).**

3. **Approval of May 25, 2017 Plan Commission Minutes.**

4. **Pre-application Meeting – 765-787 Harding Avenue – Harding Custom Homes, LLC – Planned Unit Development**. Third pre-application conference regarding a proposed development on property commonly known as 765-787 Harding Avenue. The current proposal is for a 24-unit townhome development on the eastern portion of the property and a 4-lot single-family detached residential minor subdivision on the western portion of the property. The subject property is located on the south side of Harding Avenue and borders Route 53 to the east. The site is within the R2 Residential district. As part of the project, the petitioner would be requesting that the eastern 3.35 acres of the property be rezoned to the R4 Residential district.

5. **Public Hearing – 485 Roosevelt Road – Len's Ace Hardware – Special Use Permit Amendment.** Public hearing with discussion, consideration, and recommendation regarding a request for approval of an amendment to the Special Use Permit for Len's Ace Hardware to amend the conditions contained in Ordinance 5302. The subject property is located on the south side of Roosevelt Road, west of Main Street in the C3 Service Commercial District.

6. **Pre-Application Meeting – 375 Roosevelt Road, 395 Roosevelt Road, and 681 Taft Avenue – LM Commercial Real Estate – Planned Unit Development.** Second pre-Application meeting to discuss the potential sign variations for a proposed Planned Unit Development for the property at 375 Roosevelt Road, 395 Roosevelt Road, and 681 Taft Avenue to construct four new commercial buildings. The subject property is located on the south side of Roosevelt Road between Hillcrest Avenue and Greenwood Street in the C3 Service Commercial District and the C4 Office District and is the current location of the Enterprise Rent-a-Car business.

7. **Trustee's Report.**

8. **Chairman's Report.**

9. **Staff Report.** The following items will be considered at upcoming Plan Commission meetings.
   - 1N450 Highland Avenue – Poss Trail Subdivision – 2nd Pre-Application Meeting
   - 700 Roosevelt Road – Aldi, Inc. – Sign Variations
   - SEC of Lawler Avenue and Roosevelt Road – Bucks, Inc. – Sign Variations
   - 486 Pennsylvania Avenue – Two Hound Red Brewpub – Zoning Variations

- 404 Roosevelt Road – Enterprise Rent-A-Car – Special Use Permit
- 444 North Main Street – Citibank – Sign Variations
- 632 Roosevelt Road – Jimmy John's Drive Thru Restaurant – Special Use Permit
- 739 Roosevelt Road – CVS Pharmacy – Final PUD
- 501Hillside Avenue – Glen Ellyn Bible Church – Amendment to Special Use Permit

10. **Other Business and Adjourn.**

cc: Glen Ellyn Plan Commission
Craig Pryde, Plan Commission Liaison Trustee
Mark Franz, Village Manager
Albert Stonitsch, Assistant Village Manager
Staci Hulseberg, Planning and Development Director
John Sterrett, Village Planner
Kelly Purvis, Associate Planner
Meredith Hannah, Economic Development Manager
Lori Gloude, Administrative Assistant
Barbara Utterback, Plan Commission Secretary
Jackie Chernesky, Administrative Clerk
Patti Turner, Administrative Clerk
John Norton, Multimedia Specialist
Brian Baltudis, Facilities Manager
David Harris, Glen Ellyn Park District
Dr. Emily Tammaru, CCSD 89
Chris McClain, Glenbard School District 87
Carolyn Gust, Glen Ellyn School District 41
Glen Ellyn Public Library

This note provides you with information regarding what happens to a petition after it has appeared before the Plan Commission. After the Commission makes a recommendation on a petition, a report of the meeting is prepared. Then, the petition, along with the summary report and all pertinent material, is scheduled for consideration by the Village Board. The Village Board meets on the second and fourth Mondays of each month at 7:00 p.m. in a meeting room on the third floor of the Civic Center, 535 Duane Street. Questions regarding petitions scheduled for review by the Village Board should be directed to the Planning and Development Department at (630) 547-5250.

Individuals with disabilities who plan to attend the hearing and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact the Village at least 24 hours before the meeting.

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MINUTES

BOARD / COMMISSION: Plan Commission	DATE: July 27, 2017
MEETING: Regular	CALLED TO ORDER: 7:00 PM
QUORUM: Yes	ADJOURNED: 10:52 PM
MEMBER ATTENDANCE:	PRESENT: Chairperson Loch, Commissioners Fanella, Heming-Littwin, Rodemann, and Saeed
	ABSENT: Commissioners Hartweg, Costa Howard and Vondruska
ALSO PRESENT:	Village Planner Sterrett, Trustee Pryde, Recording Secretary Johnson

I. CALL TO ORDER:

Chairman Loch called the Glen Ellyn Architectural Review Commission (ARC) special meeting to order at 7:03 PM in the Civic Center at 535 Duane Street; Glen Ellyn, Illinois. Roll call was taken and a quorum was present.

II. PUBLIC COMMENT (NON-AGENDA ITEMS)

None

III. APPROVAL OF MINUTES – MAY 25, 2017

Commissioner Heming-Littwin made a motion to approve the minutes of the May 25, 2017 meeting of the Plan Commission, seconded by Commissioner Fanella. All ayes, motion carried.

IV. PRE APPLICATION MEETING – 765-787 HARDING AVENUE – HARDING CUSTOM HOMES, LLC - PUD

Chairperson Loch explained the purpose of the pre-application meeting. This is the third and final pre-application meeting for Harding Custom Homes, LLC.

Planner Sterrett introduced the project, a proposed single family attached development. The location is south of Harding Avenue, west of Route 53. The Subject Property is 4.3 acres in size. It is currently zoned R-2. There is multi-family to the north, and single family homes to the east, west, and south. Currently the Petitioner is proposing a 24-unit townhome development of 5 buildings with 4-6 units per building. Currently would require rezoning of the east side of the property for the townhomes. The west portion of the property would be subdivided into single

family lots in the future. Items for consideration and feedback tonight are: access onto Route 53, a variation to allow existing utility lines to remain above ground in lieu of burying all existing utility lines, and a variation to not install sidewalk along the west side of Route 53.

Chairperson Loch asked for clarification on the utility lines. Planner Sterrett stated that new lines would be buried, the existing poles would remain along Harding.

The Petitioner, Marv Ritter, came forward to speak. He is a Glen Ellyn resident since 1979 and he is representing the property owner. Glen Ellyn has a shortage of townhomes and condominiums for people that have spent their lives in town raising their families. They would like to stay in the community and downsize. There is a shortage of this type of housing in the community that is new and meet today's standards. Half of the units proposed in the development will have first-floor master bedrooms. The units will be high-end, custom units. The development will be connected to Panfish Park by a walking path. The project allows long term residents to downsize and stay in the community. Since the last pre-application property, the Petitioner has involved the property owners to the south to add additional land to the development. This was at the request of the Plan Commission. At the request of the Plan Commission, they have amended the plan to include 4 single family lots on the west side of the development (approx. 1 acre total). They have reduced the number of townhomes from 31 to 24 units. They have agreed to connect the multi-use path. He discussed the common open space, approx. 48,000 square feet. The common space provided is more than 2 times what is required by Code. They have reduced the size of the units to reduce bulk. They have slightly increased the floor area ratio. The density of the townhomes has remained virtually the same. They are proposing an emergency access point for fire trucks and/or ambulances made of "quick grate", a permeable paving surface. The access road would have a locked gate as not to be used except by emergency vehicles.

The biggest issue for the Petitioner is connecting Harding to Route 53. The Petitioner is not in favor this connection. They see the development as a destination place, with families that have grown children. They think that connecting their road to Route 53 would create more undesirable traffic in the development. He discussed the changing topography and rapid decrease in width of 53, and believes that another intersection in this location could be dangerous.

The second issue is the utility poles. There are two existing utility poles on Harding, and one near Route 53 in the IL ROW. The cost to put those underground is approximately $190,000.

In regards to installing new sidewalk along Route 53, the Petitioner does not believe this is a safe area to walk. It would cost $30,000 to remove trees and install the sidewalk. Mr. Ritter stated that the Plan Commission's input on these three issues will have an enormous impact on the project.

Mr. Ritter stated that the fire department has reviewed the cul-de-sac plan and is OK with the design. In May, they discussed the 25 foot front and corner side yard setback. They are requesting a variation to allow 2 lots between non-intersecting streets (Harding and Route 53). They don't see any way around this variation.

Commissioner Heming-Littwin asked about the 3 utility poles. Mr. Ritter is not sure who it feeds power to. Everything is underground from that pole, it does not feed directly into any homes. Com-Ed must make the decision where the power for the new development comes from, but he believes it should come from transformer next to those poles.

Commissioner Saeed asked about the emergency access to Route 53. The "quick-crete" product provides a green look, permeability for water, and the strength to support trucks that would drive over it.

Commissioner Rodemann asked about an easement on the plans that wraps around the parcels. Mr. Ritter stated that a 10' landscaping easement around the property is required. Commissioner Rodemann asked about stormwater management. Mr. Ritter stated that they do not know yet how it will be done, but it must be approved by the Village. He suspects that there will be storm sewers running along the perimeter of the property. No detention/retention ponds are planned. They will pay a fee in lieu, and route the water underground to Panfish Park.

Mr. Ritter stated they have an alternative plan to build a 91-unit apartment building. The property owner's preference is for the townhome building and four single family units. Any such condominium/apartment building would require a PUD process and Village approval, along with a rezoning to R-4.

Public Comment:

Christina Morrison, an attorney representing the neighbors/residents, came forward to speak. The developer has refused to meet with her despite her contacting their office. She compared density of Water's Edge development to the proposed development. The proposed density is 150% of the density of the existing mixed use development. The requested yard variation does not meet the "uniqueness" standard for a special use. A portion of the one of the buildings is abutting the 10-foot landscape buffer. This piece of property was heavily wooded, and the developer has already removed many trees. The neighbors have experienced more noise from Route 53 as a result. The neighbors would like a berm on the west side to prevent water from flowing towards their properties. Lastly, there is nonconformance with the comprehensive plan, which requires a variation. She does not believe they meet the standards for such a variation. Burying utilities and installing sidewalks are long term objectives for the Village. This developer is requesting variations from both. Using cost as a unique circumstance is not acceptable. Common areas are to be provided for open space and recreation. The amount of open space provided is small and is directly adjacent to the townhomes. People would not use that space as open space is intended to be used.

Mary Almania, resident of Water's Edge, came forward to address the Plan Commission. She hasn't heard anything about stormwater. Water's Edge maintains a wetland and prairie land behind their units. They spend thousands each year maintaining it. She does not see how Panfish Park will hold the stormwater. Commissioner Loch stated that the development is early in the process and they have not addressed stormwater issues yet.

Sue Wiseman, resident of Water's Edge, came forward to speak. Their cul-de-sacs are privately owned and maintained. She asked if the new development would have public or private streets. Planner Sterrett stated that the new streets would be public, as the Village discourages private streets now.

Bill Shafer, 756 Glenbard Rd in Glen Ellyn. The proposal still requires rezoning a large portion of the property to R-4. He thought based on previous meetings that the PC was averse to rezoning. Commissioner Heming-Littwin stated that the western portion is the R-2 portion, and that was the portion the PC was concerned about previously.

Drew Malone, 795 Parkview Ct in Water's Edge. Undergrounding utilities and installing sidewalks are expensive but need to be done. He does not believe the Village should approve variations for those items. Anytime the Village has the opportunity to get utilities buried, they should enforce it.

End of public comment.

Commissioner Heming-Littwin stated the Plan Commission should not consider financial gains or losses to the Petitioner. She is torn about the Harding/Route 53 connection. Usually the Village requires a developer to speak with IDOT about connecting to a state road. Maybe a right in, right out access would be ok. She would like the utility poles to be buried. The PC recently required a development south of this location to put sidewalks along Route 53. She does not appreciate idle threats being made about what can or will be done on a property.

Commissioner Rodemann stated that he is indifferent about the Route 53 connection. He thinks the proposed emergency access is preferable. People may see the emergency connection drive as a pedestrian path to Panfish Park. He believes sidewalks should be installed on Route 43. Poles should be undergrounded as well. Removing trees does not sit well with him. Keeping the western part of the property as R-2 was a big step for the Petitioner to make. He thinks that the townhome development may add 10 more homes as opposed to if it was developed as all single family. He thinks this is acceptable.

Commissioner Fanella stated that she would defer the Harding/Route 53 access issue to staff, IDOT and public works. She believes the sidewalks should be installed.

Commissioner Saeed stated that the petitioner should contact IDOT with regard to Route 53 access. All utilities should be underground. The sidewalks should be installed as well.

Chairperson Loch stated that she appreciates that all new utilities will be underground. She is lukewarm on the existing poles being left as-is. She is comfortable with the R-2 lots on the western edge of the property. She believes there is a large need for townhomes in Glen Ellyn.

Commissioner Heming-Littwin added that with regard to stormwater issues, once a project is engineered correctly with property drainage, it will fix issues that were previously existing when water was left to flow naturally on undeveloped land.

VILLAGE OF GLEN ELLYN

Exterior Appearance Review
Application Packet

Planning & Development Department
535 Duane Street – Glen Ellyn, IL 60137 – Telephone 630.547.5250 – Fax 630.547.5370

EXTERIOR APPEARANCE REVIEW
APPLICATION

Please complete and return this form to the Planning and Development Department, 535 Duane St., Glen Ellyn, IL 60137. If you have questions, please phone: 630.547.5250

I. APPLICATION INFORMATION:

A. Date Filed: January 18, 2021

B. Application No.

C. Project Name: Harding Glen Townhomes

D. Project Description:

A 23 unit townhome development on approximately 3.367 acres of vacant land east of the intersection of Nicoll Way and Harding Avenue in Glen Ellyn, IL.

See chart below in section F for a breakdown of units by building.

E. Address of Property:

Common Addresses, PINs, Square Footage, and Legal Descriptions:

This information is provided on page 1 of the engineering documents labeled "Site Improvement Plans for Harding Custom Homes Subdivision Unit 2" with the revision date of 12/04/20.

F. Zoning: Currently R2, seeking R4

Lot Dimensions:

Lot size and Area:

Odd shaped, varies, see attached plat of survey, approximately 289' x 552' in total.

The detailed information can be found on pages 1 and 2 of the Plat of Subdivision.

Present Use:

Various:

Parcels 1 & 2 - Vacant land

Parcel 3 – Abandoned home
Parcel 4 - Driveway
Parcel 5 – Undeveloped Village roadway

Name of Applicant:	Harding Custom Homes, LLC
Address of Applicant:	540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137
Business Phone:	(630) 790-8144
(Mobile):	(630) 303-7754
Email:	Marv@RiteWayCustomHomes.com
(Fax):	n/a
Property Interest of Applicant:	Harding Custom Homes, LLC is the property owner Marv Ritter is the project manager for the owner
Name of Owner(s):	Harding Custom Homes, LLC Mark & Diane White 227 7th Avenue NE St. Petersburg, FL 33701 (609) 937-0409 white2p@icloud.com

II. COMFORMANCE WITH APPEARANCE REVIEW GUIDELINES:
(You may attach separate sheets as needed to answer any of the following questions)

H. Please explain why the proposed architectural style was chosen.

This style is consistent with the character of Glen Ellyn including many of the properties in the area and the finishes and style are compatible with the desires of townhome buyers in Glen Ellyn and the surrounding communities.

I. Provide information about the architectural style and exterior materials of the buildings in the surrounding area:

Please see the Color Renderings document for views and the Exterior Blueprints for materials.

J. Please explain how the project complies with the Appearance Review Guidelines:

1.1 We have reviewed the Appearance Review Guidelines and although the project does not meet every individual guideline, we believe the project is appropriate for the site, adjacent developments and streetscape.

1.1.1 The existing trees have been identified. Unfortunately, the existing trees primarily in less than average condition. All of the existing trees are in areas of site improvement, and therefore are scheduled to be removed.

1.1.2 The site grading has been minimized to preserve the character of the site and the buildings will fit the contours of the land.

1.1.3 The areas of impervious surface have been minimized to the extent possible, including use of a permeable surface for the emergency exit to Route 53.

1.1.4 We have avoided architectural styles which harshly conflict with the adjacent buildings.

1.1.5 We have maintained the rhythm of similar townhome projects in the area in terms of building setback and massing, and will dramically improve the landscaping on the site.

1.2 We have utilized both brick and stone on the front elevations and brick on the other three elevations, plus friendly earth tone colors on the exterior walls of each side of the buildings.

1.3 The buildings have not been designed that they are so unique nor harshly different or exotic in their design so as to narrowly constrain potential reuse if the original use changes.

1.4 We have avoided arbitrary or fad design treatments which will soon become out dated.

1.5 The roofs have been scaled to the building which they cover

1.5.1 The roofs are architectural shingles are a color and texture appropriate to the building structure and use, and similar to other properties in the area.

1.5.2 The roof edge and wall face are clearly differentiated by color and material.

1.5.3 All gable, pitched and mansard roofs are scaled to the face of the building so as not to dominate the elevation nor be so small as to lack a feeling of closure and protection.

1.5.4 All pitched roof have overhangs which define the roof wall interface.

1.5.5 There are no parapet walls.

1.6 The unit entrances are readily identified from parking areas (driveways) and pedestrian approaches. They are open, lit and highlighted by the building structure, lighting and architectural detailing.

1.7 The architectural character of all sides of the building relate to the principal elevation by utilizing the same siding materials.

1.8 The exterior colors are muted and compliment each other, with only a few colors on each façade.

1.8.1 A natural, neutral color has been chosen for the primary exterior façade material.

1.8.2 The applied elements such as awnings, light fixtures, downspouts, railings and signage coordinate with, rather than dominate, the color scheme for the building.

1.8.3 There are no roof top mechanical systems.

1.9 The apparent mass and bulk of the buildings have been reduced by structural articulation, windows and other architectural elements and landscaping.

2.1 Extensive landscaping material has been provided to enhance the project, buffer utilitarian views, and screen private areas of nearby residential property from visual intrusion.

2.1.1 The project does not have a parking lot.

2.1.2 The project does not have a parking lot, but has utilized perimeter landscaping screening.

2.1.3 The project has a center island at the bulb of the cul-de-sac.

2.1.4 The overall project landscape plan provides color throughout the growing season.

2.1.5 Landscaping of more than 5 feet in width have been employed along the sides of the buildings.

2.1.6 To the extent fences will be utilized within the project as buffers, their specifications will assure durability and economy of maintenance. We anticipate a 6' fence running from north to south along the Illinois Route 53 property line. A gap in the fence will be provided for the emergency access and adjoining sidewalk.

2.2 The design of the light fixtures compliment the architecture and function of the buildings.

2.2.1 All wall mounted fixtures do not directly allow light projection to the sky.

2.2.2 Other than street lights specified by the Village, there are no free standing light fixtures.

2.2.3 The color of the wall mounted lights will be consistent throughout the property.

2.3 The only ancillary and / or accessory structure anticipated is a gazebo, which likely will be constructed of cedar, and a sign indicating the name of the development.

2.3.1 No trash enclosures are anticipated within the project.

2.3.1 Commonwealth Edison will provide the design for the electrical service boxes in the area, it will be up to them to select and maintain the color of their equipment.

2.4 The proposed signage will be reviewed and approved as part of the application and approval process.

2.2.1 The sign we have proposed will be ground mounted vs. a pylon sign.

2.4.2 We have minimized the number of lines of text on the sign we have proposed.

2.4.3 The structure, materials, colors and detailing of our proposed free standing sign complements the design of the buildings.

2.4.4 We have selected landscaping around the base of our proposed sign per the landscaping plan.

2.4.5 We are not proposing a wall sign.

2.4.6 We are not proposing a wall sign.

2.4.7 Our project does not include a shopping center.

2.5 We have not selected any site furnishings at this time (such as waste receptacles, benches, bike racks, etc.). In the event we do, they will be selected to relate to each other and to the buildings in terms of material, color and style.

2.6 We anticipate a gazebo as an association (vs. public) amenity.

3.0 This section is not applicable, as the development is not within the central business district.

4.0 This section is not applicable, as the development is not a highway oriented commercial project.

5.0 This section is not applicable, as the development is not near Stacy's Corners.

6.0 This section is not applicable, as the development is not institutional.

7.0 Multi-Family and Single Family Attached Residential.

7.1 Stone and masonry has been incorporated on the ground floor of the front elevations. Masonry has been utilized on the side and rear elevations.

7.2 The buildings are over two stories in height.

7.3 The individual entries are readily identified and are designed and lighted for attractiveness and security.

7.4 Although there are no underground parking facilities, each unit has been designed with a two car garage and room for 2 or more additional cars in the driveway. In addition, 7 standard parking spaces and 1 handicapped space are being proposed as part of the project, bringing the total parking 107 spaces which is 4.7 spaces per unit.

7.5 The front elevation of the homes includes a two car garage for each unit. The front elevations have been designed with diversity between 3 different unit types, and include several harmonious materials in differing configurations.

7.5.1 The project design does not incorporate rear or side load garages.

7.5.2 The project incorporates double car garage doors for each unit. We have incorporated two, one car garage doors on the 28' wide units, with at least two single garage door units in each building. We remain concerned as to whether this will be physically possible to produce given the available size within a small number of units. We plan to re-review this situation during the building permit phase.

7.5.3 The project has proposed garage doors with panels to provide architectural detail and enhancement compared to flat surfaced doors.

7.5.4 Where possible, we have provided space between driveways to each unit adequate to landscaping treatments.

7.6 The project incorporates direct vent fireplaces which do not require a chimney.

7.7 We have avoided the buried tunnel look which often occurs with projecting and visually dominant front garages.

K. Please explain why any deviations from the Appearance Review Guidelines are proposed:

We have responded above to each of the guidelines in the applicable sections of the Appearance Review Guidelines. Although there are some items we have deviated from the guidelines, on an overall basis we believe the proposed plans substantially meet the overall intentions of the guidelines.

Signature:

Marvin K. Ritter

for Harding Custom Homes, LLC

Date: 01/18/21

Village of Glen Ellyn
535 Duane Street ▪ Glen Ellyn, Illinois 60137 ▪ Phone: (630) 547-5250 ▪ Fax: (630) 547-5370

APPLICATION FOR MAJOR SUBDIVISON PRELIMINARY APPROVAL

You may attach separate sheets as needed to answer any of the following questions.

DATE FILED: **October 4, 2021**

APPLICATION NUMBER: **TBD**

I. APPLICANT INFORMATION:

Name:	**Harding Custom Homes, LLC**
Address:	**540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137**
Phone Number: (Home)	**n/a**
(Business)	**(630) 790-8144**
Mobile Number:	**(630) 303-7754**
(Fax):	**n/a**
Email:	**Marv@RiteWayCustomHomes.com**
Property Interest of Applicant:	**Harding Custom Homes, LLC owns the property. The owners of Harding Custom Homes, LLC are:**

Mark & Diane White
227 7th Avenue NE
St. Petersburg, FL 33701

(Owner, Contract Purchaser, Owner Representative)

II. OWNER INFORMATION: Same as noted directly above.

Name:
Address:
Phone Number: (Home)
(Business)
Mobile Number:
(Fax):
Email:
Owner Information:

(Owner, Contract Purchaser, Owner Representative)

III. PROPERTY INFORMATION:

Common Addresses, PINs, Square Footage, and Legal Descriptions:

This information is contained on sheet 1 of the engineering drawings.

Zoning: **Currently R2, seeking R4**

Lot Dimensions:

Lot size and Area:

Odd shaped, varies, see attached plat of survey, approximately 289’ x 552’ in total

Most Recent Documents					
	Square Feet	Acres	Description	PIN	Address
Most Recent Cover Sheet					
Existing Parcels:					
	47,101	1.081	Parcel 1	05-23-223-020	787 Harding Avenue
	43,468	0.998	Parcel 2	05-23-223-005	No Address Assigned
	43,562	1.000	Parcel 3	05-23-223-008	138 Il State Route 53
	4,624	0.106	Parcel 4	05-23-223-025	No Address Assigned
	7,913	0.182	Parcel 5	33' Harding ROW	33' Harding ROW
	146,668	3.367			
Most Recent Geometric Plan & Others					
Proposed Lots:					
	26,315	0.604	Lot 1	N/A	N/A
	19,438	0.446	Lot 2	N/A	N/A
	21,218	0.487	Lot 3	N/A	N/A
	21,515	0.494	Lot 4	N/A	N/A
	25,079	0.576	Lot 5	N/A	N/A
	113,565				
	33,103	0.760	Harding Ave & Court	N/A	N/A
	146,668	3.367			

Present Use:

Various:

Parcels 1 & 2 - Vacant land
Parcel 3 – Abandoned home
Parcel 4 - Driveway
Parcel 5 – Undeveloped Village roadway

Description of Subdivision (Preliminary Plat/Final Plat):

We seek to develop 23 townhomes on 3.367 acres in the configuration provided within the engineering design documents. See the Plat of Subdivision prepared by Carradus Land Survey, Inc. which was provided as part of this application and the Quantitative Analysis.

Estimated Date to Begin Construction:

We anticipate starting construction within 90 days after zoning and permit applications are approved.

Name(s), Address(es) and Phone Number(s) of consultants (Architects, Engineers, Attorneys, etc.):

Project Architect:

Bret Richter
B.L.R. Architects Ltd.
1709 Ogden Avenue
Lisle, IL 60532
(630) 435-0700

Project Surveyor / Engineer:
Alan D. Carradus
Carradus Land Survey, Inc.
100 Bridge Street, Suite 1
Wheaton, IL 60187
(630) 588-0416

Transactional Representation:
Mark Rodriguez
Law Office of Mark and Beth Rodriguez
364 Pennsylvania Avenue, #1W
Glen Ellyn, IL 60137
(630) 858-1199

Homeowner's Association Documents:
Bruno Tabis
Huck Bouma
1755 South Naperville Road, Ste 200
Wheaton, IL 60189
(630) 344-1195

Traffic Studies:
Bill Grieve
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

Photometric Study:
Charles DuBeau
DRK Enterprises, LLC
1 Chestnut Street, Suite 4M
Nashua, NH 03060
(508) 3454-5477

Narrative Statement:

Harding Custom Homes, LLC is seeking to rezone from R2 to R4 the undeveloped portion of Harding Avenue east of Nicoll Way and the 4 parcels located directly south of the undeveloped portion of Harding Avenue and directly west of Illinois Route 53. The property will be re-subdivided in conjunction with the re-development plan. The surrounding zoning classifications consist of R4 directly north, R2 & R4 to the northwest, R2 to the west and south, R1 to the east side of Illinois Route 53 and CR to the northeast on the east side of Illinois Route 53.

The corresponding PIN numbers, addresses, square footage and acreage are identified on the Cover Sheet of the Engineering Documents.

In accordance with Section 11-3-11 (B) and (C) of the Glen Ellyn Subdivision Code, the following six variations are required:

Variation #1:

Section 11-4-2(G) to allow Lots 1, 3, 4, and 5 to have two frontages to public right-of-way where only one frontage per lot is permitted;

Response: The shape and size of the parcels, along with the design of the lots and improvements, require Lots 3, 4 and 5 to front on both Harding Court and Illinois Route 53. For purposes of the development, Harding Court is considered to be adjacent to the front yards of the lots and Illinois Route 53 adjacent to the rear yards of the lots.

Note, staff has indicated Lot 3's eastern edge is considered a corner yard, and therefore this variance may not apply.

Section 11-3-11 (C):

1 The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

Response: The lot lines along Route 53 will be heavily landscaped and incorporate a 6' privacy fence. We do not anticipate this variance will be detrimental to the public safety, health, or welfare or injurious to other property or improvements.

The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property; and

Response: The location, shape and size make this situation unique to the property, creating a substantial difficulty in developing the property and is not generally applicable to other property.

Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

Response: A very significant hardship to the property owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulation was carried out, due to the particular physical surroundings, shape and topographical conditions of the property.

Section 11-3-11 (D)

That the variation, if granted, will not alter the essential character of the locality;

Response: We do not anticipate the variation to alter the essential character of the locality.

That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

Response: We have evaluated a number of alternative designs, all of which would require a similar variance. The purpose of the variation is required for the implementation of this (and every) design we have evaluated.

That the proposed variation will not:

1. Diminish or impair property values within the neighborhood:

   Response: The proposed variation will not diminish or impair the property values within the neighborhood.

2. Unduly increase traffic congestion in the public streets and highway, or

   Response: The variation does not unduly increase traffic congestion in the public streets and highway.

3. Result in an increase in public expenditures; and

   Response: The variation does not result in an increase in public expenditures.

That the variation is the minimum variation that will make possible the reasonable use of the land.

Response: This variation does not have a minimum or maximum, its either it is approved to make possible the reasonable use of the land, or your reject it.

Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: The hardship has not been created by Harding Custom Homes or any person having an interest in the property. End of A

Variation #2:

Section 11-4-4(E) to allow a right-of-way width of 55 feet for a local street where 66 feet is required (Harding Avenue, Harding Court);

Response: The proposed street width is less than required by code, but consistent with the existing improved portions of Harding Avenue.

Section 11-3-11 (C):

1. The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

   Response: The street width we are proposing match the width of both Nicoll Way (south of Pershing) and Harding Avenue. The proposed width has been reviewed by Public Works and our understanding is they find no objection to this variation.

2. The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property; and

   Response: The roadways the project will be connecting to (Nicoll Way and Harding Avenue) were designed to be and approved by the Village with a width of 55 feet. It is natural for the extension to continue at the same width.

3. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

   Response: Implementing a roadway which is wider than the existing roadway would require substantial engineering challenges and the limited east-west width of the property, would not allow the proposed townhomes to be built due to the combined required front

and rear yard setbacks.

Section 11-3-11 (D)

1. That the variation, if granted, will not alter the essential character of the locality;

   Response: Building the new roadway 55' wide is keeping with the essential character of the neighborhood locality, while expanding it to code (66') would be change the character.

2. That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

   Response: The variation allows the new roadway to match the width of the existing roadway.

3. That the proposed variation will not:

   a. Diminish or impair property values within the neighborhood:

      Response: There are not any public roadways along leading to Pershing Avenue which are 66' wide. Therefore, the variation will not impair property values within the neighborhood.

   b. Unduly increase traffic congestion in the public streets and highway, or

      Response: The roadway width will not unduly increase traffic congestion in the public streets and highway. Additionally, the traffic study prepared by Gewalt Hamilton and reviewed by the Village's traffic consultant determined the incremental traffic from the townhome development will not have a material negative impact on the area.

   c. Result in an increase in public expenditures; and

      Response: The slightly narrower width will reduce the amount of pavement to be plowed, salted, maintained and replaced overtime, thus decreasing public expenditures from what would be required with a 66' roadway.

4. That the variation is the minimum variation that will make possible the reasonable use of the land.

   Response: Because the improved portion of Harding Avenue is 55' wide, creating a new roadway 66' wide would be problematic to design & implement and would not match the likely intention of the Village when the existing improved portion of Harding Avenue was approved at 55' wide.

5. Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: Harding Custom Homes, LLC nor it's owners or project managers were not involved with the Village's decision to approve the width of the existing portions of Harding Avenue at 55', and therefore did not create the hardship.

Variation #3:

Section 11-4-4(E) to allow a right-of-way width of 30 feet for a local street where 66 feet is required (Kohler property connection).

Section 11-3-11 (C):

1 The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

Response: This right-of-way serves a land locked single family one acre R2 property to the west. Due to the configuration of the property, this right-of-way serves more as a driveway than a local street. It will not be detrimental to the public safety, health or welfare or injurious to other property improvements.

2 The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property; and

Response: The single family property to the west is currently land locked, without access to a public street. Providing this right-of-way resolves this issue in a way which is mutually agreeable to the Village, developer and property owner to the west. Having a land locked property is highly unusual within the Village of Glen Ellyn and is generally not applicable to other properties.

3 Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

Response: It would be a hardship to the developer to provide a 66' roadway to solve a land locked property issue for one single family home. This solution was requested by the Village of Glen Ellyn.

Section 11-3-11 (D)

3 That the variation, if granted, will not alter the essential character of the locality;

Response: **This variation, if granted, will not alter the essential character of the locality, but rather improve the situation.**

4 That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

Response: **The purpose of the solution is to provide public access to a lot that is currently land locked.**

5 That the proposed variation will not:

a. Diminish or impair property values within the neighborhood:

Response: **The proposed variation will not diminish or impair the property values within the neighborhood. It will likely increase the value of the land locked single family home to the west.**

b. Unduly increase traffic congestion in the public streets and highway, or

Response: **The impact of this variation will not unduly increase traffic congestion in the public streets and highway.**

c. Result in an increase in public expenditures; and

Response: **This variation will not result in an increase in public expenditures as the HOA and homeowner to the west will be responsible for maintaining the proposes right-of-way.**

6 That the variation is the minimum variation that will make possible the reasonable use of the land.

Response: **This variation is the minimum variation that will make reasonable use of the land.**

7 Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: **The land locked single family home to the west was created when Harding Custom Homes, LLC purchased the shared driveway from the homeowner at the request of the Glen Ellyn Plan Commission to acquire the property to the south of Harding's original parcels. Although other solutions were possible, creating the 30' right-of-way was recommended by the Village of Glen Ellyn to the developer.**

Variation #4:

Section 11-4-4(J)(1), to allow a cul-de-sac length of approximately 1,375 feet where cul-de-sacs are limited to 300 feet;

Note code requires the length of the cul-de-sac to be measured from the intersection of Nicoll Way and Pershing Avenue.

Section 11-3-11 (C):

1 The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

Response: The two primary public safety, health, or welfare or injurious to other property or improvements concerns voiced by Village staff has been the ability of a fire truck to turn around and having a second way out to a public roadway in the event of an emergency.

Providing a cul-de-sac (of any length) creates the opportunity for a fire truck to turn around, in an area where at this point a fire truck can only back up to the intersection of Harding Avenue and Nicoll Way where it can turn.

In the existing situation, the improved portion of Harding Avenue simply dead ends into an unimproved grass roadway that does not allow a fire truck to turn around. This unimproved grass roadway without a turnaround is 33' wide and approximately 240' long. By replacing the unimproved roadway as proposed by this project, the total length from the end of the public roadway to Pershing Avenue increases by about 200' but allows firetrucks and other vehicles to travel on a paved roadway to the bulb of a cul-de-sac where it can safely turn around.

To address the emergency situation where access is required from somewhere other than the intersection of Pershing Avenue and Nicoll Way, we have created a gated emergency access road from the bulb of the cul-de-sac to Illinois Route 53.

The cul-de-sac and the emergency access road will improve the public safety, health and welfare and will not be injurious to other property or improvements.

8 The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property; and

Response: This is literally the end of the road, and therefore is unique to the project property, would create substantial difficulty in developing the property and are not generally applicable to other properties.

3 Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

Response: Harding Custom Homes has evaluated multiple ways to connect the project to public roadways and finds this approach to be best way to accomplish it's vision for the property in an efficient and equitable manner.

Section 11-3-11 (D)

9 That the variation, if granted, will not alter the essential character of the locality;

Response: The proposed cul-de-sac design plays a significant role in the placement of individual townhomes. It has written support from the Brentwood Court homeowners association, who share the western property line. All other roadway designs evaluated, place townhome units directly behind two Brentwood Court homes, while the proposed cul-de-sac design does not.

10 That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

Response: Incorporating a cul-de-sac creates the sense of a more private destination for residents, vs. an opportunity for cut through traffic to get to Route 53. Because of this, we anticipate the only residents, their guests and delivery personnel will regularly drive the street. We believe the speed they will travel, likely would be slower than those who are simply cutting through. We believe it will also discourage vandalism and break ins in the entire area, as there will not be a quick escape route to Route 53.

11 That the proposed variation will not:

a. Diminish or impair property values within the neighborhood:

Response: Installing the cul-de-sac will improve the existing roadway and neighborhood over the existing unimproved dirt roadway.

b. Unduly increase traffic congestion in the public streets and highway, or

Response: A traffic study was prepared by Gewalt Hamilton and reviewed by the Village's traffic consultant, Benes and Associates. The traffic impact was determined to not unduly increase traffic congestion in the public streets and highway. A copy of the traffic study and Benes' review are included with our application.

c. Result in an increase in public expenditures; and

Response: The cost of designing and installing the cul-de-sac is the responsibility of the developer who upon completion and acceptance of the improvements, will donate the roadway to the Village.

12 That the variation is the minimum variation that will make possible the reasonable use of the land.

Response: The variation will allow the development to continue and maintain harmony with the adjacent property owners to the west.

13 Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: The hardship has not been created by Harding Custom Homes or any person having an interest in the property.

Variation #5:

Section 11-4-8, to allow 3 out of 8 existing utility poles to not be buried,where burying of electric, communication, and other facilities both within the subdivided property and adjacent rights-of-way is required;

This is for the three existing 12,000 volt utility poles on the north side of Lot 5. All other utilities on the property will be buried.

Note, our understanding is Village Staff have no objection to the eastern pole (near the property line of Illinois Route 53) to remain.

Section 11-3-11 (C):

1 The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

Response: The two existing utility poles in question are on the north end of the project in the existing unimproved Harding Roadway. The poles carry high voltage lines (12,000 volts) from ComEd and cable / internet connections from two cable companies. Removing them to underground approximately 250 feet of overhead cable is dangerous in itself, and would likely result in a significant downtime of electrical service while the removal project is ongoing.

Glen Ellyn and the surrounding area have hundreds of miles of overhead utility lines. Leaving these in place will not provide additional detriments to the public safety, health or welfare, or injurious to other property or improvements.

The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property;

and

Response: These poles were placed where they are by ComEd without objection from the Village. Removing the poles will add significant financial risk to proceeding with the project in addition to the physical risk in removing them. All electric utilities running from ComEd sources to individual units will be undergrounded.

Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

Response: The Harding parcels are located adjacent to these lines which were installed by others without the approval of the owners of the Harding parcels. It should be noted, one of the Members of Harding Custom Homes inherited the northern parcels from her father who purchased the original parcel in 1952.

Section 11-3-11 (D)

That the variation, if granted, will not alter the essential character of the locality;

Response: Granting the variation does not alter the essential character of the locality; it leaves it as is.

That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

Response: Undergrounding the utility lines will not substantially improve the uptime of utility service in the area as this 250' section is essentially the "last mile" of delivery, which represents less than 1% of the distance between the electric source and household, does not improve safety of the neighborhood, and visually only affects those who are currently within eye sight and new residents of the townhome development.

That the proposed variation will not:

a. Diminish or impair property values within the neighborhood:

Response: Leaving the lines in place will not diminish or impair the property values within the neighborhood.

b. Unduly increase traffic congestion in the public streets and highway, or

Response: Leaving the lines in place will not increase traffic congestion in the public streets and highways.

c. Result in an increase in public expenditures; and

Response: **Leaving the lines in place will not cause an increase in public expenditures.**

That the variation is the minimum variation that will make possible the reasonable use of the land.

Response: **The economic impact is significant and among other things, could be one of several tipping points to postpone, delay or cancel the development plans.**

Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: **The hardship has not been created by Harding Custom Homes or any person having an interest in the property.**

Variation #6:

Section 11-4-7, to not install approximately 438 linear feet of sidewalk along IL-53, where sidewalk along all public rights-of-way is required.

Response: **This is from the emergency access, going north to the northeast property line of the project. Our understanding is Village Staff have no objection to this request.**

Section 11-3-11 (C):

1 The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements:

Response: **We believe it will be much safer to walk on the newly constructed public sidewalks along Harding Court, over the sidewalk leading from the bulb of the cul-de-sac to the public sidewalk to be built running south from the emergency access gate to the south edge of the property, than to walk along the Route 53 roadway to the north of the project parcels (which do not have sidewalks all the way to Pershing Avenue). Traffic frequently travels southbound on Route 53 at 45 miles per hour (or faster) 20' - 30' from where such sidewalk would be built.**

The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property; and

Response: **This property didn't choose to be next to Route 53; it was there millions of years before Route 53 was built. The existing topography is steep and the vegetation in the Route 53 right of way is such that would make installing a public sidewalk very**

difficult. This is a condition which is not generally applicable to other property.

Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.

Response: See the response directly above.

Section 11-3-11 (D)

That the variation, if granted, will not alter the essential character of the locality;

Response: We don't envision installing a sidewalk in this area will provide a comfortable route for young children and others to regularly walk on a sidewalk which is less than 30 feet away from cars, trucks and semi-trailers travelling 66' (45 mph) or more per second.

That the purpose of the variation is not based exclusively upon a desire to make more money out of the property.

Response: This is both a safety and difficulty in installing issue, among others.

That the proposed variation will not:

d. Diminish or impair property values within the neighborhood:

Response: This variation is more likely to increase the value of neighborhood properties (safer location to live than diminish or impair property values.

e. Unduly increase traffic congestion in the public streets and highway, or

Response: Installing the sidewalk may create distractions for drivers along Route 53 and therefore cause additional safety issues and / or traffic congestion.

f. Result in an increase in public expenditures; and

Response: This variation will not increase public expenditures.

That the variation is the minimum variation that will make possible the reasonable use of the land.

Response: This variation is not about the reasonable use of the project parcels, it is about public safety and the difficulty of installing it.

Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.

Response: The hardship has not been created by Harding Custom Homes or any person having an interest in the property.

Section 11-3-10 of the Subdivision Code requires that the following six (6) criteria be met before a Subdivision can be approved. Please describe how the proposed Subdivision meets these requirements. The information provided will be used by the Plan Commission in considering the request. Please describe how the proposed subdivision meets the following criteria.

1. The proposed subdivision conforms to the provisions set forth in this Subdivision Ordinance, including the rules and regulations referenced in Section 11-4-1 of the Subdivision Code.

Response: Based on Village staff review, we believe we have met the requirements of 11-4-1 with the exception of variance items identified within our application and supporting documentation.

11-4-1. - Conformance to applicable rules and regulations.

In addition to the requirements established herein, all subdivision plats shall comply with the following rules and regulations:

(A) All applicable statutory provisions;
(B) The Village of Glen Ellyn zoning ordinance;
(C) The applicable Village of Glen Ellyn building codes and all other applicable laws of the appropriate jurisdictions;
(D) The official plan, official map and capital improvement plan of the Village including all streets, drainage systems, and parks shown on the official map or official plan as adopted;
(E) The special requirements of these regulations and any rules of the county health department and/or appropriate state agencies;
(F) The rules of the Illinois department of transportation, if applicable;
(G) The DuPage County Countywide Stormwater and Floodplain Ordinance as adopted, amended or varied by the Village; and
(H) The Village of Glen Ellyn standards for construction of public improvements.

(Ord. 5334, 2-28-2005)

Although each property and project differ, this is the last undeveloped property in the immediate area. To move forward it requires re-zoning and a number of variations. Many of the variations being requested are similar to those granted for multi-family developments located 1 – 3 blocks of this site.

- **<u>Re-Zoning.</u> The parcels are currently zoned R2. The project requires rezoning to R4 to accommodate townhomes. The northern 2/3rds of the property was identified for low denisity, attached residential development in the 2001 comprehensive plan prepared by the Village.**

  Harding Custom Homes, LLC complied with the Plan Commissions request by purchasing Parcels 3 and 4 (the southern 1/3rd of the project) to expand the townhome project based on comments from the first of three prior Pre-Application Plan Commission meetings regarding this property.

The "Future Land Use Plan" in the November 11, 2020 draft of the proposed 2021 Comprehensive Plan identifies all parcels of this project as single-family attached.

2. Definite provision has been made for a water supply system that is sufficient in terms of quantity, dependability, and quality to provide an appropriate supply of water for the type of subdivision proposed.

Response: We have provided engineering designs for the water supply to the project which will be / have been reviewed by the Glen Ellyn Professional Engineer and his team. We are unaware of any deficiencies at this time in the quantity, dependability and the quality to provide an appropriate supply of water for the type of subdivision proposed.

As the Village of Glen Ellyn will be supplying the water to this project, the Village (vs. the developer) is responsible for the quality of the source.

3. A public sewage system is proposed and adequate provision has been made for such system or, if other methods of sewage disposal are proposed that such systems will comply with federal, state, and local laws and regulations.

Response: We have provided engineering designs for Glen Ellyn public sewage for the project which will be / have been reviewed by the Glen Ellyn Professional Engineer and his team. We are unaware of any deficiencies at this time in the adequacy of the provisions which have been made for such system.

4. All areas of the proposed subdivision which may involve soil or topographical conditions presenting hazards or requiring special precaution have been identified by the Subdivider and that the proposed uses of these areas are compatible with such conditions.

Response: In 2017 we identified an underground storage tank on Parcel 3 which had the potential to have leaked. We hired a professional firm to evaluate the situation, remove the tank, test the soil and restore the area. It was determined that no leakage had occurred.

We are unaware of any area within the proposed subdivision which may involve soil or topographical conditions presenting hazards or requiring special precaution that would not be compatible with the proposed uses of this property.

5. The proposed subdivision will not be detrimental to the public health, safety and welfare.

Response: We are unaware of ways in which the proposed subdivision will be detrimental to the public health, safety and welfare beyond similar types of projects.

6. No development shall be approved if such development, at full occupancy, will result in or increase traffic on an arterial or collector street to such an extent that the street does not function at a level of service

deemed acceptable by the Village. The applicant may propose and construct the approved tragic mitigation measures to provide adequate roadway capacity for the proposed development.

Response: **We engaged Gewalt Hamilton to design and prepare a traffic survey to evaluate the effects on the incremental traffic created from full occupancy of the project. A copy of that study is included with our application.**

Gewalt Hamilton provided the following within their review:

> **"Traffic Impact Discussion. Reviewing the existing traffic volumes (see Exhibit 2), the site traffic characteristics and assignment, and the total traffic assignment (see Exhibits 5, 6, and 7) indicates that:**
>
> **• There are currently almost 2,190 vehicles traveling through the IL 53 / Pershing Avenue intersection during the morning peak hour or over 35 vehicles per minute. The residential development will add only 16 trips or about 1 trip every 3-4 minutes.**
>
> **• There are currently over 2,660 vehicles traveling through the IL 53 / Pershing Avenue intersection during the evening peak hour or almost 45 vehicles per minute. The residential development will add only 16 trips or about 1 trip every 3-4 minutes.**
>
> **Key Finding. Based on the above findings, the development's traffic impacts are very small. Thus, our recommendations focus on the site plan elements."**

The Village's traffic consultant, Benes & Associates, provided the following within their review:

> **"The projected site trips are reasonable.**
>
> **It is our opinion that the new development generated traffic will not materially impact the operations at the intersection of Pershing Avenue and IL-53. Additionally, the addition of the new site traffic is not expected to have a significant impact on traffic operations at the intersection of Nicoll Way and Pershing Avenue."**

Based on the results of the traffic study prepared by Gewalt Hamilton and the Village review prepared by Bemis & Associates, we do not believe the development at full occupancy, will result in or increase traffic on the arterial or collector streets to such extent that the street does not function at an appropriate level of service.

I (We) certify that all of the statements and documents submitted as part of this application are true to the best of my (our) knowledge and belief.

I (We) consent to the entry in or upon the premises described in this application by any authorized official of the Village of Glen Ellyn for the purpose of inspection.

I (We) consent to pay the Village of Glen Ellyn all costs incurred for transcribing the public hearing on this application.

I (We) understand that no final action shall be taken by the Village Board subsequent to the public hearing and until payment of all escrow fees.

October 4, 2021

Marvin K. Ritter
for Harding Custom Homes, LLC

Village of Glen Ellyn
535 Duane Street ▪ Glen Ellyn, Illinois 60137 · Phone: (30) 547-5250 · Fax: (630) 547-5370

APPLICATION FOR MAJOR SUBDIVISON FINAL APPROVAL

You may attach separate sheets as needed to answer any of the following questions.

DATE FILED: **January 18, 2021**

APPLICATION NUMBER: **TBD**

DATE OF PRELIMINARY APPROVAL: N/A

ORDINANCE NUMBER:

I. APPLICANT INFORMATION:

Name:	**Harding Custom Homes, LLC**
Address:	**540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137**
Phone Number: (Home)	**n/a**
(Business)	**(630) 790-8144**
Mobile Number:	**(630) 303-7754**
(Fax):	**n/a**
Email:	**Marv@RiteWayCustomHomes.com**
Property Interest of Applicant:	**Harding Custom Homes, LLC owns the property. The owners of Harding Custom Homes, LLC are:**

Mark & Diane White
227 7th Avenue NE
St. Petersburg, FL 33701

(Owner, Contract Purchaser, Owner Representative)

II. OWNER INFORMATION: Same as noted directly above

Name:
Address:
Phone Number: (Home)
(Business)
Mobile Number:
(Fax):
Email:
Owner Information:

(Owner, Contract Purchaser, Owner Representative)

III. PROPERTY INFORMATION:

Common Addresses, PINs, Square Footage, and Legal Descriptions:

This information is contained on sheet 1 of the engineering drawings.

Permanent Index Number: **See directly above.**

Zoning: **Currently R2, seeking R4**

Lot size and Area:

Odd shaped, varies, see attached plat of survey, approximately 289' x 552' in total

Parcels & Lot Sizes				
Square Feet	Acres	Description	PIN	Address
Existing Parcels:				
47,101	1.081	Parcel 1	05-23-223-020	787 Harding Avenue
43,468	0.998	Parcel 2	05-23-223-005	No Address Assigned
43,562	1.000	Parcel 3	05-23-223-008	138 Il State Route 53
4,624	0.106	Parcel 4	05-23-223-025	No Address Assigned
7,913	0.182	Parcel 5	33' Harding ROW	33' Harding ROW
146,668	3.367			
Proposed Lots:				
26,315	0.604	Lot 1	TBD	TBD
19,438	0.446	Lot 2	TBD	TBD
21,218	0.487	Lot 3	TBD	TBD
21,515	0.494	Lot 4	TBD	TBD
25,079	0.576	Lot 5	TBD	TBD
1,792	0.041	Outlot A	TBD	TBD
31,311	0.719	Harding Ave & Court	N/A	N/A
146,668	3.367			

Present Use:

Various:

Parcels 1 & 2 - Vacant land
Parcel 3 – Abandoned home
Parcel 4 - Driveway
Parcel 5 – Undeveloped Village roadway

Description of Subdivision (Preliminary Plat/Final Plat):

We seek to develop 23 townhomes on 3.367 acres in the configuration provided within the engineering design documents. See the Plat of Subdivision prepared by Carradus Land Survey, Inc. which was provided as part of this application and the Quantitative Analysis.

Estimated Date to Begin Construction:

We anticipate starting construction within 90 days after zoning and permit

applications are approved.

Name(s), Address(es) and Phone Number(s) of consultants (Architects, Engineers, Attorneys, etc.):

Project Architect:
Bret Richter
B.L.R. Architects Ltd.
1709 Ogden Avenue
Lisle, IL 60532
(630) 435-0700

Project Surveyor / Engineer:
Alan D. Carradus
Carradus Land Survey, Inc.
100 Bridge Street, Suite 1
Wheaton, IL 60187
(630) 588-0416

Transactional Representation:
Mark Rodriguez
Law Office of Mark and Beth Rodriguez
364 Pennsylvania Avenue, #1W
Glen Ellyn, IL 60137
(630) 858-1199

Homeowner's Association Documents:
Bruno Tabis
Huck Bouma
1755 South Naperville Road, Ste 200
Wheaton, IL 60189
(630) 344-1195

Traffic Studies:
Bill Grieve
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

Photometric Study:
Charles DuBeau
DRK Enterprises, LLC
1 Chestnut Street, Suite 4M
Nashua, NH 03060
508) 3454-547

I (We) certify that all of the statements and documents submitted as part of this application are true to the best of my (our) knowledge and belief.

I (We) consent to the entry in or upon the premises described in this application by any authorized official of the Village of Glen Ellyn for the purpose of inspection.

I (We) consent to pay the Village of Glen Ellyn all costs incurred for transcribing the public hearing on this application.

I (We) understand that no final action shall be taken by the Village Board subsequent to the public hearing and until payment of all escrow fees.

January 18, 2021 **Marvin K. Ritter**

Date Print Name

for Harding Custom Homes, LLC

APPLICATION FOR APPROVAL OF
PRELIMINARY PLANNED UNIT DEVELOPMENT PLAN

The undersigned petitions the President and Village Board of Trustees of the Village of Glen Ellyn, Illinois, to consider this Application for approval of a Preliminary Planned United Development Plan (PUD), as described below.

Date Filed:	**October 4, 2021**
Application No.	**TBD**
Type of PUD:	**Residential Townhome Development**
Name of Applicant:	**Harding Custom Homes, LLC**
Address of Applicant:	**540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137**
Business Phone:	**(630) 790-8144**
(Mobile):	**(630) 303-7754**
Email:	**Marv@RiteWayCustomHomes.com**
(Fax):	**n/a**
Property Interest of Applicant:	**Harding Custom Homes, LLC is the property owner** **Marv Ritter is the project manager for the owner**
Name of Owner(s):	**Harding Custom Homes, LLC** **Mark & Diane White** **227 7th Avenue NE** **St. Petersburg, FL 33701**

Legal Description of Property:

This information is contained on sheet 1 of the engineering drawings.

Zoning Classification: **Currently R2, seeking R4**

Property Size/Area:

Response: Odd shaped, lots vary, see attached plat of survey, approximately 289' x 552' and chart below:

Most Recent Documents					
	Square Feet	Acres	Description	PIN	Address
Most Recent Cover Sheet					
Existing Parcels:					
	47,101	1.081	Parcel 1	05-23-223-020	787 Harding Avenue
	43,468	0.998	Parcel 2	05-23-223-005	No Address Assigned
	43,562	1.000	Parcel 3	05-23-223-008	138 Il State Route 53
	4,624	0.106	Parcel 4	05-23-223-025	No Address Assigned
	7,913	0.182	Parcel 5	33' Harding ROW	33' Harding ROW
	146,668	3.367			
Most Recent Geometric Plan & Others					
Proposed Lots:					
	26,315	0.604	Lot 1	N/A	N/A
	19,438	0.446	Lot 2	N/A	N/A
	21,218	0.487	Lot 3	N/A	N/A
	21,515	0.494	Lot 4	N/A	N/A
	25,079	0.576	Lot 5	N/A	N/A
	113,565				
	33,103	0.760	Harding Ave & Court	N/A	N/A
	146,668	3.367			

Present Use:

Various:

Parcels 1 & 2 - Vacant land
Parcel 3 – Abandoned home
Parcel 4 - Driveway
Parcel 5 – Undeveloped Village roadway

Requested Use/Construction: **Develop 23 townhomes in the configuration shown on page 4 (the Geometric Plan) of the engineering documents.**

Estimated Date to Start Construction:

Response: **We anticipate starting road construction within 90 days after zoning and permit applications are approved. See phasing letter for additional details.**

Zoning Deviations:

Twenty one (21) Zoning Deviations are required as part of the Planned Unit Development, as follows:

Lot Dimensions

a. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 19.45 feet where 90 feet is required on Lot 1;
b. Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 66.05 feet where 90 feet is required on Lot 3;

Bulk Setbacks

c. Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required;
d. Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3;
e. Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5;
f. Section 10-4-11(E)1 to allow a building height of approximately 36 feet4 inches on Lot 1 where a maximum height of 35 feet is permitted;
g. Section 10-4-11(E)1 to allow a building height of approximately 35 feet1 inch on Lot 2 where a maximum height of 35 feet is permitted;
h. Section 10-4-11(E)1 to allow a building height of approximately 35 feet8 ½ inches on Lot 5 where a maximum height of 35 feet is permitted;

Accessory Structures

i. Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5;
j. Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4 inches into the required front yard where decks are not a permitted encroachment on Lot 5;
k. Section 10-5-5(B)(4) #11.b.3 to allow a completely closed, 6-foot tall

fence to be closer to the street than the principal structures on Lots 34 and 5 where a 4 foot fence, 33.3% open is permitted;

Impervious Surfaces

l. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway;

m. Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway;

n. Section 10-5-4(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 2;

o. Section 10-5-4(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 3;

p. Section 10-5-4(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 4;

Other

q. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4;

r. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6;

s. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8;

t. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17;

u. Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.

(You may attach separate sheets as needed to answer any of the following questions)

Narrative Statement evaluating the economic effects of adjoining property, the effect of such elements as noise, glare, odor, fumes, and vibration on adjoining property, a discussion of the general compatibility with the adjacent and other properties in the district, the effect of traffic, the relationship of the proposed use to the Comprehensive Plan, and how it fulfills the requirements of paragraph (E) of Section 10-10-14 of the Zoning Code:

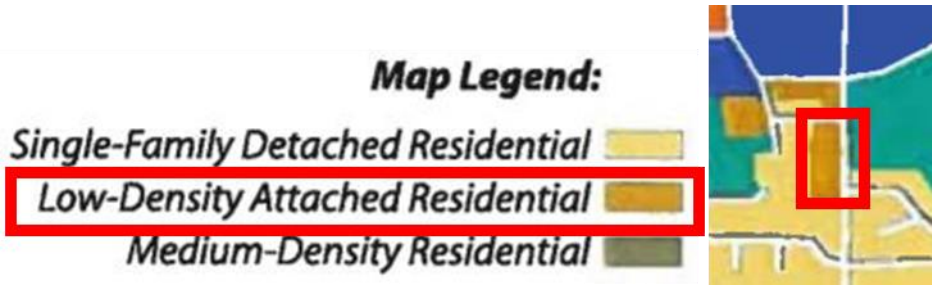
Describe How the PUD:

1. Will be harmonious with and in accordance with the general objectives, or within a specific

objective of the Comprehensive Plan and/or this Zoning Code:

Response: **The parcels are currently zoned R2. The project requires rezoning to R4 to accommodate townhomes.**

The 2001 Comprehensive Plan future land use map designates Low-Density Attached Residential for Parcels 1 & 2.

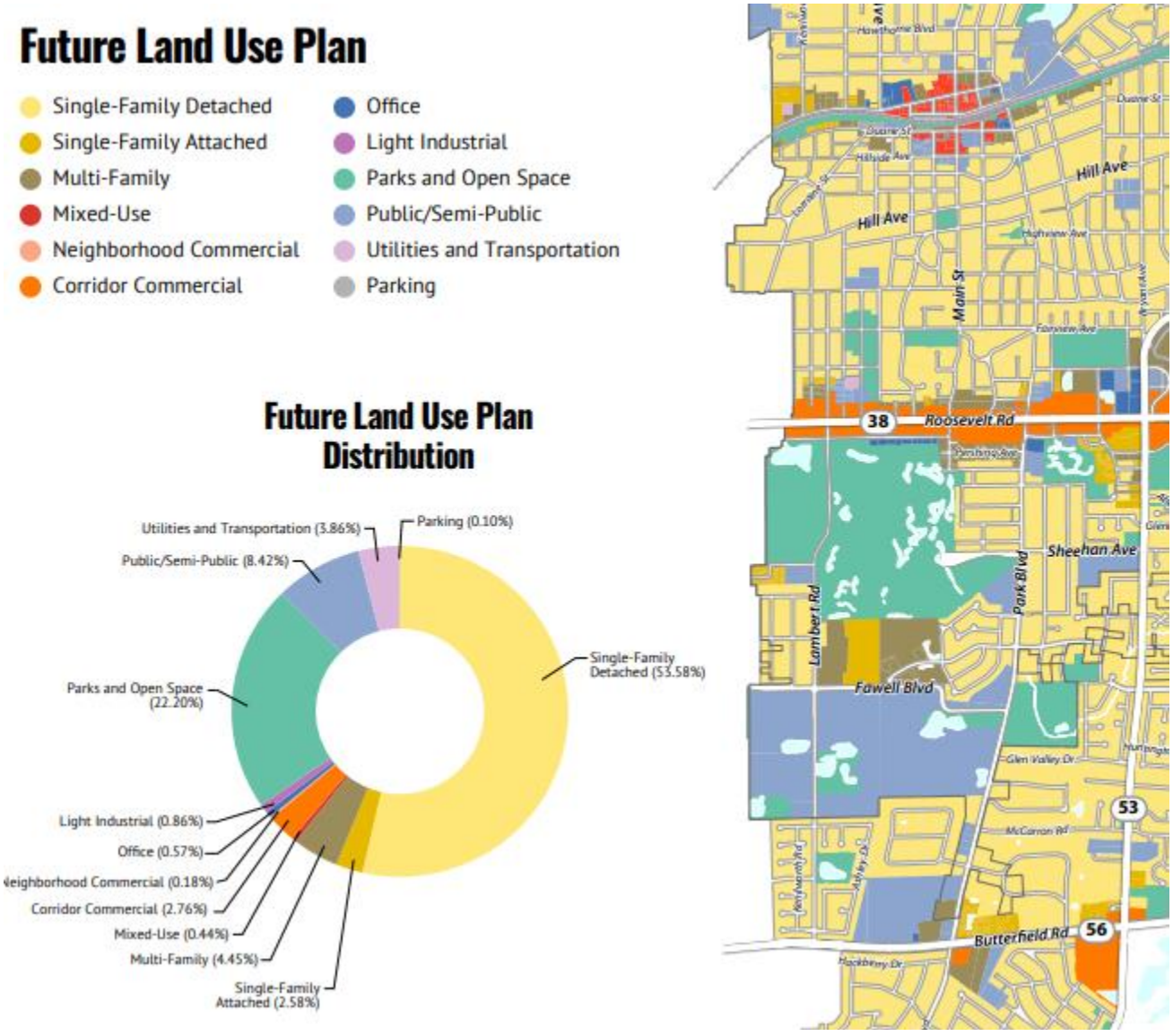


The Plan Commission previously encouraged Harding to acquire Parcels 3 & 4 to incorporate into the project, of which the developer complied.

The November 11, 2020 draft of the proposed 2021 Glen Ellyn Comprehensive plan identifies all of the parcels associated with this development as single-family attached development in the future land use plan. The draft also notes, among others:

- **Page 7: Objective 10: Encourage new residential development that provides for a range of housing types and costs**
- **Page 13: In response to these trends, community input received during the planning process indicates a desire for additional single-family attached and multi-family housing in Glen Ellyn, with many comments highlighting a need to support middle income households and first-time buyers. Single-family attached and multi-family development should be encouraged to provide for smaller, more affordable housing units. Such development should be located close to Downtown and in transition areas along commercial corridors.**
- **Page 13: Encourage increased density in select areas of the village. More than 62 percent of the housing in Glen Ellyn's housing stock consists of single-family detached homes. Although single-family neighborhoods are an essential element of the community's identity, a greater diversity in housing options is increasingly important to accommodate residents during every stage of life. Higher density housing, like single-family attached and multi-family developments, supports greater housing diversity and can be used strategically to buffer existing and future single-family detached neighborhoods from commercial areas. Multi-family and single-family attached housing also make more efficient use of infrastructure and generate increased tax revenue. The Village should encourage increased housing density in select areas including the Downtown and along key corridors in accordance with the Land Use Plan and Residential Areas Framework map**
- **Page 15: Nicoll Way and Abbey Drive. (We believe this is a typo within the**

document and should be Nicoll Way and Harding Avenue) **This site is currently made up of vacant and single-family detached properties. With close proximity to Roosevelt Road and its amenities, the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the north. Single-family homes may also be acceptable**



2. Will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area:

Response: **We have designed the property and buildings, including the materials and colors, construction and home owner's association rules to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity.**

We have made a number of modifications to our plans at the request of the village, including:

- **Acquired and incorporated two additional parcels totaling approximately one acre at the southern end of the proposed development**
- **Converted one acre on the western end of Harding Avenue from proposed townhomes to single family homes**
- **Added masonry components to all four elevations of the project**
- **Lowered the roof pitches to reduce the overall height of each building by more than two feet**
- **Added at least one unit in each building with two single garage doors vs. a single double garage door to add interest**
- **Added bump outs on windows on the rear elevations**
- **Added roof dormers on the rear elevations**
- **Added significantly to the landscaping to be installed**
- **Added a privacy fence along Route 53 to further shelter the development from the road**
- **Changed the design of the exterior light fixtures**
- **Doubled up many of the driveways to reduce the overall linear feet of curb cuts**
- **Added 8 public off street parking, including 2 handicap spaces**
- **Staggered the building front elevations 2' forward / back every 2nd unit**
- **Added a common area pergola and path to the development**
- **Reduced the total number of units and modified the unit layout to meet the requests of the 13 neighbors directly to the west of the project**

Please see the color rendering document to see what the exteriors of the building will look like and the exterior materials on the building elevation sheets.

There are a number of single family, townhome and condominium properties in the immediate area. We modified our original plans at the request of the Plan Commission to acquire approximately 1 acre directly south of our original property and to incorporate 4 single family homes (originally proposed as townhomes) on an adjacent 1.0 acre parcel directly west of this project on the south side of Harding Avenue.

Other nearby single-family attached and multi-family properties include:

- **The 24 unit Waters Edge development adjacent to Nicoll Way between this property and Pershing Avenue.**
- **The 24 unit King's Court townhomes located at Nicoll Way and Pershing Avenue.**
- **A three-story 18 unit residential complex directly north of this development on the south side of Wilson Avenue.**
- **A 6 unit multi-family property on the north side of Wilson Avenue.**
- **A 16 unit apartment building between Nicoll Way and Route 53 along the south side of Pershing.**

We met with several representatives of Waters Edge Townhomes. They are favorable to townhomes, but prefer the project does not have access to Harding Avenue and Nicoll Way. Their view is the development should only have public roadway access via Route 53 due to concerns of added traffic going by their property.

Although the Waters Edge representative's concerns, the traffic study prepared by Gewalt Hamilton indicates additional traffic during the peak morning and evening hours will be minimal and the Village's traffic consultant, Benes & Associates, agrees. See #7 below for summary information regarding the results of the traffic study.

At this time, the developer does not envision access to Illinois Route 53, either as part of a connection from Harding Avenue or as the only access to the proposed townhome development to be acceptable for development purposes.

The owner of the Kohler property directly west of Lot 2 is supportive of the project.

The Brentwood Court Homeowner's Association which includes the 11 home owners on Brentwood Court (directly west of Lot 2) reviewed our proposed design and has provided the following letter in support of it. Their written confirmation is noted below:

October 16, 2019

Village of Glen Ellyn
535 Duane St.
Glen Ellyn, IL 60137

Re: Harding Development

To all parties concerned:

This letter comes on behalf of the homeowners of Brentwood Court, including those adjacent to the Harding Townhome Development being proposed by Harding Custom Homes, LLC ("Harding"). You may be aware that our group has strenuously objected to the project from day one and historically took the position that the parcels in question should remain zoned for single family homes. We have also raised numerous complaints about the project manager, Rite-Way Custom Homes, LLC ("Rite-Way") and the handling of the project site. However, over the past couple of months, Harding and Rite-Way have engaged our group to have meaningful talks and negotiations about the project, the community and the responsibilities to the neighboring properties.

We believe the plan presented to you is a reasonable compromise and will serve the interest of our community and Glen Ellyn. Harding and Rite-Way have presented multiple variations of their plans to our group, including a "Z" street design with a right in / right out connection to Illinois Route 53. Our group adamantly rejected that plan and because of the number and positioning of the townhomes, we would pursue litigation if that plan was presented and approved by the Village.

Harding and Rite-Way then, as a gesture of compromise, presented the plan now before you with less units, a cul-de-sac design, and a layout which minimized interference with Brentwood Court. We believe this plan is a better design for the community and reduces the overall density. We also believe that this will maximize the green space and allow for better water drainage by the system they are putting into place and the natural space allotted. The cul-de-sac, with an emergency access, also addresses the concerns about increased traffic flow from the community members living on Harding. Our group *will not* challenge this plan during the review process with the village, nor would we pursue litigation.

Our group has not taken this process lightly. We have been vocal at meetings, not shy to express our displeasure or disapproval of an idea, and organized to the extent we have experts on retainer and legal representation. We are sincere in stating that the plan before you is a fair compromise that will benefit Glen Ellyn. Please note that our approval is conditioned upon Harding and Rite-Way complying with the Village drainage plan, our experts review of that plan and Harding and Rite-Way meeting certain landscaping criteria. Based on our recent productivity, we believe that Harding and Rite-Way will continue to cooperate to finalize those details and conditions.

We recommend that the Village approve the plan currently submitted, and agree we will not pursue legal action to stop or delay its implementation. If you have any questions or desire further input, I can be reached at 630-991-1486.

Sincerely,

Nicolas Nelson, on behalf of the members of Brentwood Court

Cc: Robert Jorgensen, Anne Jorgensen, Rebecca Nelson, Joseph Donat, Ashley Donat, Chad Husnick, Stephanie Husnick, Thomas Hull, Nancy Hull, Kimberly Sammarco, Brian Sammarco, Brian Milnamow, Nicole Milnamow, Susan Reijula, Peter Reijula, Carol Asselmeier, Brian Watterson, Rita Leamy, Martin Leamy, Steven Powers, Adrian Powers and Christina Morrison

3. Will not be hazardous or disturbing to existing or future neighborhood uses:

Response: We do not anticipate the property to be hazardous or disturbing to the existing or future neighborhood uses beyond what would be from similar neighborhood properties.

4. Will be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, refuse disposal, water, sewers and schools, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such services:

Response: The Village has indicated it has adequate capacity to serve the development. We find no objection to that statement.

5. Will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the Village:

Response: We anticipate this project will generate incremental public improvement donations, impact fees and property taxes of $15,744,300 over a 30 year period which is an average of approximately $525,000 per year. We anticipate this will more than compensate the Village and other entities for any incremental costs.

This incremental impact is spread among a number of entities operating in the vicinity of Glen Ellyn, with the Village itself receiving only a small percentage of the total.

Estimated 30 Year Incremental Funding to Glen Ellyn Area Taxing Bodies:		
$1,000,000		Donation of public improvements
$150,000		Donation in leu of detention
$193,000		Impact fees
$6,874,500		30 year incremental property tax impact on District 89
$4,226,300		30 year incremental property tax impact on District 87
$920,000		30 year incremental property tax impact to Village of Glen Ellyn
$559,900		30 year incremental property tax impact to Glen Ellyn Park District
$583,600		30 year incremental property tax impact to Village of Glen Ellyn Library
$429,100		30 year incremental property tax impact to College of DuPage
$309,600		30 year incremental property tax impact to DuPage County
$236,500		30 year incremental property tax impact to DuPage County Forest Preserve District
$133,600		30 year incremental property tax impact to Milton Township Road Department
$81,800		30 year incremental property tax impact to Milton Township
$27,000		30 year incremental property tax impact to DuPage Airport Authority
$19,400		30 year incremental property tax impact to Glen Ellyn Mosquito Abatement District
$15,744,300		**Estimated 30 Year Incremental Impact**
$524,810		**Average Annual Incremental Impact**

6. Will not involve uses, activities, processes, materials, equipment and/or conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors:

Response: **We do not anticipate this project will involve uses, activities, processes, materials, equipment and/or conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors to be in excess of other similarly sized construction projects within the Village of Glen Ellyn.**

7. Will have vehicular approaches to the property which shall be so designed as not to create an undue interference with traffic on surrounding public streets or roads:

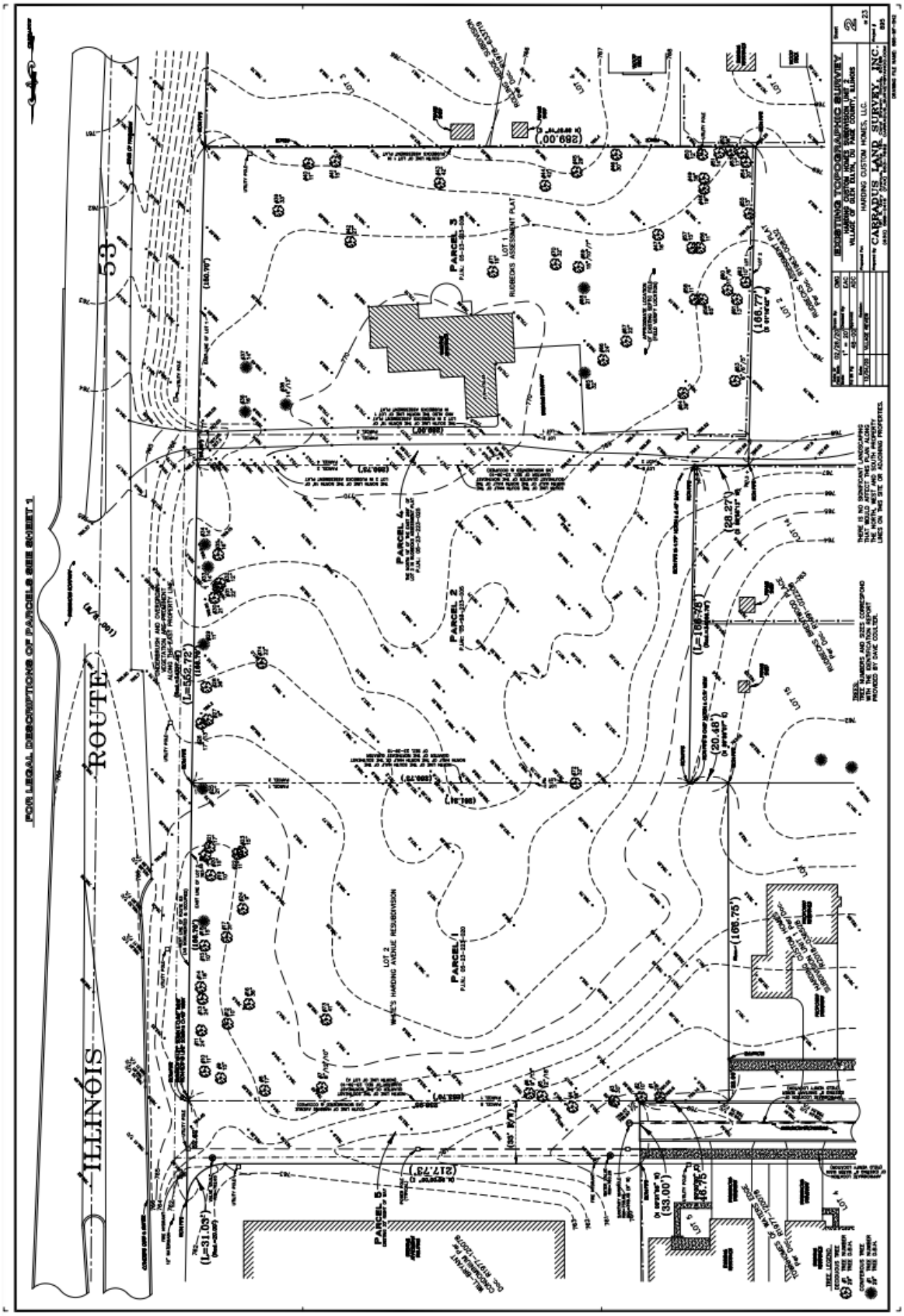
Response: **The Incremental Traffic Summary based on Traffic Study prepared by Gewalt Hamilton Associates, Inc. did not indicate undue interference with traffic on surrounding public streets or roads. The subsequent review by the Village's traffic consultant, Benes & Associates came to similar conclusions.**

8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief:

Response: **The existing topology of the property routes most rain and snow runoff over ground from the area highpoint (near the northeastern corner of the existing home on parcel 3) in a western and northwestern direction. This neighborhood highpoint is approximately 9 – 10 feet higher than the two homes to the northwest, (747 & 750 Brentwood Court). 744 Brentwood Court (directly west of Harding's 4 single family homes) is approximately 14' lower than the area highpoint.**

Without the stormwater engineering provided by this project, these homes will continue to receive the natural overland water similar to what they have encountered in the past.

The stormwater engineering proposed for this project will *dramatically* reduce overland water passing through these homesites without additional public expense for flood protection, rescue or relief.


FOR LEGAL DESCRIPTIONS OF PARCELS SEE SHEET 1
ILLINOIS ROUTE 53
PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
PARCEL 5
LOT 1 RUDBECKS ASSESSMENT PLAT
LOT 2 WHEE'S HARDING AVENUE RESUBDIVISION
EXISTING TOPOGRAPHIC SURVEY
HARDING CUSTOM HOMES, LLC.
CARRADUS LAND SURVEY, INC.

9. Will not result in destruction, loss or damage of natural, scenic or historical features of major importance to the community:

Response: We are unaware of any natural, scenic or historical features of major importance to the community within these parcels.

I (We) certify that all of the statements and documents submitted as part of this application are true to the best of my (our) knowledge and belief.

I (We) consent to the entry in or upon the premises described in this application by any authorized official of the Village of Glen Ellyn for the purpose of inspection.

I (We) consent to pay the Village of Glen Ellyn all costs incurred for transcribing the public hearing on this application.

Date: October 4, 2021

Print Name: **Harding Custom Homes, LLC**
by Marvin K. Ritter

Signature of Applicant:

APPLICATION FOR APPROVAL OF
FINAL PLANNED UNIT DEVELOPMENT PLAN

Date filed:	**January 18, 2021**
Application No.	**TBD**
Common Name of PUD:	**Harding Avenue Townhomes**
Type of PUD:	**Residential** (Residential, Commercial, Other)
Name of Applicant:	**Harding Custom Homes, LLC**
Address of Applicant:	**540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137**
Business Phone:	**(630) 790-8144**
(Mobile):	**(630) 303-7754**
Email:	Marv@RiteWayCustomHomes.com
(Fax):	**N/A**
Property Interest of Applicant:	**Project Manager** (Owner, Owner Representative, Contract Purchaser, etc.)
Name of Owner(s):	**See below.**

Address and Legal Descriptions of the Properties:

This information is contained on sheet 1 of the engineering drawings.

Zoning Classification:	**Currently R2, requesting R4**
Property Size/Area:	**Approximately 3.3670 acres**
Requested Use/Construction:	**Rezone from R2 to R4 for a townhome development**
Date of Preliminary PUD Plan Approval:	**TBD**
Estimated Date to Start Construction**:**	**Within 90 days after approval of PUD and permits**

January 18, 2021

_____

Date

Marvin K. Ritter

Marvin K. Ritter
for Harding Custom Homes, LLC

APPLICATION FOR ZONING MAP AMENDMENT

You may attach separate sheets as needed to answer any of the following questions.

The undersigned petitions the President and Village Board of Trustees of the Village of Glen Ellyn, Illinois, to consider the Zoning Map Amendment described in this application.

Date Filed:	January 12, 2021
Application No:	TBD
Name & Address of Applicant:	Harding Custom Homes, LLC 540 Duane Street, 2nd Floor Glen Ellyn, IL 60137
Business Phone No.:	(630) 790-8144
Home Phone No.:	n/a
Mobile Phone No.:	(630) 303-7754
Fax No.:	n/a
Property Interest of Applicant:	Property Owner (Owner, Contract Purchaser, Owner Representative)
Name of Property Owner:	Same as above
Address of Owner:	Same as above
Business Phone No.:	Same as above
Home Phone No.:	n/a
Mobile Phone No.:	Same as above
Fax No.:	n/a
Property Interest of Applicant:	Same as above

Address, PIN and Legal Description of the properties:

See legal description and acreage of the 5 parcels on page 1 of the engineering documents submitted at the time of this application.

All of the Parcels are currently zoned R2, with the exception of Parcel 5 which is the undeveloped portion of Harding Avenue currently owned by the Village of Glen Ellyn.

The current Lot Frontage, Lot Area and Lot Use of the Parcels are as follows:

Parcel 1:	261.27' on the undeveloped portion of Harding Avenue, and 166.78' on Illinois Route 53 47,101 square feet Vacant land
Parcel 2:	166.75' on Illinois Route 53 43,468 square feet Vacant land
Parcel 3:	150.70' on Illinois Route 53 43,563 square feet Abandoned home
Parcel 4:	16.00' on Illinois Route 53 4,624 square feet Private driveway
Parcel 5:	33.00' on Harding Avenue, and Approximately 43.00' +/- on Illinois Route 53 7,913 square feet Undeveloped Village of Glen Ellyn dirt roadway

Requested Zoning: R4

Requested Use/Construction: Single-family attached homes

Estimated Date to Begin New Use/Construction: Within 90 days after approval of PUD and building permits.

Name(s), Address(es), and Phone No(s). of Experts (architects, engineers, etc.):

Project Architect:

Bret Richter
B.L.R. Architects Ltd.
1709 Ogden Avenue
Lisle, IL 60532
(630) 435-0700

Project Surveyor / Engineer:

Alan D. Carradus
Carradus Land Survey, Inc.
191 S. Gary Avenue, Ste 180
Carol Stream, IL 60188
(630) 588-0416

Transactional Representation:

Mark Rodriguez
Law Office of Mark and Beth Rodriguez
364 Pennsylvania Avenue, #1W
Glen Ellyn, IL 60137
(630) 858-1199

Homeowner's Association Documents:

Bruno Tabis
Huck Bouma
1755 South Naperville Road, Ste 200
Wheaton, IL 60189
(630) 344-1195

Traffic Studies:

Bill Grieve
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

Photometric Study:

Charles DuBeau
DRK Enterprises, LLC
1 Chestnut Street, Suite 4M
Nashua, NH 03060
(508) 3454-5477

Narrative Statement evaluating the economic effects on adjoining property, the effect of such elements as noise, glare, odor, fumes and vibration on adjoining property, a discussion of the general compatibility with the adjacent and other properties in the district, the effect of traffic, and the relationship of the proposed use to the Comprehensive Plan, and how it fulfills the requirements of paragraph (E) of Section 10-10-13 of the Zoning Code:

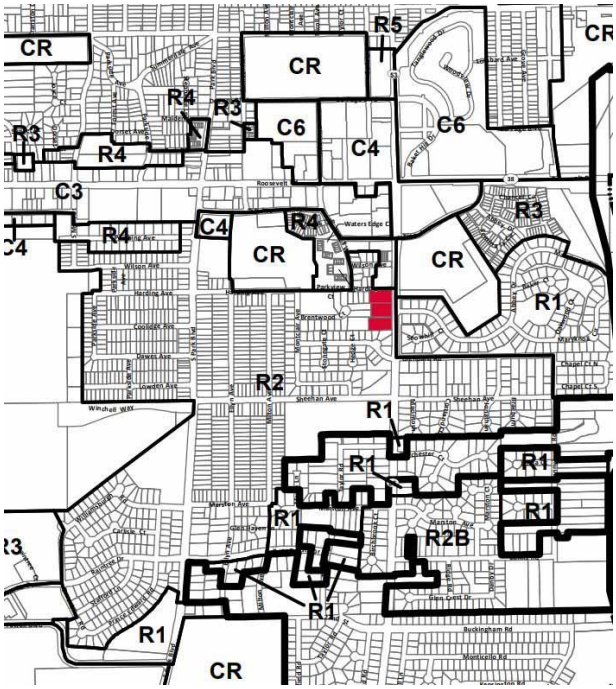
Discuss the Requested Zone Change with Respect to Each of the Following:

1. Identification of the existing uses of property within the general area of the affected property:

   - R2 Single family homes to the west
   - R2 and R4 Townhomes & single family homes to the northwest
   - R4 Multi-family to the north
   - Illinois Route 53 to the east, with CR and R1 on the east side of 53
   - R2 Single family homes to the south

2. Identification of the zoning classification of property within the general area of the affected property:

   The project parcels are highlighted in red on this subsection of the Village of Glen Ellyn's Official 2019 Zoning Map, which includes the properties within the general area of the affected property:



3. Determination as to the suitability of the property in question to the uses permitted under the existing classification or district and under the proposed classification or district:

   Parcels 1 & 2 were identified in the 2001 Comprehensive Plan as suitable for the type of

development this proposed change in zoning district addresses. The Glen Ellyn Plan Commission encouraged us to acquire Parcels 3 & 4 during the 1st of 3 pre-application meetings we have had, for the purpose of expanding the townhome development we proposed at that time. Parcel 5 is the undeveloped portion of Harding Avenue which as a public property, was not discussed within the 2001 Comprehensive Plan.

The recommendations outlined in the Land Use Plan of the November 11, 2020 draft of the Glen Ellyn Comprehensive Plan focus on the diversification of housing options by increasing single-family attached and multi-family uses. The parcels which are part of this project have all been identified in the Future Land Use Plan as Single-Family Attached locations, which is consistent with our project application.

4. The trend or development, if any, in the general area of the affected property, including changes, if any, which have taken place since the date the affected property was placed in its present zoning classification or district:

Although we are not certain when the affected parcels were originally zoned R2, Parcels 1 & 2 have been owned by the same family since 1952, when there were single family homes on the two parcels. There have been a significant number of single family homes and townhome units developed within the immediate area since then, as well as numerous commercial properties to the north, northwest and northeast.

5. The trend or development, if any, as to the proposed uses of property within the general area of the affected property, as represented on the Comprehensive Plan:

There has been a mix of both single family and multi-family construction in the general area. The 2001 Comprehensive Plan suggests "low density attached residential" for Parcels 1 and 2 in a chart and continued in greater detail with the wording "Possible location for small townhome development similar in scale to the existing development to the north. Single-family homes may also be acceptable."

The November 11, 2020 draft of the proposed Glen Ellyn Comprehensive Plan notes:

- 42% of the community members have a desire for more townhomes based on 1,700 responses. (Page 3)
- Single-Family Attached…This dwelling type should be further integrated to increase the Village's housing diversity and support higher density. (Page 9)
- Future Land Use Plan Distribution. The recommendations outline in the Land Use Plan focuses on the diversification of housing options by increasing single-famil attached and multi-family uses. (Page11)
- The subject location has been identified as Single-Family Attached. (Page1#)
- #7 Nicoll Way and Abby Drive (we suspect this is a mistake in the plan document and should have said Nicoll Way and Harding Avenue, as Nicoll Way is on the west side of IL 54 and Abby Drive is on the east). This site is currently made up of vacant and single-family detached properties. With close proximity to Roosevelt Road and its amenities, the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the

north. Single-family homes may also be acceptable. (Page 15)

- Increase Housing Diversity. Recommended Action - Encourage the provision of single-level floor plans and ADA-compliant amenities. Although we don't have single level plans, 10 of the 23 units are proposed with first floor master bedrooms. (Page 78)
- Increase Housing Diversity. Recommended Action - Encourage developers and property owners to promote the missing middle housing options (townhomes fit in this category) on infill parcels within single-family neighborhoods as well as throughout Glen Ellyn. (Page 78)

6. The length of time the property has been vacant as zoned, considered in the context of the land development and the area surrounding the subject property:

- Parcel 1 has been vacant land since 2011.
- Parcel 2 has been vacant for significantly longer.
- Parcel 3 has a home which has been vacant since May 2018. The home is not habitable. It has had homeless break ins, vandalism and in September 2020 all of the copper plumbing was stolen from the property. We have been told we cannot tear it down without a variance.
- Parcel 4 has been a shared driveway for Parcel 3 and the owner of 128 S. Route 53 since 1977.
- Parcel 5 has been a Village owned, unpaved, dirt only, portion of Harding Avenue since before 1952.

7. The extent to which property values are diminished, if at all, by the particular zoning restrictions:

The shape, size and location of this property make it extremely difficult to develop as an R2 property. We do not have an analysis of the economic effect of R2 zoning.

I (We) certify that all of the statements and documents submitted as part of this application are true to the best of my (our) knowledge and belief.

I (We) consent to entry in or upon the premises described in this application by any unauthorized official of the Village of Glen Ellyn for the purpose of inspection.

I (We) consent to pay the Village of Glen Ellyn all costs incurred for transcribing the public hearing on this application.

I (We) understand that no final action shall be taken by the Village Board subsequent to the public hearing until and upon payment of transcribing fees.

01/07/21	Marvin K. Ritter	Marvin K. Ritter
	For Harding Custom Homes, LLC	
Date	Print Name	Signature of Applicant

HARDING CUSTOM HOMES, LLC
540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137 (630) 790-8144

August 9, 2020

Ms. Katie Ashbaugh, Village Planner
and Plan Commission Members
c/o Village of Glen Ellyn
Planning and Development Department
535 Duane Street
Glen Ellyn, IL 60137

HARDING GLEN TOWNHOMES, GLEN ELLYN, IL

DISCLOSURE OF INTEREST BY A (Limited Liability) CORPORATION and PROOF OF OWNERSHIP

Dear Katie,

Pursuant to above.

Addresses, PINs, Legal Descriptions:

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

PARCEL 1
LOT 1 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.

(787 HARDING AVENUE)
PIN 05-23-223-020
47,101 Sq. Ft.

PARCEL 2
THE EAST 280.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

(NO ADDRESS ASSIGNED)
PIN 05-23-223-005
43,468 Sq. Ft.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

(138 IL. STATE ROUTE 53)
PIN 05-23-223-008
43,562 Sq. Ft.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

(PART OF 128 IL. STATE ROUTE 53)
PART OF PIN 05-23-223-025
4,624 Sq. Ft.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

EXISTING 33' HARDING RIGHT OF WAY
7,913 Sq. Ft.

LIST ALL (MEMBERS) SHAREHOLDERS AND OFFICERS/DIRECTORS (AND % OF INTEREST OWNED IN EXCESS OF 5% OF STOCK)

Mark White (50%)
227 7th Avenue, NE
Sarasota, FL 33701

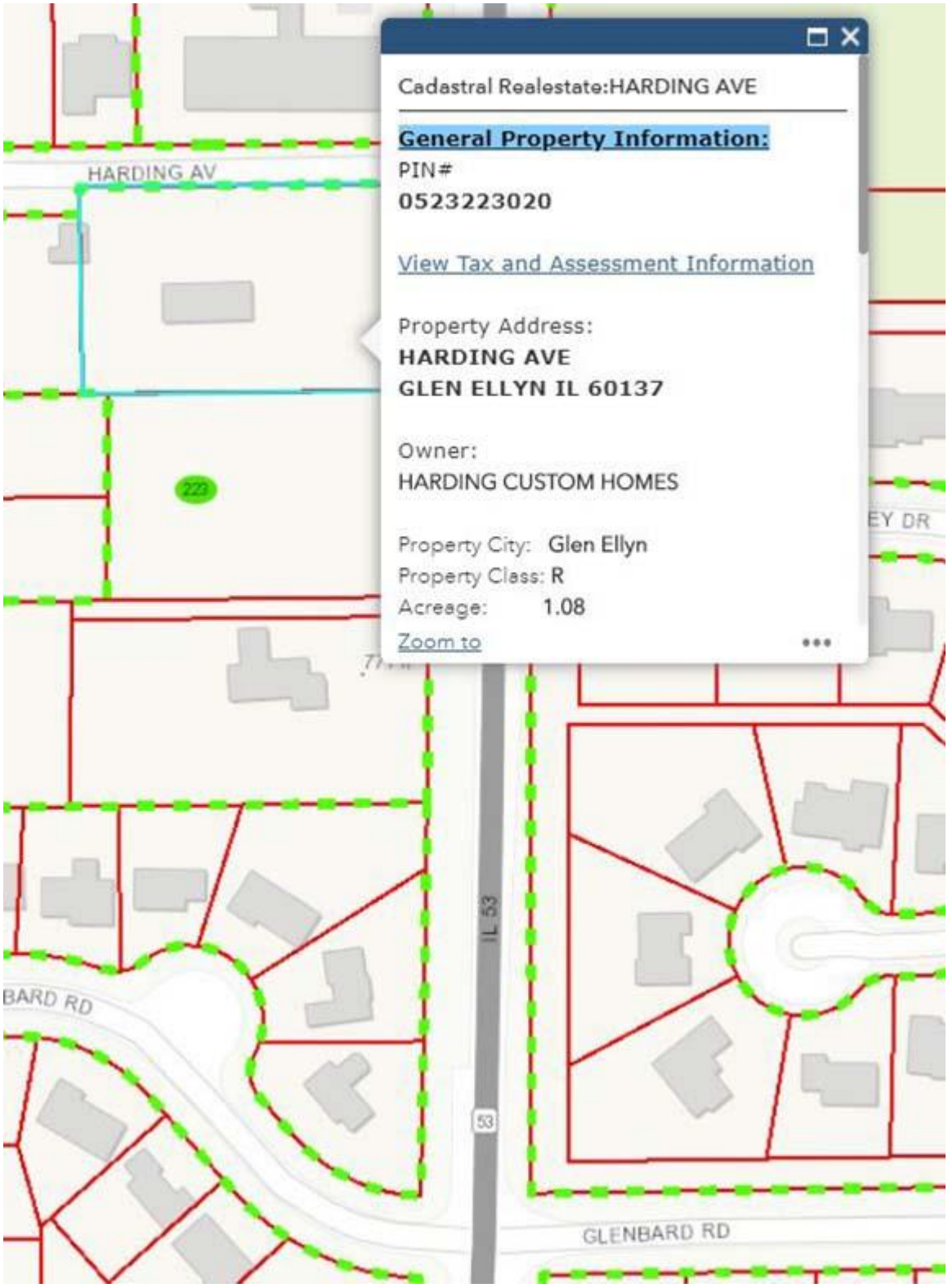
Diane White (50%)
227 7th Avenue, NE
Sarasota, FL 33701

Marvin K. Ritter

_____ March 30, 2020

Harding Custom Homes, LLC
By Marvin K. Ritter, Project Manager

The following prints are from the DuPage County GIS system and the DuPage County Tax Assessor. They indicate Harding Custom Homes, LLC as the owner of each of the parcels (with the exception of the Harding Avenue extension owned by the Village) which is anticipated to be vacated by the Village to Harding Custom Homes, LLC. Note the driveway parcel from the tax assessor does not show the owner, as this is a new parcel that never existed before. It's first time to be issued a tax bill will be this May.


Cadastral Realestate:HARDING AVE
General Property Information:
PIN#
0523223020
View Tax and Assessment Information
Property Address:
HARDING AVE
GLEN ELLYN IL 60137
Owner:
HARDING CUSTOM HOMES
Property City: Glen Ellyn
Property Class: R
Acreage: 1.08
Zoom to
HARDING AV
223
IL 53
53
GLENBARD RD

Home > Property Lookup Home

Property Information

- Ways to pay your real estate taxes

Tax Payment Information | Property Tax Distribution | Assessment Information | Property Tax History | Sale History

Click here to search for your next parcel

Print Duplicate Tax Bill
View Parcel on Interactive Map
Purchase Tax Parcel Map(s)

Parcel Number	Parcel Address	Billing Address
05-23-223-020		HARDING CUSTOM HOMES
	HARDING AVE	227 7TH AVE NE
	GLEN ELLYN, 60137	ST PETERSBURG FL 33701

Installment	Base Tax Amount	Penalty *	Net Due	Paid Date
First Due: 6/3/2019	$1,598.96	$0.00	$0.00	5/30/2019
Second Due: 9/3/2019	$1,598.96	$0.00	$0.00	8/27/2019
Total Due	$0.00			

* PENALTY OF 1.5% PER MONTH APPLIES IF PAID AFTER THE DUE DATES.

Prior Year 2017 Taxes

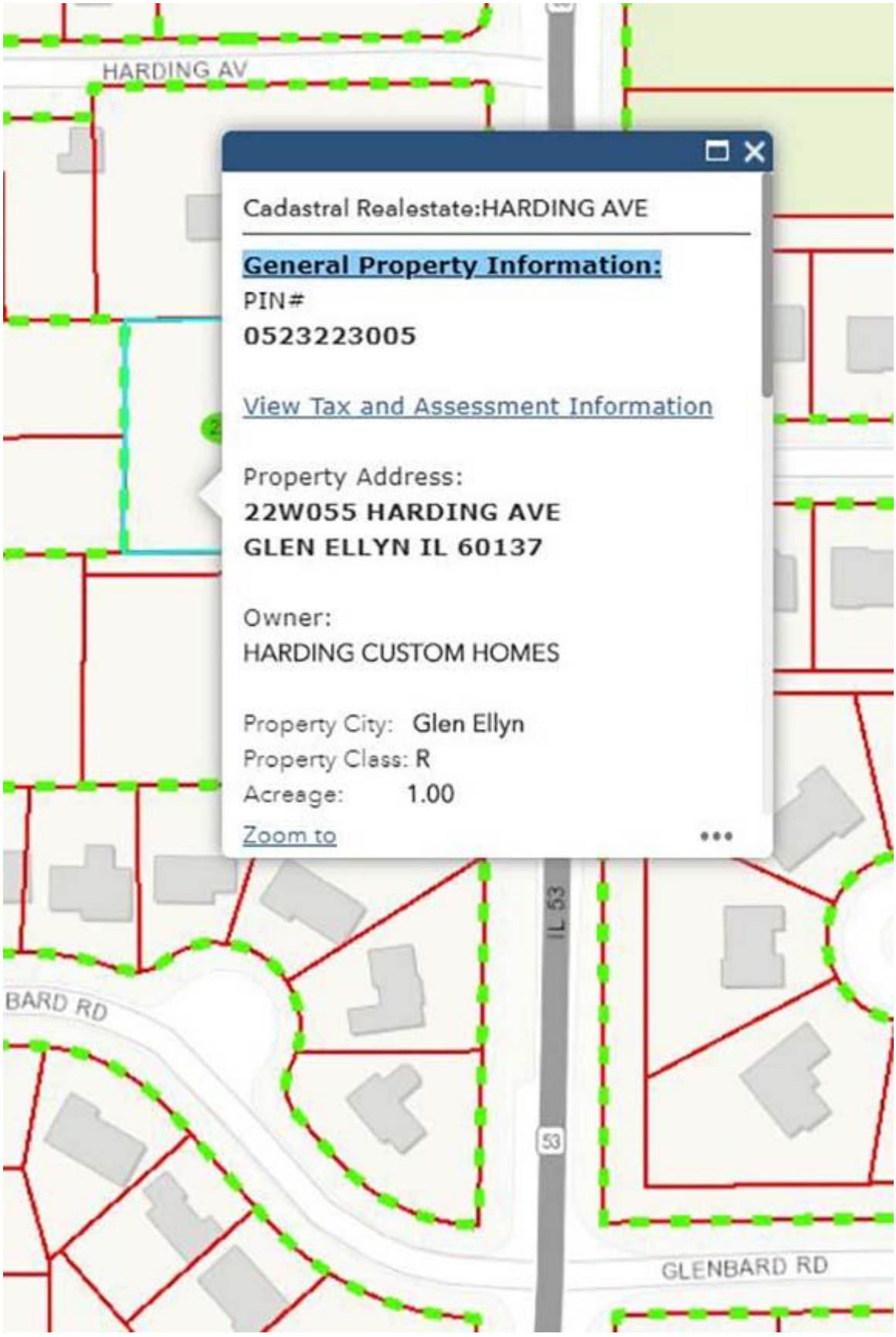
Installment	Base Tax Amount	Paid Date
First		
Second		

Prior Year 2016 Taxes

Installment	Base Tax Amount	Paid Date
First		
Second		

Prior Year 2015 Taxes

Installment	Base Tax Amount	Paid Date
First		
Second		


HARDING AV
Cadastral Realestate:HARDING AVE
General Property Information:
PIN#
0523223005
View Tax and Assessment Information
Property Address:
22W055 HARDING AVE
GLEN ELLYN IL 60137
Owner:
HARDING CUSTOM HOMES
Property City: Glen Ellyn
Property Class: R
Acreage: 1.00
Zoom to
IL 53
53
BARD RD
GLENBARD RD

Home > Property Lookup Home

Property Information

- Ways to pay your real estate taxes

Tax Payment Information | Property Tax Distribution | Assessment Information | Property Tax History | Sale History

Click here to search for your next parcel

Print Duplicate Tax Bill
View Parcel on Interactive Map
Purchase Tax Parcel Map(s)

Parcel Number	Parcel Address	Billing Address
05-23-223-005		HARDING CUSTOM HOMES
	22W055 HARDING AVE	227 7TH AVE NE
	GLEN ELLYN, 60137	ST PETERSBURG FL 33701

Installment	Base Tax Amount	Penalty *	Net Due	Paid Date
First Due: 6/3/2019	$1,553.44	$0.00	$0.00	5/30/2019
Second Due: 9/3/2019	$1,553.44	$0.00	$0.00	8/27/2019
Total Due	$0.00			

* PENALTY OF 1.5% PER MONTH APPLIES IF PAID AFTER THE DUE DATES.

Prior Year 2017 Taxes

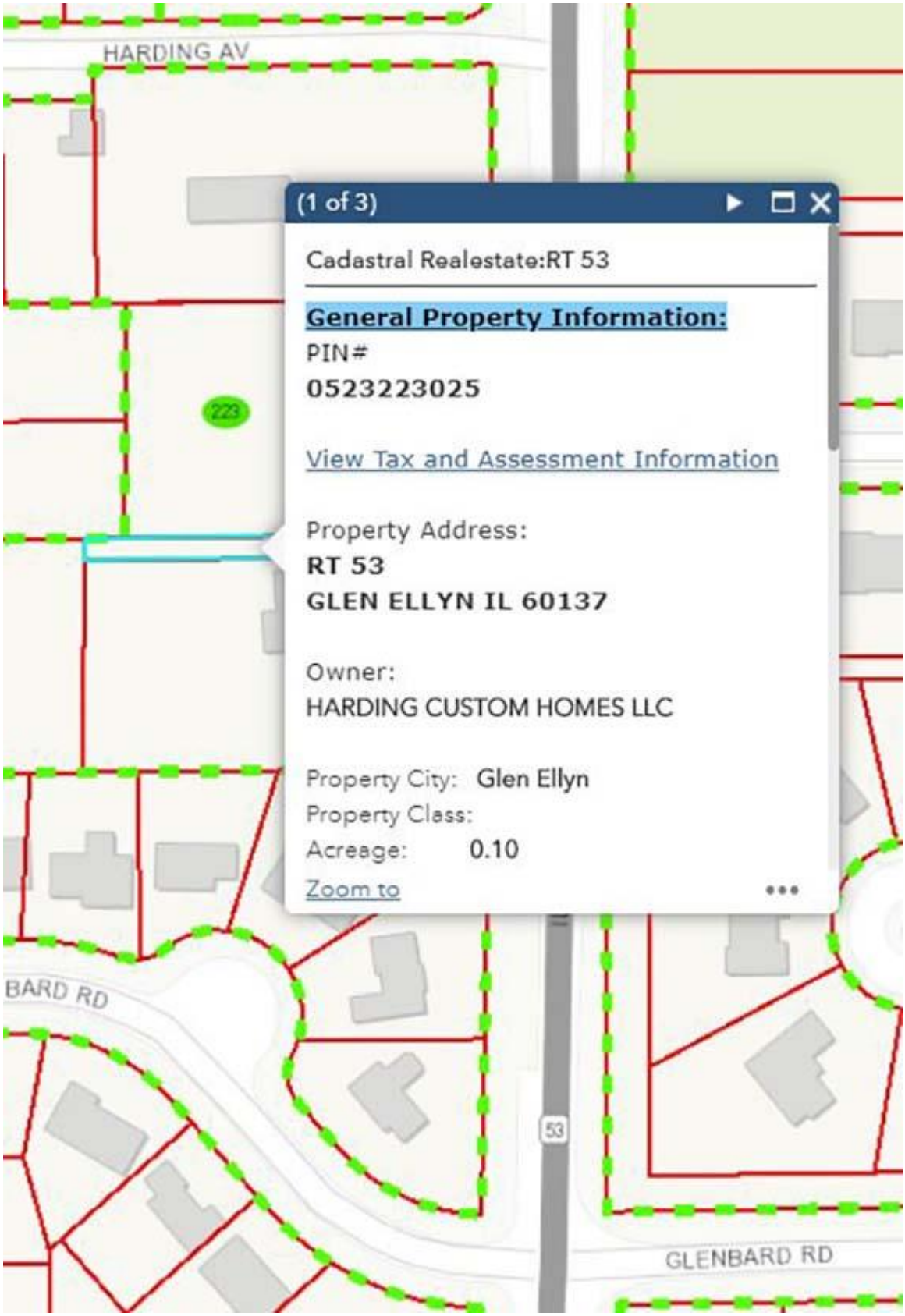
Installment	Base Tax Amount	Paid Date
First	$1,441.56	5/22/2018
Second	$1,441.56	8/27/2018

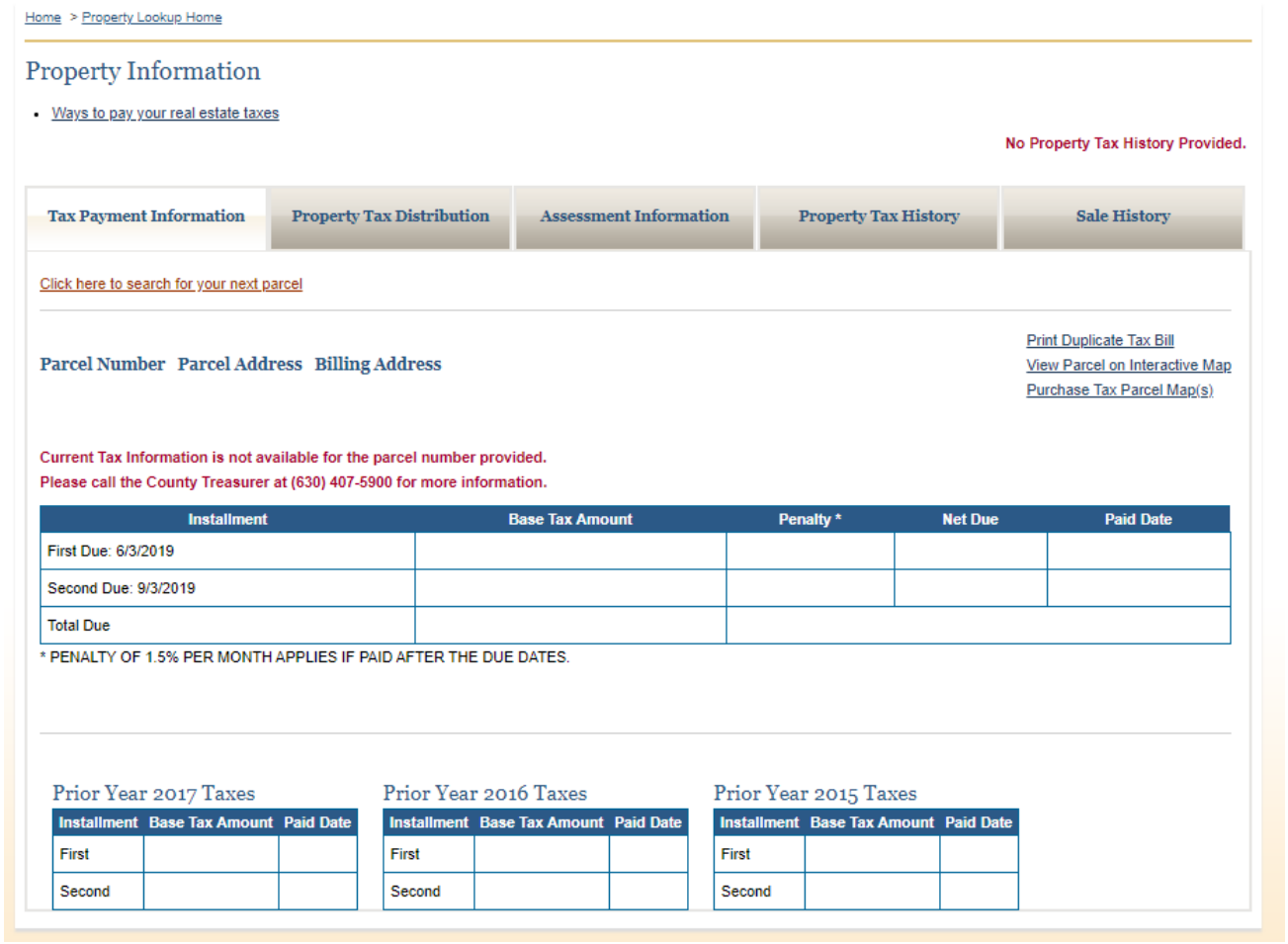
Prior Year 2016 Taxes

Installment	Base Tax Amount	Paid Date
First	$1,436.76	6/1/2017
Second	$1,436.76	8/18/2017

Prior Year 2015 Taxes

Installment	Base Tax Amount	Paid Date
First	$1,435.08	6/21/2016
Second	$1,435.08	10/27/2016


HARDING AV
(1 of 3)
Cadastral Realestate:RT 53
General Property Information:
PIN#
0523223025
View Tax and Assessment Information
Property Address:
RT 53
GLEN ELLYN IL 60137
Owner:
HARDING CUSTOM HOMES LLC
Property City: Glen Ellyn
Property Class:
Acreage: 0.10
Zoom to
223
53
GLENBARD RD



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Property Information

- Ways to pay your real estate taxes

No Property Tax History Provided.

Tax Payment Information | Property Tax Distribution | Assessment Information | Property Tax History | Sale History

Click here to search for your next parcel

Parcel Number Parcel Address Billing Address

Print Duplicate Tax Bill
View Parcel on Interactive Map
Purchase Tax Parcel Map(s)

Current Tax Information is not available for the parcel number provided.
Please call the County Treasurer at (630) 407-5900 for more information.

Installment	Base Tax Amount	Penalty *	Net Due	Paid Date
First Due: 6/3/2019				
Second Due: 9/3/2019				
Total Due				

* PENALTY OF 1.5% PER MONTH APPLIES IF PAID AFTER THE DUE DATES.

Prior Year 2017 Taxes

Installment	Base Tax Amount	Paid Date
First		
Second		

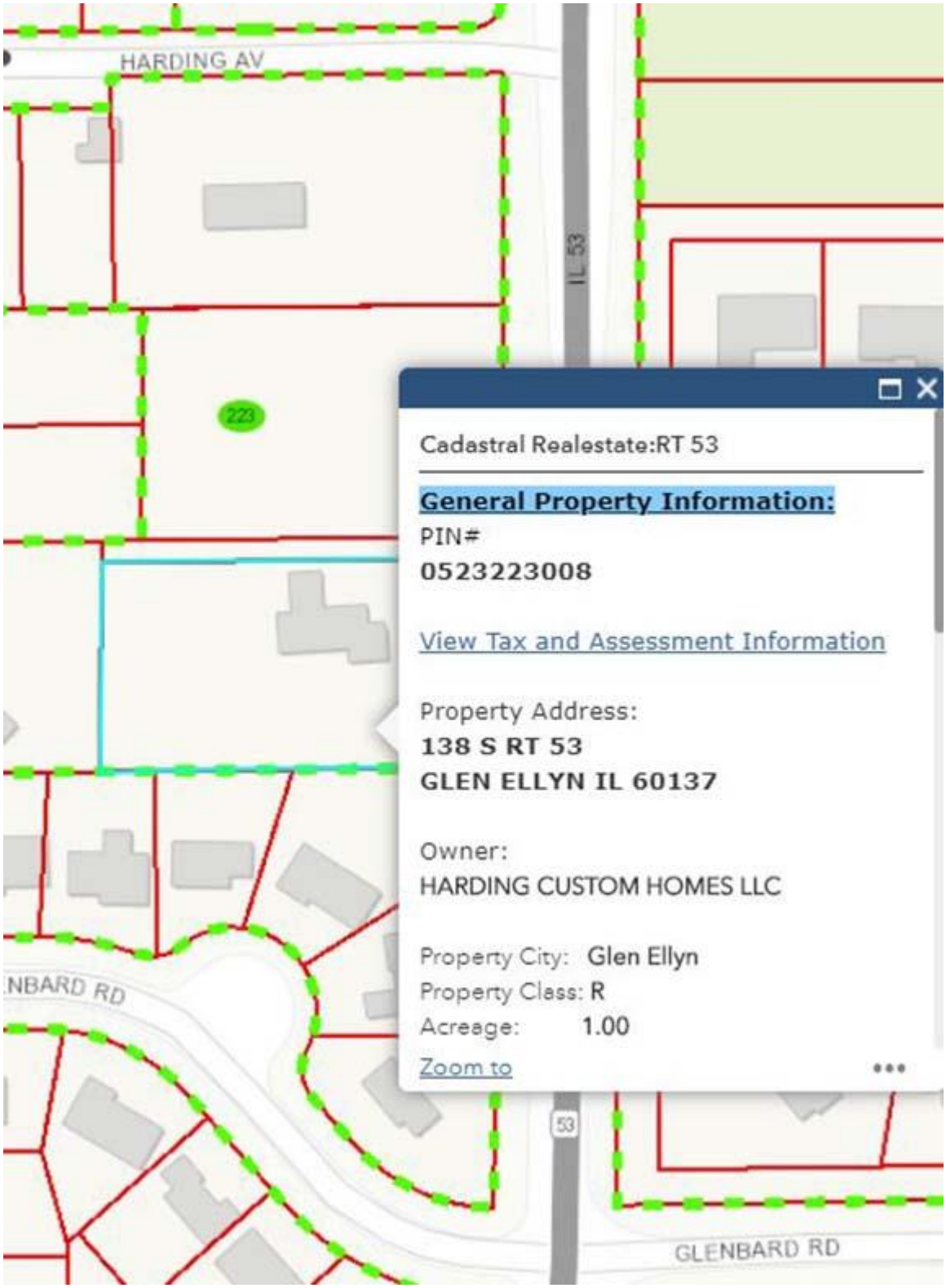
Prior Year 2016 Taxes

Installment	Base Tax Amount	Paid Date
First		
Second		

Prior Year 2015 Taxes

Installment	Base Tax Amount	Paid Date
First		
Second		

This driveway parcel has never been taxed as an individual parcel, and therefore does not display the property owner. The first tax bill this parcel will receive will be in May 2020 for the 2019 tax year. We certify this parcel is owned by Harding Custom Homes, LLC as confirmed by the GIS print. The mailing address for this tax bill will be 540 Duane Street, Glen Ellyn, IL 60137.


HARDING AV
IL 53
223
Cadastral Realestate:RT 53
General Property Information:
PIN#
0523223008
View Tax and Assessment Information
Property Address:
138 S RT 53
GLEN ELLYN IL 60137
Owner:
HARDING CUSTOM HOMES LLC
Property City: Glen Ellyn
Property Class: R
Acreage: 1.00
Zoom to
NBARD RD
53
GLENBARD RD

Home > Property Lookup Home

Property Information

- Ways to pay your real estate taxes

Tax Payment Information | Property Tax Distribution | Assessment Information | Property Tax History | Sale History

Click here to search for your next parcel

Print Duplicate Tax Bill
View Parcel on Interactive Map
Purchase Tax Parcel Map(s)

Parcel Number	Parcel Address	Billing Address
05-23-223-008		HARDING CUSTOM HOMES LLC
	138 S RT 53	540 DUANE ST
	GLEN ELLYN, 60137	UNIT 2ND FL GLEN ELLYN IL 60137-4685

Installment	Base Tax Amount	Penalty *	Net Due	Paid Date
First Due: 6/3/2019	$4,770.80	$0.00	$0.00	5/30/2019
Second Due: 9/3/2019	$4,770.80	$0.00	$0.00	8/27/2019
Total Due	$0.00			

* PENALTY OF 1.5% PER MONTH APPLIES IF PAID AFTER THE DUE DATES.

Prior Year 2017 Taxes

Installment	Base Tax Amount	Paid Date
First	$4,418.38	5/18/2018
Second	$4,418.38	8/8/2018

Prior Year 2016 Taxes

Installment	Base Tax Amount	Paid Date
First	$4,394.73	5/26/2017
Second	$4,394.73	8/25/2017

Prior Year 2015 Taxes

Installment	Base Tax Amount	Paid Date
First	$4,378.57	5/25/2016
Second	$4,378.57	8/29/2016

AFFIDAVIT OF AUTHORIZATION

Harding Custom Homes, LLC owner of the property described as:

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

PARCEL 1
LOT 1 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.

(787 HARDING AVENUE)
PIN 05-23-223-020
47,101 Sq. Ft.

PARCEL 2
THE EAST 280.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

(NO ADDRESS ASSIGNED)
PIN 05-23-223-005
43,468 Sq. Ft.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

(138 IL. STATE ROUTE 53)
PIN 05-23-223-008
43,562 Sq. Ft.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

(PART OF 128 IL. STATE ROUTE 53)
PART OF PIN 05-23-223-025
4,624 Sq. Ft.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

EXISTING 33' HARDING RIGHT OF WAY
7,913 Sq. Ft.

verify that: Marvin K. Ritter and / or Walt Arway

are duly authorized to apply and represent my interests before the Glen Ellyn Plan Commission, Zoning Board of Appeals and/or Village Board of Trustees. Owner acknowledges that any notice given applicant is actual notice to owner.

Mark White

Harding Custom Homes, LLC
by Mark White, Member

REIMBURSEMENT OF FEES AGREEMENT
(Updated by Harding Custom Homes, LLC on 08/09/20)

Village of Glen Ellyn Acct: #_____
Initial Deposit Amount: $15,300.00
Right-of-Way Vacation Fee: $300.00

I. DESCRIPTION OF PROJECT: Harding Avenue Townhomes

II. OWNER:

A. Owner of Property: Harding Custom Homes, LLC / Mark & Diane White

B. Owner's Address: 540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137 and 227 7th Avenue, NE, Sarasota, FL 33701

C. Owner's Home Phone Number: (609) 937-0409
Fax: Not Applicable

D. Owner's Work Phone Number: Not Applicable

E. Owner's E-mail: White2P@icloud.com

F. If Owner is a Land Trust or Corporation, the attached disclosures of interest should be filled out. Disclosures have been completed

III. PERSON MAKING REQUEST (Petitioner):

A. Name of Petitioner: Marv Ritter

B. Petitioner's Address: c/o Harding Custom Homes, LLC
540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137

C. Petitioner's Home Phone #: Not Applicable

D. Petitioner's Work Number: (630) 790-8144

E. Petitioner's E-mail: Marv@RiteWayCustomHomes.com

IV. LOCATION OF PROPERTY:

A. General Location of Property: Intersection of Harding Avenue & IL Route 53

B. Acreage of Parcel: Approximately 3.3 acres

C. Permanent Index Number(s) See below as part of Legal Descriptions

D. Legal Descriptions:

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

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47,101 Sq. Ft.

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EXISTING 33' HARDING RIGHT OF WAY
7,913 Sq. Ft.

V. REIMBURSEMENT OF FEES:

The Ordinances of the Village require the owners of property, or individuals seeking to utilize property, to receive approval by ordinance or the issuance of a permit to undertake various uses or improvements of property in the Village. These uses can include requests for textual or map changes in the Zoning Ordinance, applications for building permits, requests for zoning relief and other similar requests. The Village has established a fee schedule for the anticipated use of staff time in processing such petitions or applications. In many cases, however the Village cannot reasonably evaluate the validity or compliance of the petition or application with the Ordinances of the Village without the use of reports from various consultants. In some cases, the application or petition requires among other things, public hearings and associated public notice costs, preparation of minutes or transcripts from the public hearing or meeting, recording costs of Ordinances and the preparation of reports by consultants whose services require the payment of out-of-pocket expenses by the Village. These expenses would not have been incurred but for the petition or application. The Village does not intend to seek to make a profit on its utilization of such consultants, but requires that the applicant, or the person receiving benefit, shall be obligated to reimburse the out-of-pocket expenses incurred by the Village. The Village shall seek to employ consultants who shall charge rates consistent with those paid by private parties who seek similar consulting services. The Village intends, through this Agreement, to cause the payment of out-of-pocket expenses and to require the creation of an escrow fund to guarantee that the petition or application will not result in the citizens of the Village being required to pay for costs incurred at the request of the owner or applicant.

This document shall constitute a contract when an application is made for a license, permit, request for zoning relief or other approval involving the use of real property. Should the Village, in its sole and exclusive discretion, determine that it is necessary or desirable for the Village to obtain professional services, including, but not limited to, attorneys, engineers, planners, architects, surveyors, court reporters, traffic, drainage or other consultants, including full and/or part time site inspection services during the actual construction of any required improvements, and/or to incur costs related to any required notices or recordations, in connection with any application or petition filed by the petitioner then the petitioner and owner shall be jointly and severally liable for the payment of such professional fees and costs, as shall actually be incurred by the Village. The Planning and

Development Director is hereby authorized to assign the above described services to the Village staff or to consultants, as the Director deems appropriate and without prior notification to the petitioner.

Any application or petition to be reviewed by the Planning and Development Department or by the Plan Commission shall require the petitioner to establish an escrow account with the Village in an amount determined by the Planning and Development Director to reimburse the Village for all out of pocket costs associated with the request. These out of pocket costs will cover such things as services provided by the Village's consulting engineer, consulting attorney, consulting planner, traffic consultant, wetland consultant, landscape consultant, architectural consultant, appraiser and transcriber, among others, as well as reproduction costs, public hearing notice costs, recording costs, etc. Along with the application the petitioner shall also submit a signed copy of this agreement thereby acknowledging and agreeing to reimburse the Village for all out of pocket costs associated with the application or petition.

This agreement shall be accompanied by an initial deposit in an amount to be determined by the Director of Planning and Development but shall be no less than $500. The Village will provide an itemized list of Village expenses incurred related to any charge to the escrow account, and the petitioner shall deposit funds to reimburse the Village for those expenses upon notice from the Village that the deposit has dropped below $300. If the expenses are not reimbursed, then reviews meetings and permits associated with out of pocket costs will cease, and the request will not be moved forward through the review process. At the completion of the review process, and development of the project, if appropriate, any remaining balance from the deposit will be returned to the petitioner, without interest, after all expenses have been paid.

The Village shall deduct the incurred expenditures and costs from the funds deposited. If the remaining deposit balance falls below $300.00, the petitioner, upon notice by the Village, shall be required to replenish the deposit to its initial amount. The Village shall mail the petitioner regular invoices for the fees and costs incurred. The petitioner shall replenish the deposit amount within thirty (30) days of issuance of each such invoice directing replenishment of the deposit.

A petitioner who withdraws his or her petition may apply in writing to the Planning and Development Director for a refund of his or her remaining escrow balance. The Planning and Development Director may, at his or her discretion, approve such refund less any actual fees and costs, which the Village has already paid or incurred relative to the application.

Upon the failure of the petitioner or owner to reimburse the Village in accordance with this Agreement, no further action shall be undertaken on the application by the Village President and Board of Trustees, or by any other official or quasi-official individual or body thereunder, including the conduct of any hearings or deliberations, reviews of any plans or applications, the granting of any relief or approvals, issuance of any permits or occupancies, performance of inspections and the execution or recording of any documents, until all such outstanding fees are paid in full and/or the initial deposit is restored to its full amount. Upon any failure to reimburse the Village in accordance with this Section, the Village may in its discretion, apply any or all of the initial deposit to the outstanding balance due.

The remedies available to the Village as set forth hereinabove are non-exclusive and nothing herein shall be deemed to limit or waive the Village's right to seek relief of such fees against any or all responsible parties in a court of competent jurisdiction.

Any remaining balance of any funds deposited pursuant to this Agreement shall be refunded at such time as the completion of Village deliberation on the petition or application, recordation of all necessary documents associated with the petition or application, issuance of a building permit, approval of a final inspection, or issuance of a final certificate of occupancy upon the real property in question whichever occurs later.

BY SIGNING BELOW, THE PETITIONER AND OWNER ACKNOWLEDGE THAT EACH OF THEM HAS READ THE FOREGOING PARAGRAPHS AND EACH OF THEM FULLY UNDERSTANDS AND AGREES TO COMPLY WITH THE TERMS SET FORTH HEREIN. FURTHER, BY SIGNING BELOW, EACH SIGNATORY WARRANTS THAT HE/SHE/IT POSSESSES FULL AUTHORITY TO SO SIGN.

THE PETITIONER AND OWNER AGREE THAT PETITIONER AND OWNER SHALL BE JOINTLY AND SEVERALLY LIABLE FOR PAYMENT OF FEES REFERRED TO IN APPLICABLE SECTIONS OF THE ORDINANCES OF THE VILLAGE OF GLEN ELLYN, AND THE OBLIGATIONS FOR PAYMENT RELATING TO THE FILING OF PETITION OR APPLICATION, AS SET FORTH HEREIN.

Marvin K. Ritter
Petitioner Signature

Village of Glen Ellyn

Mark White
Owner Signature

Date: 07/30/20

By: _____
Staci Springer
Community Development Director

Date: _____

HARDING CUSTOM HOMES, LLC
540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137 (630) 790-8144

December 3, 2021

Ms. Kelly Purvis, Village Planner
and Plan Commission Members
c/o Village of Glen Ellyn
Planning and Development Department
535 Duane Street
Glen Ellyn, IL 60137

HARDING GLEN TOWNHOMES, GLEN ELLYN, IL

NARRATIVE STATEMENT / USE DESCRIPTION

Dear Kelly,

This letter, with the attached documents, contains our application to rezone a 3.367 acre assembly of 5 contiguous parcels located at the southwest corner of Harding Avenue and Illinois Route 53 in Glen Ellyn, IL. We are requesting the five parcels be rezoned from R2 to R4. This is consistent with Glen Ellyn's 2001 Comprehensive Plan for attached single family homes for this site, and a 2016 request by the Plan Commission for Harding Custom Homes, LLC to acquire the southern acre to incorporate within the townhome project we proposed at that time.

It also is consistent with the March 2021 draft version of the Glen Ellyn Comprehensive Plan which identifies the location on page 15 as #12 Nicoll Way and Abbey Drive (we believe Abbey Drive should be Harding Avenue, as Nicoll Way and Abbey Drive do not connect, see map). The draft plan reads "12 Nicoll Way and Abbey Drive. This site is currently made up of vacant and simgle -family detached properties. With close proximity to Roosevelt Road and its amenities, the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the north. Single-family homes may also be acceptable".

currently inhabited by an aging office building complex, this site's generous lot depth should be leveraged to develop a mix of single-family attached and multi-family units while preserving Roosevelt Road frontage for commercial development. For further discussion of this catalyst site, see the Nicoll Way and Roosevelt Road section in *Chapter 4: Subarea Plans.*

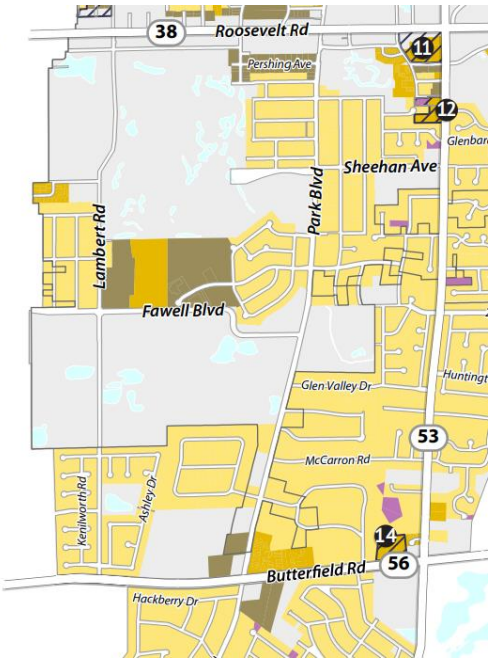
12 **Nicoll Way and Abbey Drive.** This site is currently made up of vacant and single-family detached properties. With close proximity to Roosevelt Road and its amenities, the site presents an attractive opportunity for single-family attached homes similar in scale to the existing development to the north. Single-family homes may also be acceptable.

large lot single-family zoning. Single-family attached redevelopment should be encouraged to provide as a buffer between the Butterfield Road commercial corridor and the single-family detached properties to the north.

Legend

Note: The below items present future land uses and not zoning.

- Historic District
- Residential Infill
- Single-Family Detached
- Single-Family Attached
- Multi-Family
- Residential Infill Area



The purpose of rezoning the 5 parcels is to facilitate the development of a proposed 23 unit townhome project. All of the townhomes will be upscale, 3 bedroom units, with 10 of them featuring first floor master bedrooms. The 3.367 acres consists of approximately 2.079 acres of vacant land plus two parcels totaling 1.106 acres (the southern parcels which were acquired at the request of the Plan Commission). The larger of the two southern parcels currently has an uninhabitable single family home which will be demolished as part of the townhome development. A 5th parcel is the undeveloped portion of the Harding Avenue roadway, which is approximately 0.182 acres.

Since our first meeting with the Plan Commission in March 2016 we have prepared nine different concept layouts as part of our efforts to please the neighbors, Staff, Public Works, the Plan Commission and ultimately the Village Board. Although the proposed plan is unlikely to satisfy all of the preferred design elements for each of the interested parties, it is what we believe to be the best possible design addressing the various, and sometime competing third party concerns, as well as the business reality of commercial development such as this.

The layout of the project can be seen on page 4 (Geometric Plan) of the engineering documents.

Several key things to note about the design:

- The overall density is approximately 6.83 units per acre.
- There are 5 buildings; (3) with 4 units, (1) with 5 units and (1) with 6 units.
- There are (23) three bedroom townhomes composed of 3 designs; (10) of the townhomes will have first floor master bedrooms.

- The townhomes range in size from 2,174 to 2,362 square feet, not including garages and basements.
- Each unit has a 2 car garage with parking for at least 2 additional cars in the driveway. In addition, there are 6 standard and 2 handicapped parking spaces in the parkway, bringing the total area parking 107 spaces which is 4.7 spaces per unit.
- Each of the units will have look out basements.
- There is a gated, emergency access road connecting route 53 with the development between buildings 3 and 4 which will be available for emergency services via a locked gate.
- The developer is proposing to dedicate 31,103 square feet of new street and cul-de-sac areas to the Village and is asking the Village to vacate 7,913 square feet from the currently undeveloped portion of Harding Avenue to the developer.

Please see our Quantitative Summary document and the other project submittals for additional information.

As part of our application we are requesting 6 variations which are identified in the Preliminary Plat of Subdivision Application and 21 zoning deviations which are identified in the Preliminary Planned Unit Development Application.

Thank you for your time and consideration in reviewing our submission.

Very truly yours,

Marvin K. Ritter

Harding Glen Townhomes
Quantitative Summary

Zoning Information:

- Current Zoning: R2
- Proposed Zoning: R4
- Surrounding Zoning Districts:
  - North: R4
  - Northwest: R2 & R4
  - West: R2
  - South: R2
  - East: IL 53 then R1 east side of IL 53
  - Northeast: CR

Quantitative Summary:

- Gross Site Area: 146,668 SF (3.367 Acres)
- Roadway 33,103 SF (0.759 Acres)
- Net Site Area: 113,565 SF (2.607 Acres)
- Number of Buildings: 5
- Max # Units Allowed by Code 27
- Proposed Number of Townhomes: 23
  - First Floor Master Units: 10
  - Second Floor Master Units: 13
- Units Per Gross Acre: 6.83
- Units Per Net Acre: 8.82
- Number of Parking Spaces: 107
  - Garage: 46
  - Driveway: 53
  - Street (inc. 2 handicapped): 8

- Avg. Parking Spaces Per Unit: 4.7
- Total Lot Coverage: 36,237
- Lot Coverage Ratio: 31.91%
- Common Open Space: 49,982 SF
- Common Open Space %: 44.0%
- Impervious Surfaces: 56,485 SF
- Total Floor Area: 62,415 SF (SF Allowed by Code 89,238)
- Floor Area Ratio: 54.12% (% Allowed by Code 77.38%)
- Subdivision Variations: Six (6)

  See Major Subdivision Preliminary Application for list of variations

- Zoning Deviations: Twenty one (21) deviations

  See Planned Unit Development Preliminary Application for list of deviations

P.I.N. 05-23-223-020
P.I.N. 05-23-223-005
P.I.N. 05-23-223-008
P.I.N. 05-23-223-025

PRELIMINARY PLAT OF SUBDIVISION
FOR
HARDING CUSTOM HOMES SUBDIVISION UNIT 2

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS

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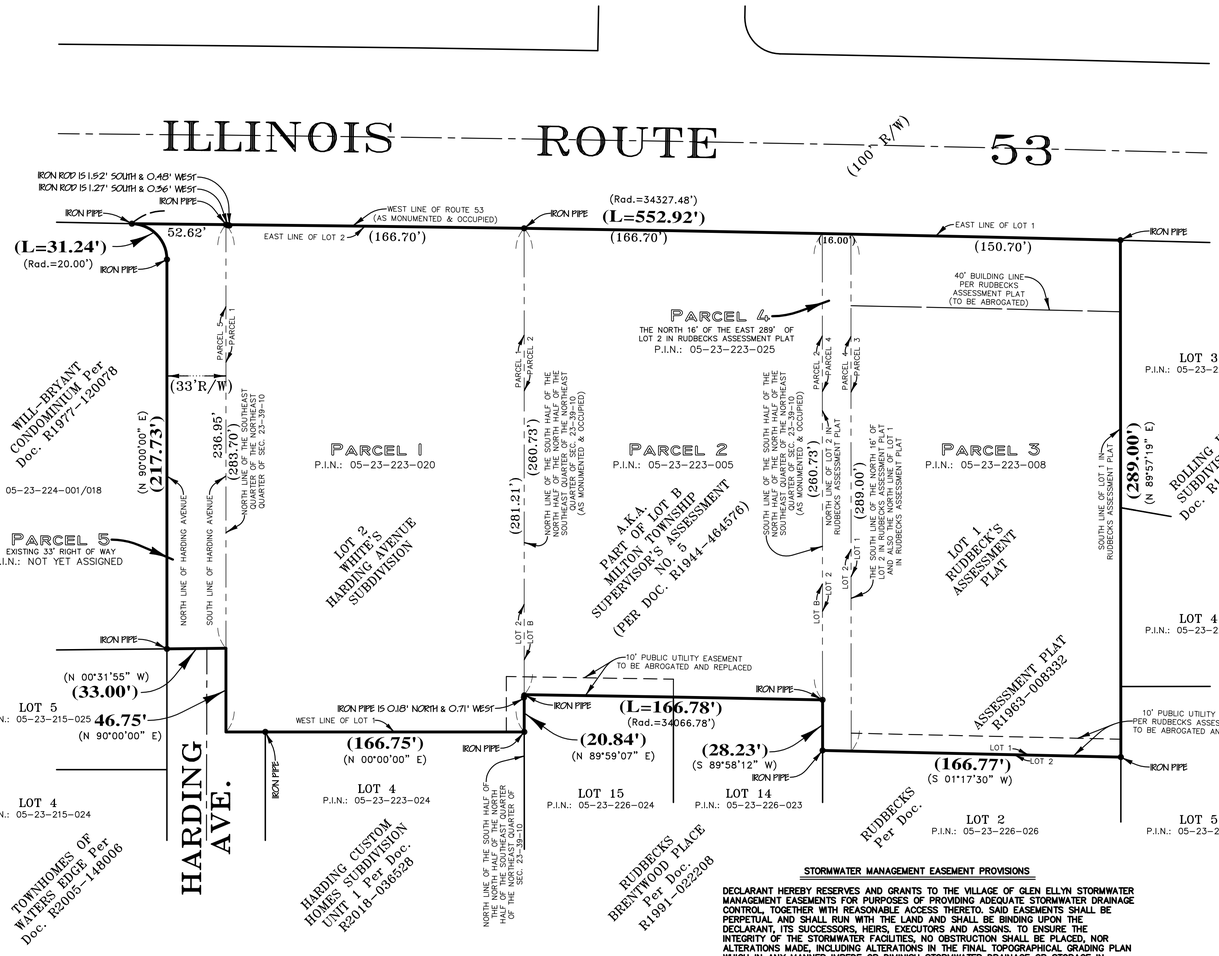
AREA OF SITE = 146,668 SQ.FT. 3.367 ACRES

CARRADUS
SCALE: 1"=40'



STORMWATER MANAGEMENT EASEMENT PROVISIONS

DECLARANT HEREBY RESERVES AND GRANTS TO THE VILLAGE OF GLEN ELLYN STORMWATER MANAGEMENT EASEMENTS FOR PURPOSES OF PROVIDING ADEQUATE STORMWATER DRAINAGE CONTROL, TOGETHER WITH REASONABLE ACCESS THERETO. SAID EASEMENTS SHALL BE PERPETUAL AND SHALL RUN WITH THE LAND AND SHALL BE BINDING UPON THE DECLARANT, ITS SUCCESSORS, HEIRS, EXECUTORS AND ASSIGNS. TO ENSURE THE INTEGRITY OF THE STORMWATER FACILITIES, NO OBSTRUCTION SHALL BE PLACED, NOR ALTERATIONS MADE, INCLUDING ALTERATIONS IN THE FINAL TOPOGRAPHICAL GRADING PLAN WHICH IN ANY MANNER IMPEDE OR DIMINISH STORMWATER DRAINAGE OR STORAGE IN, OVER, UNDER, THROUGH OR UPON SAID EASEMENT AREAS. IN THE EVENT SUCH OBSTRUCTION OR ALTERATIONS ARE FOUND TO EXIST, OR IF THE PROPERTY OWNER OTHERWISE FAILS TO PROPERLY MAINTAIN THE STORMWATER FACILITIES AND EASEMENTS OR CHANGES THE CHARACTER OF THE STORMWATER FACILITY, THE VILLAGE OF GLEN ELLYN SHALL, UPON SEVENTY-TWO (72) HOURS PRIOR NOTICE TO THE PROPERTY OWNER, HAVE THE RIGHT, BUT NOT THE DUTY, TO PERFORM, OR HAVE PERFORMED IN ITS BEHALF, ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES OR TO REMOVE SAID OBSTRUCTION OR ALTERATIONS OR TO PERFORM OTHER MAINTENANCE, REPAIR, ALTERATION OR REPLACEMENT AS MAY BE REASONABLY BE NECESSARY TO ENSURE THAT ADEQUATE STORMWATER STORAGE AND DRAINAGE FACILITIES, AND APPURTENANCES THERETO, REMAIN FULLY OPERATIONAL AND THAT THE CONDITION OF SAID FACILITIES AND EASEMENTS COMPLY WITH ALL APPLICABLE VILLAGE OF GLEN ELLYN AND DUPAGE COUNTY CODES. IN THE EVENT OF AND EMERGENCY SITUATION, AS DETERMINED BY THE VILLAGE OF GLEN ELLYN, THE SEVENTY-TWO (72) HOURS PRIOR NOTICE REQUIREMENTS SET FORTH ABOVE SHALL NOT APPLY AND THE VILLAGE OF GLEN ELLYN SHALL HAVE THE RIGHT, BUT NOT THE DUTY, TO PROCEED WITHOUT NOTICE TO THE PROPERTY OWNER. IN THE EVENT THE VILLAGE OF GLEN ELLYN SHALL BE REQUIRED TO PERFORM, OR HAVE PERFORMED ON ITS BEHALF ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES AND EASEMENTS AS SET FORTH IN THE DECLARATION, OR ANY REMOVAL OR ALTERATION AS AFORESAID, THE COST OF SUCH WORK SHALL, UPON RECORDATION OF NOTICE OF LIEN WITH THE RECORDER OF DEEDS OF DUPAGE COUNTY, ILLINOIS, CONSTITUTE A LIEN AGAINST THE ASSETS OF THE PROPERTY OWNER, IN ADDITION, THE AREA DISTRIBUTED BY THE SAID MAINTENANCE OPERATIONS, SHALL BE RE-PLANTED BY THE PROPERTY OWNER WITH THE MATERIALS ON THE APPROVED LANDSCAPE PLAN.

PUBLIC UTILITY AND DRAINAGE EASEMENT PROVISIONS

EASEMENTS ARE RESERVED AS SHOWN HEREON FOR THE VILLAGE OF GLEN ELLYN AND THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE FROM THE VILLAGE OF GLEN ELLYN, INCLUDING, BUT NOT LIMITED TO, SBC AMERITECH TELEPHONE COMPANY, NICOR GAS COMPANY, COMMONWEALTH EDISON COMPANY AND THEIR SUCCESSORS AND ASSIGNS FOR THE PERPETUAL RIGHT, PRIVILEGE AND AUTHORITY TO CONSTRUCT, RECONSTRUCT, REPAIR, INSPECT, MAINTAIN AND OPERATE VARIOUS UTILITY, TRANSMISSION AND DISTRIBUTION SYSTEMS, AS MAY BE DEEMED NECESSARY BY SAID VILLAGE OF GLEN ELLYN, OVER, UPON, ALONG, UNDER AND THROUGH SAID INDICATED EASEMENT, TOGETHER WITH RIGHT OF ACCESS TO THE PROPERTY FOR NECESSARY MEN AND EQUIPMENT TO DO ANY OF THE ABOVE WORK. THE RIGHT IS ALSO GRANTED TO CUT DOWN, TRIM OR REMOVE TREES, SHRUBS OR OTHER PLANTS ON THE EASEMENT THAT INTERFERE WITH THE OPERATION OF THE SEWERS OR OTHER UTILITIES. NO PERMANENT BUILDING OR TREES SHALL BE PLACED ON SAID EASEMENT, BUT SAME MAY BE USED FOR PARKING, GARDENS, SHRUBS, LANDSCAPING AND OTHER PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES OR RIGHTS. WHERE AN EASEMENT IS USED FOR BOTH SEWER AND FOR/OR WATER MAINS AND OTHER UTILITIES, THE OTHER UTILITY INSTALLATIONS ARE SUBJECT TO THE VILLAGE OF GLEN ELLYN AND ANY CABLE COMMUNICATIONS FRANCHISE LICENSED BY THE VILLAGE OF GLEN ELLYN WILL ALSO BE ALLOWED TO UTILIZE ALL RETAINED EASEMENTS AS HEREBY RESERVED TO THE VILLAGE OF GLEN ELLYN AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION OF THE LAND INDICATED ON THIS PLAT OVER THE ENTIRE RESERVED EASEMENT FOR INGRESS, EGRESS, AND THE PERFORMANCE OF MUNICIPAL AND OTHER GOVERNMENTAL SERVICES.

NOTES

1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f. Distances shown along curved lines are Arc Measurements unless otherwise noted.
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction.
6. Dimensions to and along buildings are exterior foundation measurements.
7. Do Not Assume distances from scaled measurements made hereon.

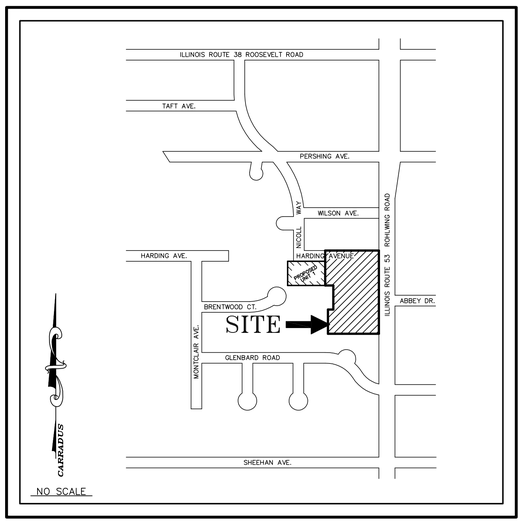
TOPOGRAPHICAL SURVEY AND GRADING PLAN LEGEND

Description	Proposed	Existing
TOPOGRAPHIC CONTOUR	886	886
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
SANITARY SEWER SERVICE	6" PVC PIPE (SDR-26) ASTM D-2241	
WATER SERVICE	1-1/4" COPPER (TYPE "K")	
CIRTAIN DRAIN		
SANITARY MANHOLE	S	S
STORM MANHOLE	D	D
CATCH BASIN		
CURB INLET		
YARD INLET		
FLARED END SECTION		
WATER VALVE	WV	WV
FIRE HYDRANT		
GAS VALVE	GV	GV
POWER POLE	PP	PP
LIGHT POLE		
TRAFFIC SIGNAL		
UTILITY STRUCTURE		
SPOT ELEVATION	886.5	885.0 +
EROSION CONTROL / SILT FENCE		
STAKED STRAW BALE OR SILT FENCE AROUND STORM SEWER STRUCTURE		
DRAINAGE FLOW ROUTE		
SUMP PUMP DISCHARGE	SP	
DOWNSPOUT DISCHARGE	DS	
RUNOFF DIVERSION LANDSCAPE BARRIER		
CONCRETE CURB, INTERLOCKING BLOCK WALL , OR LANDSCAPE TIMBER WALL. (MIN. 6" ABOVE GRADE)		
TREE TO BE PROTECTED		
TREE TO BE REMOVED		

INDEX TO SHEETS

1.) BOUNDARY & COVER SHEET
2.) EXISTING TOPOGRAPHIC SURVEY & TREE PRESERVATION PLAN
3.) SURROUNDING CONDITIONS EXHIBIT
4.) PRELIMINARY SUBDIVISION LOT LAYOUT
5.) PRELIMINARY SITE ENGINEERING

LOCATION MAP



NOTE:
ALL BEARINGS SHOWN HEREON ARE ASSUMED AND ARE FOR REFERENCE ONLY.

TO THE BEST OF OUR KNOWLEDGE THERE ARE NO RECORDED BUILDING LINES OR EASEMENTS EXCEPT AS SHOWN HEREON.

ADJACENT PROPERTY OWNERS	
P.I.N. NUMBER	OWNER NAME(S)
05-23-215-024	JEREMY R. JOHNSON
05-23-215-025	M. KOLLING & S. FONDA
05-23-223-024	HARDING CUSTOM HOMES
05-23-224-001	STERGIO TAROUSA
05-23-224-002	JOSE J. SOTO
05-23-224-003	CAROL A. DASARO
05-23-224-004	HIEP MIHN LE & LINDA BUI
05-23-224-005	DAICY BOLKAN
05-23-224-006	MUHAMMAD S. SHAMIM
05-23-224-007	CHRISTOPHER J. NESYPOR
05-23-224-008	PAUL & M. TAYLOR POORE
05-23-224-009	ARIANA DVORNIK
05-23-224-010	ZANA & MINELLA ALEKSI
05-23-224-011	ANIL & D. PAPUCIU COBO
05-23-224-012	ARTHUR ZAGORCANI
05-23-224-013	HERBERT & MARY DEVOS
05-23-224-014	MATTHEW K. OLSON
05-23-224-015	SKENDER ENINI
05-23-224-016	DAVID ROSEBERRY
05-23-224-017	TATIANA LABUTINA
05-23-224-018	ELVIRA DULAJ
05-23-226-011	THOMAS & SHANNON FORD
05-23-226-012	DAVID & ANNE DESCHAMPS
05-23-226-013	ERIC & MICHELLE HEMESATH
05-23-226-023	CHAD & STEPHANIE HUSNICK
05-23-226-024	NICHOLAS & REBECCA NELSON
05-23-226-026	ROBERT & ANNE JORGENSEN

(NAMES ARE PER DUPAGE COUNTY ASSESSORS OFFICE)

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 40'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/01/21	PRELIMINARY PLAT
06/25/21	PRELIMINARY PLAT
09/10/21	PRELIMINARY PLAT

PRELIMINARY PLAT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180 Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Sheet 1 of 5

Project # 895

DRAWING FILE 895-MF-PRE-SH1

EXISTING TOPOGRAPHIC SURVEY & TREE PRESERVATION PLAN

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY (100' R/W)

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT

12" WATERMAIN

IRON PIPE

IRON ROD 15.12' SOUTH & 0.36' WEST

IRON ROD 15.52' SOUTH & 0.48' WEST

IL. RT. 53 RIGHT OF WAY

EXISTING UTILITY POLE

HEAVY BRUSH ALONG ROADWAY

(Rad.=34327.48')

(L=552.92')

(L=31.24')

(Rad.=20.00')

VALVE VAULT RIM=762.65

ST-21

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL

(N 90°00'00" E)

(217.73')

EXISTING RESIDENCE

F/F=770.41

EXISTING BITUMINOUS DRIVEWAY

FENCE

FRAME SHED

WOOD DECK

(289.00')

(N 89°57'19" E)

FIRE HYDRANT

WATER VALVE RIM=760.28

SANITARY MANHOLE RIM=758.98 INV.=749.48 (8" N)

EXISTING UTILITY POLE

EXISTING ELECTRIC CONTROL BOX

EXISTING STREET LIGHT

(33.00')

(N 00°31'55" W)

46.75'

(N 90°00'00" E)

BITUMINOUS ROADWAY

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING WATERMAIN (FIELD VERIFY LOCATION)

(166.75')

(N 00°00'00" E)

PROPOSED RESIDENCE

IRON PIPE IS 0.18' NORTH & 0.71' WEST

(20.84')

(N 89°59'07" E)

(L=166.78')

(Rad.=34066.78')

(28.23')

(S 89°58'12" W)

(166.77')

(S 01°16'42" W)

APPROXIMATE LOCATION OF EXISTING SEPTIC FIELD (FIELD VERIFY LOCATION)

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	PRELIMINARY PLAT
06/25/21	VILLAGE REVIEW

PRELIMINARY PLAT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 2 of 5

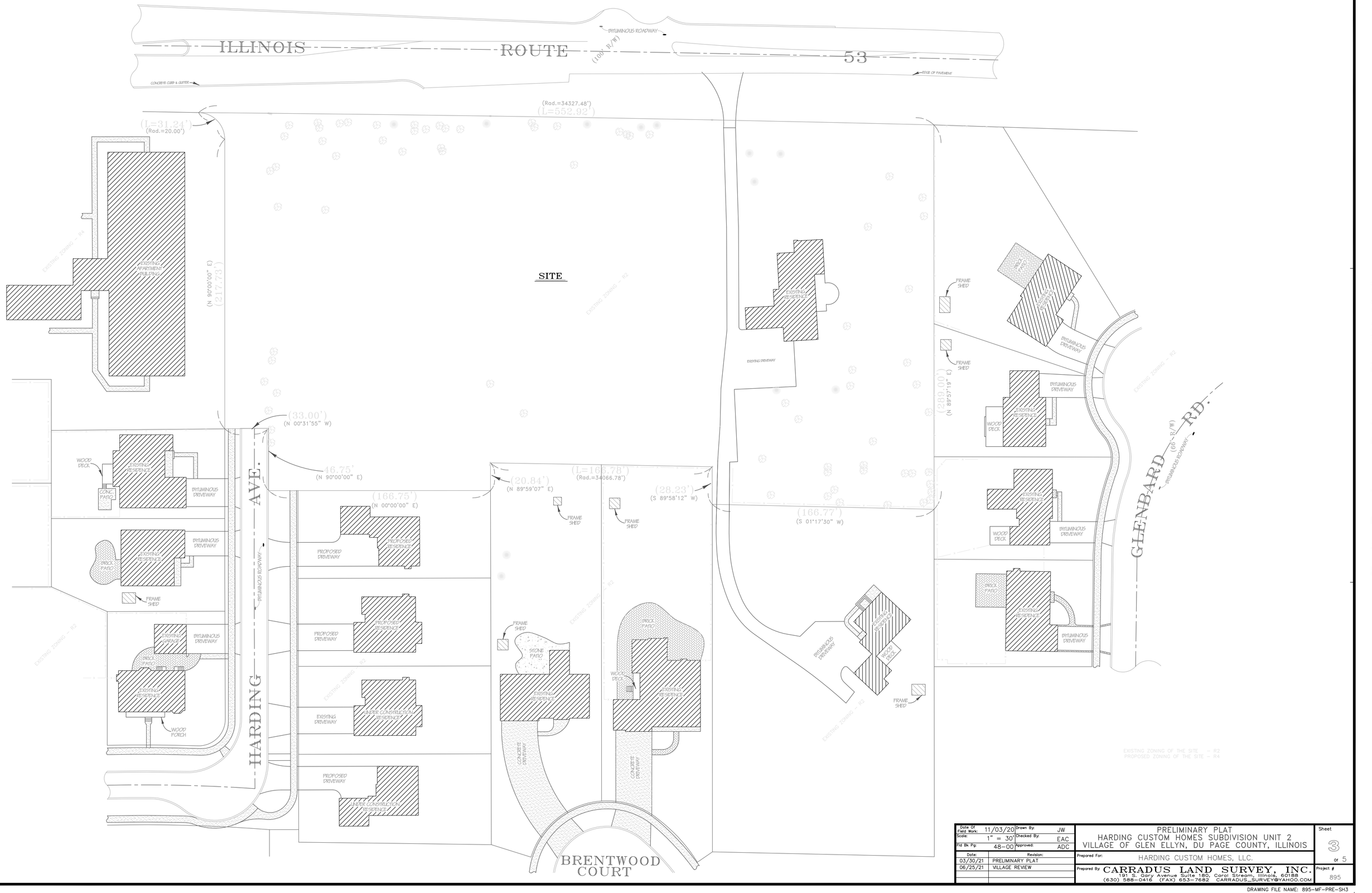
Project # 895

DRAWING FILE NAME: 895-MF-PRE-SH2

Harding Townhomes - Preliminary Plat 2021_06_30

SURROUNDING CONDITIONS EXHIBIT

CARRADUS



Date Of Field Work:	11/03/20	Drawn By:	JW
Scale:	1" = 30'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	PRELIMINARY PLAT
06/25/21	VILLAGE REVIEW

PRELIMINARY PLAT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 3 of 5

Project # 895

DRAWING FILE NAME: 895-MF-PRE-SH3

PRELIMINARY SUBDIVISION LOT LAYOUT

CARRADUS

LEGEND

- IRON MONUMENT FOUND
- IRON MONUMENT SET (PLS 35-2551)
- CONCRETE MONUMENT
- (50.00') RECORD DIMENSION
- FENCE LINE
- EASEMENT LINE
- (50.00') RECORD DIMENSION
- 100.00' PROPOSED LOT DIMENSION
- LOT EXISTING LOT NUMBER
- LOT PROPOSED LOT NUMBER

SCALE: 1"=20'

LOT AREA TABLE

LOT 1–	26,315 SQ.FT.	0.604 ACRES
LOT 2–	19,438 SQ.FT.	0.446 ACRES
LOT 3–	21,218 SQ.FT.	0.487 ACRES
LOT 4–	21,515 SQ.FT.	0.494 ACRES
LOT 5–	25,079 SQ.FT.	0.576 ACRES
LOT TOTAL–	113,565 SQ.FT.	2.607 ACRES

LAND USE TABLE

AREA WITHIN LOTS (5)	113,565 SQ.FT.
AREA WITHIN UNITS (23)	36,237 SQ.FT.
OPEN SPACE / BLANKET EASEMENT	77,328 SQ.FT.
PROPOSED DEDICATED R/W	33,103 SQ.FT.
EXISTING HARDING AVE. R/W	7,913 SQ.FT.
EXISTING HARDING AVE. R/W TO BE VACATED	4,706 SQ.FT.
EXISTING HARDING AVE. R/W TO REMAIN	3,207 SQ.FT.

ILLINOIS ROUTE 53 (100' R/W)

HARDING AVE. (55' R/W)

HARDING COURT (50' R/W)

HARDING COURT SPUR (HEREBY DEDICATED)

WEST LINE OF ROUTE 53 (AS MONUMENTED & OCCUPIED)

(L=31.24') (Rad.=20.00')

(Rad.=34327.48') (L=552.92')

PROPOSED 21' SIDEWALK & EMERGENCY VEHICLE DRIVEWAY EASEMENT

INGRESS AND EGRESS EASEMENT FOR EMERGENCY VEHICLES – SEE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2

LOT 1 | LOT 2 | LOT 3 | LOT 4 | LOT 5

UNIT 1 | UNIT 2 | UNIT 3 | UNIT 4 | UNIT 5 | UNIT 6 | UNIT 7 | UNIT 8 | UNIT 9 | UNIT 10 | UNIT 11 | UNIT 12 | UNIT 13 | UNIT 14 | UNIT 15 | UNIT 16 | UNIT 17 | UNIT 18 | UNIT 19 | UNIT 20 | UNIT 21 | UNIT 22 | UNIT 23

BLANKET EASEMENT STORMWATER MANAGEMENT EASEMENT & COMMON AREA

EXISTING 33' PUBLIC RIGHT OF WAY TO BE VACATED

EXISTING 33' PUBLIC RIGHT OF WAY TO REMAIN

ISLAND (WITHIN RIGHT OF WAY) BACK OF CURB RADIUS = 10.0'

EXISTING 10' PUBLIC UTILITY & DRAINAGE EASEMENT

EXISTING 10' PUBLIC UTILITY EASEMENT (PER DOC. R1963-008332)

PORTION OF HARDING COURT, A DESIGNATED STREET. SEE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2 FOR DETAILS ON EASEMENTS AND MAINTENANCE OBLIGATIONS.

CONCRETE MONUMENT

WILL-BRYANT CONDOMINIUM PER DOC. R1977-120078

TOWNHOMES OF WATERS EDGE PER DOC. R2005-148006

HARDING CUSTOM HOMES SUBDIVISION UNIT 1 PER DOC. R2018-036528

BRENTWOOD PLACE PER DOC. R1991-022208

RUDBECKS ASSESSMENT PLAT PER DOC. R1963-008332

ROLLING HEDGE SUBDIVISION PER DOC. R1978-035719

ALL BEARINGS SHOWN HEREON ARE ASSUMED AND ARE FOR REFERENCE ONLY.

TO THE BEST OF OUR KNOWLEDGE THERE ARE NO RECORDED BUILDING LINES OR EASEMENTS EXCEPT AS SHOWN HEREON.

COMMON AREA

THAT PORTION OF LOTS 1, 2, 3, 4 AND 5 EXCEPT UNITS 1 THROUGH 23, TO BE MAINTAINED AS OPEN SPACE, SUBJECT TO INSTALLATION OF DRIVEWAYS, DRIVEWAY APRONS, ENTRY WALKWAYS, SIDEWALKS, SUBDIVISION IDENTIFICATION SIGNS, PARKING SPACES AND AREAS, EASEMENTS, STOOPS, DECKS, STAIRS, WINDOW WELLS, PORCHES, PATIOS, UNIT MECHANICALS (SUCH AS AIR CONDITIONERS, HEAT EXCHANGERS, EXTERNAL GENERATORS, ETC.), BORDER FENCES, PAVEMENT, LANDSCAPING, HARDSCAPING, BUILDING OVERHANGS AND DECORATIVE ELEMENTS PLUS THE PROVISIONS OF THE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2 AND THE DECLARATION OF PROTECTIVE COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR HARDING GLEN TOWN HOMES.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48/00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PRELIMINARY PLAT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Sheet 4 of 5

Project # 895

DRAWING FILE 895-MF-PRE-SH4

PRELIMINARY SITE ENGINEERING

NOTE:
THE APPLICANT AND/OR LOCAL MUNICIPALITY SHALL BE RESPONSIBLE FOR ALL GARBAGE CLEANUP ASSOCIATED WITH THE USE OF THE EMERGENCY ACCESS DRIVEWAY.

NOTE:
ALL ADA RELATED ITEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ADA/PROWAG GUIDELINES AND WITH THE "ADA STANDARD FOR ACCESSIBLE DESIGN" GUIDEBOOK.

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

EDGE OF PAVEMENT

CONCRETE CURB & GUTTER

E. RT. 53 RIGHT OF WAY

EXISTING 12" WATERMAIN

(L=31.24')

(L=552.92')

231.35'

178.67'

142.70'

PROPOSED 5' CONCRETE WALK

EXISTING CONCRETE WALK

MATCH EXISTING WALK

12" STORM SEWER

15" STORM SEWER

18" STORM SEWER

24" STORM SEWER

6" D.I.P. WATERMAIN

8" SANITARY SEWER

UNIT 23 | UNIT 22 | UNIT 21 | UNIT 20 | UNIT 19 | UNIT 18

BUILDING TYPE C

UNIT 17 | UNIT 16 | UNIT 15 | UNIT 14 | UNIT 13

BUILDING TYPE B

UNIT 12 | UNIT 11 | UNIT 10 | UNIT 9

BUILDING TYPE A

UNIT 8 | UNIT 7 | UNIT 6 | UNIT 5

UNIT 1 | UNIT 2 | UNIT 3 | UNIT 4

BUILDING TYPE A

(217.73')

(33.00')

(166.75')

(166.77')

(L=166.78')

(289.00')

(28.23')

HARDING AVE.

HARDING COURT

R=227.50'

R=50.00'

R=172.50'

R=58.00'

CUL. RAD.=200.0'

PROPOSED 12' X 14' PERGOLA AND CONCRETE WALK

4" PERF. PIPE

SIGN

+00 (CL-PI)

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN. (FIELD VERIFY CONDITIONS)

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER. (FIELD VERIFY CONDITIONS)

UTILITY STRUCTURE LEGEND

CURB INLET
ST-14 ST-17 ST-26
ST-15 ST-18 ST-27
ST-16 ST-19

24" STORM INLET
ST-13 ST-25

48" CATCH BASIN/MANHOLE
ST-6 ST-11 ST-22
ST-7 ST-12 ST-23
ST-8 ST-20 ST-24
ST-9 ST-21 ST-28
ST-10

60" MANHOLE
ST-3 ST-4 ST-5

SANITARY MANHOLE
SAN-1 SAN-2 SAN-3
SAN-4 SAN-5

VALVE VAULT
W-1 W-2

STREET CROSS SECTION

Not to Scale

B/C-B/C = 21.0' (STANDARD ROADWAY)
(VARIES TO 31' IN CUL-DE-SAC)

10.5' (STANDARD ROADWAY)
3-1/2" CROWN

2.0% SLOPE

2" OF H.M.A. SURFACE
3" OF H.M.A. BINDER
12" CA-6 SUB-BASE MATERIAL
THE SUPERPAVE MIX DESIGN METHOD SHALL BE UTILIZED FOR ROADWAY PAVEMENTS.

BLANKET EASEMENT (LOT LINES TO BUILDINGS)

5' | 1' | 5'

5" THICK P.C.C. WALK (6" AT DRIVEWAYS) OVER A MINIMUM OF 4" OF COMPACTED CA-6. (TYPICAL BOTH SIDES)

FLAG OF GUTTER IS 10" THICK OVER 7" STONE BASE

7" OF CA-6 STONE BASE UNDER CONCRETE CURB EXTENDING 6" BEYOND THE BACK OF CURB.

PROPOSED STORM SEWER (SIZE AND MATERIAL VARIES)

4" P.V.C. PERFORATED UNDERDRAIN IN 12" AGGREGATE TRENCH. TRENCH SHALL BE LINED WITH GEOTEXTILES FOR UNDERDRAINS. TOP OF PIPE SHALL BE 12" BELOW THE BOTTOM OF THE AGGREGATE SUB-BASE. CONSULT WITH GLEN ELLYN PUBLIC WORKS. FOR FINAL LOCATION AND LIMITS PRIOR TO THE START OF CONSTRUCTION.

55' R/W

THE HMA SURFACE COURSE SHALL BE PLACED AND COMPACTED SO THAT IS 1/4" ABOVE THE GUTTER FLAG.

B-6.12 CONCRETE CURB & GUTTER OVER THE CA-6 SUB BASE

PROPOSED 8" P.V.C. SANITARY SEWER

PROPOSED 6" D.I.P. WATER MAIN

Date Of Field Work:	02/26/20
Scale:	1" = 20'
Fld Bk Pg:	48-00
Drawn By:	CMG
Checked By:	EAC
Approved:	ADC

Date:	Revision:
03/30/21	PRELIMINARY PLAT
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PRELIMINARY PLAT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 5 of 5

Project # 895

DRAWING FILE NAME: 895-MF-PRE-SH5

FINAL PLAT
OF
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
BEING A SUBDIVISION OF

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

CARRADUS

LEGEND

- IRON MONUMENT FOUND
- IRON MONUMENT SET (PLS 35-2551)
- CONCRETE MONUMENT
- (50.00') RECORD DIMENSION
- FENCE LINE
- EASEMENT LINE
- (50.00') RECORD DIMENSION
- 100.00' PROPOSED LOT DIMENSION
- LOT EXISTING LOT NUMBER
- LOT PROPOSED LOT NUMBER

SCALE: 1"=20'

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AREA WITHIN UNITS (23)	36,237 SQ.FT.
OPEN SPACE / BLANKET EASEMENT	77,328 SQ.FT.
PROPOSED DEDICATED R/W	33,103 SQ.FT.
EXISTING HARDING AVE. R/W	7,913 SQ.FT.
EXISTING HARDING AVE. R/W TO BE VACATED	4,706 SQ.FT.
EXISTING HARDING AVE. R/W TO REMAIN	3,207 SQ.FT.

ILLINOIS ROUTE 53 (100' R/W)

WEST LINE OF ROUTE 53 (AS MONUMENTED & OCCUPIED)

(L=31.24') (Rad.=20.00')

(Rad.=34327.48') (L=552.92')

PROPOSED 21' SIDEWALK & EMERGENCY VEHICLE DRIVEWAY EASEMENT

INGRESS AND EGRESS EASEMENT FOR EMERGENCY VEHICLES – SEE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2

LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

UNIT 23 | UNIT 22 | UNIT 21 | UNIT 20 | UNIT 19 | UNIT 18 | UNIT 17 | UNIT 16 | UNIT 15 | UNIT 14 | UNIT 13 | UNIT 12 | UNIT 11 | UNIT 10 | UNIT 9 | UNIT 8 | UNIT 7 | UNIT 6 | UNIT 5 | UNIT 4 | UNIT 3 | UNIT 2 | UNIT 1

BLANKET EASEMENT STORMWATER MANAGEMENT EASEMENT & COMMON AREA

EXISTING 33' PUBLIC RIGHT OF WAY TO BE VACATED

EXISTING 33' PUBLIC RIGHT OF WAY TO REMAIN

HEREBY DEDICATED

HARDING COURT

HARDING COURT SPUR

ISLAND (WITHIN RIGHT OF WAY) BACK OF CURB RADIUS = 10.0'

EXISTING 10' PUBLIC UTILITY & DRAINAGE EASEMENT

HARDING AVE.

LOT 5 — TOWNHOMES OF WATERS EDGE PER DOC. R2005-148006

LOT 4 — HARDING CUSTOM HOMES SUBDIVISION UNIT 1 PER DOC. R2018-036528

LOT 15 | LOT 14 — BRENTWOOD PLACE PER DOC. R1991-022208

LOT 3 | LOT 2 — RUDBECKS ASSESSMENT PLAT PER DOC. R1963-008332

LOT 4 — ROLLING HEDGE SUBDIVISION PER DOC R1978-053719

LOT 5 — WILL-BRYANT CONDOMINIUM PER DOC. R1977-120078

CONCRETE MONUMENT

ALL BEARINGS SHOWN HEREON ARE ASSUMED AND ARE FOR REFERENCE ONLY.

TO THE BEST OF OUR KNOWLEDGE THERE ARE NO RECORDED BUILDING LINES OR EASEMENTS EXCEPT AS SHOWN HEREON.

HOME OWNERS ASSOCIATION DOCUMENTS

FOR THE OWNERSHIP AND MAINTENANCE RESPONSIBILITIES OF THE UTILITIES AND OPEN SPACE AREA PLEASE REFER TO THE HOME OWNERS ASSOCIATION DOCUMENTS RECORDED ON _____, 2021, AS DOCUMENT _____ IN THE OFFICE OF THE RECORDER OF DEEDS, DU PAGE COUNTY, ILLINOIS.

COMMON AREA

THAT PORTION OF LOTS 1, 2, 3, 4 AND 5 EXCEPT UNITS 1 THROUGH 23, TO BE MAINTAINED AS OPEN SPACE, SUBJECT TO INSTALLATION OF DRIVEWAYS, DRIVEWAY APRONS, ENTRY WALKWAYS, SIDEWALKS, SUBDIVISION IDENTIFICATION SIGNS, PARKING SPACES AND AREAS, EASEMENTS, STOOPS, DECKS, STAIRS, WINDOW WELLS, PORCHES, PATIOS, UNIT MECHANICALS (SUCH AS AIR CONDITIONERS, HEAT EXCHANGERS, EXTERNAL GENERATORS, ETC.), BORDER FENCES, PAVEMENT, LANDSCAPING, HARDSCAPING, BUILDING OVERHANGS AND DECORATIVE ELEMENTS PLUS THE PROVISIONS OF THE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2 AND THE DECLARATION OF PROTECTIVE COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR HARDING GLEN TOWN HOMES.

PORTION OF HARDING COURT, A DESIGNATED STREET, SEE DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2 FOR DETAILS ON EASEMENTS AND MAINTENANCE OBLIGATIONS.

BLANKET EASEMENT STORMWATER MANAGEMENT EASEMENT & COMMON AREA

EXISTING 10' PUBLIC UTILITY EASEMENT (PER DOC. R1963-008332)

CONCRETE MONUMENT

LEGAL DESCRIPTION OF THE SITE:

SEE SHEET 2 OF 2 OF THIS SET FOR THE LEGAL DESCRIPTION AND DETAILS OF THE UNDERLYING PROPERTY BEING SUBDIVIDED.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48/00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PLAT OF SUBDIVISION
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Sheet 1 of 2

Project # 895

DRAWING FILE 895-PHASE 2 SUB-SH1.DWG

SURVEY NOTES

1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f. Distances shown along curved lines are Arc Measurements unless otherwise noted.
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction.
6. Dimensions to and along buildings are exterior foundation measurements.
7. Do Not Assume distances from scaled measurements made hereon.

LEGEND

●	IRON MONUMENT FOUND
○	IRON MONUMENT SET (PLS 35-2551)
□	CONCRETE MONUMENT
(50.00')	RECORD DIMENSION
—— x ——	FENCE LINE
— — —	EASEMENT LINE
(50.00')	RECORD DIMENSION
100.00'	PROPOSED LOT DIMENSION
LOT	EXISTING LOT NUMBER
LOT	PROPOSED LOT NUMBER

FINAL PLAT OF HARDING CUSTOM HOMES SUBDIVISION UNIT 2

BEING A SUBDIVISION OF

P.I.N. 05-23-223-020
P.I.N. 05-23-223-005
P.I.N. 05-23-223-008
P.I.N. 05-23-223-025

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

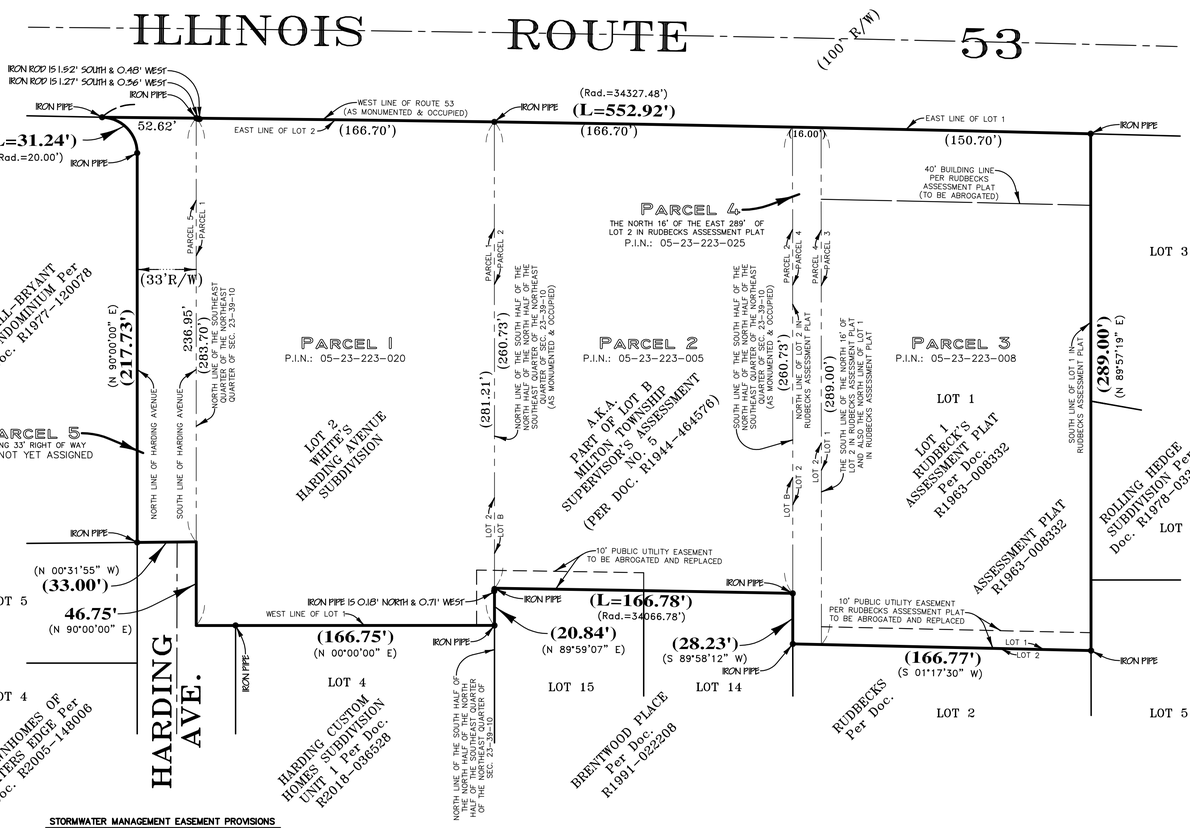
AREA OF SITE = 146,668 SQ.FT. 3.367 ACRES

NOTE:
ALL BEARINGS SHOWN HEREON ARE ASSUMED AND ARE FOR REFERENCE ONLY.

TO THE BEST OF OUR KNOWLEDGE THERE ARE NO RECORDED BUILDING LINES OR EASEMENTS EXCEPT AS SHOWN HEREON.

SUBDIVISION BOUNDARY DETAIL

SCALE: 1"=40'



CARRADUS

STORMWATER MANAGEMENT EASEMENT PROVISIONS

DECLARANT HEREBY RESERVES AND GRANTS TO THE VILLAGE OF GLEN ELLYN STORMWATER MANAGEMENT EASEMENTS FOR PURPOSES OF PROVIDING ADEQUATE STORMWATER DRAINAGE CONTROL, TOGETHER WITH REASONABLE ACCESS THERETO. SAID EASEMENTS SHALL BE PERPETUAL AND SHALL RUN WITH THE LAND AND SHALL BE BINDING UPON THE DECLARANT, ITS SUCCESSORS, HEIRS, EXECUTORS AND ASSIGNS. TO ENSURE THE INTEGRITY OF THE STORMWATER FACILITIES, NO OBSTRUCTION SHALL BE PLACED, NOR ALTERATIONS MADE, INCLUDING ALTERATIONS IN THE FINAL TOPOGRAPHICAL GRADING PLAN WHICH IN ANY MANNER IMPEDE OR DIMINISH STORMWATER DRAINAGE OR STORAGE IN, OVER, UNDER, THROUGH OR UPON SAID EASEMENT AREAS. IN THE EVENT SUCH OBSTRUCTION OR ALTERATIONS ARE FOUND TO EXIST, OR IF THE PROPERTY OWNER OTHERWISE FAILS TO PROPERLY MAINTAIN THE STORMWATER FACILITIES AND EASEMENTS OR CHANGES THE CHARACTER OF THE STORMWATER FACILITY, THE VILLAGE OF GLEN ELLYN SHALL, UPON SEVENTY-TWO (72) HOURS PRIOR NOTICE TO THE PROPERTY OWNER, HAVE THE RIGHT, BUT NOT THE DUTY, TO PERFORM, OR HAVE PERFORMED IN ITS BEHALF, ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES OR TO REMOVE SAID OBSTRUCTION OR ALTERATIONS OR TO PERFORM OTHER MAINTENANCE, REPAIR, ALTERATION OR REPLACEMENT AS MAY BE REASONABLY BE NECESSARY TO ENSURE THAT ADEQUATE STORMWATER STORAGE AND DRAINAGE FACILITIES, AND APPURTENANCES THERETO, REMAIN FULLY OPERATIONAL AND THAT THE CONDITIONS OF SAID FACILITIES AND EASEMENTS COMPLY WITH ALL APPLICABLE VILLAGE OF GLEN ELLYN AND DUPAGE COUNTY CODES. IN THE EVENT OF AND EMERGENCY SITUATION, AS DETERMINED BY THE VILLAGE OF GLEN ELLYN, THE SEVENTY-TWO (72) HOURS PRIOR NOTICE REQUIREMENTS SET FORTH ABOVE SHALL NOT APPLY AND THE VILLAGE OF GLEN ELLYN SHALL HAVE THE RIGHT, BUT NOT THE DUTY, TO PROCEED WITHOUT NOTICE TO THE PROPERTY OWNER. IN THE EVENT THE VILLAGE OF GLEN ELLYN SHALL BE REQUIRED TO PERFORM, OR HAVE PERFORMED ON ITS BEHALF ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES AND EASEMENTS AS SET FORTH IN THE DECLARATION, OR ANY REMOVAL OR ALTERATION AS AFORESAID, THE COST OF SUCH WORK SHALL, UPON RECORDATION OF NOTICE OF LIEN WITH THE RECORDER OF DEEDS OF DUPAGE COUNTY, ILLINOIS, CONSTITUTE A LIEN AGAINST THE ASSETS OF THE PROPERTY OWNER, IN ADDITION, THE AREA DISTRIBUTED BY THE SAID MAINTENANCE OPERATIONS, SHALL BE RE-PLANTED BY THE PROPERTY OWNER WITH THE MATERIALS ON THE APPROVED LANDSCAPE PLAN.

BLANKET EASEMENT

AN EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF GLEN ELLYN (THE "VILLAGE") AND ITS FRANCHISEES, FOR ALL AREAS HEREON PLATTED AND DESIGNATED "BLANKET EASEMENT," TO CONSTRUCT, INSTALL, RECONSTRUCT, REPAIR, REMOVE, REPLACE, INSPECT, MAINTAIN AND OPERATE UTILITY TRANSMISSION AND DISTRIBUTION SYSTEMS AND LINES IN, UNDER, OVER, ACROSS, ALONG AND UPON THE SURFACE OF SAID EASEMENT, INCLUDING WITHOUT LIMITATION, WATERMAINS, STORMWATER RUNOFF, STORM SEWERS, SANITARY SEWERS, GASMAINS, TELEPHONE CABLES, ELECTRICAL LINES, AND CABLE TELEVISION. NO ENCROACHMENT OF ANY KIND SHALL BE ALLOWED WITHIN SAID EASEMENT UNLESS THE VILLAGE DETERMINES THAT SAID ENCROACHMENT SHALL NOT INTERFERE WITH THE PROPER FUNCTIONING OF SUCH UTILITY FACILITIES, SUCH AS ENCROACHMENT BY NON-INTERFERING GARDENS, SHRUBS AND OTHER LANDSCAPING MATERIAL. THE VILLAGE AND ITS FRANCHISEES WITH PERMITS FROM THE VILLAGE MAY ENTER UPON SAID EASEMENT FOR THE USES HEREIN SET FORTH AND HAVE THE RIGHT TO CUT, TRIM OR REMOVE ANY TREES, SHRUBS OR OTHER PLANTS WITHIN THE AREAS DESIGNATED "BLANKET EASEMENT" WHICH ENCROACH ON AND INTERFERE WITH THE CONSTRUCTION, INSTALLATION, RECONSTRUCTION, REPAIR, REMOVAL, REPLACEMENT, MAINTENANCE AND OPERATION OF THE UNDERGROUND TRANSMISSION AND DISTRIBUTION SYSTEMS AND SUCH FACILITIES APPURTENANT THERETO.

FOLLOWING ANY WORK TO BE PERFORMED BY VILLAGE FRANCHISEES WITH PERMITS FROM THE VILLAGE, IN THE EXERCISE OF THE EASEMENT RIGHTS GRANTED HEREIN, SAID ENTITIES SHALL MAKE SURFACE RESTORATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: BACKFILLAND COMPACT, REMOVE CONCRETE AND ASPHALT SURFACES, TOPSOIL AND SEED, REMOVE EXCESS DEBRIS, MAINTAIN AREA IN A GENERALLY CLEAN AND WORKMANLIKE CONDITION. ALL SAID RESTORATION SHALL BE COMPLETED IN ACCORDANCE WITH VILLAGE STANDARDS.

FOLLOWING ANY WORK TO BE PERFORMED BY THE VILLAGE IN THE EXERCISE OF ITS EASEMENT RIGHTS GRANTED HEREIN, THE VILLAGE SHALL HAVE NO OBLIGATION WITH RESPECT TO SURFACE RESTORATION, INCLUDING BUT NOT LIMITED TO, THE LAWN OR SHRUBBERY, PROVIDED, HOWEVER, THAT THE VILLAGE SHALL BE OBLIGATED FOLLOWING MAINTENANCE WORK TO BACKFILL AND MOUND ANY TRENCH OR SETTLED SO AS TO RETAIN SUITABLE DRAINAGE, TO COLD PATCH ANY ASPHALT OR CONCRETE SURFACE, TO REMOVE ALL EXCESS DEBRIS AND SPOIL AND TO LEAVE THE MAINTENANCE AREA IN A GENERALLY CLEAN AND WORKMANLIKE CONDITION.

NOTWITHSTANDING, NEITHER THE VILLAGE NOR ANY FRANCHISEE SHALL DISTURB ANY STOOPS, DECKS, WINDOW WELLS, PORCHES, PATIOS, UNIT MECHANICALS (SUCH AS AIR CONDITIONERS, HEAT EXCHANGERS, EXTERNAL GENERATORS, ETC.) AFFIXED TO ANY BUILDING CONSTRUCTED ON ANY UNIT, AND THE HOMEOWNERS ASSOCIATION AND THE OWNER OF ANY LOT OR UNIT SHALL BE PERMITTED TO MAINTAIN DRIVEWAYS, DRIVEWAY APRONS, ENTRY WALKWAYS, SIDEWALKS, SUBDIVISION IDENTIFICATION SIGNS, OFF STREET PARKING SPACES AND AREAS, BORDER FENCES, PAVEMENT, LANDSCAPING, HARDSCAPING AND DECORATIVE ELEMENTS, AND SUCH OTHER IMPROVEMENT AS APPROVED BY THE VILLAGE.

UTILITY COMPANY CERTIFICATE (COMCAST)

WE HEREBY ACKNOWLEDGE THE VACATION OF THE EXISTING 33' HARDING RIGHT OF WAY (PARCEL 5) AS SHOWN HEREON AND ACKNOWLEDGE AND ACCEPT THE FULL EASEMENT RIGHTS PRESENTED FOR THE "BLANKET EASEMENT" WHERE ANY EXISTING IMPROVEMENTS ARE LOCATED, OR PROPOSED IMPROVEMENTS WILL BE PLACED.

DATED THIS ____ DAY OF _____, A.D. 20___.

BY: _____ ATTEST: _____

TITLE: _____ TITLE: _____

UTILITY COMPANY CERTIFICATE (NICOR)

WE HEREBY ACKNOWLEDGE THE VACATION OF THE EXISTING 33' HARDING RIGHT OF WAY (PARCEL 5) AS SHOWN HEREON AND ACKNOWLEDGE AND ACCEPT THE FULL EASEMENT RIGHTS PRESENTED FOR THE "BLANKET EASEMENT" WHERE ANY EXISTING IMPROVEMENTS ARE LOCATED, OR PROPOSED IMPROVEMENTS WILL BE PLACED.

DATED THIS ____ DAY OF _____, A.D. 20___.

BY: _____ ATTEST: _____

TITLE: _____ TITLE: _____

UTILITY COMPANY CERTIFICATE (COMMONWEALTH EDISON)

WE HEREBY ACKNOWLEDGE THE VACATION OF THE EXISTING 33' HARDING RIGHT OF WAY (PARCEL 5) AS SHOWN HEREON AND ACKNOWLEDGE AND ACCEPT THE FULL EASEMENT RIGHTS PRESENTED FOR THE "BLANKET EASEMENT" WHERE ANY EXISTING IMPROVEMENTS ARE LOCATED, OR PROPOSED IMPROVEMENTS WILL BE PLACED.

DATED THIS ____ DAY OF _____, A.D. 20___.

BY: _____ ATTEST: _____

TITLE: _____ TITLE: _____

UTILITY COMPANY CERTIFICATE (ILLINOIS BELL TELEPHONE)

WE HEREBY ACKNOWLEDGE THE VACATION OF THE EXISTING 33' HARDING RIGHT OF WAY (PARCEL 5) AS SHOWN HEREON AND ACKNOWLEDGE AND ACCEPT THE FULL EASEMENT RIGHTS PRESENTED FOR THE "BLANKET EASEMENT" WHERE ANY EXISTING IMPROVEMENTS ARE LOCATED, OR PROPOSED IMPROVEMENTS WILL BE PLACED.

DATED THIS ____ DAY OF _____, A.D. 20___.

BY: _____ ATTEST: _____

TITLE: _____ TITLE: _____

UTILITY COMPANY CERTIFICATE (WIDE OPEN WEST)

WE HEREBY ACKNOWLEDGE THE VACATION OF THE EXISTING 33' HARDING RIGHT OF WAY (PARCEL 5) AS SHOWN HEREON AND ACKNOWLEDGE AND ACCEPT THE FULL EASEMENT RIGHTS PRESENTED FOR THE "BLANKET EASEMENT" WHERE ANY EXISTING IMPROVEMENTS ARE LOCATED, OR PROPOSED IMPROVEMENTS WILL BE PLACED.

DATED THIS ____ DAY OF _____, A.D. 20___.

BY: _____ ATTEST: _____

TITLE: _____ TITLE: _____

OWNER'S CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT THE UNDERSIGNED IS THE OWNER OF THE LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE HAS CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED, AS INDICATED THEREON, FOR THE USES AND PURPOSES THEREIN SET FORTH, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON INDICATED.

I HEREBY DEDICATE FOR PUBLIC USE THE LANDS SHOWN ON THIS PLAT FOR THOROUGHFARES, STREETS, ALLEYS AND FACILITIES; AND I HEREBY ALSO RESERVE FOR THAT COMPANY OR COMPANIES WHICH HAVE BEEN GRANTED BY THE VILLAGE OR OTHER ENTITIES WITH THE POWER TO DO SO, FRANCHISES WITHIN THE VILLAGE FOR UTILITY SERVICES, INCLUDING NATURAL GAS, ELECTRICITY, TELEPHONE, WATER, SEWER, CABLE AND OTHER SIMILAR ENTITIES THE EASEMENT PROVISIONS, WHICH ARE STATED ON THEIR STANDARD FORM, WHICH IS ATTACHED HERETO.

THIS IS TO CERTIFY, AS OWNER OF THE PROPERTY DESCRIBED HEREIN AND LEGALLY DESCRIBED ON THE PLAT, THAT I HAVE DETERMINED TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT EACH OF THE SUBJECT LOTS LIE WHOLLY WITHIN THE BOUNDARIES OF SCHOOL DISTRICT(S)_____

_____

_____

(ADDRESS)
DATED THIS ____ DAY OF _____, A.D. 20___.

NOTARY'S CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

I, _____, A NOTARY PUBLIC IN AND FOR SAID COUNTY, IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNERS, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT HE/THEY SIGNED AND DELIVERED THE PLAT OF HIS/THEIR AS THEIR OWN FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS ____ DAY OF _____, A.D., _____

NOTARY PUBLIC: _____

MY COMMISSION EXPIRES: _____

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO S2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS," AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL BE REQUIRED BY THE DEPARTMENT.

_____
JOHN A. FORTMANN, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION ONE ENGINEER.

VILLAGE ENGINEER CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

I, _____, VILLAGE ENGINEER OF THE VILLAGE OF GLEN ELLYN, DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT ALL MATTERS PERTAINING TO PLAT REQUIREMENTS AS PRESCRIBED IN THE REGULATIONS GOVERNING PLATS ADOPTED BY THE VILLAGE BOARD OF THE VILLAGE OF GLEN ELLYN, ILLINOIS, INSOFAR AS THEY PERTAIN TO THE SUBJECT PLAT, HAVE BEEN COMPLIED WITH. I FURTHER CERTIFY TO THE BEST OF BY KNOWLEDGE AND BELIEF THAT THE REQUIRED PERFORMANCE SECURITY IS POSTED FOR THE COMPLETION OF THE IMPROVEMENTS COVERING SANITARY SEWERAGE SYSTEM AND DOMESTIC WATER SUPPLY AND TRANSMISSION SYSTEM UNDER THE JURISDICTION OF THE VILLAGE OF GLEN ELLYN, BASED ON ENGINEER'S PLANS AND SPECIFICATIONS PREPARED BY A LICENSED ENGINEER AND APPROVED BY ALL PUBLIC AUTHORITIES HAVING JURISDICTION.
EXCEPT: _____, I FURTHER CERTIFY THAT THE STREET NAMES HAVE BEEN EXAMINED BY ME AND FOUND TO COMPLY WITH THE VILLAGE OF GLEN ELLYN REGULATIONS.

DATED AT GLEN ELLYN, DU PAGE COUNTY, ILLINOIS,
THIS ____ DAY OF _____, A.D. 20___.

_____
VILLAGE ENGINEER

PLAN COMMISSION CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS, THIS ____ DAY OF _____, 20___.

SIGNED_____
CHAIRMAN

ATTEST_____
RECORDING SECRETARY

VILLAGE BOARD CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

APPROVED BY THE PRESIDENT AND VILLAGE BOARD OF THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS THIS _____ DAY OF _____, 20___.

SIGNED_____ ATTEST_____
PRESIDENT CLERK

I, _____, VILLAGE CLERK OF THE VILLAGE OF GLEN ELLYN, ILLINOIS, DO HEREBY CERTIFY THAT THE ANNEXED PLAT WAS PRESENTED TO AND BY ORDINANCE DULY APPROVED BY THE VILLAGE BOARD OF THE VILLAGE OF GLEN ELLYN, AT ITS MEETING HELD ON _____, A.D. 20___.
IN WITNESS WHEREOF I HAVE HEREUNTO SET THE SEAL OF THE VILLAGE OF GLEN ELLYN, ILLINOIS.

_____
VILLAGE CLERK

CERTIFICATE AS TO SPECIAL ASSESSMENTS

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

I, _____, VILLAGE COLLECTOR OF THE VILLAGE OF GLEN ELLYN, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED INSTALLMENTS THEREOF THAT HAVE BEEN APPORTIONED AGAINST THE TRACT OF LAND INCLUDED IN THE PLAT.

DATED AT GLEN ELLYN, DU PAGE COUNTY, ILLINOIS,
THIS____ DAY OF_____, A.D. 20___.

_____
VILLAGE COLLECTOR

COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

I, _____, COUNTY CLERK OF DU PAGE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. GIVEN UNDER MY HAND AND SEAL AT WHEATON, DU PAGE COUNTY, ILLINOIS,
THIS ____ DAY OF _____, A.D. 20___.

_____
COUNTY CLERK

SURFACE DRAINAGE CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, ADEQUATE PROVISIONS HAVE BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS THE RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON THE PROPERTY OF ADJOINING LAND OWNERS IN SUCH CONCENTRATIONS AS MAY CAUSE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS ____ DAY OF _____, A.D. 20___.

_____
ENGINEER

_____
OWNER OR ATTORNEY

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS } SS
COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT I, ALLEN D. CARRADUS, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2551, UNDER THE DIRECTION OF THE OWNER, AS SHOWN HEREON, HAVE SURVEYED, SUBDIVIDED, AND PLATTED THE FOLLOWING DESCRIBED PROPERTY:

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

I FURTHER CERTIFY THAT THE PLAT HEREON DRAWN IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION, AND THAT THE MONUMENTS AND MARKERS WILL BE PLACED AS SHOWN HEREON UPON COMPLETION OF ALL EXCAVATION. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF AND CORRECTED TO 68 DEGREES FAHRENHEIT, BEARINGS ARE SHOWN FOR THE PURPOSES OF DESCRIPTION ONLY.

I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE ALL REGULATIONS ENACTED BY THE VILLAGE BOARD RELATIVE TO PLATS AND SUBDIVISIONS HAVE BEEN COMPLIED WITH IN THE PREPARATION OF THIS PLAT.

I FURTHER CERTIFY THAT THE PROPERTY SHOWN ON THE PLAT HEREON DRAWN IS SITUATED WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF GLEN ELLYN WHICH HAS ADOPTED A COMPREHENSIVE PLAN AND WHICH IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE II OF ILLINOIS MUNICIPAL CODE AS HERETOFORE AND HEREAFTER AMENDED AND THAT BASED UPON A REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 17043C0156J WITH AN EFFECTIVE DATE OF AUGUST 1, 2019, IT IS MY OPINION THAT THE PROPERTY PLATTED HEREON IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA.

I HEREBY AUTHORIZE A REPRESENTATIVE FROM THE VILLAGE OF GLEN ELLYN TO RECORD THIS PLAT.

DATED AT CAROL STREAM, ILLINOIS, THIS TENTH DAY OF SEPTEMBER A.D 2021.

Allen D. Carradus
ALLEN D. CARRADUS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2551
MY LICENSE EXPIRES NOVEMBER 30, 2022

ALLEN D. CARRADUS 35-2551 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS WHEATON, ILLINOIS

PREPARED FOR:
HARDING CUSTOM HOMES, LLC
540 DUANE STREET, SECOND FLOOR
GLEN ELLYN, ILLINOIS, 60137
(630) 790-8144

RETURN TO:
VILLAGE OF GLEN ELLYN
535 DUANE STREET
GLEN ELLYN, ILLINOIS 60137

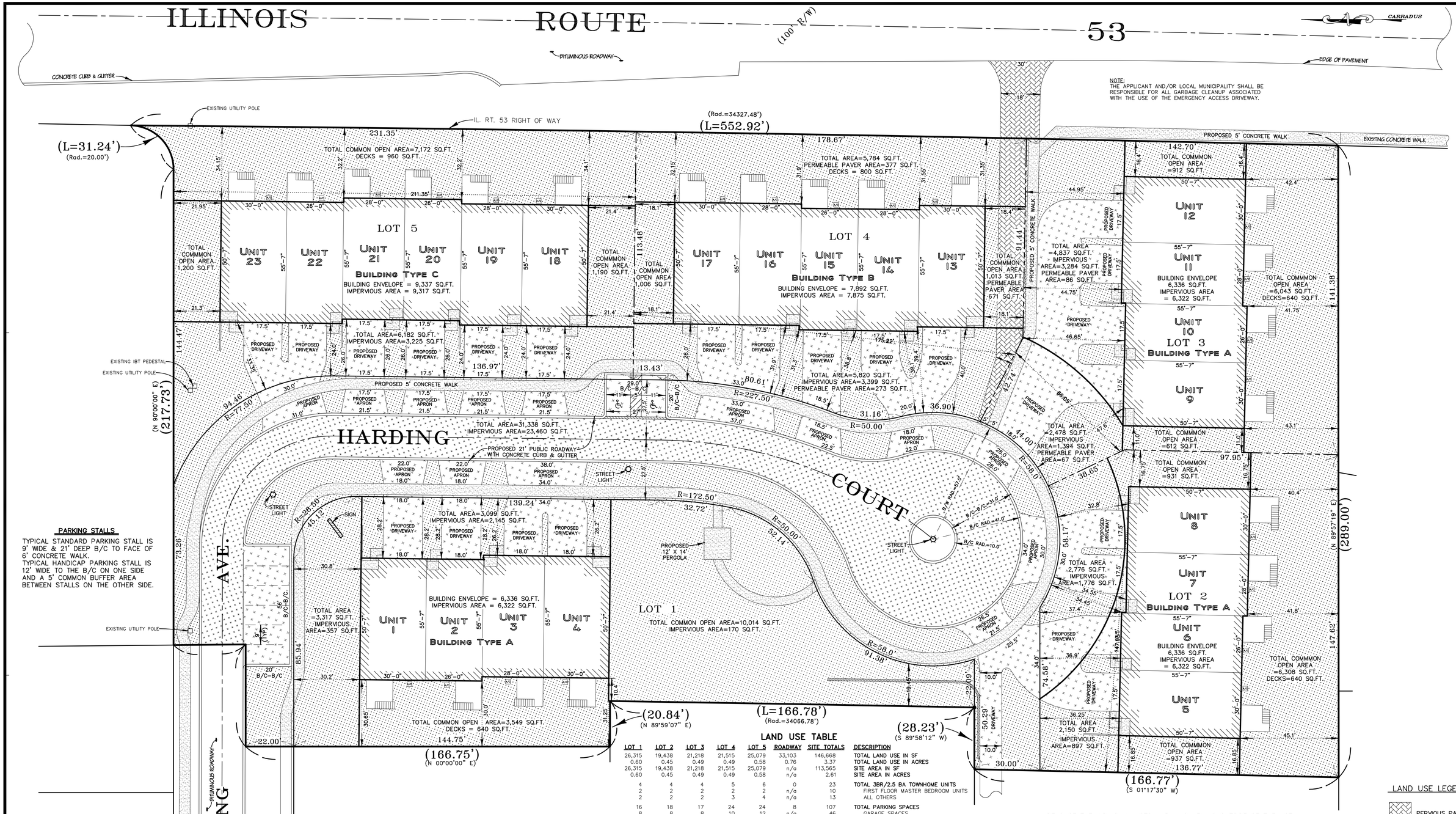
Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 40'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PLAT OF SUBDIVISION
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180 Carol Stream, Illinois 60188
(630



PARKING STALLS

TYPICAL STANDARD PARKING STALL IS 9' WIDE & 21' DEEP B/C TO FACE OF 6' CONCRETE WALK.
TYPICAL HANDICAP PARKING STALL IS 12' WIDE TO THE B/C ON ONE SIDE AND A 5' COMMON BUFFER AREA BETWEEN STALLS ON THE OTHER SIDE.

LAND USE TABLE

LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	ROADWAY	SITE TOTALS	DESCRIPTION
26,315	19,438	21,218	21,515	25,079	33,103	146,668	TOTAL LAND USE IN SF
0.60	0.45	0.49	0.49	0.58	0.76	3.37	TOTAL LAND USE IN ACRES
26,315	19,438	21,218	21,515	25,079	n/a	113,565	SITE AREA IN SF
0.60	0.45	0.49	0.49	0.58	n/a	2.61	SITE AREA IN ACRES
4	4	4	5	6	0	23	TOTAL 3BR/2.5 BA TOWNHOME UNITS
2	2	2	2	2	n/a	10	FIRST FLOOR MASTER BEDROOM UNITS
2	2	2	3	4	n/a	13	ALL OTHERS
16	18	17	24	24	8	107	TOTAL PARKING SPACES
8	8	8	10	12	n/a	46	GARAGE SPACES
8	10	9	14	12	n/a	53	DRIVEWAY SPACES
n/a	n/a	n/a	n/a	n/a	6	6	STANDARD PUBLIC PARKWAY SPACES
n/a	n/a	n/a	n/a	n/a	2	2	HANDICAPPED PUBLIC PARKWAY SPACES
4.0	4.5	4.3	4.8	4.0	0.3	4.7	AVERAGE PARKING PER UNIT
6,336	6,336	6,336	7,892	9,337	n/a	36,237	LOT COVERAGE OF BUILDING
24.08%	32.60%	29.86%	36.68%	37.23%	n/a	31.91%	LOT COVERAGE RATIO
6.62	8.96	8.21X	10.12	10.42	n/a	8.82	TOWNHOME UNITS PER SITE ACRE
n/a	n/a	n/a	n/a	n/a	n/a	6.83	TOWNHOME UNITS PER TOTAL ACRES
16,880	8,170	7,567	7,803	9,562	n/a	49,982	SF OF COMMON OPEN SPACE
64.15%	42.03%	35.66%	36.27%	38.13%	n/a	44.0%	PERCENTAGE OF SITE AREA
10,014	4,926	2,478	5,820	7,172	n/a	30,410	SF OF FRONT YARD
170	1,776	1,394	3,399	960	n/a	7,699	SF OF IMPERVIOUS SURFACES IN FRONT YARDS
1.70%	**36.05%**	**56.26%**	**58.40%**	**13.40%**	**n/a**	**25.32%**	IMPERVIOUS PERCENTAGE OF FRONT YARD
6,202	6,202	6,202	7,728	9,147	n/a	35,481	ALL IMPERVIOUS SURVACES BUILDING
206	206	206	257	300	n/a	1,175	WALKS & PORCHES
640	640	640	800	960	n/a	3,680	DECKS & STAIRS
2,043	2,559	3,925	3,082	2,878	n/a	14,487	DRIVEWAYS
110	n/a	n/a	n/a	n/a	n/a	110	GAZEBO & SIGN
86	28	12	n/a	37	n/a	163	WALLS
347	n/a	655	207	180	n/a	1,389	PUBLIC WALK & PARKING
9,634	**9,635**	**11,640**	**12,074**	**13,502**	**n/a**	**56,485**	**TOTAL IMPERVIOUS SURFACES**
36.61%	**49.57%**	**54.86%**	**56.12%**	**53.84%**		**49.74%**	**TOTAL IMPERVIOUS SURFACE PERCENTAGES**

THERE MAY BE PROPOSED AMMENITIES THAT ARE RELEVANT TO THE LANDSCAPE PLAN THAT CAN BE INCORPORATED INTO THE FINAL ENGINEERING PLANS FOR PERMIT WHEN FINALIZED.

ALL AREAS OF THE INDIVIDUAL LOTS 1–5 WHICH FALLS OUTSIDE OF THE ACTUAL BUILDINGS IS COMMON OPEN SPACE AND IS THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION. MAINTENANCE OF OTHER AREAS THAT ARE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION ARE THE PARKING SPACES WITHIN THE RIGHT OF WAY, AND THAT PART OF THE 30' WIDE HARDING COURT RIGHT OF WAY SPUR THAT PROVIDES DRIVEWAY ACCESS TO THE PRIVATE PROPERTY WEST OF AND ADJACENT TO LOT 2.

HARDING AVENUE / COURT RIGHT OF WAY

TOTAL AREA OF RIGHT OF WAY = 33,103 SQ.FT.
PAVEMENT & CURBS = 14,713 SQ.FT.
SIDEWALKS = 4,689 SQ.FT.
DRIVEWAYS & APPROACHES = 5,002 SQ.FT.

LAND USE LEGEND

- PERVIOUS PAVERS
- CONCRETE
- BITUMINOUS PAVEMENT
- BITUMINOUS ROADWAY
- LAWN & LANDSCAPE

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PRELIMINARY P.U.D. PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 1
Project # 895

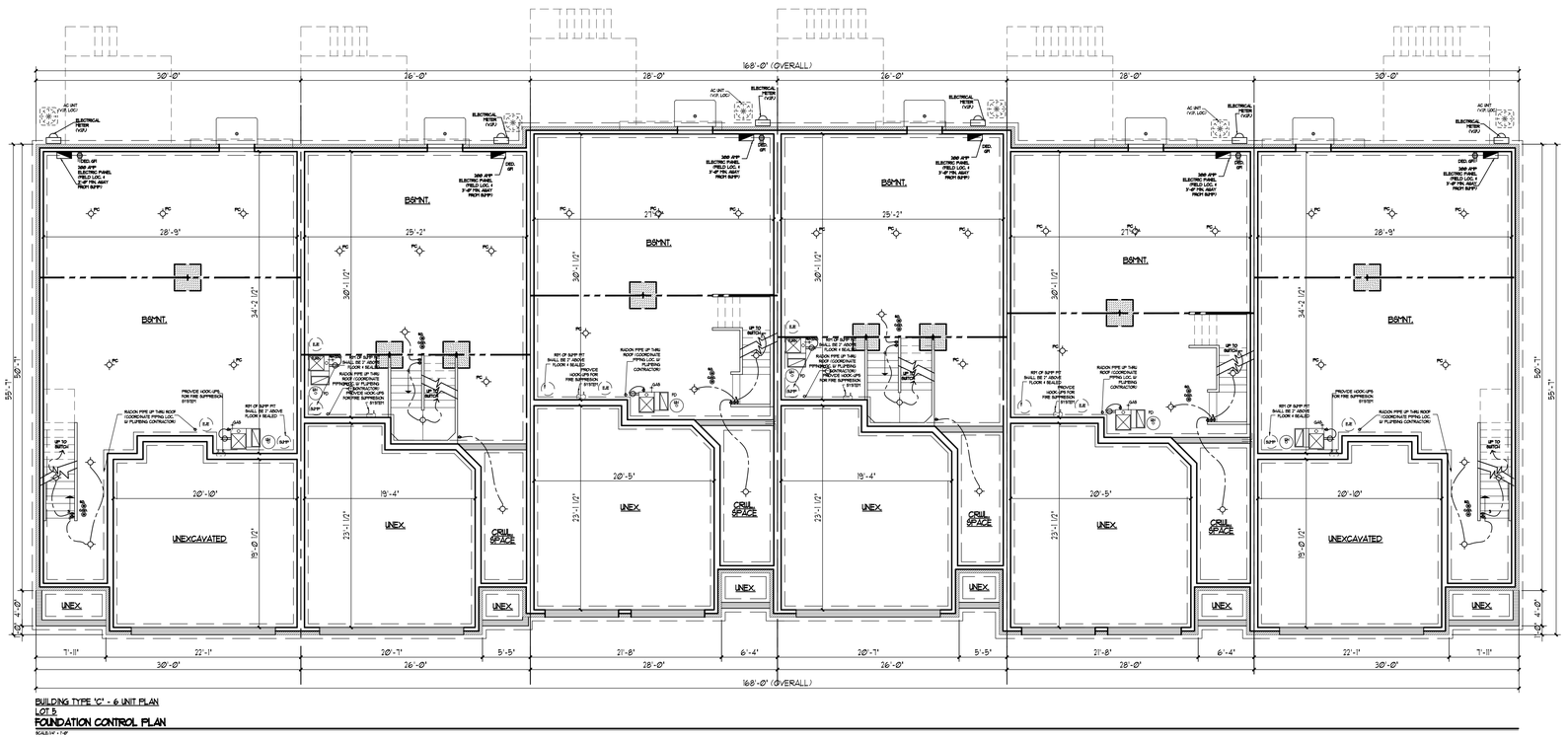
DRAWING FILE NAME: 895-MF-LAND USE

6 UNIT BUILDING FOOTPRINT		
TOTAL:		9,266 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	960 Sq. Ft.
	SECOND FLOOR=	1,214 Sq. Ft.
TOTAL:		2,174 Sq. Ft.
	OPT'L THIRD FLOOR=	282 Sq. Ft.
STANDARD BASEMENT:		724 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		440 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,035 Sq. Ft.
	SECOND FLOOR=	1,327 Sq. Ft.
TOTAL:		2,362 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		856 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		472 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,181 Sq. Ft.
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,251 Sq. Ft.
STANDARD BASEMENT:		1,073 Sq. Ft.
OPT'L FINISHED BASEMENT:		853 Sq. Ft.
GARAGE:		437 Sq. Ft.



BUILDING TYPE 'C' - 6 UNIT PLAN
LOT 5
FOUNDATION CONTROL PLAN
SCALE: 1/4"=1'-0"

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Custom Homes Multifamily Additions Consulting
1109 Ogden Avenue
Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE 'C' - 6 UNIT PLAN
PROPOSED FOUNDATION CONTROL PLAN
BUILDING TYPE 'C' - 6 UNIT PLAN - LOT 5

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A1a

PLOTTED: 4.7.2021 DP-2STORY-11.DWG

6 UNIT BUILDING FOOTPRINT		
TOTAL:		9,266 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	960 Sq. Ft.
	SECOND FLOOR=	1,214 Sq. Ft.
TOTAL:		2,174 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		724 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		440 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,035 Sq. Ft.
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TOTAL:		2,251 Sq. Ft.
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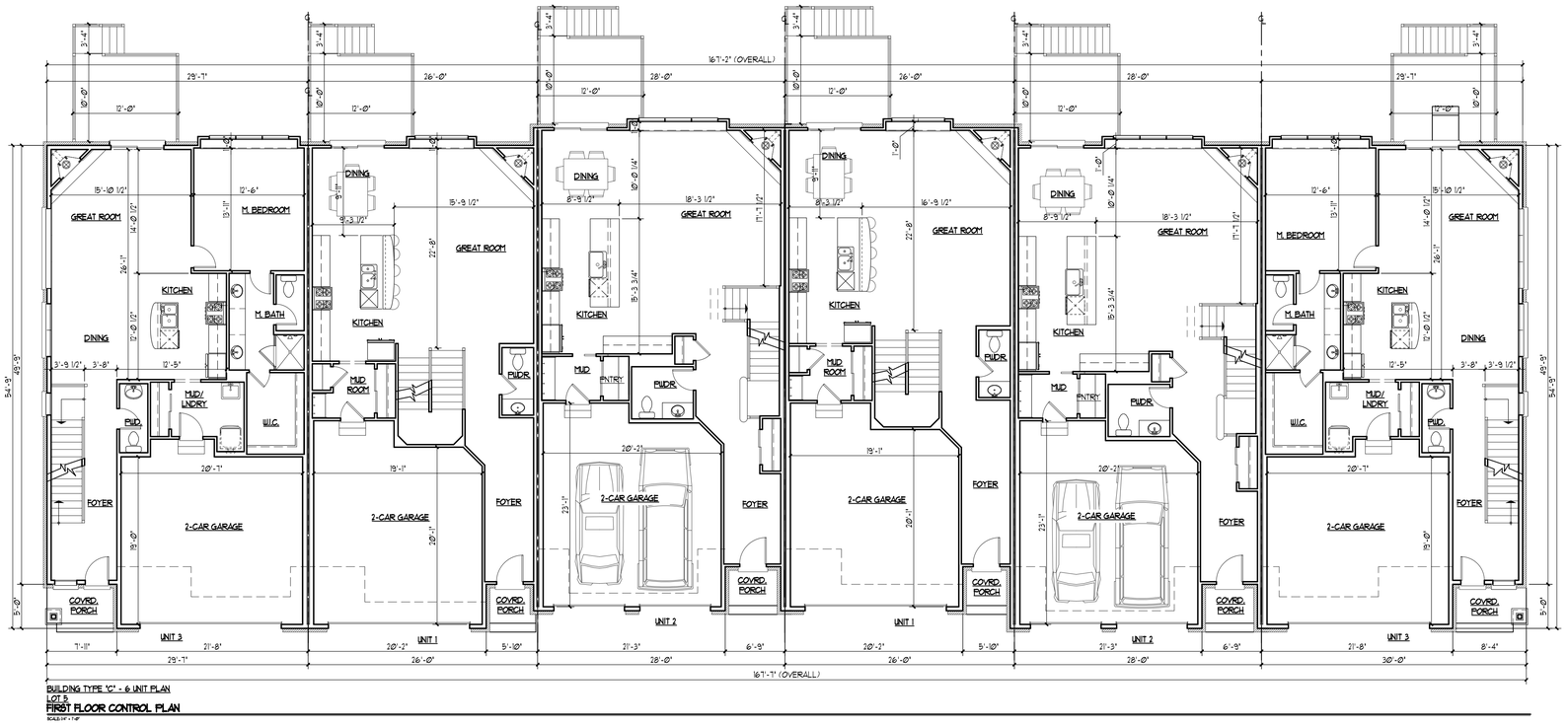
OPT'L FINISHED BASEMENT:		853 Sq. Ft.
GARAGE:		437 Sq. Ft.



BUILDING TYPE "C" - 6 UNIT PLAN
LOT 5
FIRST FLOOR CONTROL PLAN
SCALE: 1/4" = 1'-0"

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Custom Homes Multifamily Additions Consulting
1109 Ogden Avenue
Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYP "C" - 6 UNIT PLAN
PROPOSED FIRST FLOOR CONTROL PLAN
BUILDING TYPE "C" - 6 UNIT PLAN - LOT 5

REVISIONS:
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Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A1b

PLOTTED: 4/7/2021 DP-2STORY-1.DWG

6 UNIT BUILDING FOOTPRINT		
TOTAL:		9,266 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	960 Sq. Ft.
	SECOND FLOOR=	1,214 Sq. Ft.
TOTAL:		2,174 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		724 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		440 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,035 Sq. Ft.
	SECOND FLOOR=	1,327 Sq. Ft.
TOTAL:		2,362 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		856 Sq. Ft.
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GARAGE:		472 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,181 Sq. Ft.
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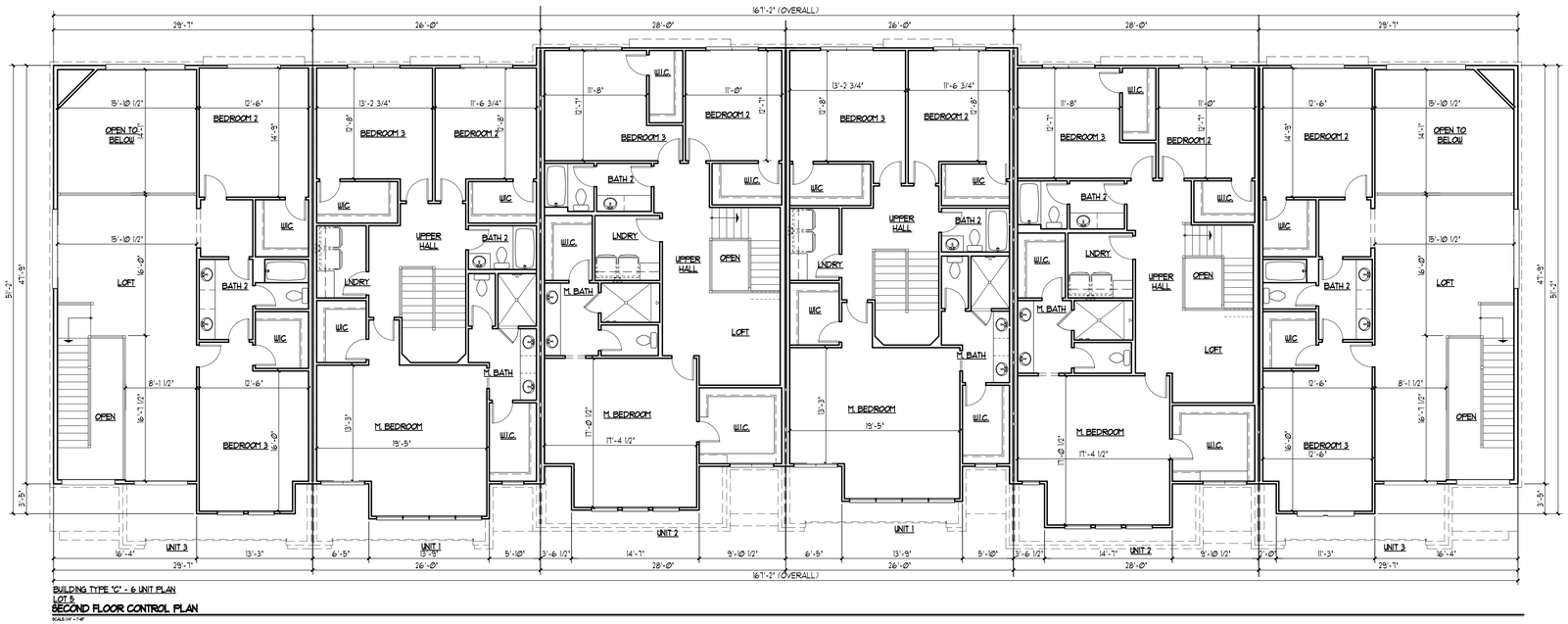

BUILDING TYPE 'C' - 6 UNIT PLAN
LOT 5
SECOND FLOOR CONTROL PLAN
SCALE: 1/4"=1'-0"

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1109 Ogden Avenue
Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE 'C' - 6 UNIT PLAN
PROPOSED SECOND FLOOR CONTROL PLANS
BUILDING TYPE 'C' - 6 UNIT PLAN - LOT 5

REVISIONS:

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Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A1c

PLOTTED: 4/7/2021 DP-2STORY-1.DWG

BUILDING TYPE "C" - 6 UNIT PLAN
LOT 5
(EAST ELEVATION)
FRONT ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "C" - 6 UNIT PLAN
LOT 5
(SOUTH ELEVATION)
RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "C" - 6 UNIT PLAN
LOT 5
(NORTH ELEVATION)
LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "C" - 6 UNIT PLAN
LOT 5
(WEST ELEVATION)
REAR ELEVATION
SCALE: 1/8" = 1'-0"

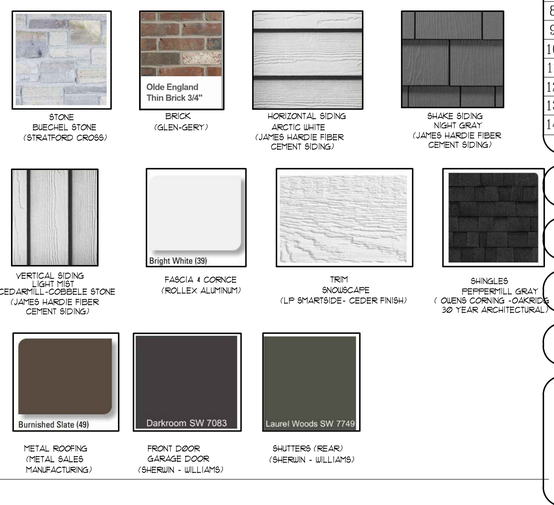
PLOTTED: 4.7.2021 (DP-2STORY-11DWG

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	762.4	763.00
B	766.40	771.050
C	764.90	765.50
D	763.40	764.00
AVERAGE:	764.30	765.75

1. - 30 YEAR ARCHITECTURAL SHINGLES
2. - STANDING SEAM ROOF MATERIAL
3. - CEDAR TRIM (SMARTSIDE)
4. - SMOOTH PANEL SMART TRIM
5. - PREFINISHED ALUMINUM GUTTERS AND FASCIA
6. - SMART TRIM CORNER AND SMART TRIM ACCENT
7. - INSULATED WINDOWS
8. - SMART TRIM SIDES AND SILL W/ SMART TRIM ACCENT
9. - HARDI-BOARD HORIZONTAL SIDING
10. - DECORATIVE CEDAR ACCENT
11. - CEDAR WRAPPED COLUMN
12. - STONE SILL
13. - STONE
14. - SOLDIER COURSE HEADER W/ STONE KEYSTONE
15. - INSULATED DOOR
16. - STONE KEYSTONE W/ STONE ACCENT
17. - INSULATED GARAGE DOOR
18. - ARCHED STONE HEADER W/ DECORATIVE ACCENT
19. - CARRIAGE LIGHT
20. - RECESSED CAN LIGHT IN SOFFIT
21. - HARDI-BOARD VERTICAL SIDING
22. - HARDI-BOARD SHAKE
23. - DECORATIVE VINYL TRIM ACCENTS
24. - HARDI-BOARD VERTICAL SIDING
25. - BRICK
26. - SMART TRIM FRIEZE BOARD
27. - INSULATED SLIDING GLASS DOOR
28. - CONCRETE STOOP AND STEPS / DECKS
29. - ARCHED SMART TRIM W/ SMART TRIM ACCENTS
30. - VINYL PANEL SHUTTERS

COLOR SCHEME - "A"	
BRICK:	GLEN-GERY - OLDE ENGLAND THIN BRICK 3" -
STONE:	BUECHEL STONE - STRATFORD CROSS
VERTICAL SIDING:	JAMES HARDIE FIBER CEMENT SIDING - ARCTIC WHITE
SHAKE SIDING:	JAMES HARDIE FIBER CEMENT SIDING - NIGHT GRAY
HORIZONTAL SIDING	JAMES HARDIE FIBER CEMENT SIDING 6" CEDARMILL - LIGHT MIST
FASCIA & CORNICE:	ROLLEX ALUMINUM FASCIA & SOFFIT - BRIGHT WHITE
TRIM:	LP SMARTSIDE - CEDAR FINISH - SNOUSCAPE WHITE
METAL ROOFING:	METAL SALES MANUFACTURING - STANDING SEAM - BURNISHED SLATE
SHINGLES:	OWENS CORNING - OAKRIDGE 30 YEAR ARCHITECTURAL - PEPPERMILL GRAY
FRONT DOOR:	SW 7083 DARKROOM
SHUTTERS (REAR):	SW 7749 LAUREL WOODS
GARAGE DOOR:	SW 7083 DARKROOM

SAMPLE BOARD - COLOR SCHEME A



STONE
BUECHEL STONE
(STRATFORD CROSS)

BRICK
(GLEN-GERY)

HORIZONTAL SIDING
ARCTIC WHITE
(JAMES HARDIE FIBER CEMENT SIDING)

SHAKE SIDING
NIGHT GRAY
(JAMES HARDIE FIBER CEMENT SIDING)

VERTICAL SIDING
LIGHT MIST
6" CEDARMILL - COBBELE STONE
(JAMES HARDIE FIBER CEMENT SIDING)

FASCIA & CORNICE
(ROLLEX ALUMINUM)

TRIM
SNOUSCAPE
(LP SMARTSIDE- CEDER FINISH)

SHINGLES
PEPPERMILL GRAY
(OWENS CORNING -OAKRIDGE 30 YEAR ARCHITECTURAL)

METAL ROOFING
(METAL SALES - MANUFACTURING)

FRONT DOOR
GARAGE DOOR
(SHERWIN - WILLIAMS)

SHUTTERS (REAR)
(SHERWIN - WILLIAMS)

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Custom Homes Multifamily Additions Consulting
1109 Ogden Avenue
Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYP "C" - 6 UNIT PLAN

PROPOSED ELEVATIONS
BUILDING TYPE "C" - 6 UNIT PLAN - LOT 5

REVISIONS:	
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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

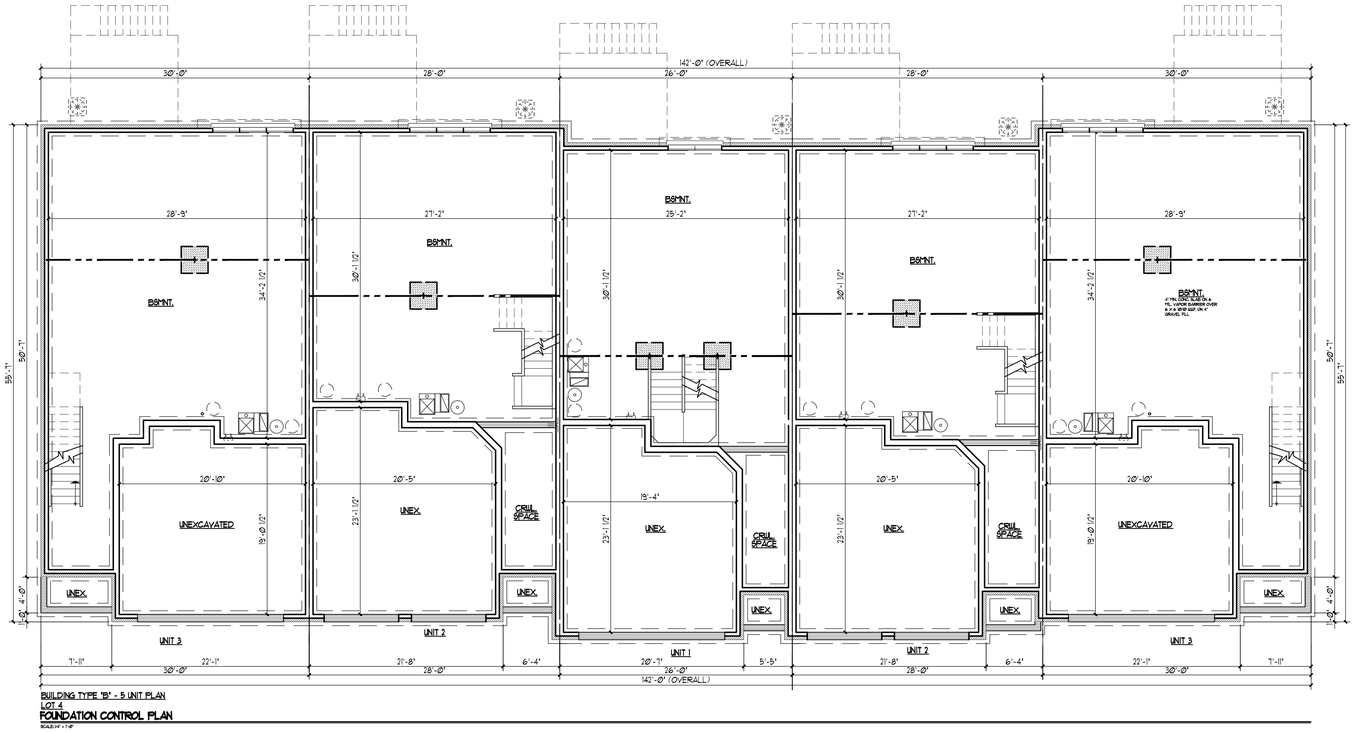
Sheet No. A1d

5 UNIT BUILDING FOOTPRINT		
TOTAL:		7,830 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2,268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1,340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,164 Sq. Ft.
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



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Lisle, Illinois 60532
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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "B" - 5 UNIT PLAN
PROPOSED FOUNDATION CONTROL PLAN
BUILDING TYPE "B" - 5 UNIT PLAN - LOT 4

REVISIONS:
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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A2a

PLOTTED: 4/28/2021 DP-2STORY-11.DWG

5 UNIT BUILDING FOOTPRINT		
TOTAL:		7,830 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2,268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1,340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		691 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
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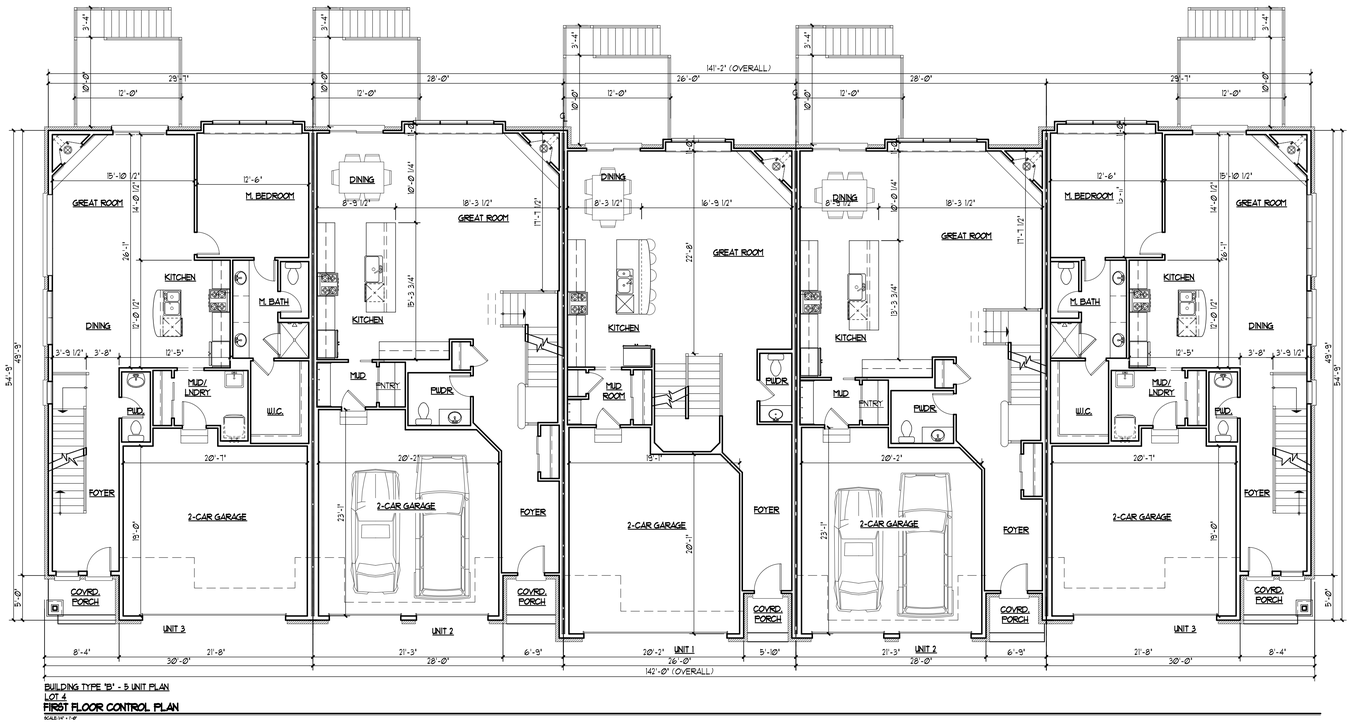
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "B" - 5 UNIT PLAN
PROPOSED FIRST FLOOR CONTROL PLAN
BUILDING TYPE "B" - 5 UNIT PLAN - LOT 4

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A2b

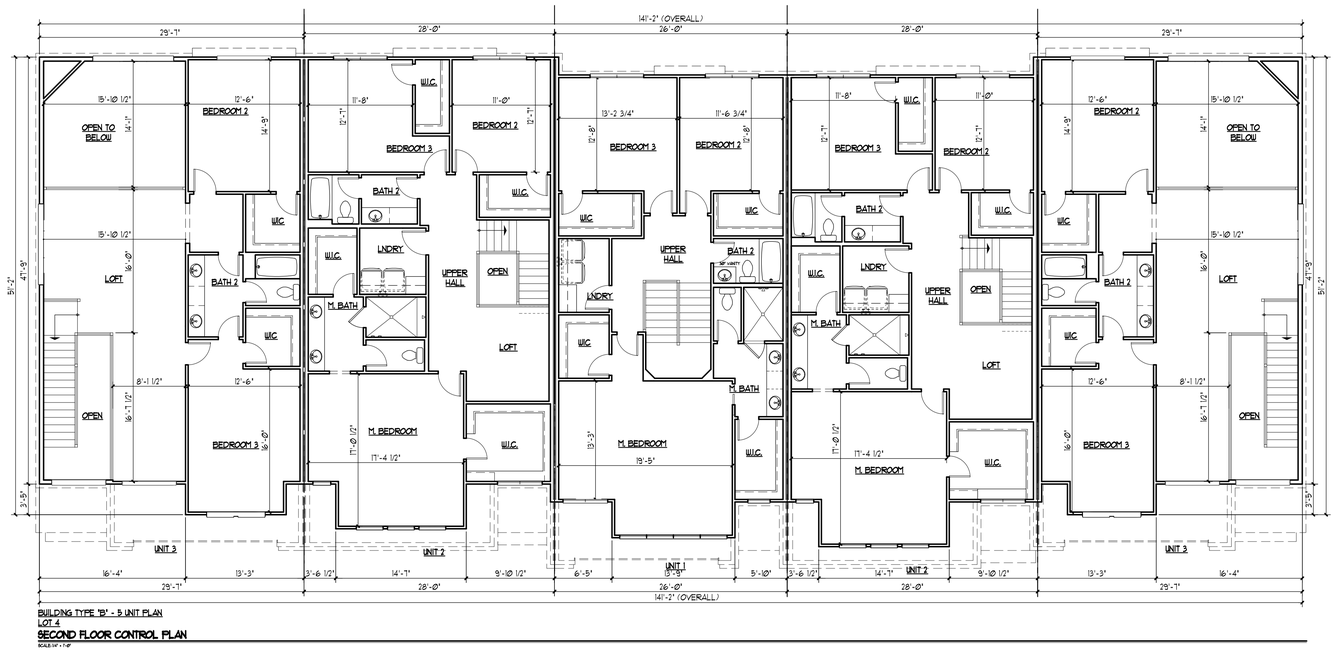
PLOTTED: 4/7/2021 DP-2STORY-11.DWG

5 UNIT BUILDING FOOTPRINT		
TOTAL:		7,830 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2,268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1,340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,164 Sq. Ft.
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		438 Sq. Ft.



BUILDING TYPE "B" - 5 UNIT PLAN
LOT 4

SECOND FLOOR CONTROL PLAN

SCALE: 1/8" = 1'-0"

PLOTTED: 4.7.2021 DP-2STORY-1.DWG

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "B" - 5 UNIT PLAN
PROPOSED SECOND FLOOR CONTROL PLANS
BUILDING TYPE "B" - 5 UNIT PLAN - LOT 4

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

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BUILDING TYPE "B" - 5 UNIT PLAN
LOT 4
(WEST ELEVATION)
FRONT ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "B" - 5 UNIT PLAN
LOT 4
(SOUTH ELEVATION)
RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "B" - 5 UNIT PLAN
LOT 4
(NORTH ELEVATION)
LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "B" - 5 UNIT PLAN
LOT 4
(EAST ELEVATION)
REAR ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	767.20	772.50
B	771.00	772.00
C	769.70	768.50
D	766.10	768.00
AVERAGE:	768.50	771.25

1. - 30 YEAR ARCHITECTURAL SHINGLES
2. - STANDING SEAM ROOF MATERIAL
3. - CEDAR TRIM (SMARTSIDE)
4. - SMOOTH PANEL SMART TRIM
5. - PREFINISHED ALUMINUM GUTTERS AND FASCIA
6. - SMART TRIM CORNER AND SMART TRIM ACCENT
7. - INSULATED WINDOWS
8. - SMART TRIM SIDES AND SILL W/ SMART TRIM ACCENT
9. - HARDI-BOARD HORIZONTAL SIDING
10. - DECORATIVE CEDAR ACCENT
11. - CEDAR WRAPPED COLUMN
12. - STONE SILL
13. - STONE
14. - SOLDIER COURSE HEADER W/ STONE KEYSTONE
15. - INSULATED DOOR
16. - STONE KEYSTONE W/ STONE ACCENT
17. - INSULATED GARAGE DOOR
18. - ARCHED STONE HEADER W/ DECORATIVE ACCENT
19. - CARRIAGE LIGHT
20. - RECESSED CAN LIGHT IN SOFFIT
21. - HARDI-BOARD VERTICAL SIDING
22. - HARDI-BOARD SHAKE
23. - DECORATIVE VINYL TRIM ACCENTS
24. - HARDI-BOARD VERTICAL SIDING
25. - BRICK
26. - SMART TRIM FRIEZE BOARD
27. - INSULATED SLIDING GLASS DOOR
28. - CONCRETE STOOP AND STEPS / DECKS
29. - ARCHED SMART TRIM W/ SMART TRIM ACCENTS
30. - VINYL PANEL SHUTTERS

COLOR SCHEME - "A"	
BRICK:	GLEN-GERY - OLDE ENGLAND THIN BRICK 3" -
STONE:	BUECHEL STONE - STRATFORD CROSS
VERTICAL SIDING:	JAMES HARDIE FIBER CEMENT SIDING - ARCTIC WHITE
SHAKE SIDING:	JAMES HARDIE FIBER CEMENT SIDING - NIGHT GRAY
HORIZONTAL SIDING	JAMES HARDIE FIBER CEMENT SIDING 6" CEDARMILL - LIGHT MIST
FASCIA & CORNICE:	ROLLEX ALUMINUM FASCIA & SOFFIT - BRIGHT WHITE
TRIM:	LP SMARTSIDE - CEDAR FINISH - SNOUSCAPE WHITE
METAL ROOFING:	METAL SALES MANUFACTURING - STANDING SEAM - BURNISHED SLATE
SHINGLES:	QUENS CORNING - OAKRIDGE 30 YEAR ARCHITECTURAL - PEPPERMILL GRAY
FRONT DOOR:	SW 7083 DARKROOM
SHUTTERS (REAR):	SW 7749 LAUREL WOODS
GARAGE DOOR:	SW 7083 DARKROOM

SAMPLE BOARD - COLOR SCHEME A

STONE
BUECHEL STONE
(STRATFORD CROSS)

BRICK
(GLEN-GERY)

HORIZONTAL SIDING
ARCTIC WHITE
(JAMES HARDIE FIBER CEMENT SIDING)

SHAKE SIDING
NIGHT GRAY
(JAMES HARDIE FIBER CEMENT SIDING)

VERTICAL SIDING
LIGHT MIST
6" CEDARMILL-COBBELE STONE
(JAMES HARDIE FIBER CEMENT SIDING)

FASCIA & CORNICE
(ROLLEX ALUMINUM)

TRIM
SNOUSCAPE
(LP SMARTSIDE- CEDER FINISH)

SHINGLES
PEPPERMILL GRAY
(QUENS CORNING -OAKRIDGE 30 YEAR ARCHITECTURAL)

METAL ROOFING
(METAL SALES MANUFACTURING)

FRONT DOOR
GARAGE DOOR
(SHERWIN - WILLIAMS)

SHUTTERS (REAR)
(SHERWIN - WILLIAMS)

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "B" - 5 UNIT PLAN
PROPOSED ELEVATIONS
BUILDING TYPE "B" - 5 UNIT PLAN - LOT 4

REVISIONS:
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Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A2d

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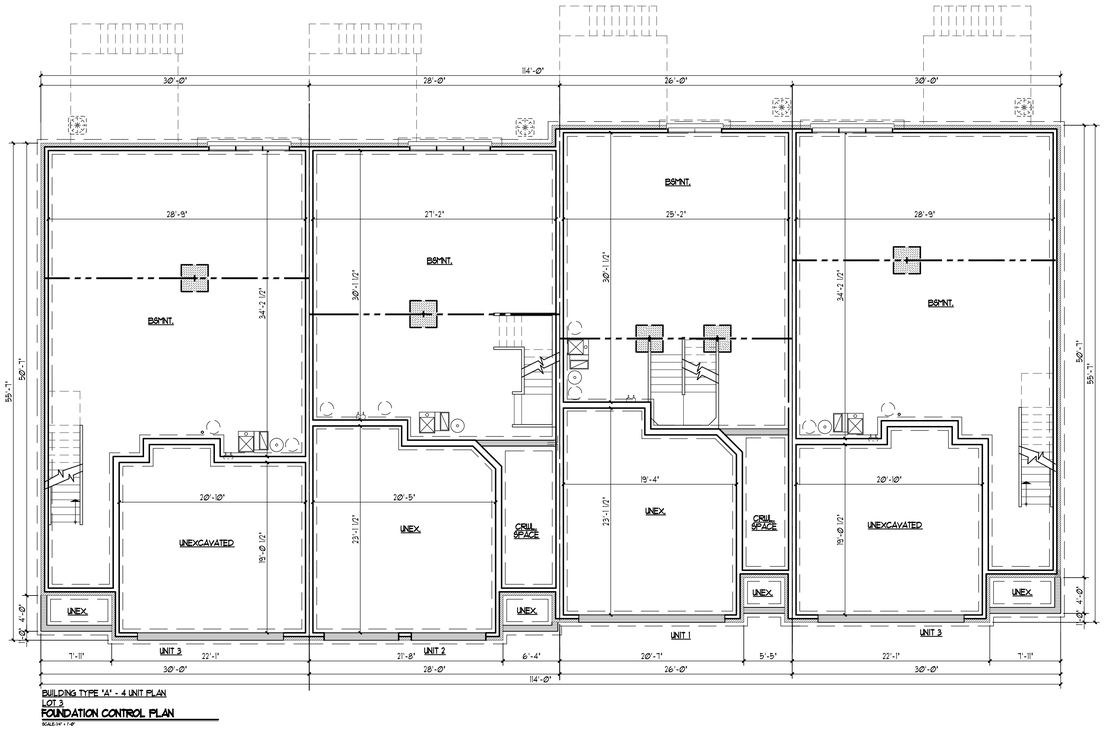
4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE 'A' - 4 UNIT PLAN
LOT 3
FOUNDATION CONTROL PLAN
SCALE: 1/4" = 1'-0"

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE 'A' - 4 UNIT PLAN
PROPOSED FOUNDATION CONTROL PLAN
BUILDING TYPE 'A' - 4 UNIT PLAN - LOT 3

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A3a

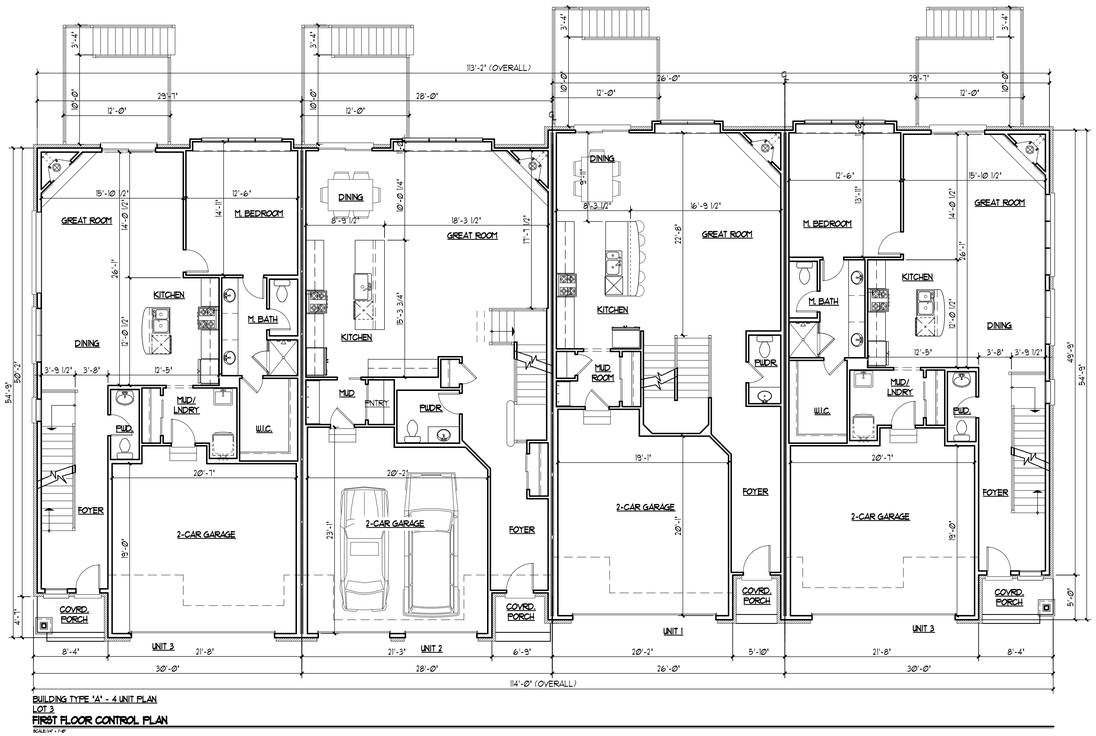
PLOTTED: 4.7.2021 DP-2STORY-11.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		438 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
FIRST FLOOR CONTROL PLAN
SCALE: 1/4"=1'-0"

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED FIRST FLOOR CONTROL PLAN
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 3

REVISIONS:

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Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A3b

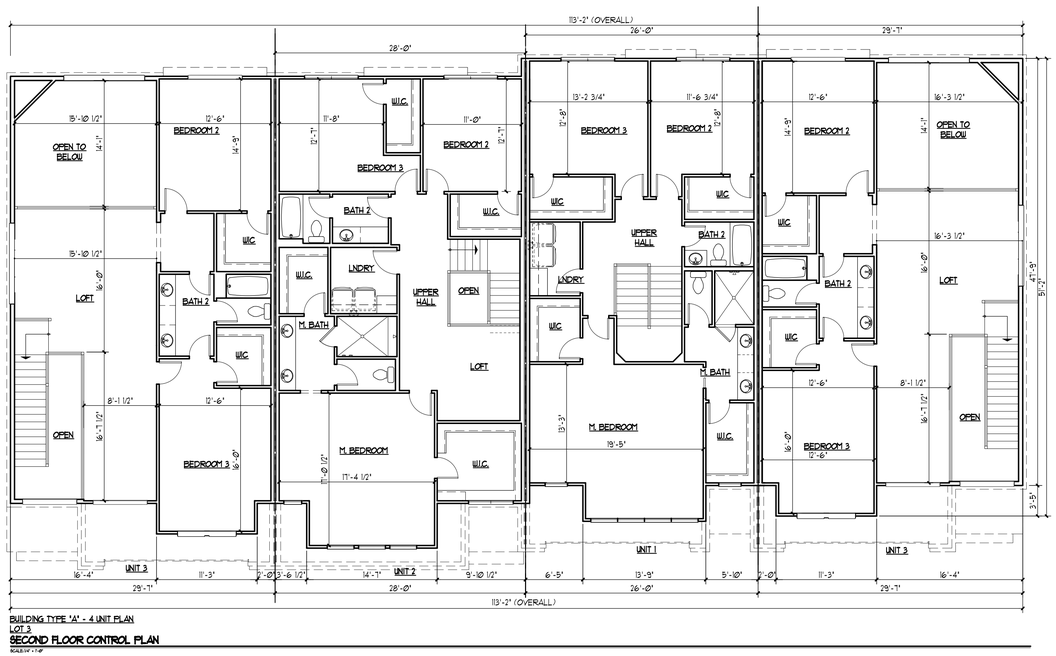
PLOTTED: 4/7/2021 DP-2STORY-11.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
SECOND FLOOR CONTROL PLAN
SCALE: 1/4"

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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED SECOND FLOOR CONTROL PLANS
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 3

REVISIONS:

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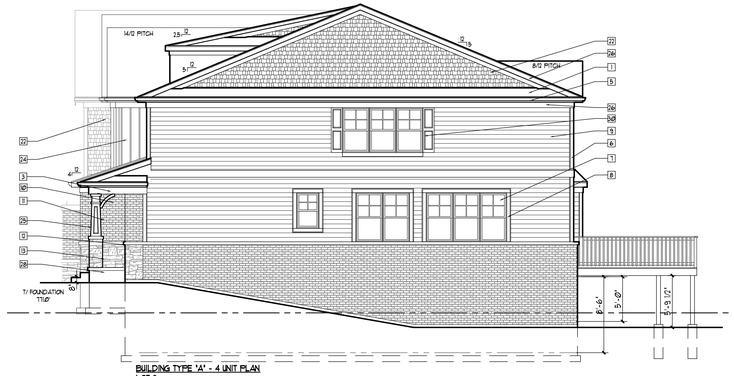
Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A3c

PLOTTED: 4/7/2021 DP-2STORY-11.DWG

BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
(NORTH ELEVATION)
FRONT ELEVATION
SCALE: 1/8" = 1'-0"



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
(WEST ELEVATION)
RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
(EAST ELEVATION)
LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

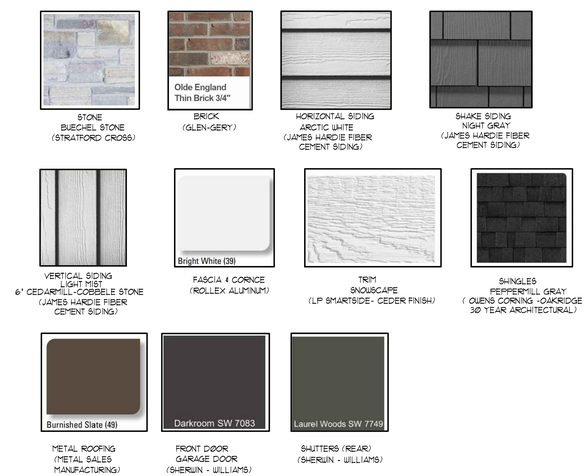
BUILDING TYPE "A" - 4 UNIT PLAN
LOT 3
(SOUTH ELEVATION)
REAR ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	770.10	772.50
B	768.90	767.80
C	768.60	768.50
D	770.40	771.00
AVERAGE:	769.50	769.95

1. - 30 YEAR ARCHITECTURAL SHINGLES
2. - STANDING SEAM ROOF MATERIAL
3. - CEDAR TRIM (SMARTSIDE)
4. - SMOOTH PANEL SMART TRIM
5. - PREFINISHED ALUMINUM GUTTERS AND FASCIA
6. - SMART TRIM CORNER AND SMART TRIM ACCENT
7. - INSULATED WINDOWS
8. - SMART TRIM SIDES AND SILL W/ SMART TRIM ACCENT
9. - HARDI-BOARD HORIZONTAL SIDING
10. - DECORATIVE CEDAR ACCENT
11. - CEDAR WRAPPED COLUMN
12. - STONE SILL
13. - STONE
14. - SOLDIER COURSE HEADER W/ STONE KEYSTONE
15. - INSULATED DOOR
16. - STONE KEYSTONE W/ STONE ACCENT
17. - INSULATED GARAGE DOOR
18. - ARCHED STONE HEADER W/ DECORATIVE ACCENT
19. - CARRIAGE LIGHT
20. - RECESSED CAN LIGHT IN SOFFIT
21. - HARDI-BOARD VERTICAL SIDING
22. - HARDI-BOARD SHAKE
23. - DECORATIVE VINYL TRIM ACCENTS
24. - HARDI-BOARD VERTICAL SIDING
25. - BRICK
26. - SMART TRIM FRIEZE BOARD
27. - INSULATED SLIDING GLASS DOOR
28. - CONCRETE STOOP AND STEPS / DECKS
29. - ARCHED SMART TRIM W/ SMART TRIM ACCENTS
30. - VINYL PANEL SHUTTERS

COLOR SCHEME - "A"	
BRICK:	GLEN-GERY - OLDE ENGLAND THIN BRICK ¾" -
STONE:	BUECHEL STONE - STRATFORD CROSS
VERTICAL SIDING:	JAMES HARDIE FIBER CEMENT SIDING - ARCTIC WHITE
SHAKE SIDING:	JAMES HARDIE FIBER CEMENT SIDING - NIGHT GRAY
HORIZONTAL SIDING	JAMES HARDIE FIBER CEMENT SIDING 6" CEDARMILL - LIGHT MIST
FASCIA & CORNICE:	ROLLEX ALUMINUM FASCIA & SOFFIT - BRIGHT WHITE
TRIM:	LP SMARTSIDE - CEDAR FINISH - SNOUSCAPE WHITE
METAL ROOFING:	METAL SALES MANUFACTURING - STANDING SEAM - BURNISHED SLATE
SHINGLES:	OWENS CORNING - OAKRIDGE 30 YEAR ARCHITECTURAL - PEPPERMILL GRAY
FRONT DOOR:	SW 7083 DARKROOM
SHUTTERS (REAR):	SW 7749 LAUREL WOODS
GARAGE DOOR:	SW 7083 DARKROOM

SAMPLE BOARD - COLOR SCHEME A



STONE
BUECHEL STONE
(STRATFORD CROSS)

BRICK
(GLEN-GERY)

HORIZONTAL SIDING
ARCTIC WHITE
(JAMES HARDIE FIBER CEMENT SIDING)

SHAKE SIDING
NIGHT GRAY
(JAMES HARDIE FIBER CEMENT SIDING)

VERTICAL SIDING
LIGHT MIST
6" CEDARMILL-COBBELE STONE
(JAMES HARDIE FIBER CEMENT SIDING)

FASCIA & CORNICE
(ROLLEX ALUMINUM)

TRIM
SNOUSCAPE
(LP SMARTSIDE- CEDER FINISH)

SHINGLES
PEPPERSMILL GRAY
(OWENS CORNING -OAKRIDGE 30 YEAR ARCHITECTURAL)

METAL ROOFING
(METAL SALES MANUFACTURING)

FRONT DOOR
GARAGE DOOR
(SHERWIN - WILLIAMS)

SHUTTERS (REAR)
(SHERWIN - WILLIAMS)

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Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED ELEVATIONS
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 3

REVISIONS:
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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A3d

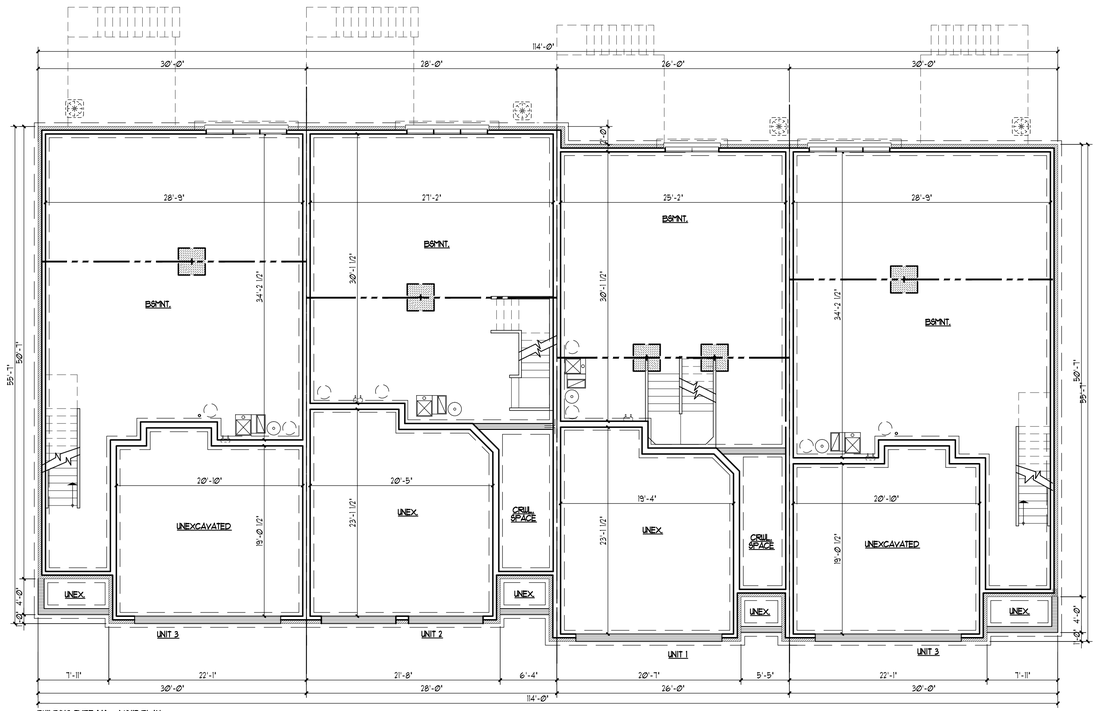
PLOTTED: 4/7/2021 DP-2STORY-11.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,164 Sq. Ft.
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
FOUNDATION CONTROL PLAN
SCALE: 1/8"

PLOTTED: 4/28/2021 DP-2STORY-11.DWG

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED FOUNDATION CONTROL PLAN
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 2

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

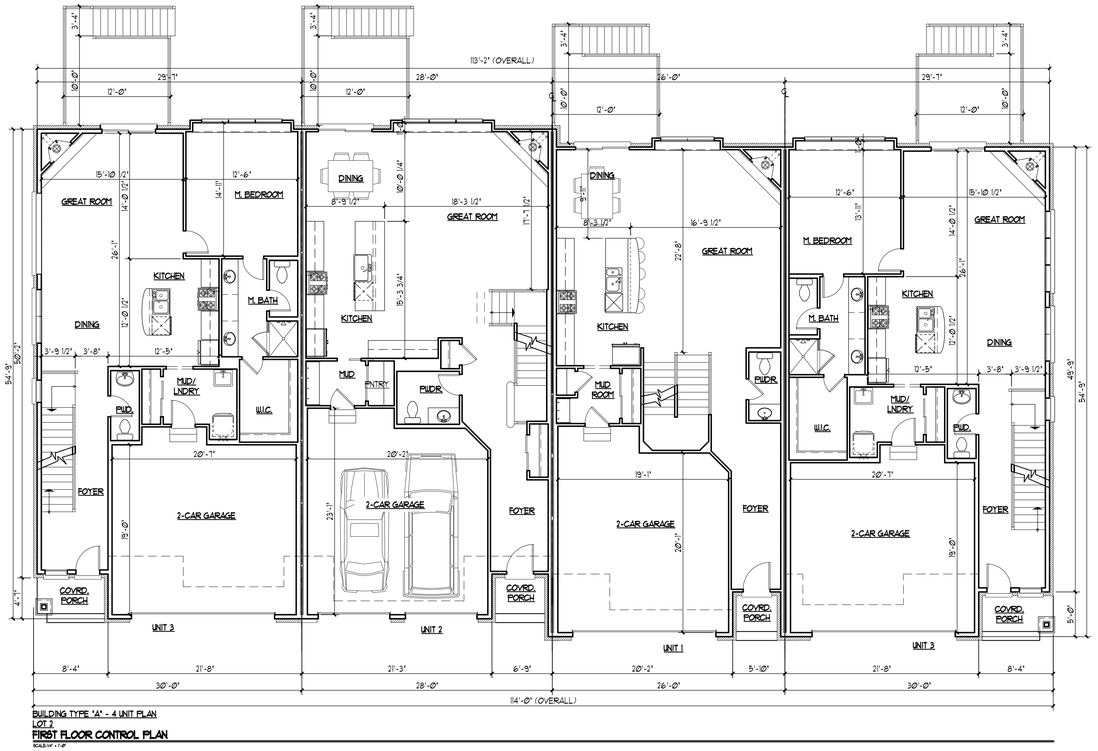
Sheet No. A4a

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES

GLEN ELLYN

BUILDING TYPE "A" - 4 UNIT PLAN

PROPOSED FIRST FLOOR CONTROL PLAN
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 2

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A46

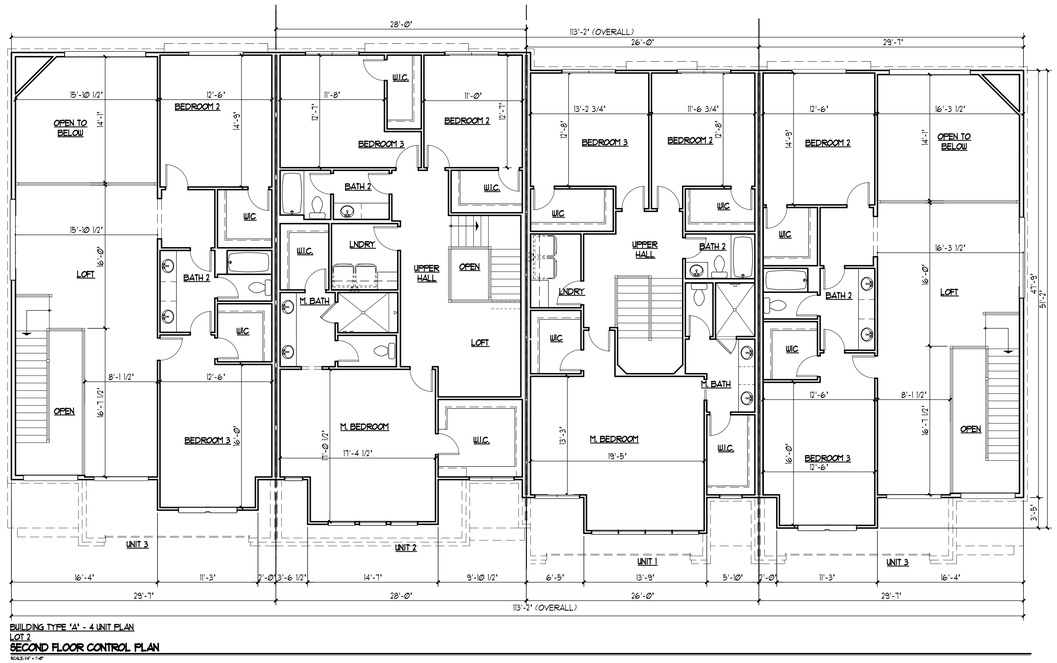
PLOTTED: 4.7.2021 DP-2STORY-1.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
SECOND FLOOR CONTROL PLAN
SCALE: 1/4" = 1'-0"

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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED SECOND FLOOR CONTROL PLANS
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 2

REVISIONS:

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Job No.: dp-2story-11
Date: 4.7.2021
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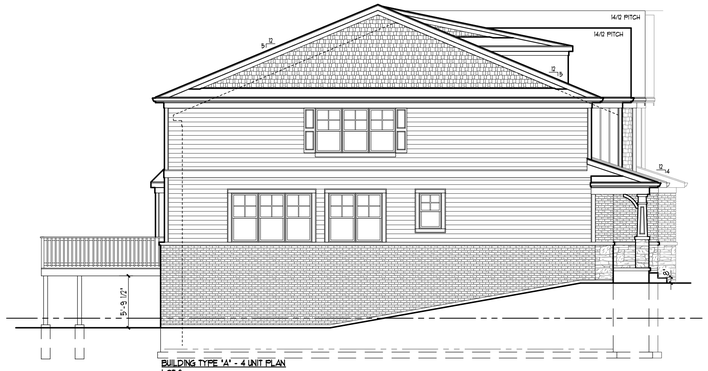
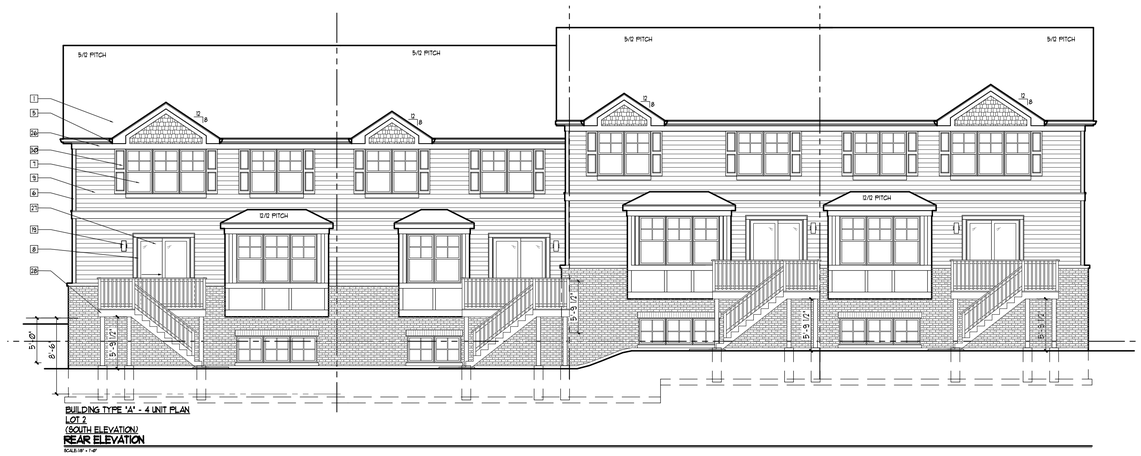
PLOTTED: 4/7/2021 DP-2STORY-1.DWG

BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
(NORTH ELEVATION)
FRONT ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
(WEST ELEVATION)
RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
(EAST ELEVATION)
LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 2
(SOUTH ELEVATION)
REAR ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	768.80	768.10
B	769.20	767.80
C	768.90	767.90
D	770.40	773.10
AVERAGE:	769.35	769.40

1. - 30 YEAR ARCHITECTURAL SHINGLES
2. - STANDING SEAM ROOF MATERIAL
3. - CEDAR TRIM (SMARTSIDE)
4. - SMOOTH PANEL SMART TRIM
5. - PREFINISHED ALUMINUM GUTTERS AND FASCIA
6. - SMART TRIM CORNER AND SMART TRIM ACCENT
7. - INSULATED WINDOWS
8. - SMART TRIM SIDES AND SILL W/ SMART TRIM ACCENT
9. - HARDI-BOARD HORIZONTAL SIDING
10. - DECORATIVE CEDAR ACCENT
11. - CEDAR WRAPPED COLUMN
12. - STONE SILL
13. - STONE
14. - SOLDIER COURSE HEADER W/ STONE KEYSTONE
15. - INSULATED DOOR
16. - STONE KEYSTONE W/ STONE ACCENT
17. - INSULATED GARAGE DOOR
18. - ARCHED STONE HEADER W/ DECORATIVE ACCENT
19. - CARRIAGE LIGHT
20. - RECESSED CAN LIGHT IN SOFFIT
21. - HARDI-BOARD VERTICAL SIDING
22. - HARDI-BOARD SHAKE
23. - DECORATIVE VINYL TRIM ACCENTS
24. - HARDI-BOARD VERTICAL SIDING
25. - BRICK
26. - SMART TRIM FRIEZE BOARD
27. - INSULATED SLIDING GLASS DOOR
28. - CONCRETE STOOP AND STEPS / DECKS
29. - ARCHED SMART TRIM W/ SMART TRIM ACCENTS
30. - VINYL PANEL SHUTTERS

COLOR SCHEME - "A"	
BRICK:	GLEN-GERY - OLDE ENGLAND THIN BRICK ¾" -
STONE:	BUECHEL STONE - STRATFORD CROSS
VERTICAL SIDING:	JAMES HARDIE FIBER CEMENT SIDING - ARCTIC WHITE
SHAKE SIDING:	JAMES HARDIE FIBER CEMENT SIDING - NIGHT GRAY
HORIZONTAL SIDING	JAMES HARDIE FIBER CEMENT SIDING 6" CEDARMILL - LIGHT MIST
FASCIA & CORNICE:	ROLLEX ALUMINUM FASCIA & SOFFIT - BRIGHT WHITE
TRIM:	LP SMARTSIDE - CEDAR FINISH - SNOUSCAPE WHITE
METAL ROOFING:	METAL SALES MANUFACTURING - STANDING SEAM - BURNISHED SLATE
SHINGLES:	OWENS CORNING - OAKRIDGE 30 YEAR ARCHITECTURAL - PEPPERMILL GRAY
FRONT DOOR:	SW 7083 DARKROOM
SHUTTERS (REAR):	SW 7749 LAUREL WOODS
GARAGE DOOR:	SW 7083 DARKROOM

SAMPLE BOARD - COLOR SCHEME A

STONE
BUECHEL STONE
(STRATFORD CROSS)

BRICK
(GLEN-GERY)

HORIZONTAL SIDING
ARCTIC WHITE
(JAMES HARDIE FIBER CEMENT SIDING)

SHAKE SIDING
NIGHT GRAY
(JAMES HARDIE FIBER CEMENT SIDING)

VERTICAL SIDING
LIGHT MIST
6" CEDARMILL-COBBELE STONE
(JAMES HARDIE FIBER CEMENT SIDING)

FASCIA & CORNCE
(ROLLEX ALUMINUM)

TRIM
SNOUSCAPE
(LP SMARTSIDE- CEDER FINISH)

SHINGLES
PEPPERMILL GRAY
(OWENS CORNING -OAKRIDGE 30 YEAR ARCHITECTURAL)

METAL ROOFING
(METAL SALES MANUFACTURING)

FRONT DOOR
GARAGE DOOR
(SHERWIN - WILLIAMS)

SHUTTERS (REAR)
(SHERWIN - WILLIAMS)

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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED ELEVATIONS
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 2

REVISIONS:
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Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A4.0

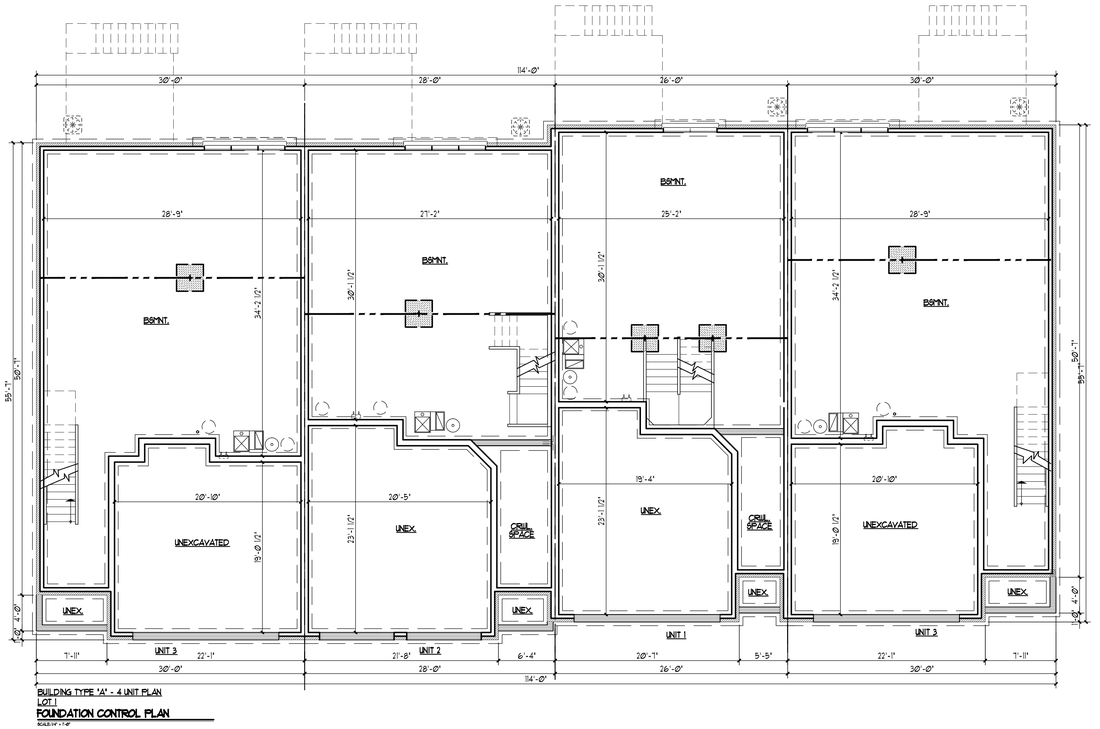
PLOTTED: 4.7.2021 DP-2STORY-11DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1,312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1,021 Sq. Ft.
	SECOND FLOOR=	1,340 Sq. Ft.
TOTAL:		2,361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1,164 Sq. Ft.
	SECOND FLOOR=	1,070 Sq. Ft.
TOTAL:		2,234 Sq. Ft.
STANDARD BASEMENT:		1,071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



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PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
FOUNDATION CONTROL PLAN
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 1

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A5a

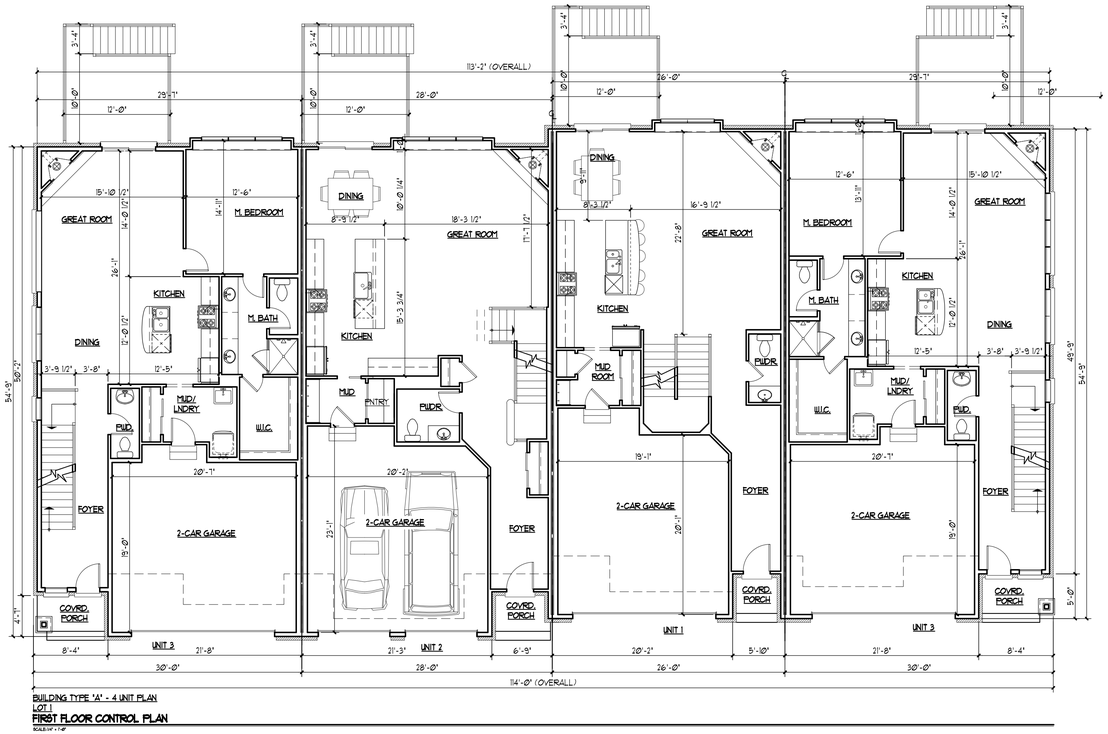
PLOTTED: 4.7.2021//DP-2STORY-11.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 1
FIRST FLOOR CONTROL PLAN
SCALE: 1/4"=1'-0"

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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED FIRST FLOOR CONTROL PLAN
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 1

REVISIONS:

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Drawn By: MIKES

Job No.: dp-2story-11

Date: 4.7.2021

Issued For Permit:

Sheet No. A5b

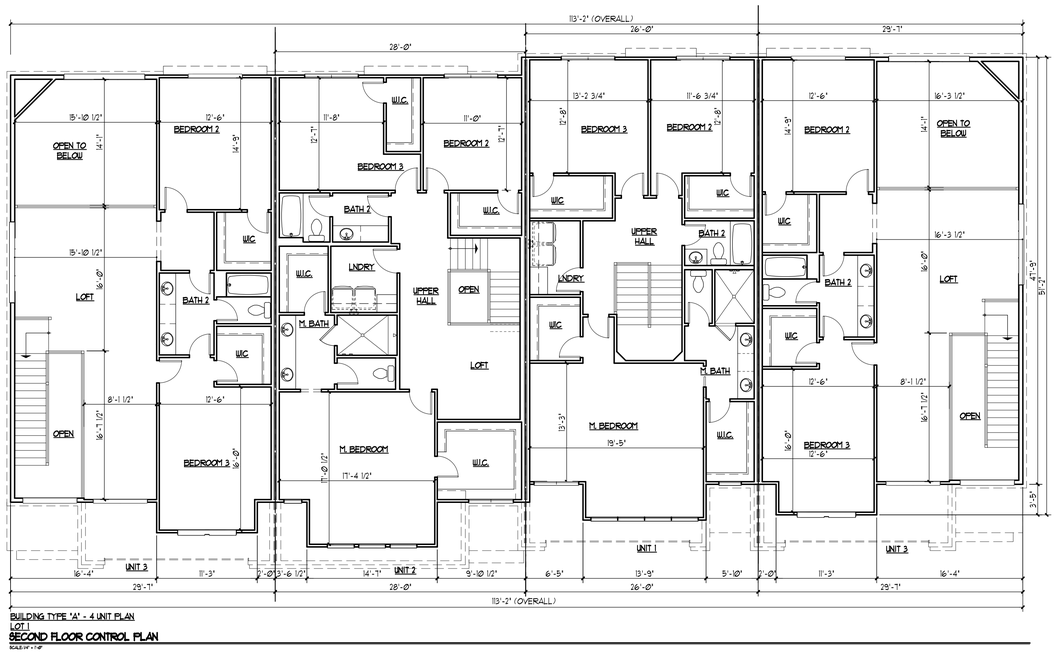
PLOTTED: 4/7/2021 DP-2STORY-1.DWG

4 UNIT BUILDING FOOTPRINT		
TOTAL:		6285 Sq. Ft.

BUILDING AREA (square feet) 26' UNIT		
LIVING AREA:	FIRST FLOOR=	956 Sq. Ft.
	SECOND FLOOR=	1312 Sq. Ft.
TOTAL:		2268 Sq. Ft.
	OPT'L THIRD FLOOR=	292 Sq. Ft.
STANDARD BASEMENT:		808 Sq. Ft.
OPT'L FINISHED BASEMENT:		653 Sq. Ft.
GARAGE:		442 Sq. Ft.

BUILDING AREA (square feet) 28' UNIT		
LIVING AREA:	FIRST FLOOR=	1021 Sq. Ft.
	SECOND FLOOR=	1340 Sq. Ft.
TOTAL:		2361 Sq. Ft.
	OPT'L THIRD FLOOR=	310 Sq. Ft.
STANDARD BASEMENT:		860 Sq. Ft.
OPT'L FINISHED BASEMENT:		697 Sq. Ft.
GARAGE:		474 Sq. Ft.

BUILDING AREA (square feet) 30' UNIT		
LIVING AREA:	FIRST FLOOR=	1164 Sq. Ft.
	SECOND FLOOR=	1070 Sq. Ft.
TOTAL:		2234 Sq. Ft.
STANDARD BASEMENT:		1071 Sq. Ft.
OPT'L FINISHED BASEMENT:		852 Sq. Ft.
GARAGE:		439 Sq. Ft.



BUILDING TYPE "A" - 4 UNIT PLAN
LOT 1
SECOND FLOOR CONTROL PLAN

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Lisle, Illinois 60532
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PROPOSED TOWNHOMES FOR HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED SECOND FLOOR CONTROL PLANS
BUILDING "A" - 4 UNIT PLAN - LOT 1

REVISIONS:

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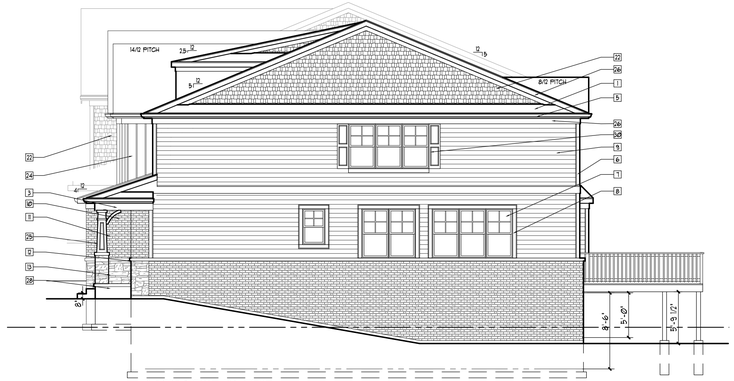
Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A5c

PLOTTED: 4/7/2021 DP-2STORY-1.DWG

BUILDING TYPE 'A' - 4 UNIT PLAN
LOT 1
(EAST ELEVATION)
FRONT ELEVATION
SCALE:1/8" = 1'-0"



BUILDING TYPE 'A' - 4 UNIT PLAN
LOT 1
(NORTH ELEVATION)
RIGHT SIDE ELEVATION
SCALE:1/8" = 1'-0"

BUILDING TYPE 'A' - 4 UNIT PLAN
LOT 1
(SOUTH ELEVATION)
LEFT SIDE ELEVATION
SCALE:1/8" = 1'-0"

BUILDING TYPE 'A' - 4 UNIT PLAN
LOT 1
(WEST ELEVATION)
REAR ELEVATION
SCALE:1/8" = 1'-0"

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	161.50	161.0
B	163.40	163.60
C	168.10	169.70
D	166.20	166.70
AVERAGE:	164.80	165.25

1. - 30 YEAR ARCHITECTURAL SHINGLES
2. - STANDING SEAM ROOF MATERIAL
3. - CEDAR TRIM (SMARTSIDE)
4. - SMOOTH PANEL SMART TRIM
5. - PREFINISHED ALUMINUM GUTTERS AND FASCIA
6. - SMART TRIM CORNER AND SMART TRIM ACCENT
7. - INSULATED WINDOWS
8. - SMART TRIM SIDES AND SILL W/ SMART TRIM ACCENT
9. - HARDI-BOARD HORIZONTAL SIDING
10. - DECORATIVE CEDAR ACCENT
11. - CEDAR WRAPPED COLUMN
12. - STONE SILL
13. - STONE
14. - SOLDIER COURSE HEADER W/ STONE KEYSTONE
15. - INSULATED DOOR
16. - STONE KEYSTONE W/ STONE ACCENT
17. - INSULATED GARAGE DOOR
18. - ARCHED STONE HEADER W/ DECORATIVE ACCENT
19. - CARRIAGE LIGHT
20. - RECESSED CAN LIGHT IN SOFFIT
21. - HARDI-BOARD VERTICAL SIDING
22. - HARDI-BOARD SHAKE
23. - DECORATIVE VINYL TRIM ACCENTS
24. - HARDI-BOARD VERTICAL SIDING
25. - BRICK
26. - SMART TRIM FRIEZE BOARD
27. - INSULATED SLIDING GLASS DOOR
28. - CONCRETE STOOP AND STEPS / DECKS
29. - ARCHED SMART TRIM W/ SMART TRIM ACCENTS
30. - VINYL PANEL SHUTTERS

COLOR SCHEME - "A"	
BRICK:	GLEN-GERY - OLDE ENGLAND THIN BRICK ¾" -
STONE:	BUECHEL STONE - STRATFORD CROSS
VERTICAL SIDING:	JAMES HARDIE FIBER CEMENT SIDING - ARCTIC WHITE
SHAKE SIDING:	JAMES HARDIE FIBER CEMENT SIDING - NIGHT GRAY
HORIZONTAL SIDING	JAMES HARDIE FIBER CEMENT SIDING 6" CEDARMILL - LIGHT MIST
FASCIA & CORNICE:	ROLLEX ALUMINUM FASCIA & SOFFIT - BRIGHT WHITE
TRIM:	LP SMARTSIDE - CEDAR FINISH - SNOUSCAPE WHITE
METAL ROOFING:	METAL SALES MANUFACTURING - STANDING SEAM - BURNISHED SLATE
SHINGLES:	OUENS CORNING - OAKRIDGE 30 YEAR ARCHITECTURAL - PEPPERMILL GRAY
FRONT DOOR:	SW 7083 DARKROOM
SHUTTERS (REAR):	SW 7749 LAUREL WOODS
GARAGE DOOR:	SW 7083 DARKROOM

SAMPLE BOARD - COLOR SCHEME A

STONE
BUECHEL STONE
(STRATFORD CROSS)

BRICK
(GLEN-GERY)

HORIZONTAL SIDING
ARCTIC WHITE
(JAMES HARDIE FIBER CEMENT SIDING)

SHAKE SIDING
NIGHT GRAY
(JAMES HARDIE FIBER CEMENT SIDING)

VERTICAL SIDING
LIGHT MIST
6" CEDARMILL-COBBELE STONE
(JAMES HARDIE FIBER CEMENT SIDING)

FASCIA & CORNCE
(ROLLEX ALUMINUM)

TRIM
SNOUSCAPE
(LP SMARTSIDE- CEDER FINISH)

SHINGLES
PEPPERMILL GRAY
(OUENS CORNING -OAKRIDGE 30 YEAR ARCHITECTURAL)

METAL ROOFING
(METAL SALES MANUFACTURING)

FRONT DOOR
GARAGE DOOR
(SHERWIN - WILLIAMS)

SHUTTERS (REAR)
(SHERWIN - WILLIAMS)

Copyright 2011 B. L. R. Architects Ltd.

B. L. R. Architects
Custom Homes Multifamily Additions Consulting
1109 Ogden Avenue
Lisle, Illinois 60532
Phone: 630.435.0100 Fax: 630.435.0101

PROPOSED TOWNHOMES FOR
HARDING CUSTOM HOMES
GLEN ELLYN
BUILDING TYPE "A" - 4 UNIT PLAN
PROPOSED ELEVATIONS
BUILDING TYPE "A" - 4 UNIT PLAN - LOT 1

REVISIONS:
1
2
3
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12
13
14

Drawn By: MIKES
Job No.: dp-2story-11
Date: 4.7.2021
Issued For Permit:
Sheet No. A5.1

PLOTTED: 4/7/2021 DP-2STORY-11.DWG

All or Part of P.I.N.
05-23-223-020
05-23-223-005
05-23-223-025
05-23-223-008
05-23-223-___

SITE IMPROVEMENT PLANS FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2

NET AREA OF PROPERTY = 138,755 SQ.FT. , 3.1860 ACRES
EXISTING HARDING 33' R/W = 7,913 SQ.FT. , 0.1817 ACRES
TOTAL AREA OF PROJECT SITE = 146,668 SQ.FT. , 3.3676 ACRES

GENERAL NOTES

1.) THE ENGINEERING DIVISION OF THE VILLAGE OF GLEN ELLYN MUST BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK. A PRE CONSTRUCTION MEETING WILL NEED TO BE HELD INVOLVING THE DEVELOPER/APPLICANT, GENERAL CONTRACTOR, UNDERGROUND CONTRACTOR AND THE VILLAGE STAFF.

2.) ALL ELEVATIONS SHOWN ARE DATUM NAVD88.

3.) THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 TO OBTAIN THE LOCATION OF ALL UTILITIES PRIOR TO ANY WORK IN AN EASEMENT, RIGHT OF WAY OR SUSPECTED UTILITY LOCATION.

4.) THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE RESPONSIBLE FOR ANY DAMAGE THERETO.

5.) THE CONTRACTOR SHALL INDEMNIFY THE VILLAGE OF GLEN ELLYN AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF WORK ASSOCIATED WITH THIS PROJECT.

6.) ERRORS AND OMISSIONS IN REVIEWING THE PLANS AND OR SPECIFICATIONS SHALL NOT RELIEVE THE OWNER, DEVELOPER, OR THE CONTRACTOR FROM CONSTRUCTING THE IMPROVEMENTS PER VILLAGE REQUIREMENTS.

7.) THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY STATE AND COUNTY PERMITS.

8.) Standard Specifications That Govern This Project

8.1 All construction performed shall conform to the applicable sections of:

A. The General Requirements and Special Provisions provided within this Site Improvement Plan Set.

B. Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016 or latest edition. Hereinafter referred to as IDOT Standard Specifications.

C. Illinois Department of Transportation "Supplemental Specifications and Recurring Special Provisions", adopted April 1, 2016 or latest edition.

D. Standard Specifications for Water and Sewer Main Construction in Illinois, 7th Edition, 2014.

E. Federal Highway Administration "Manual on Uniform Traffic Control Devices" latest Edition.

F. In case of conflict with the above Standard Specifications, the Village Code of the Village of Glen Ellyn, Illinois, shall take precedence and shall govern.

8.2 The items contained within this Plan Set shall serve as a guide to items of specific requirements in the Village of Glen Ellyn.

8.3 Where reference is made to "The Village" it shall be interpreted to mean the Public Works Director or the Public Works Professional Engineer or a designated representative of the Public Works Director.

GENERAL CONSTRUCTION NOTES

1.) WATER FOR CONSTRUCTION SHALL BE BROUGHT IN FROM OFFSITE, OR THE CONTRACTOR CAN SECURE A WATER METER FROM PUBLIC WORKS TO BE USED AT AN APPROVED LOCATION NEAR THE SITE.

2.) CONSTRUCTION VEHICLES SHALL BE PARKED ON THE SOUTH SIDE OF HARDING AVENUE ONLY.

3.) ALL TREES ON THE SITE, EXCEPT THOSE DESIGNATED TO BE REMOVED, SHALL BE PROTECTED.

4.) THE CONTRACTOR SHALL BE REQUIRED TO KEEP THE STREETS CLEAN THROUGHOUT CONSTRUCTION.

5.) ALL ACCESS TO AND FROM THE SITE BY CONSTRUCTION VEHICLES SHALL BE VIA THE BITUMINOUS DRIVEWAY.

6.) THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION LATEST REVISION, AND THE STANDARD SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST REVISION, SHALL GOVERN CONSTRUCTION FOR THE PROPOSED IMPROVEMENT UNLESS SUPERSEDED BY SPECIAL PROVISIONS IN THE VILLAGE OF GLEN ELLYN SUBDIVISION AND ENGINEERING SPECIFICATIONS MANUAL.

7.) THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF GLEN ELLYN AT LEAST TWO (2) WORKING DAYS BEFORE THE INITIAL START OF OPERATIONS, OPENING ANY STREET PAVEMENT OR ANY TEMPORARY STOP OR RESUMPTION OF OPERATIONS.

8.) ALL NEW UNDERGROUND SERVICES SHALL BE PLACED AT LEAST FIVE (5) FEET FROM SANITARY AND WATER SERVICES.

9.) WHEREVER THE WORDS "ENGINEER" OR "INSPECTOR" APPEAR, IT SHALL BE INTERPRETED TO MEAN A REPRESENTATIVE OF THE VILLAGE OF GLEN ELLYN.

10.) A COPY OF THE VILLAGE APPROVED STAMPED PLANS AND SPECIFICATIONS AND OTHER AGENCIES' PERMITS, I.E. COUNTY HIGHWAY, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, ETC. MUST BE KEPT ON THE JOB SITE DURING CONSTRUCTION.

11.) CHANGES IN THE ENGINEERING PLANS MUST BE APPROVED BY THE VILLAGE ENGINEER, A WRITTEN REQUEST, ACCOMPANIED BY REVISED ENGINEERING PLANS, IS TO BE SUBMITTED AND APPROVED BEFORE CHANGES ARE STARTED.

12.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES (AMERITECH, COMMONWEALTH EDISON ELECTRIC COMPANY, ETC.) PRIOR TO CONSTRUCTION AND ALL UTILITIES DAMAGED AND/OR DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER, LOCATIONS AS SHOWN ARE APPROXIMATE AND BASED UPON THE BEST AVAILABLE INFORMATION, CALL J.U.L.I.E. FOR MAJOR UTILITY LOCATIONS.

13.) THE CONTRACTOR IS TO VERIFY ALL ELEVATIONS PRIOR TO THE START OF WORK AND, IF THERE ARE ANY DISCREPANCIES, IS TO NOTIFY THE DESIGN ENGINEER AT ONCE, NO WORK SHALL BE DONE UNTIL THE DISCREPANCIES ARE RESOLVED.

14.) EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE REMOVED TO A MINIMUM DISTANCE OF 15 FEET ON EACH SIDE OF ANY EXISTING UTILITIES TO REMAIN IN SERVICE AND/OR ANY PROPOSED UTILITIES.

GENERAL UTILITY SERVICE NOTES

1.) WATER SERVICE SHALL BE 1-1/2" COPPER (TYPE "K")

2.) SANITARY SEWER SERVICES SHALL BE 6" P.V.C. PIPE (SDR-26) ASTM D-2241 @ A MINIMUM 1.0% SLOPE

3.) RESTORE PAVED AREAS DISTURBED DURING THE INSTALLATION OF SEWER & WATER SERVICE

4.) ALL TRENCHES SHALL BE BACKFILLED WITH CA-6 GRANULAR MATERIAL UNDER ROADWAYS, DRIVEWAYS AND SIDEWALKS, AND EXTEND 2' BEYOND ALL EXISTING AND PROPOSED PAVED AREAS. RECYCLED CONCRETE CA-6 WILL BE ALLOWED PROVIDED IT MEETS IDOT GRADATION REQUIREMENTS. TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.

GENERAL GRADING NOTES

1.) MATCH EXISTING GRADES AT THE PROPERTY LINES.

2.) DIRECT DOWNSPOUTS AND SUMP DISCHARGE TOWARDS THE REAR AND FRONT YARD SWALES.

3.) THE EXISTING DRAINAGE CHARACTERISTICS OF THE SITE SHALL REMAIN SUBSTANTIALLY UNCHANGED.

4.) ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION.

5.) ONLY THAT MATERIAL NEEDED FOR FOUNDATION BACKFILL AND FINAL GRADING SHALL BE STORED ONSITE.

6.) ALL GRADING OPERATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ELEVATIONS AND GRADES, AS SHOWN ON THE PLANS OR MODIFIED BY THE VILLAGE ENGINEER.

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.
(787 HARDING AVENUE)
PIN 05-23-223-020
47,101 Sq. Ft.

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.
(NO ADDRESS ASSIGNED)
PIN 05-23-223-005
43,468 Sq. Ft.

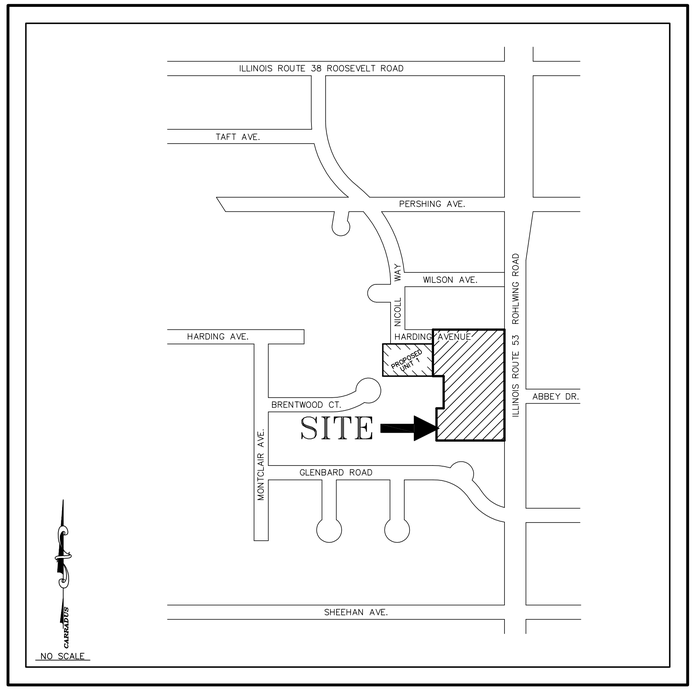
PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.
(138 IL. STATE ROUTE 53)
PIN 05-23-223-008
43,562 Sq. Ft.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS
(PART OF 128 IL. STATE ROUTE 53)
PART OF PIN 05-23-223-025
4,624 Sq. Ft.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

EXISTING 33' HARDING RIGHT OF WAY
7,913 Sq. Ft.

LOCATION MAP



TOPOGRAPHICAL SURVEY AND GRADING PLAN LEGEND

Description	Proposed	Existing
TOPOGRAPHIC CONTOUR	886	886
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
SANITARY SEWER SERVICE	6" PVC PIPE (SDR-26) ASTM D-2241	
WATER SERVICE	1-1/4" COPPER (TYPE "K")	
CIRTAIN DRAIN		
SANITARY MANHOLE	S	S
STORM MANHOLE	S	S
CATCH BASIN		
CURB INLET		
YARD INLET		
FLARED END SECTION		
WATER VALVE	WV	WV
FIRE HYDRANT		
GAS VALVE	GV	GV
POWER POLE	PP	PP
LIGHT POLE		
TRAFFIC SIGNAL		
UTILITY STRUCTURE		
SPOT ELEVATION	886.5	885.0 +
EROSION CONTROL / SILT FENCE		
STAKED STRAW BALE OR SILT FENCE AROUND STORM SEWER STRUCTURE		
DRAINAGE FLOW ROUTE		
SUMP PUMP DISCHARGE	SP	
DOWNSPOUT DISCHARGE	DS	
RUNOFF DIVERSION LANDSCAPE BARRIER		
CONCRETE CURB, INTERLOCKING BLOCK WALL , OR LANDSCAPE TIMBER WALL. (MIN. 6" ABOVE GRADE)		
TREE TO BE PROTECTED		
TREE TO BE REMOVED		

INDEX TO SHEETS

1.) COVER SHEET
2.) EXISTING TOPOGRAPIC SURVEY
3.) EROSION CONTROL & DEMOLITION PLAN
4.) GEOMETRIC PLAN
5.) UTILITY PLAN
6.) OVERALL SITE/GRADING PLAN
7.) PLAN & PROFILE - HARDING COURT
8.) SITE PLAN LOT 1, UNITS 1-4
9.) SITE PLAN LOT 2, UNITS 5-8
10.) SITE PLAN LOT 3, UNITS 9-12
11.) SITE PLAN LOT 4, UNITS 13-17
12.) SITE PLAN LOT 5, UNITS 18-23
13.) EROSION CONTROL & TREE PRESERVATION PLAN DETAILS
14.) CONSTRUCTION NOTES & DETAILS
15.) CONSTRUCTION NOTES & DETAILS
16.) CONSTRUCTION NOTES & DETAILS
17.) CONSTRUCTION NOTES-GLEN ELLYN
18.) CONSTRUCTION NOTES-GLEN ELLYN
19.) SURROUNDING CONDITIONS EXHIBIT
20.) CROSS SECTIONS
21.) IL. RT. 53 CROSS SECTIONS
22.) TREE PRESERVATION PLAN
23.) IDOT TRAFFIC CONTROL DETAILS
24.) IDOT CONSTRUCTION DETAILS
25.) IDOT CONSTRUCTION DETAILS

ATTACHMENTS

1.) SWPPP EXHIBIT D (3 SHEETS)
2.) LANDSCAPE PLAN (BY OTHERS)
3.) LIGHTING PLAN (BY OTHERS)

CALL J.U.L.I.E. TOLL FREE 1-800-892-0123

WARNING
CALL BEFORE YOU DIG

NOTE:
48 HOURS (2WORKING DAYS) PRIOR TO BEGINNING ANY CONSTRUCTION THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. 1-800-892-0123

J.U.L.I.E. WILL ESTABLISH ON THE GROUND, THE LOCATION OF UNDERGROUND PIPES, CONDUITS OR CABLES ADJOINING OR CROSSING PROPOSED CONSTRUCTION.

STATE OF ILLINOIS) SS
COUNTY OF DU PAGE)

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE STORMWATER AND DRAINAGE OF SURFACE WATERS MEET THE MINIMUM CRITERIA FOR STORMWATER MANAGEMENT IN ACCORDANCE WITH LOCAL AND COUNTY STANDARDS.

September 10, 2021
DATE

ILLINOIS PROFESSIONAL ENGINEER NO. 062-063571
MY LICENSE EXPIRES 11/30/2021

LICENSED PROFESSIONAL ENGINEER
JOSEPH W. LUREAU
062-063571
STATE OF ILLINOIS

STATE OF ILLINOIS) SS
COUNTY OF DU PAGE)

WE HAVE REVIEWED THE LOCAL TOPOGRAPHY AND IDENTIFIED ANY LOCAL DEPRESSIONAL AREAS. FURTHERMORE WE HAVE DETERMINED THAT THIS TECHNICAL SUBMISSION INCORPORATES PROPOSED IMPROVEMENTS THAT WILL NOT DISPLACE ANY PONDING OR STANDING WATER, AND WILL NOT CHANGE THE DRAINAGE OF SURFACE WATERS, AND THAT ADEQUATE PROVISIONS HAVE BEEN INCORPORATED INTO THE PROPOSED SITE GRADING SO AS TO NOT ADVERSELY AFFECT THE DRAINAGE OF STORMWATER TO, OR FROM THE SITE AND ABUTTING OR ADJACENT PROPERTIES.

THIS IS TO CERTIFY THAT I, ALLEN D. CARRADUS, AN ILLINOIS REGISTERED LAND SURVEYOR, HAS SURVEYED THE PROPERTY AS DESCRIBED HEREON AND THAT THE ANNEXED PLAT IS A CORRECT AND TRUE REPRESENTATION THEREOF.

SIGNED AND SEALED AT CAROL STREAM, THIS 10th DAY OF September, A.D. 2021.
BY Allen D Carradus, ILLINOIS REGISTERED LAND SURVEYOR NO. 35-2551.
MY LICENSE EXPIRES NOVEMBER 30, 2022

ALLEN D. CARRADUS
35-2551
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
WHEATON, ILLINOIS

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	No Scale	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

COVER SHEET
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 25
Project # 895

THIS IS AN ELECTRONICALLY TRANSMITTED DIGITAL REPRODUCTION OF AN ORIGINAL SIGNED AND SEALED PRINTED PLAT.
DRAWING FILE NAME: 895-MF-SH1

Harding Townhomes - Engineering, 10/04/2021

FOR LEGAL DESCRIPTIONS OF PARCELS SEE SHEET 1

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

EXISTING CONCRETE WALK

FIRE HYDRANT

12" WATERMAIN

IRON PIPE

EXISTING UTILITY POLE

IRON ROD 15.27' SOUTH & 0.36' WEST

IRON ROD 15.52' SOUTH & 0.48' WEST

WEST LINE OF ROUTE 53 (AS MONUMENTED & OCCUPIED)

UNDERBRUSH AND OVERGROWN VEGETATION ARE PROMINENT ALONG THE EAST PROPERTY LINE

(L=31.24')
(Rad.=20.00')

VALVE VAULT RIM=762.65

52.62'

(166.70')

EAST LINE OF LOT 2

(L=552.92')
(Rad.=34327.48')

(166.70')

(16.00')

EAST LINE OF LOT 1

(150.70')

FENCE

SOUTH LINE OF HARDING AVENUE (AS MONUMENTED & OCCUPIED)

NORTH LINE OF THE SOUTHEAST QUARTER OF SEC. 23-39-10 (NORTH LINE OF LOT A)

LOT 2
WHITE'S HARDING AVENUE RESUBDIVISION

PARCEL 1
P.I.N.: 05-23-223-020

PARCEL 2
P.I.N.: 05-23-223-005

PARCEL 3
P.I.N.: 05-23-223-008

PARCEL 4
THE NORTH 16' OF THE EAST 289' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT
P.I.N.: 05-23-223-025

PARCEL 5
EXISTING 33' RIGHT OF WAY

EXISTING APARTMENT BUILDING

WILL-BRYANT CONDOMINIUM Per Doc. R1977-120078

EXISTING POWER POLE

EXISTING IBT PEDESTAL

(N 90°00'00" E)
(217.73')

236.95'

(283.70')

(33' R/W)

PARCEL 5 = PARCEL 1

(281.24')

NORTH LINE OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF SEC. 23-39-10

(260.73')

SOUTH LINE OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SEC. 23-39-10 (AS MONUMENTED & OCCUPIED)

(289.00')
(N 89°57'19" E)

THE SOUTH LINE OF THE NORTH 16' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT AND ALSO THE NORTH LINE OF LOT 1 IN RUDBECKS ASSESSMENT PLAT

THE NORTH LINE OF THE NORTH 16' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT

EXISTING RESIDENCE

F/F=770.41

EXISTING DRIVEWAY

LOT 1
RUDBECKS ASSESSMENT PLAT

LOT 2
RUDBECKS ASSESSMENT PLAT
Per Doc. R1963-008532

ROLLING HEDGE SUBDIVISION Per Doc. R1978-033719

LOT 3

LOT 4

FRAME SHED

WOOD DECK

APPROXIMATE LOCATION OF EXISTING SEPTIC FIELD (FIELD VERIFY LOCATION)

EXISTING ELECTRIC CONTROL BOX

EXISTING STREET LIGHT

(33.00')
(N 00°31'55" W)

LOT 5

(N 90°00'00" E)
46.75'

EXISTING RESIDENCE

BITUMINOUS DRIVEWAY

TOWNHOMES OF WATERS EDGE Per Doc. R1977-120078

LOT 4

APPROXIMATE LOCATION OF EXISTING WATER MAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

FIRE HYDRANT

WATER VALVE RIM=760.28

SANITARY MANHOLE RIM=758.98 8" W=749.48 (8" W) EXISTING UTILITY POLE

22.00'

(166.75')
(N 00°00'00" E)

PROPOSED DRIVEWAY

HARDING CUSTOM HOMES SUBDIVISION UNIT 1 Per Doc. R2018-036528

PROPOSED RESIDENCE

LOT 15

LOT 14

RUDBECKS BRENTWOOD PLACE Per Doc. R1991-022208

IRON PIPE 15 GAS' NORTH & 0.71' WEST

(L=166.78')
(Rad.=34066.78')

(20.84')
(N 89°59'07" E)

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

IRON PIPE

FRAME SHED

LOT 1

LOT 2

LOT 4

LOT 8

LOT 7

LOT 6

LOT 5

PARCEL 1

PARCEL 2

PARCEL 3

PARCEL 4

TREE LEGEND

DECIDUOUS TREE
#1 TREE NUMBER
29" TREE D.B.H.

CONIFEROUS TREE
#1 TREE NUMBER
29" TREE D.B.H.

TREES:
TREE NUMBERS AND SIZES CORRESPOND WITH THE IDENTIFICATION REPORT PROVIDED BY DAVE COULTER.

THERE IS NO SIGNIFICANT LANDSCAPING THAT WOULD AFFECT THIS PLAN ALONG THE NORTH, WEST AND SOUTH PROPERTY LINES ON THIS SITE OR ADJOINING PROPERTIES.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

EXISTING TOPOGRAPHIC SURVEY
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream Illinois, 60188
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Sheet 2 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH2

Harding Townhomes - Engineering, 10/04/2021

NOTE:
ALL TREE PROTECTION AND TREE REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH THE VILLAGES NOTES AND DETAILS FOR TREE PROTECTION INCLUDED ON SHEET 13 AND AS SHOWN ON THE "TREE PRESERVATION AND REMOVAL PLAN" PREPARED BY OTHERS AND INCLUDED AS AN ATTACHMENT TO THIS PLAN SET. NO VARIATION FROM SAID PLAN SHALL START WITHOUT PRIOR APPROVAL FROM THE VILLAGE STAFF.

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY

(100' R/W)

EDGE OF PAVEMENT

CONCRETE CURB & GUTTER

FIRE HYDRANT

12" WATERMAIN

EXISTING UTILITY POLE TO REMAIN

IL. RT. 53 RIGHT OF WAY

EXISTING UTILITY POLE

EXISTING UTILITY SERVICE POLES ALONG IL. RT. 53 TO BE REMOVED (3) (TYPICAL)

HEAVY BRUSH ALONG RIGHT OF WAY SHALL BE REMOVED AS NEEDED FOR SIDEWALK CONSTRUCTION WITHIN ROUTE 53 RIGHT OF WAY

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

VALVE VAULT RIM=762.65

EXISTING CONCRETE WALK

EXISTING UTILITY POLE

EXISTING UTILITY SERVICE POLES ON SITE SHALL BE ABANDONED AND REMOVED AS SOON AS SERVICE AROUND THE PERIMETER OF THE SITE IS PROVIDED BY COM ED. CO. (TYPICAL)

FENCE

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL TO REMAIN

EXISTING UTILITY POLE TO REMAIN

(217.73')
(N 90°00'00" E)

INSTALL FILTER BASKET INSIDE FRAME AND 5" DIA. FILTER SOCK (OR APPROVED EQUAL) AROUND ALL STORM STRUCTURES AS THEY ARE INSTALLED FOR SEDIMENT PROTECTION. (PROPOSED STRUCTURES TYPICAL)

STABILIZED CONSTRUCTION ENTRANCE

CONCRETE WASHOUT AREA

PORTABLE TOILET

WATER VALVE RIM=760.28

EXISTING UTILITY POLE TO REMAIN

SANITARY MANHOLE RIM=758.98 INV.=749.48 (8" W)

EXISTING ELECTRIC CONTROL BOX

EXISTING STREET LIGHT

PROTECT EXISTING SANITARY MANHOLE WITH CONSTRUCTION SAFETY FENCE AND WHEN CONSTRUCTION ACCESS ENTRANCE TO ALLOW CONSTRUCTION TRAFFIC ACCESS ON EACH SIDE OF THE MANHOLE SUFFICIENTLY TO PERMIT CONSTRUCTION VEHICLES WITHOUT DAMAGE. THE VILLAGE SHALL APPROVE THE METHOD OF PROTECTION IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

SILT FENCE SHALL BE INSTALLED PRIOR TO THE START OF ANY WORK ON THE SITE AND BE MAINTAINED UNTIL FINAL VEGETATION IS ESTABLISHED.

(33.00')
(N 00°31'55" W)

46.75'
(N 90°00'00" E)

(166.75')
(N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

EXISTING RESIDENCE TO BE DEMOLISHED.

EXISTING DRIVEWAY TO BE REMOVED.

EXISTING SEPTIC SHALL BE FIELD LOCATED AND ABANDONED PER DUPAGE COUNTY AND STATE OF ILLINOIS HEALTH DEPARTMENT SPECIFICATIONS AND PROCEDURES.

T/F=770.41

FRAME SHED

WOOD DECK

EXISTING RESIDENCE

BITUMINOUS DRIVEWAY

PROPOSED RESIDENCE

APPROXIMATE LOCATION OF EXISTING 8" WATERMAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

ST-1 ST-2 ST-3 ST-4 ST-5 ST-6 ST-7 ST-8 ST-9 ST-10 ST-11 ST-12 ST-13 ST-14 ST-15 ST-16 ST-17 ST-18 ST-19 ST-20 ST-21 ST-22 ST-23 ST-24 ST-25 ST-26 ST-27 ST-28 ST-29

#1 29" #2 10" #3 30" #4 18" #5 12"/18" #6 9"/13" #7 8"/12"/10" #8 17" #9 15" #10 11" #11 24" #12 10" #13 24" #14 18" #15 10" #16 36" #17 31" #18 15" #19 10" #20 15" #21 47" #22 11" #23 15" #24 9" #25 21" #26 17"/13" #27 9" #28 26" #29 11" #30 21" #31 22" #32 12" #33 14" #34 14" #35 16" #36 16" #37 14" #38 14"/13" #39 33" #40 11" #41 15" #42 27" #43 42" #44 42" #45 29" #46 30" #47 16" #48 19" #49 18" #50 12" #51 14" #52 16" #53 17" #54 20" #55 13" #56 11" #57 15" #58 11" #59 65" #60 11"/6" #61 13" #62 10" #63 6"/6"/5" #64 39" #65 32" #66 24" #67 22" #68 21" #69 15"/10"/7" #70 32" #71 15" #72 32" #73 41" #74 22"

STORM STRUCTURE LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

NOTE:
FOR EROSION CONTROL AND TREE PRESERVATION NOTES & DETAILS SEE SHEET 13 OF THIS PLAN SET.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

EROSION CONTROL & DEMOLITION PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Project # 895

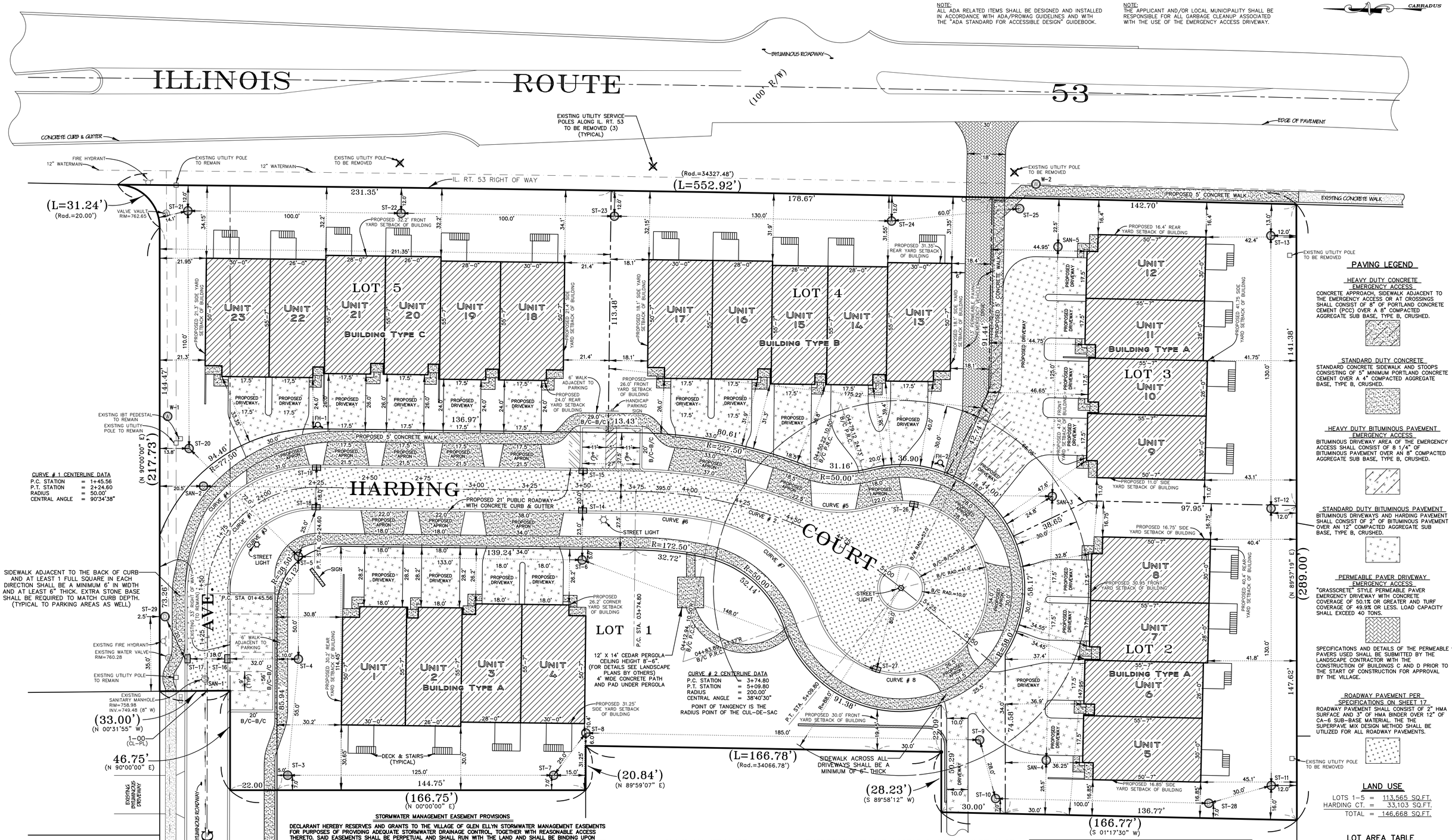
DRAWING FILE NAME: 895-MF-SH3

Harding Townhomes - Engineering, 10/04/2021

NOTE:
ALL ADA RELATED ITEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ADA/PROWAG GUIDELINES AND WITH THE "ADA STANDARD FOR ACCESSIBLE DESIGN" GUIDEBOOK.

NOTE:
THE APPLICANT AND/OR LOCAL MUNICIPALITY SHALL BE RESPONSIBLE FOR ALL GARBAGE CLEANUP ASSOCIATED WITH THE USE OF THE EMERGENCY ACCESS DRIVEWAY.

CARRADUS



CURVE # 1 CENTERLINE DATA

P.C. STATION	= 1+45.56
P.T. STATION	= 2+24.60
RADIUS	= 50.00'
CENTRAL ANGLE	= 90°34'38"

CURVE # 2 CENTERLINE DATA

P.C. STATION	= 3+74.80
P.T. STATION	= 5+09.80
RADIUS	= 200.00'
CENTRAL ANGLE	= 38°40'30"

POINT OF TANGENCY IS THE RADIUS POINT OF THE CUL-DE-SAC

PAVING LEGEND

HEAVY DUTY CONCRETE EMERGENCY ACCESS
CONCRETE APPROACH, SIDEWALK ADJACENT TO THE EMERGENCY ACCESS OR AT CROSSINGS SHALL CONSIST OF 8" OF PORTLAND CONCRETE CEMENT (PCC) OVER A 8" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

STANDARD DUTY CONCRETE
STANDARD CONCRETE SIDEWALK AND STOOPS CONSISTING OF 5" MINIMUM PORTLAND CONCRETE CEMENT OVER A 4" COMPACTED AGGREGATE BASE, TYPE B, CRUSHED.

HEAVY DUTY BITUMINOUS PAVEMENT EMERGENCY ACCESS
BITUMINOUS DRIVEWAY AREA OF THE EMERGENCY ACCESS SHALL CONSIST OF 8 1/4" OF BITUMINOUS PAVEMENT OVER AN 8" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

STANDARD DUTY BITUMINOUS PAVEMENT
BITUMINOUS DRIVEWAYS AND HARDING PAVEMENT SHALL CONSIST OF 2" OF BITUMINOUS PAVEMENT OVER AN 12" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

PERMEABLE PAVER DRIVEWAY EMERGENCY ACCESS
"GRASSCRETE" STYLE PERMEABLE PAVER EMERGENCY DRIVEWAY WITH CONCRETE COVERAGE OF 50.1% OR GREATER AND TURF COVERAGE OF 49.9% OR LESS. LOAD CAPACITY SHALL EXCEED 40 TONS.

SPECIFICATIONS AND DETAILS OF THE PERMEABLE PAVERS USED SHALL BE SUBMITTED BY THE LANDSCAPE CONTRACTOR WITH THE CONSTRUCTION OF BUILDINGS C AND D PRIOR TO THE START OF CONSTRUCTION FOR APPROVAL BY THE VILLAGE.

ROADWAY PAVEMENT PER SPECIFICATIONS ON SHEET 17
ROADWAY PAVEMENT SHALL CONSIST OF 2" HMA SURFACE AND 3" OF HMA BINDER OVER 12" OF CA-6 SUB-BASE MATERIAL. THE THE SUPERPAVE MIX DESIGN METHOD SHALL BE UTILIZED FOR ALL ROADWAY PAVEMENTS.

LAND USE

LOTS 1-5	= 113,565 SQ.FT.
HARDING CT.	= 33,103 SQ.FT.
TOTAL	= 146,668 SQ.FT.

LOT AREA TABLE

LOT 1	= 26,315 SQ.FT.
LOT 2	= 19,438 SQ.FT.
LOT 3	= 21,218 SQ.FT.
LOT 4	= 21,515 SQ.FT.
LOT 5	= 25,079 SQ.FT.
TOTAL	= 113,565 SQ.FT.

STORMWATER MANAGEMENT EASEMENT PROVISIONS

DECLARANT HEREBY RESERVES AND GRANTS TO THE VILLAGE OF GLEN ELLYN STORMWATER MANAGEMENT EASEMENTS FOR PURPOSES OF PROVIDING ADEQUATE STORMWATER DRAINAGE CONTROL, TOGETHER WITH REASONABLE ACCESS THERETO. SAID EASEMENTS SHALL BE PERPETUAL AND SHALL RUN WITH THE LAND AND SHALL BE BINDING UPON THE DECLARANT, ITS SUCCESSORS, HEIRS, EXECUTORS AND ASSIGNS. TO ENSURE THE INTEGRITY OF THE STORMWATER FACILITIES, NO OBSTRUCTION SHALL BE PLACED, NOR ALTERATIONS MADE, INCLUDING ALTERATIONS IN THE FINAL TOPOGRAPHICAL GRADING PLAN WHICH IN ANY MANNER IMPEDE OR DIMINISH STORMWATER DRAINAGE OR STORAGE IN, OVER, UNDER, THROUGH OR UPON SAID EASEMENT AREAS. IN THE EVENT SUCH OBSTRUCTION OR ALTERATIONS ARE FOUND TO EXIST, OR IF THE PROPERTY OWNER OTHERWISE FAILS TO PROPERLY MAINTAIN THE STORMWATER FACILITIES AND EASEMENTS OR CHANGES THE CHARACTER OF THE STORMWATER FACILITY, THE VILLAGE OF GLEN ELLYN SHALL, UPON SEVENTY-TWO (72) HOURS PRIOR NOTICE TO THE PROPERTY OWNER, HAVE THE RIGHT, BUT NOT THE DUTY, TO PERFORM, OR HAVE PERFORMED IN ITS BEHALF, ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES OR TO REMOVE SAID OBSTRUCTION OR ALTERATIONS OR TO PERFORM OTHER MAINTENANCE, REPAIR, ALTERATION OR REPLACEMENT AS MAY BE REASONABLY BE NECESSARY TO ENSURE THAT ADEQUATE STORMWATER STORAGE AND DRAINAGE FACILITIES, AND APPURTENANCES THERETO, REMAIN FULLY OPERATIONAL AND THAT THE CONDITION OF SAID FACILITIES AND EASEMENTS COMPLY WITH ALL APPLICABLE VILLAGE OF GLEN ELLYN AND DUPAGE COUNTY CODES. IN THE EVENT OF AND EMERGENCY SITUATION, AS DETERMINED BY THE VILLAGE OF GLEN ELLYN, THE SEVENTY-TWO (72) HOURS PRIOR NOTICE REQUIREMENTS SET FORTH ABOVE SHALL NOT APPLY AND THE VILLAGE OF GLEN ELLYN SHALL HAVE THE RIGHT, BUT NOT THE DUTY, TO PROCEED WITHOUT NOTICE TO THE PROPERTY OWNER. IN THE EVENT THE VILLAGE OF GLEN ELLYN SHALL BE REQUIRED TO PERFORM, OR HAVE PERFORMED ON ITS BEHALF ANY MAINTENANCE WORK TO OR UPON THE STORMWATER FACILITIES AND EASEMENTS AS SET FORTH IN THE DECLARATION, OR ANY REMOVAL OR ALTERATION AS AFORESAID, THE COST OF SUCH WORK SHALL, UPON RECORDATION OF NOTICE OF LIEN WITH THE RECORDER OF DEEDS OF DUPAGE COUNTY, ILLINOIS, CONSTITUTE A LIEN AGAINST THE ASSETS OF THE PROPERTY OWNER, IN ADDITION, THE AREA DISTRIBUTED BY THE SAID MAINTENANCE OPERATIONS, SHALL BE RE-PLANTED BY THE PROPERTY OWNER WITH THE MATERIALS ON THE APPROVED LANDSCAPE PLAN.

ISLAND MAINTENANCE

LANDSCAPE MAINTENANCE AND CARE OF THE ISLAND IN THE CUL-DE-SAC OF HARDING COURT SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.

SIDEWALK MAINTENANCE

ALL PUBLIC WALKS WITHIN OR ADJACENT TO THE RIGHT OF WAY SHALL BE THE RESPONSIBILITY OF THE VILLAGE INCLUDING THE WALK WITHIN AN EASEMENT AROUND THE TWO PARKING STALLS ADJACENT TO LOTS 4 AND 5, THE WALK IN AN EASEMENT AROUND THE SIX PARKING SPACES NORTH OF LOT 1, AND THE WALK WITHIN AN EASEMENT THAT CONNECTS HARDING COURT SIDEWALKS WITH THE PROPOSED IL. RT. 53 PUBLIC SIDEWALK.

EMERGENCY VEHICLE ACCESS & GATE MAINTENANCE

THE MAINTENANCE AND CARE OF THE EMERGENCY ACCESS DRIVEWAY AND GATE SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.

UTILITY MAINTENANCE & OWNERSHIP

ALL SANITARY SEWER MAINS AND STRUCTURES, STORM SEWER MAINS AND STRUCTURES, ALONG WITH ALL WATERMAINS AND STRUCTURES, VALVES, HYDRANTS, ETC SHALL BE OWNED AND MAINTAINED BY THE VILLAGE OF GLEN ELLYN, EXCEPT STORM SEWER STRUCTURES ST-20 THRU ST-25, ST-7, ST-8, ST-11 THRU ST-13 AND ST-28. ALSO EXCEPTED IS THE IMMEDIATE STORM SEWERS BETWEEN THESE STRUCTURES ALONG WITH THE STORM SEWERS CONNECTING ST-3 TO ST-7, ST-8 TO ST-9, AND ST-10 TO ST-28. ALSO EXCLUDED FROM THE VILLAGES RESPONSIBILITY IS THE MAINTENANCE AND UPKEEP OF ALL BMP FACILITIES WITHIN THIS PROJECT.

BACK OF CURB CURVE DATA

CURVE	RADIUS	LENGTH	CENTRAL ANGLE	P.C. STATION	P.T. STATION
3	39.50'	64.43'	90°34'38"	01+45.56, 10.50'R	02+24.60, 10.50R
4	60.50'	95.64'	90°34'38"	01+45.56, 10.50'L	02+24.60, 10.50'L
5	50.00'	35.20'	40°19'58"	04+50.22, 10.50'L	04+79.12, 24.73'L
6	189.50'	35.95'	10°52'10"	03+74.80, 10.50'R	04+12.94, 10.50'R
7	67.00'	69.87'	59°45'01"	04+12.94, 10.50'R	04+83.89, 33.37'R
8	41.00'	192.78'	269°24'16"	04+83.89, 33.37'R	04+79.12, 24.73'L

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
06/09/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

GEOMETRIC PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Project # 895

DRAWING FILE NAME: 895-MF-SH4

FURTHER REVIEW BY THE VILLAGE STAFF OF THE STORM SEWER SYSTEM WITHIN THE ROADWAY MAY NECESSITATE THE NEED FOR ADDITIONAL INLETS, IF IT IS DETERMINED ADDITIONAL CURB INLETS ARE NEEDED TO HANDLE FLOWS IN EXCESS OF THOSE SHOWN TO REDUCE THE POTENTIAL OF WATER ON THE PAVEMENT FOR STORMS IN EXCESS OF THE 10 YEAR STORM EVENT, THE DEVELOPER WILL WORK WITH THE VILLAGE TO FIND SUITABLE LOCATIONS THAT WORK WITH THE DRIVEWAY APPROACHES

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT

EXISTING 12" WATERMAIN

EXISTING UTILITY POLE TO REMAIN

IL. RT. 53 RIGHT OF WAY

ST-22
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.90
INV.=760.47

ST-23
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=764.00
INV.=761.27

ST-24
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.31

ST-25
24" STORM INLET WITH TYPE "8" FRAME & OPEN GRATE.
RIM=766.80
INV.=762.79

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

60 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

EXISTING STRUCTURES WITH FRAMES SHALL BE ADJUSTED TO MATCH THE PROPOSED GRADE PER VILLAGE OF GLEN ELLYN PUBLIC WORKS STANDARDS AND SPECIFICATIONS, AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR ANY UNDERGROUND PIPE WITHIN 2 FEET OF ANY PAVEMENT, CURB, DRIVEWAY OR SIDEWALK.

(L=552.92')

(L=31.24')

VALVE VAULT RIM=762.65

ST-21
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.25
INV.=759.87

100 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

PROPOSED 5' CONCRETE WALK

EXISTING CONCRETE WALK

110 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.72% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE

18 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

UNIT 23 | UNIT 22 | UNIT 21 | UNIT 20 | UNIT 19 | UNIT 18

BUILDING TYPE C

UNIT 17 | UNIT 16 | UNIT 15 | UNIT 14 | UNIT 13

BUILDING TYPE B

UNIT 12 | UNIT 11 | UNIT 10 | UNIT 9

BUILDING TYPE A

UNIT 8 | UNIT 7 | UNIT 6 | UNIT 5

72 L.F. 15" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.40%

ST-19
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.85

ST-18
48" STORM CATCH BASIN WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.67

ST-15
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.82

FH-1
FIRE HYDRANT & HYDRANT VALVE

FH-2
FIRE HYDRANT & HYDRANT VALVE

ST-20
48" STORM CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=761.50
INV.=759.08

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%

20 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

6" D.I.P. WATERMAIN

STREET LIGHT POWER DROP FROM EXISTING UTILITY POLE. TYPE 5 DISTRIBUTION.

SAN-2
SANITARY MANHOLE
RIM=763.00
INV.=751.60 (8" W)
INV.=751.70 (8" S)

FOR WATERMAIN STORM SEWER CROSSING SEE SHEET 12

ST-26
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=767.33

SAN-5
SANITARY MANHOLE
RIM=771.30
INV.=764.80 (8" E)

ST-13
24" STORM INLET WITH TYPE "8" FRAME & OPEN GRATE.
RIM=766.00
INV.=763.67

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

115 L.F. 8" P.V.C. SANITARY SEWER @ 1.00% 8" P.V.C., SDR-26 ASTM D-2241 PIPE

90 L.F. 8" P.V.C. SANITARY SEWER @ 2.00% 8" P.V.C., SDR-26, ASTM D-2241 PIPE

50 L.F. 18" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.80%

(217.73')

HARDING AVE.

HARDING COURT

CLN. RAD.=50.0'

CLN. RAD.=200.0'

ST-12
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.89

(289.00')

SAN-3
SANITARY MANHOLE
RIM=772.50
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

125 L.F. 8" P.V.C. SANITARY SEWER @ 1.00% 8" P.V.C., SDR-26, ASTM D-2241 PIPE

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

32 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.50%

ST-16
48" STORM CATCH BASIN WITH DEPRESSED CURB FRAME & GRATE.
RIM=759.69 T/C
=759.49 F/L
INV.=757.33

225 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

STREET LIGHT

133 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 4.00%

SIGN

PROPSOED 12' X 14' PERGOLA AND WALK

PROPOSED 2" P.V.C. CONDUIT FOR STREET LIGHT POWER SUPPLY

STREET LIGHT

ST-29
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=759.30
INV.=757.71

EXISTING FIRE HYDRANT

18 L.F. 12" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 0.90%

EXISTING WATER VALVE RIM=760.28

EXISTING UTILITY POLE TO REMAIN

STREET LIGHT & STREET LIGHT CONTROLLER

ST-5
60" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=764.50
INV.=758.07 (W-18")
=758.07 (N-15")
=758.07 (S-12")
=760.42 (E-12")

ST-6
48" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=769.65
INV.=763.39 (N-12")
=763.39 (S-12")
=764.39 (E-12")

ST-14
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.62

23 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

148 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.80%

80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.60%

ST-4
60" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=762.50
INV.=757.17 (W, E, N)

UNIT 1 | UNIT 2 | UNIT 3 | UNIT 4

BUILDING TYPE A

22 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE. TOP OF THE WATER MAIN AT THE CROSSING IS AT ELEVATION 755.48. BOTTOM OF THE STORM SEWER AT THE CROSSING IS AT ELEVATION 756.98. CREATING A VERTICAL SEPARATION OF 18". FIELD VERIFY THIS INFORMATION PRIOR TO THE START OF CONSTRUCTION. MAINTAIN A MINIMUM HORIZONTAL SEPERATION OF 10.0' FROM THE EXISTING FIRE HYDRANT AND VALVE.

EXISTING STREET LIGHT & STREET LIGHT CONTROLLER

55 L.F. 18" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 2.40%

125 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.60%

(L=166.78')

185 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

(20.84')

(28.23')

ST-8
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=763.30
INV.=758.25

ST-27
48" STORM CATCH BASIN WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=766.05

25 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.60%

(166.75')

(166.77')

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

ST-11
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.11

30 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

ST-17
48" STORM INLET WITH FLAT TOP & CURB FRAME & GRATE.
RIM=759.99 T/C
=759.49 F/L
INV.=757.49

REMOVE AND REPLACE THE NECESSARY "SQUARES" (APPROXIMATELY 10') TO PERMIT REALIGNMENT OF SIDEWALK AROUND EXISTING POWER POLE.

EXISTING PERMANENT DRIVEWAY

ST-3
60" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=759.70
INV.=755.85 (W-24")
INV.=755.85 (E-18")
INV.=755.85 (S-12")

ST-7
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.50
INV.=757.85

125 L.F. 4" PERFORATED P.V.C. PIPE IN FILTER SOCK DRAIN TILE TO DISCHARGE TO DAYLIGHT @ INV.=764.50.

ST-9
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=770.00
INV.=760.47

28 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

SAN-4
SANITARY MANHOLE
RIM=771.30
INV.=764.90 (8" E)

ST-28
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.20
INV.=761.81

ST-10
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.30
INV.=760.81

SAN-1
EXISTING SANITARY MANHOLE
RIM=758.98 (EXISTING)
RIM=759.51 (PROPOSED)
INV.=749.48 (8" W) EXISTING
PROPOSED INV. @ CONNECTION=749.80

247 L.F. 24" R.C.P. C-76-IV WITH ASTM C-361 OR 443 GASKETS (FOR PROTECTION OF WATER SERVICES) STORM SEWER PIPE @ 1.60%

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN

APPROXIMATE LOCATION OF EXISTING WATER SERVICE (FIELD VERIFY LOCATION)

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

UTILITY PLAN

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Sheet 5 of 25

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Project # 895

DRAWING FILE NAME: 895-MF-SH5

NOTE:
ALL ADA RELATED ITEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ADA/PROWAG GUIDELINES AND WITH THE "ADA STANDARD FOR ACCESSIBLE DESIGN" GUIDEBOOK.

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY

(100' R/W)

EDGE OF PAVEMENT

CONCRETE CURB & GUTTER

FIRE HYDRANT

EXISTING POWER POLE TO REMAIN

EL. RT. 53 RIGHT OF WAY

(L=31.24')
(Rad.=20.00')

VALVE VAULT
RIM=762.65

(Rad.=34327.48')
(L=552.92')

PROPOSED 5' CONCRETE WALK

EXISTING CONCRETE WALK

MATCH EXISTING WALK

ST-21 RIM=762.25

ST-22 RIM=762.90

ST-23 RIM=764.00

ST-24 RIM=766.00

ST-25 RIM=766.80

ST-13 RIM=766.00

ST-12 RIM=766.00

ST-11 RIM=766.00

ST-9 RIM=770.00

ST-10 RIM=767.30

ST-28 RIM=767.20

LOT 5

LOT 4

LOT 3

LOT 2

LOT 1

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL TO REMAIN

EXISTING UTILITY POLE TO REMAIN

ST-20 RIM=761.50

FH-1

FH-2

SAN-1

SAN-2

SAN-3

SAN-4

SAN-5

HARDING AVE.

HARDING COURT

PROPOSED 21' PUBLIC ROADWAY WITH CONCRETE CURB & GUTTER

PROPOSED APRON

ST-19 F/L=763.98

ST-18 F/L=763.98

ST-15 F/L=768.50

ST-14 F/L=768.50

ST-26 F/L=769.75

ST-27 F/L=769.75

F/L=770.10

ST-5 RIM=764.50

ST-6 RIM=769.65

ST-17 F/L=759.49

ST-16 F/L=759.49

ST-4 RIM=762.50

ST-8 RIM=763.30

ST-7 RIM=762.50

ST-3 RIM=759.70

ST-29 RIM=759.30

STREET LIGHT

SIGN

PROPOSED 12' X 14' PERGOLA AND WALK

PROPOSED RESIDENCE

EXISTING FIRE HYDRANT

EXISTING WATER VALVE RIM=760.28

EXISTING POWER POLE TO REMAIN

EXISTING SANITARY MANHOLE RIM=758.98 INV.=749.48 (8" W)

(33.00')
(N 00°31'55" W)

1-00
(CL-PL)

46.75'
(N 90°00'00" E)

(217.73')
(N 90°00'00" E)

(166.75')
(N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

RUNOFF DIVERSION BERM

FRAME SHED

WOOD DECK

EXISTING RESIDENCE

EXISTING RESIDENCE

BITUMINOUS DRIVEWAY

BITUMINOUS DRIVEWAY

BITUMINOUS DRIVEWAY

PROPOSED RESIDENCE

759.25 OVERFLOW ROUTE & HIGH WATER OVERFLOW ELEVATION

BMP AND STORMWATER DETENTION REQUIREMENTS

PER DU PAGE COUNTYWIDE ORDINANCE BMP MEASURES WILL BE REQUIRED WITH THIS DEVELOPMENT. THE VOLUME NEEDED WILL BE BASED ON THE OVERALL DEVELOPED SITE AND DIVIDED PER UNIT AND DESIGNED AND INSTALLED AT THE TIME PERMIT IS APPLIED FOR WITH EACH BUILDING.
STORMWATER DETENTION IS REQUIRED FOR THIS DEVELOPMENT AND WILL BE PROVIDED FOR BY THE PANFISH PARK SYSTEM.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

OVERALL SITE/GRADING PLAN

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
100 Bridge Street Suite 1, Wheaton, Illinois 60187
(630) 588-0416 (FAX) 653-7682

Sheet 6 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH6

EXISTING STRUCTURES WITH FRAMES SHALL BE ADJUSTED TO MATCH THE PROPOSED GRADE PER VILLAGE OF GLEN ELLYN PUBLIC WORKS STANDARDS AND SPECIFICATIONS. AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR ANY UNDERGROUND PIPE WITHIN 2 FEET OF ANY PAVEMENT, CURB, DRIVEWAY OR SIDEWALK.

CARRADUS

ST-18
2+25.00, 10.5' R
48" CATCH BASIN WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.82

ST-19
2+25.00, 10.5' L
48" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=761.00

ST-14
3+50.00, 10.5' R
48" CATCH BASIN WITH CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.62

ST-15
3+40.00, 10.5' L
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.82

ST-26
4+92.0, 36.0 L
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=767.33

72 L.F. 15" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.40%

ST-20
48" CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=761.50
INV.=759.08

SAN-2
1+84.10, 22.5 L
SANITARY MANHOLE
RIM=763.00
INV.=751.60 (8" W)
INV.=751.70 (8" S)

93 L.F. 8" P.V.C. SANITARY SEWER @ 2.00%

50 L.F. 18" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.80%

32 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.50%

ST-16
1+15.00, 10.5 R
48" CATCH BASIN WITH DEPRESSED CURB FRAME & GRATE.
RIM=759.69 T/C
=759.49 F/L
INV.=757.33

18 L.F. 12" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 0.90%

ST-29
1+35.0, 19.8' L
24" STORM INLET WITH FLAT TOP AND TYPE "B" FRAME & OPEN GRATE.
RIM=759.30
INV.=757.71

22 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%
ASTM-D-2241 WATERMAIN SPECIFICATION PIPE

ST-17
1+15.00, 10.5 L
48" STORM INLET WITH FLAT TOP AND CURB FRAME & GRATE.
RIM=759.99 T/C
=759.49 F/L
INV.=757.49

SAN-1
1+05.00, 0.0' R
EXISTING SANITARY MANHOLE
RIM=758.98 (EXISTING)
RIM=759.51 (PROPOSED)
INV.=749.48 (8" W) EXISTING
PROPOSED INV. @ CONNECTION=749.75

EXISTING IBT PEDESTAL
EXISTING POWER POLE
EXISTING FIRE HYDRANT
EXISTING WATER VALVE RIM=760.28
EXISTING POWER POLE

6" D.I.P. WATERMAIN
PROPOSED 5' CONCRETE WALK
18 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%
23 L.F. 10" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%
133 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 4.00%
PROPOSED STREET LIGHT
25 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%
20 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%
395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%
PROPOSED 5' CONCRETE WALK
FIRE LANE
EMERGENCY VEHICLE ONLY

ST-5
2+04.10, 30.9' R
60" STORM MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=764.50
INV.=758.07 (W-24")
=758.07 (N-18")
=758.07 (S-12")
=760.52 (E-12")

ST-6
3+50.00, 32.5' R
48" STORM MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=769.65
INV.=763.39 (N-12")
=763.39 (S-12")
=764.39 (E-10")

ST-4
1+15.00, 42.65 R
60" STORM MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=762.50
INV.=758.51

55 L.F. 18" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 2.40%

ST-3
0+60.45, 39.75 R
EXISTING 60" STORM MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE
RIM=759.70
INV.=755.85 (W-24")
INV.=755.85 (E-18")
INV.=755.85 (S-12")

PROPOSED 12' X 14' PERGOLA
148 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.80%

ST-27
5+26.00, 37.9' R
48" CATCH BASIN WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=766.05

185 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%
80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.60%

ST-9
48" CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=770.00
INV.=760.17

SAN-3
5+37.40, 78.15' L
SANITARY MANHOLE
RIM=772.50
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

SAN-4
SANITARY MANHOLE
RIM=771.30
INV.=764.15 (8" E)

BOTTOM OF 6" WATERMAIN PIPE AT CROSSING IS AT ELEVATION 765.05. TOP OF 8" SANITARY SEWER PIPE AT CROSSING IS AT ELEVATION 762.54. (OVER 30" BELOW WATERMAIN PIPE)

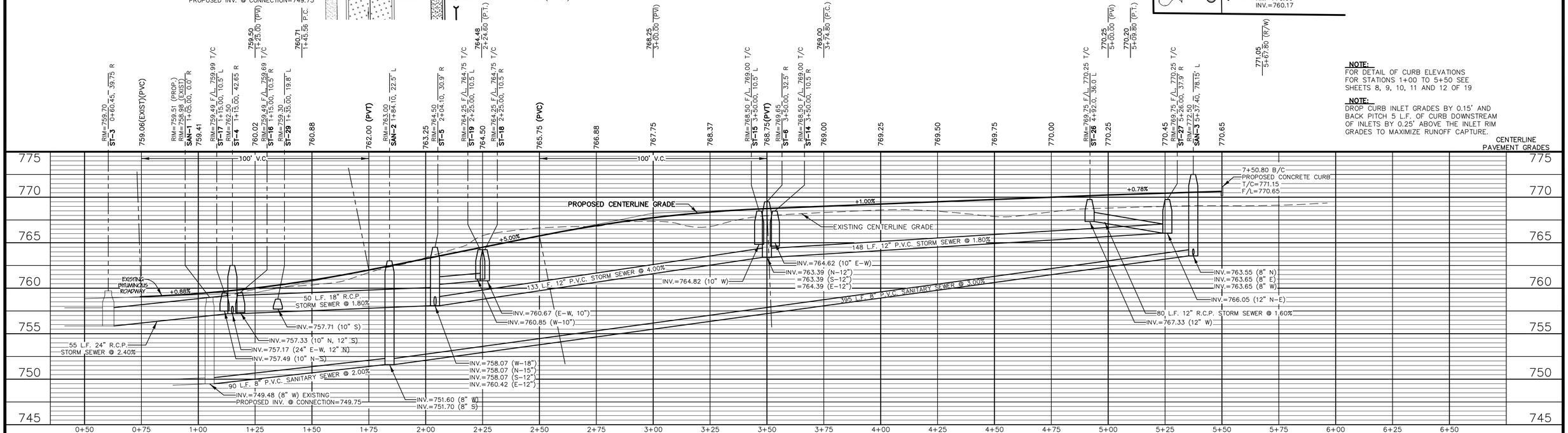
BOTTOM OF 6" WATERMAIN PIPE AT CROSSING IS AT ELEVATION 766.15. TOP OF 8" SANITARY SEWER PIPE AT CROSSING IS AT ELEVATION 763.89. (OVER 27" BELOW WATERMAIN PIPE)

HIGH POINT 770.10

B/C=5+51.00, 79.15 T/C, 770.65 F/L

B/C RAD.=41.0'

UNIT 23, 22, 21, 20, 19, 18 — BUILDING TYPE C
UNIT 17, 16, 15, 14, 13 — BUILDING TYPE B
UNIT 1, 2, 3, 4 — BUILDING TYPE A
UNIT 10, 9, 8, 7, 6, 5 — BUILDING A



NOTE:
FOR DETAIL OF CURB ELEVATIONS FOR STATIONS 1+00 TO 5+50 SEE SHEETS 8, 9, 10, 11 AND 12 OF 19

NOTE:
DROP CURB INLET GRADES BY 0.15' AND BACK PITCH 5 L.F. OF CURB DOWNSTREAM OF INLETS BY 0.25' ABOVE THE INLET RIM GRADES TO MAXIMIZE RUNOFF CAPTURE.

SCALE:
1"=20' HORIZONTAL
1"=5' VERTICAL

HARDING COURT

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

PLAN & PROFILE - HARDING COURT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 7 or 25

Project # 895

Harding Townhomes - Engineering, 10/04/2021

DRAWING FILE NAME: 895-MF-SH7

PROPOSED SERVICE LEGEND

- 6" STORM SERVICE
- 6" SANITARY SERVICE
- 1-1/4" COPPER WATER SERVICE
- 2" P.V.C. CONDUIT FOR ELECTRIC SERVICE & COMMUNICATIONS TRENCH (E — E)
- NATURAL GAS SERVICE (G — G)

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	761.5	761.0
B	763.4	763.6
C	768.1	769.7
D	766.2	766.7
AVERAGE	764.8	765.25

"EXISTING GRADE" REFERS TO THE UNALTERED GRADE OF THE PROPERTY PRIOR TO MASS GRADING OF THE SITE.

"PROPOSED GRADE" REFERENCES THE EXISTING GRADE FOR THE LOT AT THE TIME OF BUILDING PERMIT APPLICATION BASED ON THE MASS GRADING OF THE ENTIRE SUBDIVISION FROM THE APPROVED SUBDIVISION PLANS.

CARRADUS

72 L.F. 15" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.40%

ST-18
48" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.67

18 L.F. 10" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

ST-19
2+28.00, 10.5' L
48" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=763.25 F/L
INV.=760.85

FH-1
FIRE HYDRANT & HYDRANT VALVE

PROPOSED 6" D.I.P. WATERMAIN

FOR LEGEND OF PAVEMENT TYPES SEE SHEETS 4 AND 11

SAN-2
SANITARY MANHOLE
RIM=763.00
INV.=751.60 (W-8")
INV.=751.70 (S-8")

25 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

ST-5
60" CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=764.50
INV.=758.07 (W-18")
=758.07 (N-15")
=758.07 (S-12")
=760.42 (E-12")

50 L.F. 18" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.80%

"HARDING GLEN TOWNHOMES" SIGN

STREET LIGHT

90 L.F. 8" P.V.C. SANITARY SEWER @ 2.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

ST-29
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=759.30
INV.=757.71

22 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE. TOP OF THE WATER MAIN AT THE CROSSING IS AT ELEVATION 755.25, BOTTOM OF THE STORM SEWER AT THE CROSSING IS AT ELEVATION 756.75, CREATING A VERTICAL SEPARATION OF 18". FIELD VERIFY THIS INFORMATION PRIOR TO THE START OF CONSTRUCTION. MAINTAIN A MINIMUM HORIZONTAL SEPERATION OF 10.0' FROM THE EXISTING FIRE HYDRANT AND VALVE.

FIRE HYDRANT

WATER VALVE RIM=760.28

ST-17
48" STORM INLET WITH FLAT TOP AND CURB FRAME & GRATE.
RIM=759.99 T/C
=759.49 F/L
INV.=757.49

18 L.F. 10" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 0.90%

SAN-1
EXISTING SANITARY MANHOLE
RIM=758.98 (EXIST)
RIM=759.51 (PROPOSED)
INV.=749.48 (8" W) EXISTING
PROPOSED INV. @ CONNECTION=749.80

ST-16
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE.
RIM=759.69 T/C
=759.49 F/L
INV.=757.33

32 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.50%

ST-4
60" CATCH BASIN WITH TYPE "1" FRAME & CLOSED LID.
RIM=762.50
INV.=757.17 (W,E,N)

EXISTING BITUMINOUS DRIVEWAY

55 L.F. 18" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 2.40%

ST-3
60" STORM MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE
RIM=759.70
INV.=755.85 (W-24")
INV.=755.85 (E-18")
INV.=755.85 (S-12")

247 L.F. 24" R.C.P. C-76-IV WITH ASTM C-361 OR 443 GASKETS (FOR PROTECTION OF WATER SERVICES) STORM SEWER PIPE @ 1.60%

0+75 MATCH EXIST

PROPOSED DRIVEWAY

PROPOSED 5' CONCRETE WALK

PROPOSED CONCRETE APRON

10' PUBLIC UTILITY & DRAINAGE EASEMENT

133 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 4.00%

GARAGE DOOR
T/F=769.10
G/F=768.60

GARAGE DOOR
T/F=769.10
G/F=768.60

GARAGE DOOR
T/F=771.10
G/F=770.60

GARAGE DOOR
T/F=771.10
G/F=770.60

DOOR

1 1/4" WATER SERVICE (TYPICAL)

6" SANITARY SERVICE (TYPICAL)

STEP FOUNDATION

UNIT 1 | UNIT 2 | UNIT 3 | UNIT 4

LOT 1
BUILDING TYPE A

2" P.V.C. CONDUIT BURIED AT 24" DEPTH FOR COM ED. & COMMUNICATION SERVICE FROM THE REAR YARD. (TYPICAL)

6" STORM SERVICE (TYPICAL)

DROP SIDING AS NEEDED TO MATCH FINISH GRADE

5' LOOKOUT
T/F=764.10
PATIO DOOR
30'-0"

5' LOOKOUT
T/F=766.10
PATIO DOOR
26'-6"

5' LOOKOUT
T/F=766.10
PATIO DOOR
28'-0"

5' LOOKOUT
T/F=766.10
PATIO DOOR
30'-0"

DECK & STAIRS (TYPICAL)

RIM=761.80
RIM=761.80
RIM=762.80
RIM=762.80

DECK IS 6.6' MINIMUM FROM PROPERTY LINE

5 L.F. 6" P.V.C. @ 1.00%
INV.=756.38 @ 12"x12"x6"WYE

5 L.F. 6" P.V.C. @ 1.00%
INV.=756.83 @ 12"x12"x6"WYE

DIVERSION BERM ALONG THE WEST END OF THE BMP BED TO SLOW FLOW AND ALLOW FOR PERCOLATION INTO THE BMP BED.

PROPOSED TWO STORY RESIDENCE T/F=763.50

FOR VCBMP CONSTRUCT A 35'x7'x3.5' THICK STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF.
TOP OF STONE = 760.80
BOTTOM OF STONE = 757.30
INV. OF 24" P.V.C. = 757.80

DIVERSION BERM TO CAPTURE RUNOFF AND DIRECT TOWARDS THE STORM INLETS

FOR VCBMP CONSTRUCT A 40'x7'x3.5' THICK STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF.
TOP OF STONE = 762.00
BOTTOM OF STONE = 758.50
INV. OF 24" P.V.C. = 759.00

125 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.60%

20 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

ST-14
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.62

23 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

ST-6
48" CATCH BASIN WITH TYPE "1" FRAME & CLOSED LID.
RIM=769.65
INV.=763.39 (N-12")
=763.39 (S-12")
=764.39 (E-12")

148 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.80%

12'-0" X 14' CEDAR PERGOLA CEILING HEIGHT 8'-6" (FOR DETAILS SEE LANDSCAPE PLANS BY OTHERS) 4' WIDE CONCRETE PATH AND PAD UNDER PERGOLA

FOR VCBMP CONSTRUCT TWO 44'x7'x3.5' THICK STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF.
TOP OF STONE = 763.00
BOTTOM OF STONE = 759.50
INV. OF 24" P.V.C. = 760.00

RIM=764.00 (x4)

10' MIN.

ST-8
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=763.30
INV.=758.25

DIVERSION BERM TO CAPTURE RUNOFF AND DIRECT TOWARDS THE STORM INLETS

185 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

10 L.F. 6" P.V.C. @ 1.00%
INV.=758.39 @ 12"x12"x6"WYE

125 L.F. 4" PERFORATED P.V.C. PIPE IN FILTER SOCK DRAIN TILE TO DISCHARGE TO DAYLIGHT @ INV.=764.50.

25 L.F. 12" PVC (SDR-26) STORM SEWER PIPE @ 1.60%

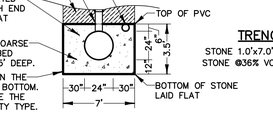
ST-7
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.50
INV.=757.35

NOTE:
6" STORM SERVICES SHALL COLLECT DISCHARGE FROM SUMP PUMP AND DOWNSPOUTS ON THE REAR OF THE BUILDINGS AND DELIVER IT TO THE BMP SYSTEM FOR TREATMENT.

IMPERVIOUS AREA TABLE FOR LOT 1

BUILDING =	6,202 SQ.FT.
WALKS & PORCHES =	206 SQ.FT.
DECKS & STAIRS =	640 SQ.FT.
DRIVEWAYS =	2,043 SQ.FT.
GAZEBO & SIGN =	110 SQ.FT.
WALLS =	86 SQ.FT.
PUBLIC WALK =	347 SQ.FT.
TOTAL =	9,634 SQ.FT.

LOT 1, TYPICAL DETAIL



TRENCH END CAPS

STONE 1.0'x7.0'x3.5' DEEP = 24.50 SQ.FT.
STONE @36% VOID FACTOR = 8.82 CU.FT/L.F.

SILT FENCING OR ORANGE SAFETY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND ALL BMP AREAS TO PROTECT THE INTEGRITY OF THE SOIL PRIOR TO BUILDING CONSTRUCTION, AND TO PROTECT THE BMP SYSTEM AFTER INSTALLATION FROM ALL CONSTRUCTION ACTIVITY, AND WILL BE PROVIDED ON THE FINAL DESIGN AT THE TIME OF SUBMITTAL PER EACH BUILDING PERMIT.

DU PAGE COUNTY STORMWATER BMP ORDINANCE

1.) VOLUME CONTROL BEST MANAGEMENT PRACTICES (VCBMP)
AT A 1.25" RAINFALL OVER 9,634 OF IMPERVIOUS AREA THE VOLUME OF TREATMENT REQUIRED IS 1004 CU.FT.
(FOR CA-7 COURSE AGGREGATE USE A 36% VOID RATIO)

TRENCH CALCULATION

24" P.V.C. PERFORATED CULVERT = 3.14 CU.FT./L.F.
STONE @ 36% VOID FACTOR 21.36x0.36 = 7.69 CU.FT./L.F.
7.0' X 3.5' DEEP (LESS 24" P.V.C.) = 21.36 SQ.FT./L.F.
TOTAL = 10.83 CU.FT./L.F.

TRENCH DESIGN TOTALS

30' TRENCH
PIPE & STONE: 10.83x28' = 303.2 CU.FT
STONE ENDS: 8.82x2 = 17.6 CU.FT
TOTAL = 320.8 CU.FT

35' TRENCH
PIPE & STONE: 10.83x33' = 357.4 CU.FT
STONE ENDS: 8.82x2 = 17.6 CU.FT
TOTAL = 375.0 CU.FT

40' TRENCH
PIPE & STONE: 10.83x38' = 411.5 CU.FT
STONE ENDS: 8.82x2 = 17.6 CU.FT
TOTAL = 429.1 CU.FT

44' TRENCH
PIPE & STONE: 10.83x42' = 454.9 CU.FT
STONE ENDS: 8.82x2 = 17.6 CU.FT
TOTAL = 472.5 CU.FT
DOUBLE TRENCHES = x 2
TOTAL = 945.0 CU.FT.

DESIGN TOTAL = 2069.9 CU.FT
(REQUIRED = 1004.0 CU.FT)
1065.9 CU.CF. CREDITED TOWARD PUBLIC RIGHT OF WAY

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 10'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SITE PLAN LOT 1, UNITS 1-4
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 8 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH8

Harding Townhomes - Engineering, 10/04/2021

CARRADUS

6" D.I.P. WATERMAIN

PROPOSED DRIVEWAY

PROPOSED 6" D.I.P. WATERMAIN

PROPOSED CONCRETE WALL

FH-2

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

ST-26
24" STORM INLET WITH CURB FRAME & GRATE
RIM=770.25 T/C
=769.75 F/L
INV.=767.33

80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.80%

ST-27
24" STORM INLET WITH CURB FRAME & GRATE
RIM=770.25 T/C
=769.75 F/L
INV.=766.05

PROPOSED CONCRETE APRON

PROPOSED DRIVEWAY 7.35%

PROPOSED DRIVEWAY 7.20%

PROPOSED DRIVEWAY 0.90%

PROPOSED DRIVEWAY 0.80%

HIGH POINT

STREET LIGHT

115 L.F. 8" P.V.C. SANITARY SEWER @ 1.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE
T/F=774.00
G/F=773.50

SAN-3
SANITARY MANHOLE
RIM=772.50
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

UNIT 9
T/F=769.00
5' LOOKOUT

UNIT 8
T/F=774.00
G/F=773.50
T/F=769.00
5' LOOKOUT

LOT 2
UNIT 7
T/F=774.00
G/F=773.50
T/F=769.00
5' LOOKOUT

BUILDING TYPE A

UNIT 6
T/F=772.00
G/F=771.50
T/F=769.00
3' LOOKOUT

UNIT 5
T/F=772.00
G/F=771.50
T/F=769.00
3' LOOKOUT

GARAGE DOOR
PATIO DOOR
DOOR
DECK & STAIRS (TYPICAL)

2" P.V.C. CONDUIT BURIED AT 24" DEPTH FOR COM ED. & COMMUNICATION SERVICE FROM THE REAR YARD. (TYPICAL)

1-1/4" WATER SERVICE (TYPICAL)

6" SANITARY SERVICE (TYPICAL)

6" STORM SERVICE (TYPICAL)

130 L.F. 12" P.V.C. (SDR-26)
STORM SEWER PIPE @ 0.60%

33 L.F. 6" P.V.C. BALLANCE PIPE BETWEEN BEDS LAID FLAT AT ELEVATION 762.65 CONNECTING END CAPS OF 24" P.V.C. PERF. PIPES.

ST-12
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.89

FOR LEGEND OF PAVEMENT TYPES SEE SHEETS 4 AND 11

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=762.73 FOR 12" P.V.C. @ 12"x12"x6" WYE

FOR VCBMP CONSTRUCT A 100'x10'x3.5' DEEP STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF. TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=762.25 WITHIN THE BMP STONE BED.
TOP OF STONE = 765.25
BOTTOM OF STONE = 761.75
INV. OF 24" P.V.C. = 762.25

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=762.48 FOR 12" P.V.C. @ 12"x12"x6" WYE

OVERFLOW ELEVATION 767.35

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=762.25 FOR 12" P.V.C. @ 12"x12"x6" WYE

EXISTING UTILITY POLE

130 L.F. 12" P.V.C. (SDR-26)
STORM SEWER PIPE @ 0.60%

FOR CONTINUATION OF LOT 1 SEE SHEET 8 AND SHEET 6

125 L.F. 4" PERFORATED P.V.C. PIPE IN FILTER SOCK DRAIN TILE TO DISCHARGE TO DAYLIGHT @ INV.=764.50.

INTERLOCKING BLOCK LANDSCAPE WALL. WALL SHALL NOT EXCEED 28" TALL.

ENCASE 12" P.V.C. STORM SEWER WITHIN 15" P.V.C. PIPE FOR PROTECTION UNDER DRIVEWAY AND RETAINING WALL.

ST-9
48" CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=770.00
INV.=760.47

PRIVATE BITUMINOUS DRIVEWAY

28 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

ST-10
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.30
INV.=760.81

SAN-4
SANITARY MANHOLE
RIM=771.30
INV.=764.90 (8" E)

125 L.F. 8" P.V.C. SANITARY SEWER @ 1.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

DIVERSION BERM ALONG PROPERTY LINE TO CONTROL RUNOFF FROM LEAVING THE PROPERTY.

ST-28
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.20
INV.=761.81

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

30 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

ST-11
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=761.51

CONSULT ARCHITECTURAL PLANS FOR RAILINGS THAT MAY BE NEEDED ON PORCHES ADJACENT TO LANDSCAPE RETAINING WALLS.

NOTE:
FOR FURTHER INFORMATION ON SANITARY SERWER MAINS AND STORM SEWER MAINS SEE SHEET 7 OF 20

NOTE:
6" STORM SERVICES SHALL COLLECT DISCHARGE FROM SUMP PUMP AND DOWNSPOUTS ON THE REAR OF THE BUILDINGS AND DELIVER IT TO THE BMP SYSTEM FOR TREATMENT.

PROPOSED SERVICE LEGEND

- 6" STORM SERVICE
- 6" SANITARY SERVICE 1-1/4" COPPER
- WATER SERVICE
- 2" P.V.C. CONDUIT FOR ELECTRIC SERVICE & COMMUNICATIONS TRENCH
- NATURAL GAS SERVICE

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	768.8	768.7
B	769.2	767.8
C	768.9	767.9
D	770.4	773.1
AVERAGE	769.35	769.4

"EXISTING GRADE" REFERS TO THE UNALTERED GRADE OF THE PROPERTY PRIOR TO MASS GRADING OF THE SITE.

"PROPOSED GRADE" REFERENCES THE EXISTING GRADE FOR THE LOT AT THE TIME OF BUILDING PERMIT APPLICATION BASED ON THE MASS GRADING OF THE ENTIRE SUBDIVISION FROM THE APPROVED SUBDIVISION PLANS.

REFER TO THE LANDSCAPE PLAN FOR DETAILS AND SPECIFICATIONS ON ALL LANDSCAPE WALLS. ONLY THE RELATED GRADES ARE SHOWN HEREON.

SILT FENCING OR ORANGE SAFETY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND ALL BMP AREAS TO PROTECT THE INTEGRITY OF THE SOIL PRIOR TO BUILDING CONSTRUCTION, AND TO PROTECT THE BMP SYSTEM AFTER INSTALLATION FROM ALL CONSTRUCTION ACTIVITY, AND WILL BE PROVIDED ON THE FINAL DESIGN AT THE TIME OF SUBMITTAL PER EACH BUILDING PERMIT.

DU PAGE COUNTY STORMWATER BMP ORDINANCE

1.) VOLUME CONTROL BEST MANAGEMENT PRACTICES (VCBMP)
AT A 1.25" RAINFALL OVER 9,635 OF IMPERVIOUS AREA
THE VOLUME OF TREATMENT REQUIRED IS 1,004 CU.FT.
(FOR CA-7 COURSE AGGREGATE USE A 36% VOID RATIO)

IMPERVIOUS AREA TABLE FOR LOT 2

BUILDING =	6,202 SQ.FT.
WALKS & PORCHES =	206 SQ.FT.
DECKS & STAIRS =	640 SQ.FT.
WALLS =	28 SQ.FT.
DRIVEWAYS =	2,559 SQ.FT.
TOTAL =	9,635 SQ.FT.

BMP DESIGN CALCULATION

100'x10'x3.5' DEEP STONE BED WITH TWIN 24" PVC PERF PIPES.

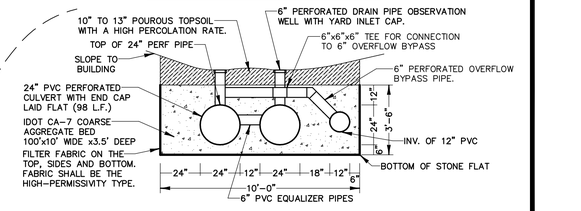
TRENCH CROSS SECTION

STONE BED @ 3.5' X 10.0' =	35.00 SQ.FT.
LESS 24" PERF. PIPE (2) =	– 6.28 SQ.FT.
LESS 12" STORM SEWER =	– 0.80 SQ.FT.
TOTAL AREA OF STONE =	27.92 SQ.FT.
@36% VOID FACTOR =	10.05 CU.FT/L.F.
ADD 24" PVC PIPES (2) =	6.28 CU.FT/L.F.
TOTAL CAPACITY OF TRENCH =	16.33 CU.FT/L.F.

TRENCH END CAPS

STONE 1.0'x10.0'x3.5' DEEP =	35.00 SQ.FT.
LESS 12" STORM SEWER =	– 0.80 SQ.FT.
TOTAL AREA OF STONE =	34.20 CU.FT/L.F.
@36% VOID FACTOR =	12.31 CU.FT/L.F.
TRENCH WITH TWIN 24" PERF PIPES = 98'x16.33 =	1,600.34 CU.FT.
END CAPS = 2x12.31 =	24.62 CU.FT.
TOTAL PROPOSED STORAGE OF BMP BED =	1,624.96 CU.FT.
REQUIRED STORAGE =	1,004.00 CU.FT.
	620.96 CU.CF. CREDITED TOWARD PUBLIC RIGHT OF WAY

VCBMP INFILTRATION BED DETAIL



Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 10'	Checked By:	EAC
Pid Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SITE PLAN LOT 2, UNITS 5-8
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 9 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH9

Harding Townhomes - Engineering, 10/04/2021

ILLINOIS ROUTE 53

MATCH EXISTING EDGE OF PAVEMENT AND GRADE TO CAPTURE RUNOFF SO THAT IT DRAINS AWAY FROM THE RT. 53 ROADWAY.

PROVIDE POSITIVE OVERLAND DRAINAGE FLOW OVER ACCESS DRIVEWAY AS THE DRAINAGE PATTERN NOW EXISTS.

REFER TO SHEET 11 FOR DETAILED LAYOUT AND GRADING OF THE EXISTING APPROACH RECONSTRUCTION.

CARRADUS

EDGE OF PAVEMENT

MATCH EXISTING IL. RT. 53 PAVEMENT

PROVIDE A RIDGE AT PROPERTY LINE IN EMERGENCY ACCESS DRIVEWAY TO PREVENT EXISTING AND PROPOSED RUNOFF FROM ENTERING THE R/W.

FOR EMERGENCY VEHICLE ACCESS GATE DETAIL SEE SHEET 11 OF THIS PLAN SET. GATE SHALL BE PLACED ON THE PROPERTY LINE.

RECONSTRUCT EXISTING APPROACH AS NEEDED TO ACCOMMODATE SIZE & WEIGHT OF EMERGENCY VEHICLE ACCESS.

ST-25
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=766.80
INV.=762.79

EXISTING UTILITY POLE

W-2

60 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

RIDGE LINE

RT. 53 RIGHT OF WAY

PROPOSED 5' PUBLIC CONCRETE WALK

EXISTING CONCRETE WALK

MATCH EXISTING WALK

ST-24
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.31

PATIO DOOR
T/F=768.50
5' LOOKOUT

EXTRA STRENGTH DRIVEWAY, SIDEWALK & PERMEABLE PAVING TO ACCOMMODATE EMERGENCY VEHICLES. NOTE SPECIFICATIONS ON SHEET 11 OF THIS PLAN SET.

PROPOSED 5' CONCRETE WALK

PROPOSED 11' PERMEABLE PAVING FOR EMERGENCY VEHICLE ACCESS

UNIT 13

UNIT 12
T/F=769.00
3' LOOKOUT
T/F=772.00
G/F=771.50

SAN-5
SANITARY MANHOLE
RIM=770.30
INV.=764.80 (8" E)

2" P.V.C. CONDUIT BURIED AT 24" DEPTH FOR COM ED. & COMMUNICATION SERVICE FROM THE REAR YARD. (TYPICAL)

ST-13
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=766.00
INV.=763.67

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

RIM=766.00

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=763.53 FOR 12" P.V.C. @ 12"x12"x6" WYE

UNIT 11
T/F=769.00
3' LOOKOUT

DECK & STAIRS (TYPICAL)

LOT 3
BUILDING TYPE A

FOR VCBMP CONSTRUCT A 102'x10'x3.5' DEEP STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF. TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=762.25
WITHIN THE BMP STONE BED.
TOP OF STONE = 765.25
BOTTOM OF STONE = 761.75
INV. OF 24" P.V.C. = 762.25

T/F=773.00
G/F=772.50

T/F=774.00
G/F=773.50

UNIT 10
T/F=769.00
5' LOOKOUT

1-1/4" WATER SERVICE (TYPICAL)

6" SANITARY SERVICE (TYPICAL)

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=763.29 FOR 12" P.V.C. @ 12"x12"x6" WYE

TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=762.25

115 L.F. 8" P.V.C. SANITARY SEWER @11.00%
8" P.V.C., SDR-26,
ASTM D-2241 PIPE

6" STORM SERVICE (TYPICAL)

UNIT 9
T/F=769.00
5' LOOKOUT

SAN-3
SANITARY MANHOLE
RIM=772.50
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

OVERFLOW ELEVATION 767.35

6" P.V.C. PIPE AT INV.=763.25 FOR CONNECTION BETWEEN 24" PIPES OF BMP STONE BED AND 12" P.V.C. STORM SEWER.
INV.=763.04 FOR 12" P.V.C. @ 12"x12"x6" WYE

LOT 3
LOT 2
97.95'

ST-12
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.89

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%
8" P.V.C., SDR-26,
ASTM D-2241 PIPE

ST-26
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=767.33

33 L.F. 6" P.V.C. BALLANCE PIPE BETWEEN BEDS LAID BLAT AT ELEVATION 762.65 CONNECTING END CAPS OF 24" P.V.C. PERF. PIPES.

80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.60%

PROPOSED 6" D.I. WATERMAIN

125 L.F. 8" P.V.C. SANITARY SEWER @ 1.00%

UNIT 8
T/F=769.00
5' LOOKOUT
T/F=774.00
G/F=773.50

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

PROPOSED SERVICE LEGEND

- 6" STORM SERVICE
- 6" SANITARY SERVICE
- 1-1/4" COPPER WATER SERVICE
- 2" P.V.C. CONDUIT FOR ELECTRIC SERVICE & COMMUNICATIONS TRENCH — E —
- NATURAL GAS SERVICE — G —

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	770.1	772.5
B	768.9	767.8
C	768.6	768.5
D	770.4	771.0
AVERAGE	769.5	769.95

"EXISTING GRADE" REFERS TO THE UNALTERED GRADE OF THE PROPERTY PRIOR TO MASS GRADING OF THE SITE.

"PROPOSED GRADE" REFERENCES THE EXISTING GRADE FOR THE LOT AT THE TIME OF BUILDING PERMIT APPLICATION BASED ON THE MASS GRADING OF THE ENTIRE SUBDIVISION FROM THE APPROVED SUBDIVISION PLANS.

REFER TO THE LANDSCAPE PLAN FOR DETAILS AND SPECIFICATIONS ON ALL LANDSCAPE WALLS. ONLY THE RELATED GRADES ARE SHOWN HEREON.

FOR LEGEND OF PAVEMENT TYPES SEE SHEETS 4 AND 11

NOTE:
FOR FURTHER INFORMATION ON SANITARY SERWER MAINS AND STORM SEWER MAINS SEE SHEET 7 OF 23

NOTE:
PERMEABLE PAVER EMERGENCY ACCESS SHALL BE INSTALLED WITH THE FINAL GRADING AND LANDSCAPING OF THE BUILDING ON LOT 4. THE SIDEWALK ADJACENT THERETO SHALL BE INSTALLED WITH THE CONSTRUCTION OF THE BUILDING ON LOT 3.

SILT FENCING OR ORANGE SAFETY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND ALL BMP AREAS TO PROTECT THE INTEGRITY OF THE SOIL PRIOR TO BUILDING CONSTRUCTION, AND TO PROTECT THE BMP SYSTEM AFTER INSTALLATION FROM ALL CONSTRUCTION ACTIVITY, AND WILL BE PROVIDED ON THE FINAL DESIGN AT THE TIME OF SUBMITTAL PER EACH BUILDING PERMIT.

DU PAGE COUNTY STORMWATER BMP ORDINANCE

1.) VOLUME CONTROL BEST MANAGEMENT PRACTICES (VCBMP)

AT A 1.25" RAINFALL OVER 11,640 OF IMPERVIOUS AREA
THE VOLUME OF TREATMENT REQUIRED IS 1,213 CU.FT.
(FOR CA-7 COURSE AGGREGATE USE A 36% VOID RATIO)

IMPERVIOUS AREA TABLE FOR LOT 3

BUILDING =	6,202 SQ.FT.
WALKS & PORCHES =	206 SQ.FT.
DECKS & STAIRS =	640 SQ.FT.
WALLS =	12 SQ.FT.
ACCESS WALK =	655 SQ.FT.
DRIVEWAYS =	3,925 SQ.FT.
TOTAL =	11,640 SQ.FT.

BMP DESIGN CALCULATION

102'x10'x3.5' DEEP STONE BED WITH TWIN 24" PVC PERF PIPES.

TRENCH CROSS SECTION

STONE BED @ 3.5' X 10.0' =	35.00 SQ.FT.
LESS 24" PERF. PIPE (2) =	– 6.28 SQ.FT.
LESS 12" STORM SEWER =	– 0.80 SQ.FT.
TOTAL AREA OF STONE =	27.92 SQ.FT.
@36% VOID FACTOR =	10.05 CU.FT/L.F.
ADD 24" PVC PIPES (2) =	6.28 CU.FT/L.F.
TOTAL CAPACITY OF TRENCH =	16.33 CU.FT/L.F.

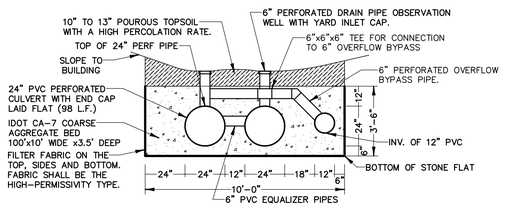
TRENCH END CAPS

STONE 1.0'x10.0'x3.5' DEEP =	35.00 SQ.FT.
LESS 12" STORM SEWER =	– 0.80 SQ.FT.
TOTAL AREA OF STONE =	34.20 CU.FT/L.F.
@36% VOID FACTOR =	12.31 CU.FT/L.F.

TRENCH WITH TWIN 24" PERF PIPES = 100'x16.33 =	1,633.0 CU.FT.
END CAPS = 2x12.31 =	24.62 CU.FT.
TOTAL PROPOSED STORAGE OF BMP BED =	1,657.65 CU.FT.
REQUIRED STORAGE =	1,213.00 CU.FT.

444.65 CU.CF. CREDITED TOWARD PUBLIC RIGHT OF WAY

VCBMP INFILTRATION BED DETAIL



Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 10'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SITE PLAN LOT 3, UNITS 9-12
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 10 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH10

Harding Townhomes - Engineering, 10/04/2021

ILLINOIS ROUTE 53

PROPOSED SERVICE LEGEND

- 6" STORM SERVICE
- 6" SANITARY SERVICE 1-1/4" COPPER
- WATER SERVICE
- 2" P.V.C. CONDUIT FOR ELECTRIC SERVICE & COMMUNICATIONS TRENCH
- NATURAL GAS SERVICE

CARRADUS

FOR VCBMP CONSTRUCT A 72'x7'x3.5' DEEP STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF. TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=762.25 WITHIN THE BMP STONE BED.
TOP OF STONE = 765.25
BOTTOM OF STONE = 761.75
INV. OF 24" P.V.C. = 762.25

6" P.V.C. PIPE AT INV.=763.75 @ 24" PIPE. CONNECTION BETWEEN BMP STONE BED WITH 24" PIPES AND 12" P.V.C. STORM SEWER. INV.=761.75 FOR 12" P.V.C. @ 12"x12"x6" WYE

PROVIDE A RIDGE AT PROPERTY LINE IN EMERGENCY ACCESS DRIVEWAY TO PREVENT EXISTING AND PROPOSED RUNOFF FROM ENTERING THE R/W.

6" P.V.C. PIPE AT INV.=763.75 @ 24" PIPE. CONNECTION BETWEEN BMP STONE BED WITH 24" PIPES AND 12" P.V.C. STORM SEWER. INV.=762.09 FOR 12" P.V.C. @ 12"x12"x6" WYE

60 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

ST-24
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.31

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

ST-23
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=763.00
INV.=759.93

THE 3:1 SLOPE CAN BE REPLACED WITH A LANDSCAPE RETAINING WALL IF PROVIDED FOR ON THE LANDSCAPE PLAN.

MATCH EXISTING EDGE OF PAVEMENT AND GRADE TO CAPTURE RUNOFF SO THAT IT DRAINS AWAY FROM THE RT. 53 ROADWAY.

PROVIDE POSITIVE OVERLAND DRAINAGE FLOW OVER ACCESS DRIVEWAY AS THE DRAINAGE PATTERN NOW EXISTS.

RECONSTRUCT EXISTING APPROACH AS NEEDED TO ACCOMMODATE SIZE & WEIGHT OF EMERGENCY VEHICLE ACCESS.

ST-25
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=766.80
INV.=762.79

NOTE:
THE APPLICANT AND/OR LOCAL MUNICIPALITY SHALL BE RESPONSIBLE FOR ALL GARBAGE CLEANUP ASSOCIATED WITH THE USE OF THE EMERGENCY ACCESS DRIVEWAY.

SAN-5
SANITARY MANHOLE
RIM=771.50
INV.=764.80 (8" E)

EXTRA STRENGTH DRIVEWAY, SIDEWALK & PERMEABLE PAVING TO ACCOMMODATE EMERGENCY VEHICLES. NOTE SPECIFICATIONS AT RIGHT.

NOTE:
ALL ADA RELATED ITEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ADA/PROWAG GUIDELINES AND WITH THE "ADA STANDARD FOR ACCESSIBLE DESIGN" GUIDEBOOK.

REFER TO THE LANDSCAPE PLAN FOR DETAILS AND SPECIFICATIONS ON ALL LANDSCAPE WALLS. ONLY THE RELATED GRADES ARE SHOWN HEREON.

PAVING LEGEND

HEAVY DUTY CONCRETE EMERGENCY ACCESS
CONCRETE APPROACH, SIDEWALK ADJACENT TO THE EMERGENCY ACCESS OR AT CROSSINGS SHALL CONSIST OF 8" OF PORTLAND CONCRETE CEMENT (PCC) OVER A 8" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

STANDARD DUTY CONCRETE
STANDARD CONCRETE SIDEWALK AND STOOPS CONSISTING OF 5" MINIMUM PORTLAND CONCRETE CEMENT OVER A 4" COMPACTED AGGREGATE BASE, TYPE B, CRUSHED.

HEAVY DUTY BITUMINOUS PAVEMENTEMERGENCY ACCESS
BITUMINOUS DRIVEWAY AREA OF THE EMERGENCY ACCESS SHALL CONSIST OF 8 1/4" OF BITUMINOUS PAVEMENT OVER AN 8" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

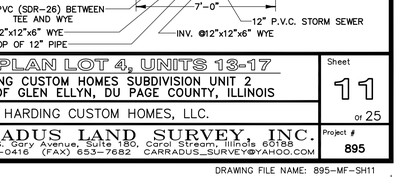
STANDARD DUTY BITUMINOUS PAVEMENT
BITUMINOUS DRIVEWAYS AND HARDING PAVEMENT SHALL CONSIST OF 2" OF BITUMINOUS PAVEMENT OVER AN 12" COMPACTED AGGREGATE SUB BASE, TYPE B, CRUSHED.

PERMEABLE PAVER DRIVEWAY EMERGENCY ACCESS
"GRASSCRETE" STYLE PERMEABLE PAVER EMERGENCY DRIVEWAY WITH CONCRETE COVERAGE OF 50.1% OR GREATER AND TURF COVERAGE OF 49.9% OR LESS. LOAD CAPACITY SHALL EXCEED 40 TONS.

SPECIFICATIONS AND DETAILS OF THE PERMEABLE PAVERS USED SHALL BE SUBMITTED BY THE LANDSCAPE CONTRACTOR WITH THE CONSTRUCTION OF BUILDINGS C AND D PRIOR TO THE START OF CONSTRUCTION FOR APPROVAL BY THE VILLAGE.

ROADWAY PAVEMENT PER SPECIFICATIONS ON SHEET 17
ROADWAY PAVEMENT SHALL CONSIST OF 2" HMA SURFACE AND 3" OF HMA BINDER OVER 12" OF CA-6 SUB-BASE MATERIAL. THE THE SUPERPAVE MIX DESIGN METHOD SHALL BE UTILIZED FOR ALL ROADWAY PAVEMENTS.

EMERGENCY VEHICLE ACCESS GATE DETAIL



DU PAGE COUNTY STORMWATER BMP ORDINANCE

1.) VOLUME CONTROL BEST MANAGEMENT PRACTICES (VCBMP)
AT A 1.25" RAINFALL OVER 12,074 OF IMPERVIOUS AREA THE VOLUME OF TREATMENT REQUIRED IS 1,258 CU.FT.
(FOR CA-7 COURSE AGGREGATE USE A 36% VOID RATIO)

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	767.2	772.5
B	771.0	772.0
C	769.7	768.5
D	766.1	768.0
AVERAGE	768.5	770.4

"EXISTING GRADE" REFERS TO THE UNALTERED GRADE OF THE PROPERTY PRIOR TO MASS GRADING OF THE SITE.

"PROPOSED GRADE" REFERENCES THE EXISTING GRADE FOR THE LOT AT THE TIME OF BUILDING PERMIT APPLICATION BASED ON THE MASS GRADING OF THE ENTIRE SUBDIVISION FROM THE APPROVED SUBDIVISION PLANS.

IMPERVIOUS AREA TABLE FOR LOT 4

BUILDING =	7,728 SQ.FT.
WALKS & PORCHES =	257 SQ.FT.
DECKS & STAIRS =	800 SQ.FT.
PUBLIC WALK & PARKING =	207 SQ.FT.
DRIVEWAYS =	3,082 SQ.FT.
TOTAL =	12,074 SQ.FT.

BMP DESIGN CALCULATION

72'x7'x3.5' DEEP STONE BED WITH TWIN 24" PVC PERF PIPES.

TRENCH CROSS SECTION

STONE BED @ 3.5' X 7.0' =	24.50 SQ.FT.
LESS 24" PERF. PIPE (2) =	- 6.28 SQ.FT.
TOTAL AREA OF STONE =	18.22 SQ.FT.
@36% VOID FACTOR =	6.56 CU.FT/L.F.
ADD 24" PVC PIPES (2) =	6.28 CU.FT/L.F.
TOTAL CAPACITY OF TRENCH =	12.84 CU.FT/L.F.

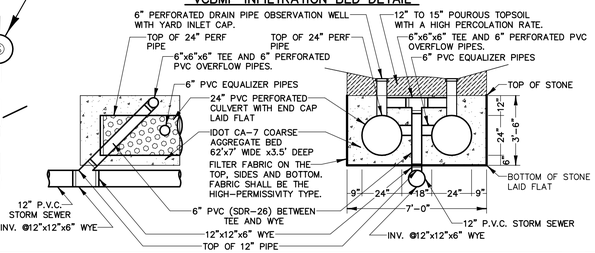
TRENCH END CAPS

STONE 1.0'x7.0'x3.5' DEEP =	24.50 SQ.FT.
TOTAL AREA OF STONE @36% VOID FACTOR =	8.82 CU.FT/L.F.

TRENCH WITH TWIN 24" PERF PIPES = 70'x12.84 =	898.80 CU.FT.
END CAPS = 2x8.82 =	17.64 CU.FT.
TOTAL PROPOSED STORAGE OF BMP BED =	916.44 CU.FT.
REQUIRED STORAGE =	1,258.00 CU.FT.

SHORTAGE OF 341.56 CU.FT. SHALL BE MADE UP WITH EXCESS FROM LOT 5

VCBMP INFILTRATION BED DETAIL



115 L.F. 8" P.V.C. SANITARY SEWER @ 1.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

SAN-3
SANITARY MANHOLE
RIM=772.00
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

ST-15
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.82

20 L.F. 10" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%
8" P.V.C., SDR-26, ASTM D-2241 PIPE

ST-26
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=767.33

80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.60%

NOTE:
FOR FURTHER INFORMATION ON SANITARY SERWER MAINS AND STORM SEWER MAINS SEE SHEET 7 OF 20

SILT FENCING OR ORANGE SAFETY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND ALL BMP AREAS TO PROTECT THE INTEGRITY OF THE SOIL PRIOR TO BUILDING CONSTRUCTION, AND TO PROTECT THE BMP SYSTEM AFTER INSTALLATION FROM ALL CONSTRUCTION ACTIVITY, AND WILL BE PROVIDED ON THE FINAL DESIGN AT THE TIME OF SUBMITTAL PER EACH BUILDING PERMIT.

NOTE:
PERMEABLE PAVER EMERGENCY ACCESS SHALL BE INSTALLED WITH THE FINAL GRADING AND LANDSCAPING OF THE BUILDING ON LOT 4. THE SIDEWALK ADJACENT THERETO SHALL BE INSTALLED WITH THE CONSTRUCTION OF THE BUILDING ON LOT 3.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 10'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SITE PLAN LOT 4, UNITS 13-17

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 11 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH11

Harding Townhomes - Engineering, 10/04/2021

CARRADUS

6" P.V.C. PIPE AT INV.=760.35 @ 24" PIPE. CONNECTION BETWEEN BMP STONE BED WITH 24" PIPES AND 15" P.V.C. STORM SEWER. INV.=760.02 FOR 15" P.V.C. @ 15"x15"x6" WYE

100 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

ST-21
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.25
INV.=759.87

110 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.72% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE

DROP FOUNDATION WALL BELOW AND AROUND STOOP AS NEEDED TO MATCH FINISH GRADE AND PROVIDE SAFETY RAIL AS MAY BE REQUIRED.

WATERMAIN AND STORM CROSSING AT THE BOTTOM OF THE STORM SEWER PIPE IS AT ELEVATION 759.0. DROP WATERMAIN PIPE SO TOP OF PIPE IS BELOW ELEVATION 757.0 AT CROSSING. NO JOINTS IN THE STORM SEWER PIPE WITHIN 5' OF EITHER SIDE OF THE CROSSING.

48" VALVE VAULT WITH CONNECTION TO EXISTING MAIN AND VALVE RIM=762.00

ST-20
48" CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=761.50
INV.=757.56

72 L.F. 15" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.40%

SAN-2
SANITARY MANHOLE
RIM=763.00
INV.=751.60 (8" W)
INV.=751.70 (8" S)

AT STORM SEWER AND SANITARY SEWER CROSSING THE INVERT OF THE 8" SANITARY SEWER IS 752.00 AND THE INVERT OF THE 15" STORM SEWER IS 758.28.

FOR VCBMP CONSTRUCT A 72'x12'x3.5' DEEP STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF. TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=758.85 WITHIN THE BMP STONE BED. TOP OF STONE = 761.85 BOTTOM OF STONE = 758.35 INV. OF 24" P.V.C. = 758.85

6" PVC PERFORATED PIPE AT INV.=761.35 WITH A 6"x6"x6" TEE CONNECTING THE TWIN 6" PERFORATED PVC OBSERVATION WELLS WITH YARD INLET CAP TO PROVIDE OVERFLOW PROTECTION OF THE STONE BED, CONNECT THE 6"x6"x6" TEE TO A 15"x15"x6" "WYE" IN THE 15" STORM SEWER WITH 6" PVC SOLID WALL PIPE FOR DISCHARGE OF OVERFLOW TREATED STORMWATER FROM THE STONE BEDS. INV.=760.32 FOR THE 15" PVC STORM SEWER AT THE 15"x15"x6" "WYE"

ST-22
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.90
INV.=760.47

6" PVC PERFORATED PIPE AT INV.=762.05 WITH A 6"x6"x6" TEE CONNECTING THE TWIN 6" PERFORATED PVC OBSERVATION WELLS WITH YARD INLET CAP TO PROVIDE OVERFLOW PROTECTION OF THE STONE BED, CONNECT THE 6"x6"x6" TEE TO A 12"x12"x6" "WYE" IN THE 12" STORM SEWER WITH 6" PVC SOLID WALL PIPE FOR DISCHARGE OF OVERFLOW TREATED STORMWATER FROM THE STONE BEDS. INV.=760.71 FOR THE 12" PVC STORM SEWER AT THE 12"x12"x6" "WYE"

FOR VCBMP CONSTRUCT A 72'x12'x3.5' DEEP STONE BED 12" TO 15" BELOW FINISH GRADE OF THE DEPRESSIONAL AREA FOR INFILTRATION RUNOFF. TWIN 24" P.V.C. PERF. PIPE LAID FLAT @ INV.=759.55 WITHIN THE BMP STONE BED. TOP OF STONE = 762.55 BOTTOM OF STONE = 759.05 INV. OF 24" P.V.C. = 759.55

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

ST-23
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=764.00
INV.=761.27

EXISTING 12" WATERMAIN

130 L.F. 10" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

PROPOSED SERVICE LEGEND

- 6" STORM SERVICE
- 6" SANITARY SERVICE
- 1-1/4" COPPER WATER SERVICE
- 2" P.V.C. CONDUIT FOR ELECTRIC SERVICE & COMMUNICATIONS TRENCH
- NATURAL GAS SERVICE

FOR LEGEND OF PAVEMENT TYPES SEE SHEETS 4 AND 11

BUILDING ELEVATION TABLE		
CORNER	EXISTING GRADE	PROPOSED GRADE
A	762.4	763.0
B	766.4	770.5
C	764.9	765.5
D	763.4	764.0
AVERAGE	764.3	765.75

"EXISTING GRADE" REFERS TO THE UNALTERED GRADE OF THE PROPERTY PRIOR TO MASS GRADING OF THE SITE.

"PROPOSED GRADE" REFERENCES THE EXISTING GRADE FOR THE LOT AT THE TIME OF BUILDING PERMIT APPLICATION BASED ON THE MASS GRADING OF THE ENTIRE SUBDIVISION FROM THE APPROVED SUBDIVISION PLANS.

DU PAGE COUNTY STORMWATER BMP ORDINANCE

1.) VOLUME CONTROL BEST MANAGEMENT PRACTICES (VCBMP)

AT A 1.25" RAINFALL OVER 13,502 OF IMPERVIOUS AREA THE VOLUME OF TREATMENT REQUIRED IS 1,406 CU.FT. (FOR CA-7 COURSE AGGREGATE USE A 36% VOID RATIO)

IMPERVIOUS AREA TABLE FOR LOT 5

BUILDING =	9,147 SQ.FT.
WALKS & PORCHES =	300 SQ.FT.
DECKS & STAIRS =	960 SQ.FT.
WALLS =	37 SQ.FT.
PUBLIC WALK & PARKING =	180 SQ.FT.
DRIVEWAYS =	2,878 SQ.FT.
TOTAL =	13,502 SQ.FT.

BMP DESIGN CALCULATION

2 - 72'x12'x3.5' DEEP STONE BED WITH TWIN 24" PVC PERF PIPES.

TRENCH CROSS SECTION

STONE BED @ 3.5' X 12.0' =	42.00 SQ.FT.
LESS 24" PERF. PIPE (2) =	- 6.28 SQ.FT.
LESS 12" PVC STORM SEWER =	- 0.80 SQ.FT.
TOTAL AREA OF STONE =	34.92 SQ.FT.
@36% VOID FACTOR =	12.57 CU.FT/L.F.
ADD 24" PVC PIPES (2) =	6.28 CU.FT/L.F.
TOTAL CAPACITY OF TRENCH =	18.85 CU.FT/L.F.

TRENCH END CAPS

STONE 1.0'x12.0'x3.5' DEEP =	42.00 SQ.FT.
TOTAL AREA OF STONE @36% VOID FACTOR =	10.08 CU.FT/L.F.
TRENCH WITH TWIN 24" PERF PIPES = 70'x18.85 =	1,319.50 CU.FT.
END CAPS = 2x15.12 =	30.24 CU.FT.
TOTAL PROPOSED STORAGE OF SINGLE BMP BED =	1,349.74 CU.FT.
TWO BED DESIGN =	2,699.48 CU.FT.
REQUIRED STORAGE =	1,406.00 CU.FT.
OVERAGE TO BE APPLIED TO THE SHORTAGE ON =	1,293.48 CU.FT.

LOT 4 OF 336.76 CU.FT. AND THE VOLUME REQUIRED FOR THE IMPROVEMENTS WITHIN THE HARDING RIGHT OF WAY (960.72 CU.FT. APPLIED)

PROPOSED 6" D.I.P. WATERMAIN

ST-15
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE
RIM=769.00 T/C
=768.50 F/L
INV.=764.82

REFER TO THE LANDSCAPE PLAN FOR DETAILS AND SPECIFICATIONS ON ALL LANDSCAPE WALLS. ONLY THE RELATED GRADES ARE SHOWN HEREON.

BACK PITCH 5' OF CURB DOWNSTREAM OF INLET TO AID IN THE CAPTURE OF RUNOFF.

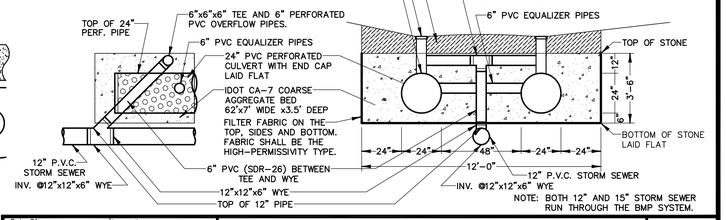
395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00% 8" P.V.C., SDR-26, ASTM D-2241 PIPE

20 L.F. 10" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

18 L.F. 112" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

ST-19
48" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.85

VCBMP INFILTRATION BED DETAIL



SILT FENCING OR ORANGE SAFETY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND ALL BMP AREAS TO PROTECT THE INTEGRITY OF THE SOIL PRIOR TO BUILDING CONSTRUCTION, AND TO PROTECT THE BMP SYSTEM AFTER INSTALLATION FROM ALL CONSTRUCTION ACTIVITY, AND WILL BE PROVIDED ON THE FINAL DESIGN AT THE TIME OF SUBMITTAL PER EACH BUILDING PERMIT.

NOTE:
FOR FURTHER INFORMATION ON SANITARY SERWER MAINS AND STORM SEWER MAINS SEE SHEET 7 OF 23

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 10'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SITE PLAN LOT 5, UNITS 18-23
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 12 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH12

Harding Townhomes - Engineering, 10/04/2021

PROTECTION OF EXISTING TREES

PREFACE

Contractors are advised that it is the express intent of the Village to minimize trimming of trees in the work corridors and to vigorously protect the quality of the urban forest. The equipment and methods used to perform any and all portions of the work must be of the size and nature that results in the least disruption to the existing environment
The contractor shall at all times demonstrate to the satisfaction of the Village that suitable precautions and due diligence are being observed to protect the natural and improved features of the area. Special and continuing attention will be paid to the maintenance of tree protection fencing and the appropriate observance of tree protection areas as delineated by the fencing.

The Village of Glen Ellyn Ordinances related to tree protection apply except as stated or modified herein.

A. Earth Saw Cut of Tree Roots (Root Pruning) Within The Public Right of Way:

1. Whenever the proposed excavation falls within the drip–line of a tree, the Contractor shall:

a. Root prune 6–inches behind and parallel to the proposed edge of trench a neat, clean vertical cut to a minimum depth ALL directed by the Village Forestry Representative through all affected tree roots.
b. Root prune to a maximum width of 4–inches using a "Vermeer" wheel matching the following criteria. The root pruner wheel shall be 60" Diameter (188" Circumference) carrying 28 pair (56 total) stump cutter teeth with tooth spacing at 6.7" on center. The cutting depth shall be 24" and shall utilize a 65hp tractor. Trenching machines will not be permitted. The Village Forestry Representative or designee shall review and approve all root pruning equipment prior to use.

c. Exercise care not to cut any existing utilities.

d. If during construction it becomes evident that additional tree roots will require root pruning, the Village Forestry Representative shall be notified and the Contractor shall have the root pruning sub– contractor return to the site to properly root prune the tree at the location directed by the Village Forestry Representative. The contractor will be paid for the additional root pruning as described below, however, no additional compensation will be made for remobilization to the construction site.

e. For locations where root pruning is performed for the purpose of curb and gutter removal and replacement, the contractor shall root prune 6–inches behind the curbing so as to neatly cut the tree roots.

f. Depth of cut shall be 12 inches for curb removal and replacement and 24 inches for structural work. Any roots encountered at a greater depth shall be neatly saw–cut at no additional cost.

g. The Village Forestry Representative will mark locations where earth saw cutting of tree roots is required in the field.

2. All root pruning cuts shall be immediately backfilled with material side cast from the earth–sawing procedure, so that the ground surface is even and no tripping potential exists.

3. All root pruning work is to be performed through the services of a certified arborist to be approved by the Owner / Village.

4. If during construction it becomes evident that the Contractor has dug beyond the limits of root pruning, the Contractor will prune the damaged roots at no cost to the Owner.

B. Temporary Fence Within The Public Right of Way:

1. The Contractor shall erect a temporary fence around all trees within the construction area to establish a "tree protection zone" (see diagram in attached ordinance) before any work begins or any material is delivered to the jobsite. Once the "tree protection zone" is established, it is intended that no work be performed, materials stored or vehicles driven or parked within the fenced areas.

2. The exact location and establishment of the "tree protection zone" fence shall be as determined by the Owners Representative in the field and approved by the Village Forestry Representative prior to setting the fence.

3. The fence shall be erected on three sides of the tree at the drip–line of the tree or as determined by the Village Forestry Representative.

4. If work is required within the "tree protection zone", it shall have the Village Forestry Representative's prior approval. All slopes and other areas not re– graded should be avoided so that unnecessary damage is not done to the existing turf, tree root system or ground cover. When work is approved in the "tree protection zone", all of the work will be performed by hand with the exception that a sod cutter may be used to remove the existing ground cover.

5. The grade within the "tree protection zone" shall not be changed unless approved by the Village Forestry Representative prior to making said changes or performing the work.

The fence shall be 48 inches high, plastic poly–type or any other type of highly visible barrier in an open–weave type pattern with large openings. The type, color and pattern of the fence shall be approved by the Engineer prior to erection. This fence shall be properly maintained and shall remain up until final restoration, unless the Owner or Village Forestry Representative directs removal otherwise. Tree fence shall be supported using T–Post style fence posts. Utilizing re–bar as a fence post will not be permitted. Tree fencing may not be removed until after the landscaping is complete.

The general contractor shall assign, as the contractor's agent, a competent, English–speaking individual capable of reading and thoroughly understanding the contract tree protection engineering drawings and specifications

At the end of every work day the Contractor shall repair any tree protective fencing areas that are damaged, leaning, or in the need of re–erection, regardless of whether construction activities by the general contractor or any sub–contractor's have taken place or not. The tree fence protection shall be maintained to the satisfaction of Owner or Village Forestry Representative.

C. Augering/Saw Cutting Requirements Within The Public Right of Way:

TREE DIAMETER (DBH)	AUGERING/SAW CUTTING SPECIFICATION
2 – 9 inch in diameter	Auger or saw cut 6–foot from face of tree in all directions if trench is located within this radius.
10 – 14 inch. in diameter	Auger or saw cut 10–feet from face of tree in all directions if trench is located within this radius.
15 – 19 inch. in diameter	Auger or saw cut 12–feet from face of tree in all directions if trench is located within this radius.
Over 19 inch in diameter	Saw cut 15–feet from face of tree in all directions if trench is located within this radius.

DBH = Diameter Breast Height, measured at 4.5–ft. above ground.

These augering specifications can be amended as needed by the Village Forestry Representative.

D. Tree Limb Pruning Within The Public Right of Way:

1. The Village may elect ot prune tree limbs prior to start of the project of any trees within the Right of Way that may be affected by the construction. The Contractor must allow a minimum of two (2) weeks for the completion of tree limb pruning. The Contractor shall inspect the work site in advance and may request, in writing, additional areas of limb pruning that might be damaged by equipment operations. The Village Forestry Representative will review the request and have final authorization as to whether the additional pruning will be allowed. Any tree limbs that are broken by construction equipment after the initial pruning must be reported to the Village Forestry Representative within 24 hours. Any correction cuts that are necessary will be pruned by the Village at the Contractor's expense. The Contractor will also be responsible for any additional maintenance as described in these specifications.

E. Removal of Driveway Pavement and Sidewalk Within The Public Right of Way:

1. In order to minimize the potential damage to the tree root system(s), the Contractor will not be allowed to operate any construction equipment or machinery within the "tree protection zone" located between the curb and the right–of–way property line.

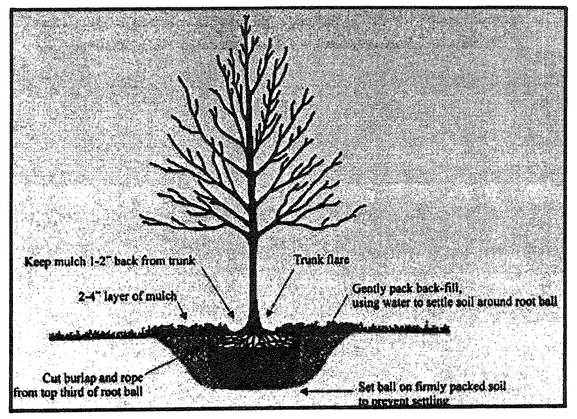
2. Sidewalk to be removed in the areas adjacent to the "tree protection zones" shall be removed with equipment operated from the street pavement. Removal equipment shall be Grad–all (or similar method), or by hand or a combination of these methods. The method of removal shall be approved by the Engineer prior to commencing any work.

3. Any pavement or pavement related work that is removed should be immediately disposed of from the area and shall not be stockpiled or stored within the parkway area under any circumstances.

F. Backfilling and Mulching Within The Public Right of Way:

1. All backfill material within the turf area of the Public Right of Way in back of the curb, which is not selected trench backfill material, shall be pulverized topsoil meeting the requirements of Section 211 of the Standard Specifications. Excavated spoil material will not be permitted as an acceptable backfill material. Prior to placing the topsoil and/or sod, in areas outside the protection zone, the existing ground shall be disked to a depth no greater than one inch (1"), unless otherwise directed by the Village Forestry Representative. No grading will be allowed within the drip–line of any tree unless directed by the Village Forestry Representative.

2. The Contractor shall provide shredded tree bark mulch meeting the requirements of Section 251 of the Standard Specifications and shall be dark, premium hardwood bark mulch, shredded, double processed, non–dyed around all parkway trees. The area of mulching will depend on the size, location and adjacent grades, but shall be a minimum of three inches (3") deep. In no case will the limits of the mulch material be less than the area of existing mulch and/or less than 24" from the face of the tree unless otherwise directed by the Village Forestry Representative. Tree mulching will be paid for at the unit price per each for TREE MULCHING.

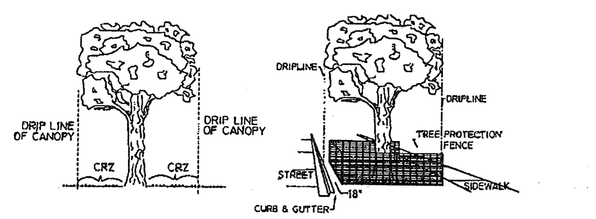


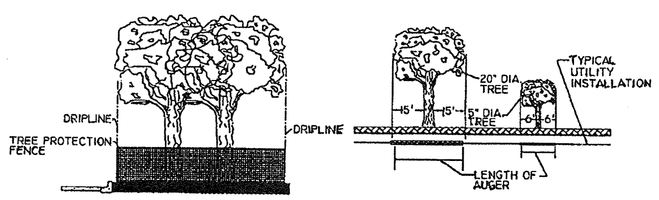
G. Damages:

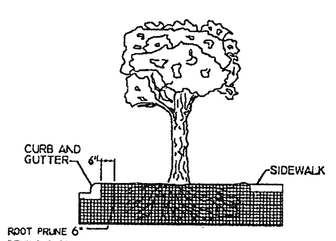
1. In the event that a tree is injured such that potential irreparable damage may ensue, as determined by the Village Forester, the Contractor shall be held liable for the full value of the tree based upon the guideline entitled Guide for Plant Appraisal, latest Edition. The Contractor shall cause to be paid to the Village of Glen Ellyn either by direct payment to the Village or a deduction by the Owner (should the Owner make payment to the Village) from the contract the full amount of replacement worth as determined by the guideline.

2. Replacement of shrubs, small trees, plants and evergreens shall be furnished, delivered and planted of the same species, variety and size of which they are to replace. The replacement shall be as specified in the Standard Specifications and at locations determined by the Engineer.

The Contractor shall place extreme importance upon the protection and care of trees and shrubs, which are to remain, during all times of this improvement. Special attention is called to the Contractor with regard to the "tree protection zone" of this specification. It is of paramount importance to the Village of Glen Ellyn that the trees and shrubs that are to remain are adequately protected by the Contractor and made safe from harm and potential damage from the operations and construction of this improvement. If the Contractor fails to erect and maintain tree protection fencing and/or is found to be in violation of storage or operations within the "tree protection zone" or construction activities not approved by the Village Forester, a penalty shall be levied against the Contractor with the monies being deducted by the Owner from the contract for payment to the Village. The amount of the penalty shall be two hundred fifty dollars ($250.00) per occurrence per day. The Contractor will also be responsible for any costs associated with fertilization and future maintenance of trees damaged during construction as deemed necessary by the Village







GENERAL NOTES FOR EROSION CONTROL

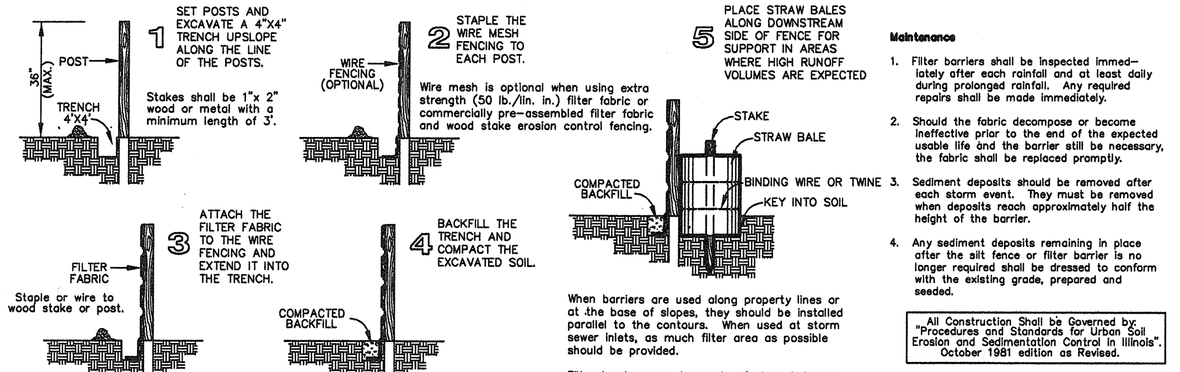
1. SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENT CONTROL IN ILLINOIS", AND SHALL MEET ALL REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY, N.P.D.E.S. PERMIT FOR "CONSTRUCTION SITE ACTIVITIES".
2. SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE PROPERTY WHERE BERMS, STOCKPILES, OR OTHER EARTHWORK WILL TAKE PLACE AND AROUND ANY EXISTING STORM SEWER STRUCTURES, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT A VALID NOTICE OF INTENT (N.O.I.) IS ON RECORD WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (I.E.P.A.), AND THAT COPIES OF ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CERTIFICATES ARE SIGNED, AND ON FILE PRIOR TO DISTURBING ANY GROUND.
4. A COPY OF THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MAINTAINED ON SITE AT ALL TIMES.
5. A STABILIZED CONSTRUCTION ENTRANCE(S) FOR MUD AND DUST CONTROL SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF THE PROJECT. CONSTRUCTION ENTRANCE(S) SHALL BE LOCATED WHERE SHOWN ON THE PLANS, AND AT ANY OTHER POINTS WHERE CONSTRUCTION TRAFFIC FREQUENTLY LEAVES THE PUBLIC ROADWAY TO ENTER THE SITE. THE STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE A MINIMUM 30' WIDE, 50' LONG, AND SHALL BE CONSTRUCTED OF A 6" THICK MINIMUM LAYER OF 2" ANGULAR CRUSHED AGGREGATE COMPACTED IN PLACE, LAID OVER A GEOTEXTILE FABRIC.
6. STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND OTHER DEBRIS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY DIRT, MUD OR DEBRIS THAT MAY BECOME DEPOSITED UPON THE ADJACENT STREETS.
7. HAULING WILL NOT BE ALLOWED WHEN THE WORK SITE IS TOO WET TO MAINTAIN ACCEPTABLE CONDITIONS ON ADJACENT STREETS.
8. ADJACENT STREETS SHALL BE MECHANICALLY SWEPT PERIODICALLY AS DIRECTED BY THE VILLAGE INSPECTOR.
9. NO SEDIMENT SHALL BE ALLOWED TO ENTER THE STORM SEWER SYSTEM.
10. ALL STORM SEWER STRUCTURES EXISTING OR PROPOSED, LOCATED IN GRADED AREAS, SHALL BE PROTECTED SILT FENCE AND REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. ALL OPEN GRATE STORM SEWER STRUCTURES LOCATED IN PAVED AREAS, ON SITE OR WITHIN 300' OF THE PROJECT, SHALL BE PROTECTED BY A REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED AND/OR CONSTRUCTION IS COMPLETE. FILTRATION BASKETS SHALL BE FLEXSTORM OR EQUAL.
11. TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFF SITE AREAS, I.E. THE STOCKPILE SHALL BE LOCATED SO THAT AN ONSITE DRAINAGE SWALE IS LOCATED BETWEEN THE STOCKPILE AND THE DOWNSTREAM OFF SITE PROPERTY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN TWELVE MONTHS, IT IS REQUIRED THAT THE STOCKPILE BE SEEDED SO AS TO MINIMIZE SOIL EROSION BY BOTH WIND AND RAIN.
12. CONCRETE TRUCKS SHALL WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONLY IN DESIGNATED WASHOUT LOCATIONS. THE CONTRACTOR SHALL TAKE SUFFICIENT PRECAUTIONS TO PREVENT SURPLUS CONCRETE OR DRUM WASH WATER FROM ENTERING THE STORM SEWER SYSTEM.
13. ALL STORM SEWER STRUCTURES, PERMANENT SEDIMENT BASINS AND RETENTION BASINS PROVIDED WITHIN THIS PROJECT ARE TO BE CLEANED AT THE END OF CONSTRUCTION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE. CLEANING MAY ALSO BE REQUIRED DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT IF IT IS DETERMINED THAT THE SILT AND DEBRIS TRAPS ARE NOT PROPERLY FUNCTIONING AND THEIR PERFORMANCE IS IMPAIRED.
14. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS OF FINAL INSPECTION, OR AFTER THE CONTROL MEASURES ARE NO LONGER NEEDED.
15. IF FOUND BY INSPECTION THAT THE CONDITIONS ARE NOT SUBSTANTIALLY AS STATED OR SHOWN IN THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, THE VILLAGE ENGINEER MAY STOP FURTHER WORK UNTIL DEFICIENT CONDITIONS ARE CORRECTED.
16. SOIL STABILIZATION (TEMPORARY SEEDING OR EROSION CONTROL BLANKETS) SHALL BE INITIATED AS SOON PRACTICAL IN THOSE PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, IN NO CASE SHALL AN AREA THAT IS AT FINAL GRADE REMAIN EXPOSED TO THE ELEMENTS FOR MORE THAN FIFTEEN (15) DAYS. SOIL STABILIZATION SHALL ALSO BE INITIATED WITHIN FIFTEEN (15) DAYS FOR THOSE AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN UNDISTURBED FOR LONGER THAN SIXTY (60) DAYS.

INSPECTION SCHEDULE

1. DIVERSION AND STRUCTURAL MEASURES – WILL BE INSPECTED AT WEEKLY INTERVALS OR AFTER EVERY RAINSTORM PRODUCING RUNOFF.
2. SEDIMENT BASINS – WILL BE CHECKED WEEKLY FOR SEDIMENT ACCUMULATION.
3. VEGETATIVE PLANTINGS – SPRING PLANTINGS WILL BE CHECKED DURING SUMMER OR EARLY FALL.
4. REPAIRS – ANY EROSION CONTROL MEASURES, STRUCTURAL MEASURES OR OTHER RELATED ITEMS IN NEED OF REPAIR, ARE EXPECTED TO BE BROUGHT INTO COMPLIANCE IMMEDIATELY.
5. MOWING – DRAINAGEWAYS, DITCHES AND OTHER AREAS THAT SUPPORT A DESIGNATED FLOW OF WATER WILL BE MOWED REGULARLY TO MAINTAIN THAT FLOW.
6. RESEEDING – SEEDED AREAS WHERE THE SEED HAS NOT PRODUCED A GOOD COVER WILL BE RESEEDED AND FERTILIZED.

EROSION CONTROL DETAILS

Plans and Specifications
For Silt Fence and Straw Bale Placement



Maintenance

1. Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

All Construction Shall be Governed by "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois". October 1981 edition as Revised.

OVERALL EROSION CONTROL NOTES

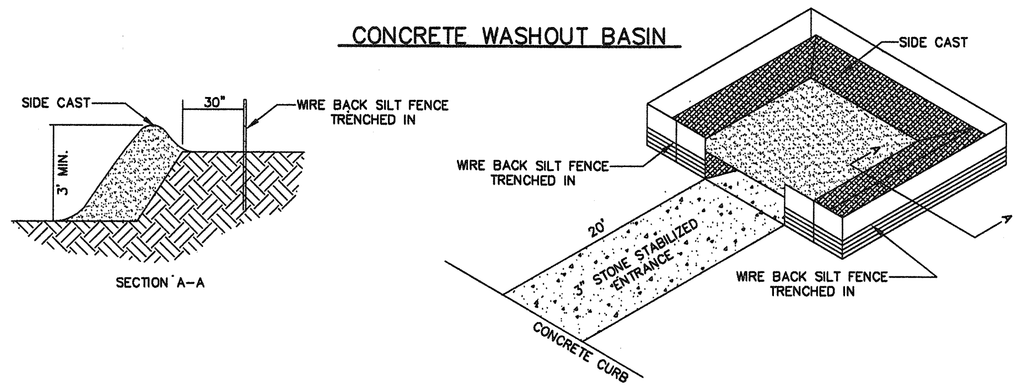
1. Sediment and erosion control devices shall be installed and functional before the site is otherwise disturbed.
2. If a stockpile is to remain in place for more than seven days, it shall be surrounded by silt fence. If a stockpile is to remain in place for more than fourteen days, it shall be protected with temporary seeding.
3. All flared end sections shall be protected by sediment settling basins and/or straw bales until ground cover has been established. Filter fabric shall be placed under all inlet grates until ground cover has been established.
4. Water pumped, or otherwise discharged, from the site as part of construction dewatering shall be filtered.
5. All soil, mud and debris washed, tracked or deposited onto the street pavement shall be removed at the end of each work day.
6. All vehicular access to the site shall be restricted to the existing driveway of the site, or if is to be removed then to a gravel drive after the existing drive has been removed. The gravel drive shall be installed prior to the start of any construction activity at the site.
7. Ground cover (seed and mulch or sod) shall be placed on all disturbed areas within fourteen days of the completion of top soil placement and final grading. If weather conditions preclude the placement of seed and mulch or sod, all disturbed areas shall be protected with erosion blanket.

SEQUENCE FOR SOIL EROSION CONTROL ITEMS

EACH RESPECTIVE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND ANY NECESSARY CORRECTIVE ACTION ASSOCIATED WITH THE EROSION CONTROL MEASURES SO DESIGNATED FOR THAT CONTRACTOR. THE FOLLOWING ITEMS ARE TO BE PROVIDED BY THE DESIGNATED CONTRACTOR AT THE TIME AND IN THE GENERAL SEQUENCE INDICATED BELOW.

I. MASS GRADING / EARTHWORK CONTRACTOR
   A. PROVIDE CONSTRUCTION ENTRANCE, AND SILT FENCE PRIOR TO THE START OF CONSTRUCTION.
   B. PROVIDE DIVERSION SWALES AROUND SITE PERIMETER (WHICH ARE PART OF OVERALL GRADING PLAN) AS NECESSARY TO PREVENT AND/OR INTERCEPT STORM WATER RUNOFF TO OFFSITE AREAS, AS PART OF THE INITIAL MASS GRADING IMPROVEMENTS.
   C. OVER–EXCAVATE PROPOSED TEMPORARY SILTATION BASIN(S) AS NECESSARY
   D. OVER–EXCAVATE AROUND PROPOSED YARD INLETS.
   E. PROVIDE A DIVERSION DITCH OR BERM IN ACCORDANCE WITH THE TEMPORARY STOCKPILE DETAIL FOR ALL STOCKPILES PRIOR TO ANY PLACEMENT OF MATERIAL IN SAID STOCKPILE.
II. UNDERGROUND CONTRACTOR
   A. PROVIDE SILT FENCE AROUND ALL STORM STRUCTURES IMMEDIATELY UPON INSTALLATION OF SAID STRUCTURE(S).
   B. PROVIDE REUSABLE FILTRATION BASKETS AT ALL OPEN GRATE STORM STRUCTURES DURING CONSTRUCTION. REUSABLE FILTRATION BASKETS SHALL BE PLACED BETWEEN THE GRATE AND CAST IRON FRAME TO ALLOW MAINTENANCE BY REMOVING GRATE WITH FRAME TO REMAIN IN PLACE. REUSABLE FILTRATION BASKETS SHALL BE MAINTAINED UNTIL ALL "UPSTREAM" AREAS TO A RESPECTIVE STORM STRUCTURE HAVE BEEN COMPLETED THROUGH ESTABLISHMENT OF VEGETATIVE COVER.
   C. PROVIDE CLEANING OF THE STORM SEWER SYSTEM AND SEWER STRUCTURES.

CONCRETE WASHOUT BASIN



TREE PROTECTION NOTES

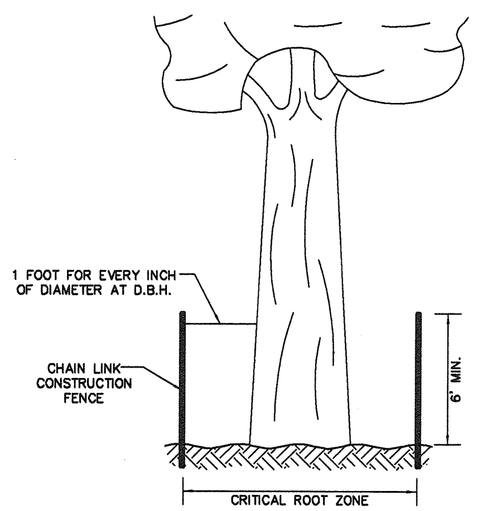
PARKWAY TREE PROTECTION SHALL INVOLVE AVOIDING DAMAGE TO BOTH THE ABOVE GROUND TREE TRUNK, INCLUDING THE BRANCHES, AND THE BELOW GROUND ROOT SYSTEM. ROOTS ARE THE MOST VITAL PART OF A TREE WITH THE MAJORITY OF NUTRIENT AND WATER ABSORBING ROOTS IN THE UPPER 18 TO 24 INCHES OF SOIL. TREE ROOTS MUST BE PROTECTED FROM SEVERING OR CHANGES IN THEIR SOIL ENVIRONMENT (SUCH AS COMPACTION OR GRADE CHANGES) TO PREVENT IRREVERSIBLE TREE DECLINE OR DEATH IN THE COMING YEARS.

THE CRITICAL ROOT ZONE, OR CRZ, IS THE AREA IMMEDIATELY SURROUNDING A TREE THAT NEEDS TO BE PROTECTED FROM DAMAGE. THE SIZE OF THIS AREA, MEASURED FROM THE CENTER OF THE TREE, IS IDEALLY A CIRCLE WITH A RADIUS OF ONE FOOT FOR EACH INCH OF TRUNK DIAMETER. THE DEPTH OF THE CRZ EXTENDS TO 4 FEET BELOW THE NATURAL GROUND SURFACE LEVEL. IN A MUNICIPAL PARKWAY SETTING WITH UTILITIES AND PAVED OR CONCRETE SURFACES, THE CRZ CANNOT ALWAYS BE THE IDEAL SIZE. INSTEAD, THE CRZ HAS BEEN ADJUSTED TO FORM A RECTANGLE AROUND THE PARKWAY TREE TRUNK WITH THE MINIMUM DIMENSIONS LISTED IN THE FOLLOWING TABLE. AT A MINIMUM, THE LISTED CRZ SHALL BE FENCED WITH A 6 FOOT HIGH TEMPORARY CHAIN LINK CONSTRUCTION FENCE SECURED TO METAL POSTS SPACED NO FURTHER THAN 10 FEET APART. WHENEVER POSSIBLE, THE ENTIRE PARKWAY SHALL BE FENCED IN EXCEPT WHERE ACCESS HAS BEEN PERMITTED. ANY EXCEPTIONS SHALL BE NOTED ON THE DRAWINGS SUBMITTED FOR A GIVEN PERMIT.

FOR PUBLIC PARKWAY TREES, ROOTS LOCATED WITHIN THE DETERMINED CRZ SHALL BE PROTECTED FROM COMPACTION, SEVERING, AND THE STORAGE OF MATERIALS OR EQUIPMENT. UTILITIES MUST BE AUGURED UNDERNEATH THE TREE. IN CASES WHEN SEVERING OF ROOTS WITHIN A PORTION OF THE CRZ MAY BE UNAVOIDABLE (EX. SIDEWALK INSTALLATION, CURB REPLACEMENT, WATER MAIN OR SANITARY MAIN DISCONNECTS IN THE PARKWAY), SUBJECT TO THE APPROVAL OF THE VILLAGE FORESTER, THE SMALLEST POSSIBLE AREA SHALL BE DISTURBED AND SHARP CLEAN CUTS SHALL BE MADE ON ROOT ENDS TO PROMOTE WOUND CLOSURE AND ROOT REGENERATION. ALL CRZ FENCING SHALL BE A 6 FOOT HIGH TEMPORARY CHAIN LINK CONSTRUCTION FENCE SECURED TO METAL POSTS SPACED NO FURTHER THAN 10 FEET APART, AND SHALL BE MAINTAINED DAILY IN GOOD CONDITION. ANY EXCEPTIONS TO THE FENCE DIMENSIONS OR PARKWAY POSITION SHALL BE NOTED ON THE PERMIT.

PARKWAY TREE DIAMETER AT 4.5'	WIDTH FROM STREET TO PROPERTY (MINIMUM CURB TO SIDEWALK)	LENGTH ALONG STREET (MINIMUM)	DEPTH
0–12 INCHES	10 FEET	10 FEET	4 FEET
12.1–24.0 INCHES	10 FEET	20 FEET	4 FEET
24.1 OR MORE INCHES	10 FEET	30 FEET	4 FEET

NOTE:
THERE ARE NO EXISTING TREES ONSITE GREATER THEN 5" DIA. TO REMAIN AFTER CONSTRUCTION.

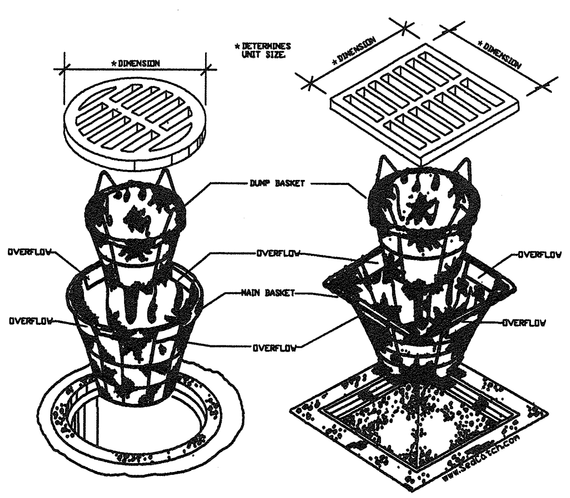


SEDCATCH® SEDIMENT BASKET® SQUARE, RECTANGULAR, OR ROUND GRATES

LEGEND

SB	SEDIMENT BASKET®

SIZING INSTRUCTIONS:
MEASURE THE ACTUAL SIZE OF THE GRATE, CHECK FOR ANY OBSTRUCTIONS THAT COULD INTERFERE WITH THE SEDCATCH® SEDIMENT BASKET®



US PATENTS D 598,196, D 600,324, D 604,800, OTHER PATENTS PENDING

1. INLET PROTECTION SHALL BE INSTALLED AT THE TIME THE STRUCTURE IS SET.
2. TO INSTALL: REMOVE GRATE, DROP MAIN SEDIMENT BASKET IN OPENING, PLACE DUMP BASKET IN MAIN BASKET. REPLACE GRATE.
3. INSPECT AFTER EACH RAIN OR AS DIRECTED BY ENGINEER OR INSPECTOR.
4. IF THERE IS AN ACCUMULATION OF SEDIMENT; SLIDE THE GRATE OFF THE INLET, LIFT THE DUMP BASKET OUT OF THE MAIN BASKET, EMPTY CONTENTS IN A SUITABLE LOCATION, REPLACE DUMP BASKET, REPLACE GRATE.
5. AFTER APPOOXIMATELY 10–20 DUMPS, OR AS NEEDED, EMPTY THE MAIN BASKET OF ANY ACCUMULATED SEDIMENT.
6. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE TO BE BLOCKED ENTIRELY. DO NOT INSTALL IF IT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184–007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	No Scale	Checked By:	EAC
Fld Bk Pg:	48–00	Approved:	ADC

Date:	Revision:
03/01/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

EROSION CONTROL & TREE PRESERVATION PLAN DETAILS
HARDING CUSTOMHOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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(630) 588–0416 (FAX) 653–7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 13 of 25
Project # 895

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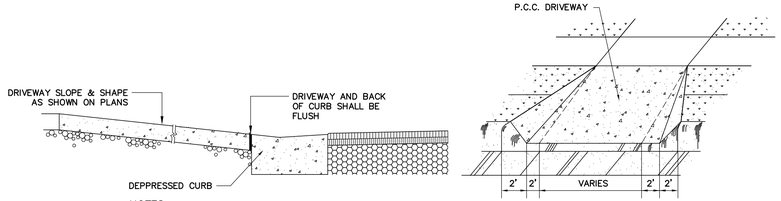
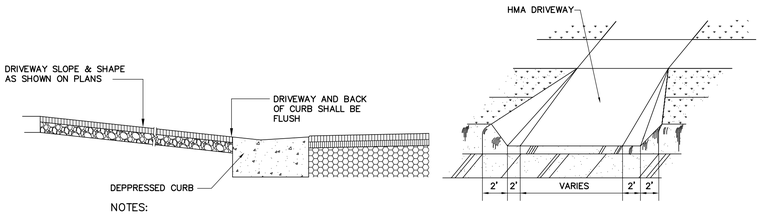


NOTES:

1. THE CONCRETE DRIVEWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 423 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THE CONCRETE SHALL CONFORM TO SECTION 1020 AND SHALL BE CLASS PV AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS.
3. THE DRIVEWAY SHALL BE 6-INCHES THICK FOR RESIDENTIAL DRIVEWAY AND 8" THICK FOR COMMERCIAL DRIVEWAY OVER 4" AGGREGATE BASE AND SHALL BE REINFORCED WITH FIBER MESH ADDITIVE. SEE P.C.C. DRIVEWAY SPECIAL PROVISION FOR SYNTHETIC FIBER SPECIFICATIONS.
4. PREMOULDED FIBER EXPANSION JOINTS SHALL BE INSTALLED BETWEEN DRIVEWAY AND BACK OF CURB.
5. THE DRIVEWAY SHALL HAVE A BROOM FINISH.

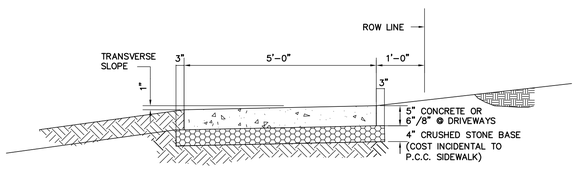
CONCRETE DRIVEWAY DETAIL
(NOT TO SCALE)



NOTES:

1. THE HOT-MIX ASPHALT DRIVEWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THE DRIVEWAY SHALL BE HMA SURFACE COURSE, MIX "D", N50, 3-INCHES THICK OVER 6" AGGREGATE BASE.

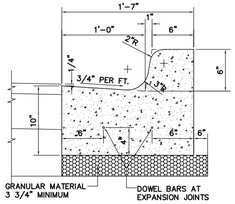
HOT-MIX ASPHALT DRIVEWAY DETAIL
(NOT TO SCALE)



NOTES:

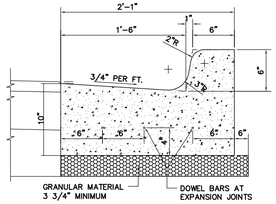
1. THE CONCRETE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 424 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THE CONCRETE SHALL CONFORM TO SECTION 1020 AND SHALL BE A CLASS SI AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS.
3. THE SIDEWALK PORTION OF THE RESIDENTIAL DRIVEWAY SHALL BE 6-INCHES THICK OR 8-INCHES FOR COMMERCIAL DRIVEWAY AND SHALL BE REINFORCED WITH FIBER MESH ADDITIVE. SEE P.C.C. SIDEWALK SPECIAL PROVISION FOR SYNTHETIC FIBER SPECIFICATIONS.
4. PLACEMENT WILL NOT BE PERMITTED UNLESS THE TEMPERATURE IS 28°F AND RISING. NO CHLORIDE ADDITIVE WILL BE PERMITTED IN THE CONCRETE.
5. SIDEWALK AT INTERSECTIONS SHALL BE DEPRESSED AND TEXTURED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. THE MAXIMUM ALLOWABLE SLOPE IS 1:20.
6. CONTROL JOINTS SHALL BE INSTALLED AT 5 FOOT CENTERS.
7. PREMOULDED FIBER EXPANSION JOINTS SHALL BE INSTALLED AT 100 FOOT CENTERS MAXIMUM OR WHERE THE SIDEWALK ABUTTS CURB OR OTHER SIDEWALK, OR AT THE END OF EACH POUR.
8. THE SIDEWALK SHALL HAVE A BROOM FINISH.

CONCRETE SIDEWALK DETAIL
(NOT TO SCALE)



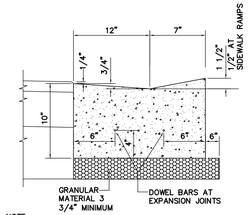
NOTE:
1. INSTALL 2-10' #5 REINFORCING BARS, CENTERED ON ALL TRENCH CROSSINGS.
2. IF REQUIRED, CASTING SHALL BE EJIW 7000 W/ TYPE T1 BACK & TYPE M1 GRATE OR NEENAH R-3275.

B-6.12 CURB & GUTTER
(NOT TO SCALE)



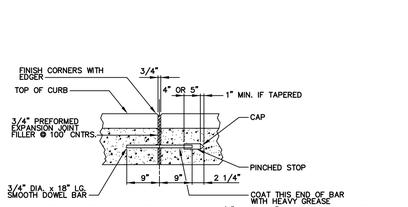
NOTE:
1. INSTALL 3-10' #5 REINFORCING BARS, CENTERED ON ALL TRENCH CROSSINGS.
2. IF REQUIRED, CASTING SHALL BE EJIW 7000 W/ TYPE T1 BACK & TYPE M1 GRATE OR NEENAH R-3275.

B-6.18 CURB & GUTTER
(NOT TO SCALE)



NOTE:
1. INSTALL 2-10' #5 REINFORCING BARS, CENTERED ON ALL TRENCH CROSSINGS.
2. IF REQUIRED, CASTING SHALL BE EJIW 7000 W/ TYPE M3 FLAT GRATE OR APPROVED EQUAL.

DEPRESSED CURB
(NOT TO SCALE)

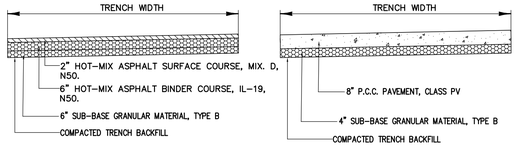


ALL EXPANSION JOINTS SHALL BE PROVIDED WITH A 3/4" DIA. x 18" LONG COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 710.148 OF THE STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION. JOINTS SHALL CONSTRUCTED AT 100 FT. INTERVALS, AT ALL POINTS OF TANGENCY AND AT THE END OF EACH DAY'S POUR. SAWED JOINTS SHALL BE PROVIDED AT 25 FT. INTERVALS.

P.C.C. CURB & GUTTER EXPANSION JOINT DETAIL
(NOT TO SCALE)

MIX REQUIREMENT TABLE

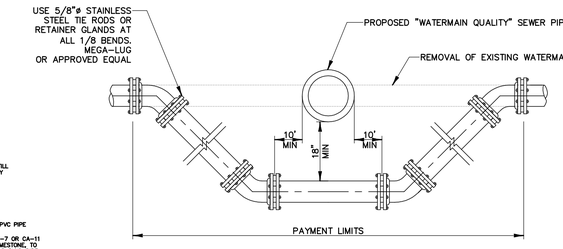
ITEM	AC TYPE	VOIDS
HMA SURFACE – MIX D	PG 64-22	4% @ 50 Gyration
HMA BINDER – IL-19	PG 58-22	4% @ 50 Gyration



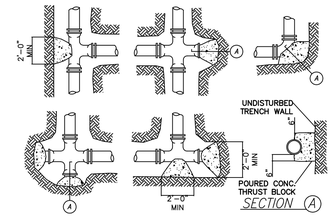
BITUMINOUS PAVEMENT — P.C.C. PAVEMENT

NOTE: INSTALL TRENCH BACKFILL UP TO THE EXISTING PAVEMENT SURFACE ELEVATION UNTIL THE INSTALLATION OF THE HMA SURFACE COURSES OR PCC PAVEMENT. REMOVE EXCESS BACKFILL PRIOR TO PAVING OPERATIONS. COST OF TRENCH BACKFILL IS CONSIDERED INCIDENTAL TO THE PIPE PAY ITEM.

TYPICAL PAVEMENT RESTORATION
(NOT TO SCALE)



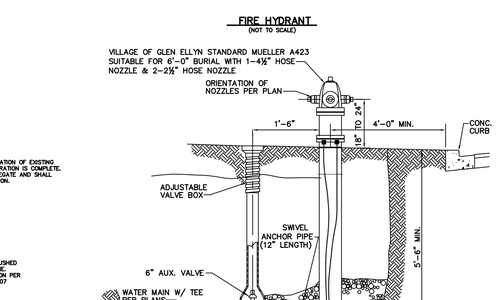
ADJUST WATERMAIN DETAIL
(NOT TO SCALE)



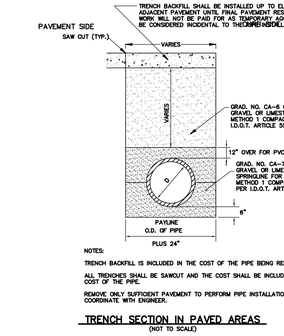
THRUST BLOCK DETAIL
(NOT TO SCALE)

SIZE (DIA. IN INCH.)	DEAD END OR TEE (SQ. FT.)	1/4 BEND 90 BEND (SQ. FT.)	1/8 BEND 45 BEND (SQ. FT.)	1/16 BEND 22.5 BEND (SQ. FT.)	1/32 BEND 11.25 BEND (SQ. FT.)
6	3.9	5.5	3.0	1.5	1.5
8	6.7	9.4	5.1	2.6	2.6
10	10.9	15.4	8.4	4.3	4.3
12	15.5	21.8	11.9	6.1	6.1
14	21.0	29.6	16.1	8.2	8.2
16	28.5	37.9	20.6	12.5	12.5
18	38.6	54.4	29.7	14.9	14.9
20	47.8	67.4	36.7	18.6	18.6
24	69.0	97.2	52.9	26.8	26.8

NOTES:
1. THE ABOVE TABLE IS BASED ON 2,000 PSF SOIL BEARING AGAINST THE UNDISTURBED TRENCH WALL AND ARE TO REPRESENT THE MINIMUM VERTICAL AREA OF THE THRUST BLOCK PERPENDICULAR TO THE FITTING INCLUDING THE ANGLE OF THE FITTING.
2. THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS AND AT POINTS SPECIFIED SHALL BE CLASS "SI" CONCRETE. A MIN. OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OF 11 1/4 OR MORE. RETAINER GLANDS MAY BE USED IN PLACE OF THRUST BLOCKS. THE COST OF THRUST BLOCKS OR RETAINER GLANDS SHALL BE INCLUDED IN THE COST OF THE FITTING.
3. PROVIDE POLYETHYLENE ENCASEMENT THROUGHOUT THE ENTIRE LENGTH OF THE WATERMAIN.



FIRE HYDRANT
(NOT TO SCALE)



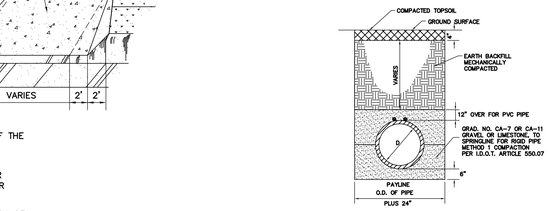
NOTES:

TRENCH BACKFILL IS INCLUDED IN THE COST OF THE PIPE BEING REPLACED.

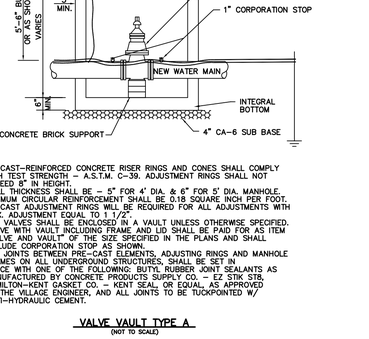
ALL TRENCHES SHALL BE SAWCUT AND THE COST SHALL BE INCLUDED IN THE COST OF THE PIPE.

REMOVE ONLY SUFFICIENT PAVEMENT TO PERFORM PIPE INSTALLATION AND COORDINATE WITH ENGINEER.

TRENCH SECTION IN PAVED AREAS
(NOT TO SCALE)



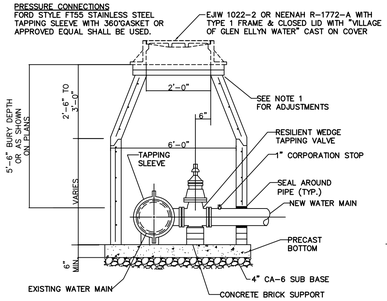
TRENCH SECTION IN UNPAVED AREAS
(NOT TO SCALE)



NOTES:
1. PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH – A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
2. WALL THICKNESS SHALL BE – 5" FOR 4' DIA. & 6" FOR 5' DIA. MANHOLE. MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
3. PRECAST ADJUSTMENT RINGS WILL BE REQUIRED FOR ALL ADJUSTMENTS WITH MAX. ADJUSTMENT EQUAL TO 1 1/2".
4. ALL VALVES SHALL BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
5. VALVE WITH VAULT INCLUDING FRAME AND LID SHALL BE PAID FOR AS ITEM "VALVE AND VAULT" OF THE SIZE SPECIFIED IN THE PLANS AND SHALL INCLUDE CORPORATION STOP AS SHOWN.
6. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH ONE OF THE FOLLOWING: BUTYL RUBBER JOINT SEALANTS AS MANUFACTURED BY CONCRETE PRODUCTS SUPPLY CO. – EZ STIK STB, HAMILTON-KENT GASKET CO. – KENT SEAL, OR EQUAL, AS APPROVED BY THE VILLAGE ENGINEER, AND ALL JOINTS TO BE TUCKPOINTED W/ ANTI-HYDRAULIC CEMENT.

VALVE VAULT TYPE A
(NOT TO SCALE)

PRESSURE CONNECTIONS
FORD STYLE FTSS STAINLESS STEEL TAPPING SLEEVE WITH 360°GASKET OR APPROVED EQUAL SHALL BE USED.



NOTES:
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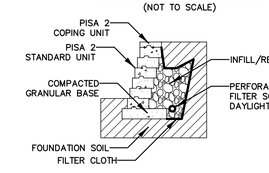
PRESSURE CONNECTION VALVE VAULT
(NOT TO SCALE)



CONCRETE BLOCK WALL DETAIL
(NOT TO SCALE)

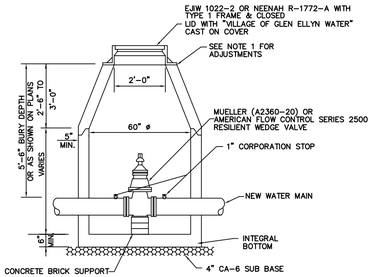
DESIGN SPECIFIC GEOMETRIC INFORMATION

RETAINING WALL SYSTEM	PISA 2
MAXIMUM HEIGHT MM\(IN.)	840\(33)
MAXIMUM SLOPE ABOVE WALL	HORIZONTAL
MAX.\ SURCHARGE ABOVE WALL kPa\(lb\sq.ft.)	PEDESTRIAN SURCHARGE 2.4\kPa\ (50 lbs\sq.ft.)
BATTER OF WALL	7.12°

GEOGRID TYPE AND MANUFACTURER	N/A
MINIMUM GEOGRID\ LTDS kN\m\(lb\ft)	N/A
MAXIMUM SLOPE BELOW WALL	NONE
DEPTH OF EMBEDMENT mm\(in)	153\(6)
COMPACTED BASE DIMENSION mm\(in)	610 x 153 \ (24 x 6)

DESIGN SPECIFIC SOIL INFORMATION

	SOIL REGION				
	INFILL / RETAINED		FOUNDATION	BASE	DRAINAGE
DESCRIPTION (by\USCS)	GP ANGULAR 3/4" CLEAR STONE (NO FINES)		CL INORGANIC CLAYS LOW PLASTICITY	GW WELL GRADED FREE DRAINING GRANULAR	SEE INFILL WELL GRADED FREE DRAINING GRANULAR
EFFECTIVE INTERNAL FRICTION ANGLE	36°		28°	39°	NR
MOIST\UNIT WEIGHT kN\cu.m(lb\cu.ft.)	18 \ (115)		20 \ (127)	22 \ (140)	NR
EFFECTIVE COHESION kPa\(lb\sq.ft.)	NR		13 \ (270)	NR	NR
SOIL NOTES	PLACE IN 150mm (6") LIFTS AND COMPACTED TO 95% SPD.	ANGULAR DRAIN STONE PLACED AT 1H:1V FROM HEEL OF WALL AS SHOWN	ALLOWABLE BEARING CAP. MUST EXCEED 50kPa\1050 psf)	CRUSHED GRAVEL (FREE DRAINING) COMPACTED TO 98% SPD.	GRAVEL INFILL MUST BE GAP GRADED ANGULAR, FREE DRAIN WITH NO FINES



NOTES:
1. PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH – A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
2. WALL THICKNESS SHALL BE – 5" FOR 4' DIA. & 6" FOR 5' DIA. MANHOLE. MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
3. PRECAST ADJUSTMENT RINGS WILL BE REQUIRED FOR ALL ADJUSTMENTS WITH MAX. ADJUSTMENT EQUAL TO 1 1/2".
4. ALL VALVES SHALL BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
5. VALVE WITH VAULT INCLUDING FRAME AND LID SHALL BE PAID FOR AS ITEM "VALVE AND VAULT" OF THE SIZE SPECIFIED IN THE PLANS AND SHALL INCLUDE CORPORATION STOP AS SHOWN.
6. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH ONE OF THE FOLLOWING: BUTYL RUBBER JOINT SEALANTS AS MANUFACTURED BY CONCRETE PRODUCTS SUPPLY CO. – EZ STIK STB, HAMILTON-KENT GASKET CO. – KENT SEAL, OR EQUAL, AS APPROVED BY THE VILLAGE ENGINEER, AND ALL JOINTS TO BE TUCKPOINTED W/ ANTI-HYDRAULIC CEMENT.

VALVE VAULT TYPE A
(NOT TO SCALE)

FOR PRESSURE CONNECTIONS, TAPPING SLEEVE SHALL BE FORD STYLE FTSS STAINLESS STEEL TAPPING SLEEVE WITH 360 DEGREE GASKET OR APPROVED EQUAL.

EXISTING STRUCTURES WITH FRAMES SHALL BE ADJUSTED TO MATCH THE PROPOSED GRADE PER VILLAGE OF GLEN ELLYN PUBLIC WORKS STANDARDS AND SPECIFICATIONS, AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR ANY UNDERGROUND PIPE WITHIN 2 FEET OF ANY PAVEMENT, CURB, DRIVEWAY OR SIDEWALK.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CONSTRUCTION NOTES & DETAILS
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

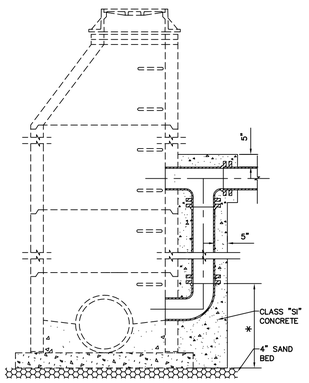
Sheet 14 of 25
Project # 895

DRAWING FILE NAME: 895-MF-SH14

Harding Townhomes - Engineering, 10/04/2021

NOTES:

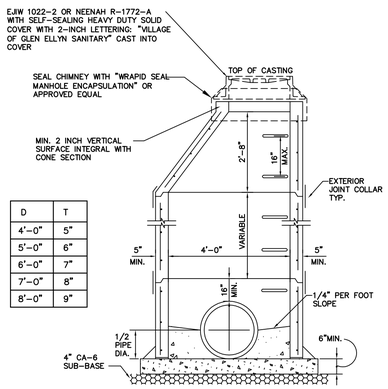
1. DROP MANHOLE SHALL BE REQUIRED WHEN THE DIFFERENCE IN ELEVATION OF TWO (2) INTERSECTING CONDUITS IS GREATER THAN 24 INCHES.
2. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
3. THE JOINTS BETWEEN SECTIONS SHALL CONFORM TO ASTM C-443.
4. *MAXIMUM HEIGHT FOR CONCRETE ENCASEMENT POUR FOR RISER ON THE FIRST DAY.
5. CONTRACTOR HAS THE OPTION OF INSTALLING DUCTILE IRON RISER PIPE FROM THE DUCTILE IRON ELBOW TO THE DUCTILE IRON TEE WHENEVER THE LENGTH OF THE RISER IS NOT MORE THAN 18 FT. THE ELBOW SHALL BE PRECAST IN THE MANHOLE, THE TEE SHALL BE SET IN CONCRETE FOR THE FULL THICKNESS OF THE MANHOLE WALL.
6. FOR INCOMING SEWER LESS THAN 12", USE VERTICAL PIPE OF SAME DIAMETER.
7. DROP CONNECTION SHOULD BE INTEGRALLY CAST WITH MANHOLE.



DROP CONNECTION TO SANITARY MANHOLE
(NOT TO SCALE)

NOTES:

1. PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH - A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
2. MINIMUM WALL THICKNESS SHALL BE 5" AND MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
3. THE BOTTOM MAY BE EITHER PRECAST WITH INVERTS AS INTEGRAL PART OR CAST IN PLACE WITH CLASS "SI" CONCRETE.
4. MANHOLE WALL THICKNESS "T" SHALL BE AS SHOWN IN THE LIST BELOW.
5. ALL STEPS SHALL BE CAST IRON AND CONFORM WITH NEENAH STANDARDS R-1981-1 OR APPROVED EQUAL.
6. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH ONE OF THE FOLLOWING BUTYL RUBBER JOINT SEALANTS WITH A MINIMUM CROSS SECTIONAL AREA OF 1.25 SQ. IN.: CONCRETE PRODUCTS SUPPLY CO. - EZ STIK ST8, HAMILTON - KENT GASKET CO.- KENT SEAL, OR EQUAL, AS APPROVED BY VILLAGE. ALL JOINTS SHALL BE TUCKPOINTED WITH HYDRAULIC CEMENT.
7. ALL SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED WITH FLEXIBLE MANHOLE COUPLINGS, AS MANUFACTURED BY ALOK PRODUCTS INC. (ALOK MANHOLE CONNECTOR), PRESS-SEAL GASKET CORPORATION (PRESS WEDGE II) OR EQUAL, AS APPROVED BY VILLAGE ENGINEER. ALL MATERIALS SHALL COMPLY WITH, AND INSTALLATION PROCEDURES SHALL FOLLOW THOSE SPECIFIED BY THE MANUFACTURER OR VILLAGE.
8. AN EXTERIOR JOINT COLLAR SHALL BE INSTALLED AT ALL JOINTS BETWEEN SANITARY MANHOLE ELEMENTS. JOINT COLLARS WILL NOT BE REQUIRED FOR ADJUSTING RINGS. THE JOINT COLLAR SHALL BE MACWRAP EXTERIOR JOINT SEALER AS MANUFACTURED BY MAR-MAC MANUFACTURING COMPANY OR AN APPROVED EQUAL. THE COLLAR SHALL CONSIST OF A BAND NINE INCH (9) WIDE. MASTIC COLLARS REQUIRING THE USE OF A PRIMER WILL NOT BE ACCEPTED.
9. COST FOR CHIMNEY SEAL SHALL BE INCIDENTAL TO THE CONTRACT PRICE OF SANITARY MANHOLE.

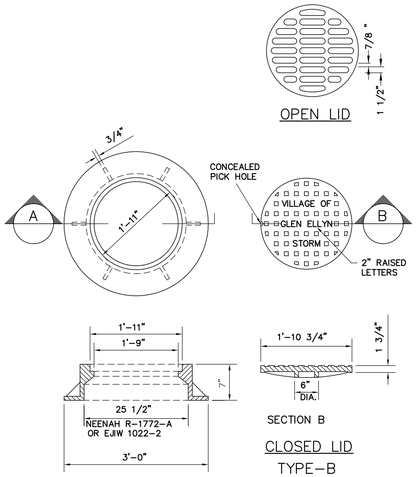


D	T
4'-0"	5"
5'-0"	6"
6'-0"	7"
7'-0"	8"
8'-0"	9"

SANITARY SEWER MANHOLE, TYPE A
NOT TO SCALE
TYPE "C" MANHOLE IS WITHOUT CONE SECTION AND HAVING PRECAST FLAT TOP

NOTES:

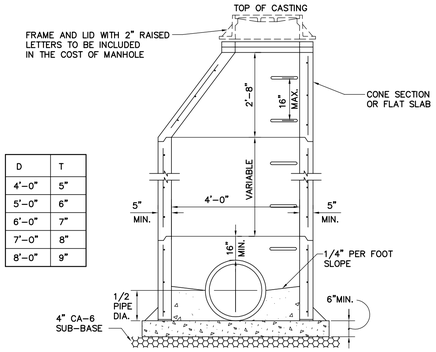
1. DUCTILE IRON CASTING SHALL BE GRADE 60-40-18 AND SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
2. ALL FRAMES AND LIDS SHALL BE MACHINED.
3. THE MANHOLE LIDS SHALL HAVE RAISED LETTERS AS SHOWN.
4. ALTERNATIVE TO DUCTILE IRON LID, GRAY IRON LID MAY BE USED.
5. FRAME AND LID TO BE EJIW-1022-2 OR NEENAH R-1772-A
6. CLOSED LID SHALL HAVE A CONCEALED PICK HOLE.
7. SANITARY MANHOLE LID SHALL BE " SELF-SEALING".
8. LID SHALL BE IMPRINTED WITH THE DESIGNATION "VILLAGE OF GLEN ELLYN STORM", "VILLAGE OF GLEN ELLYN SANITARY" OR "VILLAGE OF GLEN ELLYN WATER".



TYPE 1 FRAME & LID
(NOT TO SCALE)

NOTES:

1. PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH - A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
2. MINIMUM WALL THICKNESS SHALL BE 5" AND MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
3. THE BOTTOM MAY BE EITHER PRECAST WITH INVERTS AS INTEGRAL PART OR CAST IN PLACE WITH CLASS "SI" CONCRETE.
4. MANHOLE WALL THICKNESS "T" SHALL BE AS SHOWN IN THE LIST BELOW.
5. ALL STEPS SHALL BE CAST IRON AND CONFORM WITH NEENAH STANDARDS R-1981-1 OR APPROVED EQUAL.
6. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH TWO ROWS OF ONE OF THE FOLLOWING BUTYL RUBBER JOINT SEALANTS: CONCRETE PRODUCTS SUPPLY CO. - EZ STIK ST8, HAMILTON-KENT GASKET CO, - (KENT SEAL), OR EQUAL, AS APPROVED BY VILLAGE ENGINEERS, AND ALL JOINTS TO BE TUCKPOINTED WITH HYDRAULIC CEMENT.
7. SEE CONSTRUCTION PLANS FOR ACTUAL TYPE OF CASTING SPECIFIED.

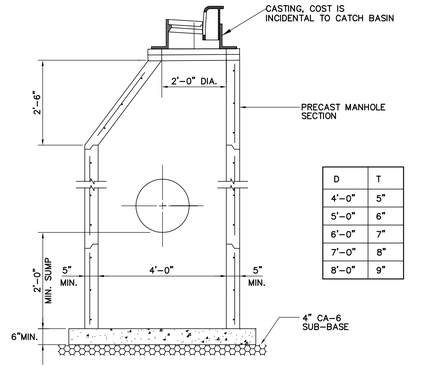


D	T
4'-0"	5"
5'-0"	6"
6'-0"	7"
7'-0"	8"
8'-0"	9"

STORM SEWER MANHOLE, TYPE A
(NOT TO SCALE)
TYPE "C" CATCH BASIN IS WITHOUT CONE SECTION AND HAVING PRECAST FLAT TOP (IDOT STD. 602601).

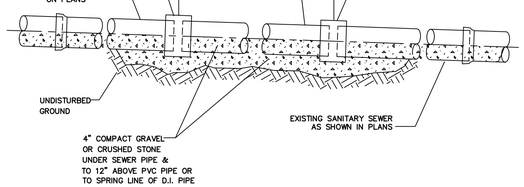
NOTES:

1. PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH - A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
2. MINIMUM WALL THICKNESS SHALL BE 5" AND MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
3. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH TWO ROWS OF ONE OF THE FOLLOWING BUTYL RUBBER JOINT SEALANTS: CONCRETE PRODUCTS SUPPLY CO. - (EZ STIK ST8), HAMILTON-KENT GASKET CO, - (KENT SEAL), OR EQUAL, AS APPROVED BY VILLAGE ENGINEER, AND ALL JOINTS TO BE TUCKPOINTED WITH HYDRAULIC CEMENT.
4. ALL DRAINAGE STRUCTURES LOCATED IN REAR OR SIDE YARD AREAS SHALL BE INSTALLED WITH 2-6 INCH OR 3-4 INCH ADJUSTING RINGS. THIS WILL PROVIDE FOR A FUTURE MAXIMUM ADJUSTMENT OF 12 INCHES.
5. MANHOLE WALL THICKNESS "T" SHALL BE AS SHOWN IN THE LIST BELOW.
6. CASTING FOR SOME SLOPE CONDITIONS, USE EJIW V-4010-2 (NEENAH R-3065-2) OR APPROVED EQUAL.
7. SEE CONSTRUCTION PLANS FOR ACTUAL TYPE OF CASTING SPECIFIED.

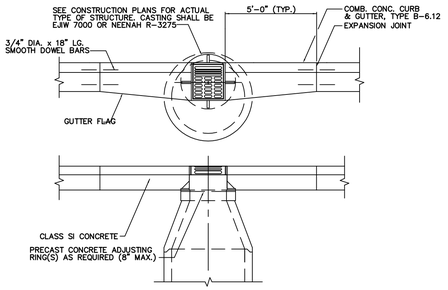


D	T
4'-0"	5"
5'-0"	6"
6'-0"	7"
7'-0"	8"
8'-0"	9"

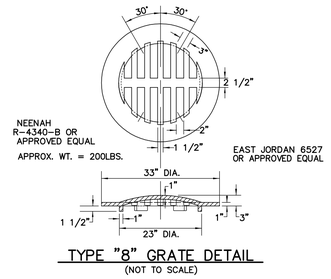
CATCH BASIN, TYPE A
(NOT TO SCALE)
TYPE "C" CATCH BASIN IS WITHOUT CONE SECTION AND HAVING PRECAST FLAT TOP (IDOT STD. 602601).



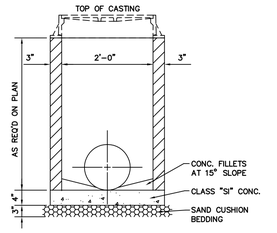
SANITARY SEWER REPLACEMENT DETAIL
(NOT TO SCALE)



TYPICAL CURB DETAIL AT STORM STRUCTURE
(NOT TO SCALE)



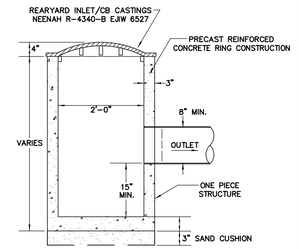
TYPE "8" GRATE DETAIL
(NOT TO SCALE)



24" INLET, TYPE A
(NOT TO SCALE)

NOTES:

1. MINIMUM WALL THICKNESS SHALL BE 3" AND MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
2. THE BOTTOM MAY BE EITHER PRECAST WITH INVERTS AS INTEGRAL PART OR CAST IN PLACE WITH CLASS "SI" CONCRETE.
3. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH TWO ROWS OF ONE OF THE FOLLOWING BUTYL RUBBER JOINT SEALANTS: CONCRETE PRODUCTS SUPPLY CO. - EZ STIK ST8, HAMILTON - KENT GASKET CO. - KENT SEAL, OR EQUAL, AS APPROVED BY THE VILLAGE ENGINEERS, AND ALL JOINTS TO BE TUCKPOINTED WITH HYDRAULIC CEMENT.
4. DRAINAGE STRUCTURES LOCATED IN REAR OR SIDE YARD AREAS SHALL BE INSTALLED WITH 2-6 INCH OR 3-4 INCH ADJUSTING RINGS. THIS WILL PROVIDE FOR A FUTURE MAXIMUM ADJUSTMENT OF 12 INCHES.
5. CASTING FOR SOME SLOPE CONDITIONS, USE EJIW V-4010-2 (NEENAH R-3065-2) OR APPROVED EQUAL.
6. SEE CONSTRUCTION PLANS FOR ACTUAL TYPE OF CASTING SPECIFIED.

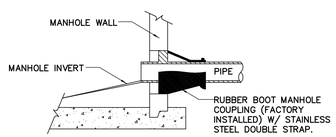


24" CATCH BASIN
(NOT TO SCALE)

GLEN ELLYN SPECIFIED FRAMES, LIDS AND GRATES TABLE
(OR APPROVED EQUAL)

UTILITY	DESIGNATION IN CONTRACT DOCUMENTS	SPECIFIC FRAME AND GRATE/COVER	LETTERING - 2" HIGH	APPLICATION
STORM	TYPE 8	EJIW 6527N (BEEHIVE TYPE) OR NEENAH R-4340-B	DUMP NO WASTE DRAINS TO RIVER	INLETS AND CB'S IN LAWN AREAS
STORM	TYPE 3	EJIW 7000 WITH TYPE T1 BACK OR NEENAH R-3275 (TYPE M3 FLAT GRATE IN DRIVEWAYS)	DUMP NO WASTE DRAINS TO RIVER	INLETS AND CB'S IN BARRIER CURBS
STORM	TYPE 1 CLOSED LID	EJIW 1020/1022 OR NEENAH R-1772-A (CLOSED LID)	VILLAGE OF GLEN ELLYN STORM	ALL STORM MANHOLES
STORM	TYPE 1 OPEN LID	EJIW 1020/1022 OR NEENAH R-1772-A (OPEN LID)	DUMP NO WASTE DRAINS TO RIVER	INLETS, CB'S (AS SHOWN ON PLANS)
STORM	ROLLED	EJIW 7430M1 OR NFCO R-3237-1	DUMP NO WASTE DRAINS TO RIVER	INLETS, CB'S (AS SHOWN ON PLANS)
STORM	TYPE 1 FRAME, OPEN LID (ADA ACCESSIBLE)	EJIW 1020-1022 WITH 1020M3 GRATE	DUMP NO WASTE DRAINS TO RIVER	PEDESTRIAN ACCESS ROUTE
STORM	TYPE 4 FRAME AND GRATE (DOUBLE)	EJIW 5425	DUMP NO WASTE DRAINS TO RIVER	AS SHOWN ON PLANS
SANITARY	TYPE 1 CLOSED LID	EJIW 1020-1022 OR NEENAH R-1772-A (SELF SEALING SOLID LID WITH CONCEALED PICK HOLE)	VILLAGE OF GLEN ELLYN SANITARY	ALL SANITARY MANHOLES
SANITARY	MINI MANHOLE SANITARY CLEANOUT	EJIW 1566 OR NEENAH R-1975-A2	S	SANITARY CLEANOUTS WITHIN PAVEMENT
WATER	TYPE 1 CLOSED LID	EJIW 1020/1022 OR NEENAH R-1772-A (CLOSED LID)	VILLAGE OF GLEN ELLYN WATER	ALL WATER VAULTS

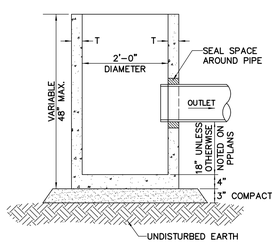
IN ADDITION TO BEING BOLTED TO THE FRAME. CURB OPENING CASTINGS SHALL BE SUPPORTED AGAINST THE STRUCTURE AND/OR ADJUSTING RINGS WITH CONCRETE WEDGES MORTARED IN PLACE TO PREVENT SETTLEMENT OF THE CURB OPENING CASTING.



MANHOLE PIPE CONNECTION DETAIL
FOR NEW CONNECTIONS IN EXISTING MANHOLES

EXISTING STRUCTURES WITH FRAMES SHALL BE ADJUSTED TO MATCH THE PROPOSED GRADE PER VILLAGE OF GLEN ELLYN PUBLIC WORKS STANDARDS AND SPECIFICATIONS, AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR ANY UNDERGROUND PIPE WITHIN 2 FEET OF ANY PAVEMENT, CURB, DRIVEWAY OR SIDEWALK.

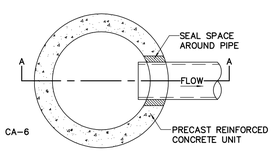
NOTE:
SEE "FRAME, LID AND GRATE SCHEDULE" FOR APPROVED GLEN ELLYN LIDS.



SECTION A-A

NOTES:

1. TYPE C CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE UNITS, CONFORMING TO ASTM C-478 UNLESS OTHERWISE NOTED.
2. BASE AND WALL SECTION SHALL BE PRECAST AS A MONOLITHIC UNIT WITH CLASS X CONCRETE UNLESS APPROVED OTHERWISE.
3. STEPS ARE NOT REQUIRED IN A TYPE C CATCH BASIN.
4. SEAL THE SPACE AROUND THE PIPE WITH SOLID CONCRETE BLOCK AND NON-SHRINK OR HYDRAULIC GROUT.



PLAN

ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE SECTIONS	3"
CAST IN PLACE CONCRETE	6"

CATCH BASIN TYPE C
(NOT TO SCALE)

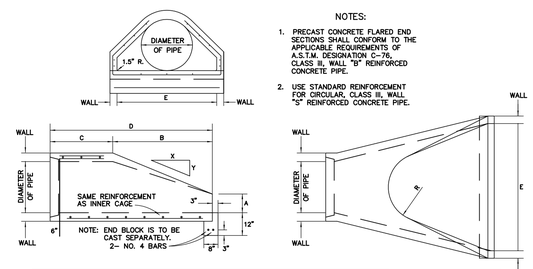
NOTE:
REFER TO IDOT STANDARDS FOR TRAFFIC CONTROL PROCEDURES FOR THE INSTALLATION OF STORM SEWER AND WATER MAIN AND CONSTRUCTION OF DRIVEWAY WITHIN HARDING AVENUE AND HARDING COURT RIGHT OF WAY.

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUCTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGETATION WITHIN THE SITE IS ESTABLISHED.

DETAILS ARE NOT DRAWN TO SCALE.

NOTES:

1. PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF A.S.T.M. DESIGNATION C-76, CLASS III, WALL "B" REINFORCED CONCRETE PIPE.
2. USE STANDARD REINFORCEMENT FOR CIRCULAR, CLASS III, WALL "S" REINFORCED CONCRETE PIPE.



FLARED END-SECTION DIMENSION CHART

PIPE DIAM.	WALL	A	B	C	D	E	R	SLOPE
24"	5"	8 1/2"	3' 7 1/2"	2' 6"	6' 1 1/2"	4' 0"	14"	3 : 1
27"	3 1/4"	10 1/2"	4' 0"	2' 3 1/2"	6' 1 1/2"	4' 6"	14 1/2"	3 : 1
30"	3 1/2"	1' 0"	4' 6"	2' 7 3/4"	7' 1 1/2"	5' 0"	15"	3 : 1
33"	3 3/4"	1' 1 1/2"	4' 10 1/2"	3' 3 1/4"	8' 1 3/4"	5' 6"	17 1/2"	3 : 1

REINFORCED CONCRETE FLARED END SECTION
(NOT TO SCALE)

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2017

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CONSTRUCTION NOTES & DETAILS
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 15 or 25
Project # 895

DRAWING FILE NAME: 895-MF-SH15

Harding Townhomes - Engineering, 10/04/2021

GENERAL NOTES FOR THE UNDERGROUND IMPROVEMENTS

GENERAL:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE VILLAGE OF GLEN ELLYN, AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.
2. THE ENGINEERING DIVISION OF THE VILLAGE OF GLEN ELLYN MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO COMMENCEMENT OF EACH WORK PHASE TO OBTAIN A LIST OF ITEMS REQUIRING VILLAGE INSPECTION.
3. MISSION BAND COUPLINGS SHALL BE USED TO CONNECT PIPES OF DISSIMILAR MATERIALS.
4. ALL TRENCHES UNDER OR WITHIN TWO FEET OF EXISTING OR PROPOSED SIDEWALKS, CURBS, PAVEMENTS OR BUILDINGS SHALL BE BACKFILLED WITH GRANULAR TRENCH BACKFILL MATERIAL AND COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY.
5. ALL STORM AND SANITARY MANHOLES, AND WATER VAULTS SHALL HAVE "WATER", "SANITARY", OR "STORM" CAST INTO THE APPROVED LID.
6. NO MORE THAN TWO (2) ADJUSTING RINGS SHALL BE INSTALLED ON ANY GIVEN STRUCTURE, HOWEVER, NO MORE THAN ONE (1) OF THESE RINGS SHALL BE 2" IN SIZE. IN NO CASE SHALL MORE THAN 12" OF ADJUSTING RINGS BE PERMITTED.
7. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION OF THE WORK.
8. THE FOLLOWING PIPE SPECIFICATION SHALL APPLY:
   A. REINFORCED CONCRETE PIPE (RCP) 12" AND LARGER IN DIAMETER, PIPE CONFORMING TO ASTM C-76, TABLE III, CLASS III, WALL THICKNESS B, RUBBER "O" RING GASKET JOINT PER ASTM C-361, RUBBER GASKET JOINT PER ASTM C-443, OR MASTIC JOINTS.
   B. POLYVINYL CHLORIDE (PVC) SDR-26 SEWER PIPE 6" TO 15" IN DIAMETER PER ASTM D-3034, WITH ELASTOMERIC SEAL JOINT PER ASTM D-3212, OR SDR-26PR SEWER PIPE PER ASTM D-2241 WITH ELASTOMERIC SEAL JOINTS PER ASTM D-3139.
   C. EXTRA STRENGTH VITRIFIED CLAY PIPE (ESVCP) 24" AND SMALLER DIAMETER PER ASTM C-7000, JOINT PER ASTM C-425, PLAIN END VITRIFIED PIPE SHALL HAVE A PVC BELL AND JOINT CONFORMING TO ASTM C-594.
   D. DUCTILE IRON PIPE (DIP) CONFORMING TO ANSI A21.51 (AWWA C-151), THICKNESS CLASS 52 PER ANSI A21.50 (AWWA C-150), BITUMINOUS SEAL COATED AND CEMENT LINED PER ANSI A21.4 (AWWA C-104), WITH MECHANICAL OR RUBBER GASKET PUSH-ON JOINTS "BELL-TITE" OR EQUAL PER ANSI A21.11 (AWWA C111) AND (AWWA C600).
9. BEDDING FOR ALL PIPING SHALL EXTEND FROM 4" BELOW THE INVERT TO 12" OVER THE TOP OF THE PIPE.
10. GRANULAR PIPE BEDDING MATERIAL SHALL MEET IDOT SPECIFICATIONS AS FOLLOWS:
    A. CA-11 (CRUSHED LIMESTONE) FOR POLYVINYL CHLORIDE PIPE.
    B. CA-11 (CRUSHED LIMESTONE) FOR VITRIFIED CLAY PIPE.
    C. CA-6 (CRUSHED LIMESTONE) FOR REINFORCED CONCRETE PIPE.
    D. FA-6 (SAND) FOR DUCTILE IRON PIPE.
    E. FA-6 MAY BE USED IN PLACE OF CA-11 OR CA-6.
11. "AS-BUILT" RECORDS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS THE UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENT TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES, OR BENDS SHALL BE TIED TO A FIRE HYDRANT.
12. THE DEVELOPER SHALL BE RESPONSIBLE FOR SUBMITTING AN "AS-BUILT" DRAWN IN INK ON MYLAR TO THE VILLAGE OF ADDISON PRIOR TO THE ACCEPTANCE OF THE PROJECT.

WATER:

13. ALL WATERMAINS, FITTINGS, AND VALVES ARE TO BE AMERICAN MADE.
14. MAINTAIN 5'-6" MINIMUM COVER OVER WATERMAINS AND WATER SERVICE LINES.
15. ALL WATERMAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST, AND A LEAKAGE RECOVERY TEST PERFORMED BY THE CONTRACTOR, AND WITNESSED BY THE ENGINEERING DIVISION. PRESSURE TESTS SHALL BE BASED ON 150 PSI FOR 2 HOURS. ALL WATERMAINS SHALL BE CHLORINATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
16. ALL D.I.W.M., VALVES AND HYDRANTS SHALL BE WRAPPED IN, CLASS C (BLACK) ANSI/AWWA C-106-77 POLYETHYLENE, AND SECURED WITH POLY TAPE.
17. FIRE HYDRANTS SHALL BE CLOW-EDDY F-2640 WITH A BREAKAWAY FLANGE, AND A 6" AUXILIARY VALVE. A LOCKING HYDRANT TEE SHALL BE USED ON ALL FIRE HYDRANT INSTALLATIONS. THE AUXILIARY VALVE SHALL BE INSTALLED DIRECTLY ONTO THE LOCKING HYDRANT TEE. FIRE HYDRANTS SHALL BE PAINTED YELLOW (SHERWIN WILLIAMS ACROLON 218 HS CATALYZED POLYURETHANE).
18. IF A FIRE HYDRANT HAS TO BE RELOCATED, A FIRE HYDRANT RELOCATED PERMIT AND BOND WILL BE REQUIRED. (CONTACT ENGINEERING DIVISION)
19. CONTACT PUBLIC WORKS (WATER DEPARTMENT) 48 HOURS IN ADVANCE OF A FIRE HYDRANT RELOCATION. RE-ESTABLISH A BENCHMARK ON THE RELOCATED FIRE HYDRANT AND SHOW THE ELEVATION ON THE "AS-BUILT" DRAWING.
20. PRESSURE CONNECTIONS SHALL BE MADE WITH A FULL CIRCLE STAINLESS STEEL TAPPING SLEEVE WITH A GRIDDED, TAPERED OVERLAPPING GASKET (ROCKWELL 662, 663, OR APPROVED EQUAL), RESILIENT WEDGE GATE VALVE, SIX (6) FOOT MAXIMUM DIAMETER CONCENTRIC PRESSURE CONNECTION VAULT WITH FRAME AND LID. A MINIMUM OF FIVE (5) FEET SHALL BE MAINTAINED BETWEEN PRESSURE TAPS, AND A MINIMUM OF TWO (2) FEET FROM ANY JOINT. THE CONTRACTOR AND THE OWNER DEVELOPER SHALL BE LIABLE FOR ALL COSTS DUE TO REPAIRING A WATERMAIN BREAK THAT MAY OCCUR WITHIN TEN (10) FEET OF THE CONNECTION FOR A PERIOD OF ONE (1) YEAR AFTER INSTALLATION.
21. CONCENTRIC VALVE VAULTS SHALL BE USED ON ALL VALVES 4 INCHES IN DIAMETER AND LARGER, EXCEPT FOR FIRE HYDRANT AUXILIARY VALVES.
22. VALVE VAULTS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 5 FEET FOR 4 INCH TO 12 INCH VALVES, AND 6 FEET FOR 14 INCH TO 16 INCH VALVES.
23. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES, MANUFACTURED BY MUELLER, WATEROUS, OR CLOW. BONNET AND PACKING GLAND BOLTS SHALL BE STAINLESS STEEL.
24. USE MEG-A-LUG RETAINER GLANDS ON ALL TEES, REDUCERS, FIRE HYDRANTS AND ELBOWS.
25. ALL TEES, REDUCERS, FIRE HYDRANTS AND ELBOWS SHALL BE BLOCKED WITH TEN (10) INCH THICK PREFABRICATED SOLID CONCRETE BLOCKS AGAINST UNDISTURBED EARTH. POURED IN PLACE CONCRETE WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE INSPECTOR. THRUST BLOCKS SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION OF THE WATERMAIN IN EITHER THE HORIZONTAL OR VERTICAL DIRECTION.
26. BRASS FITTINGS (CURB STOP AND CORPORATION STOP COUPLINGS) SHALL BE MUELLER OR FORD GRIP-TIGHT.
27. WATER SERVICES SHALL BE A MINIMUM OF ONE INCH K COPPER.
28. WATER SERVICE TAPS OVER 1 INCH IN SIZE REQUIRE A STAINLESS STEEL TAPPING SLEEVE, FORD STYLE FTSS STAINLESS STEEL WITH 360° GASKET OR APPROVED EQUAL.
29. SERVICE BOXES SHALL BE MUELLER H-10350 95-E-ARCH TYPE SADDLE WITH "WATER" IMPRINTED ON THE LID.
30. THE CONTRACTOR SHALL MARK THE B-BOX AND THE END OF EACH WATER SERVICE WITH A POST PAINTED BLUE.
31. CONTRACTOR SHALL NOTIFY PUBLIC WORKS 48 HOURS IN ADVANCE OF ANY REQUIRED WATER SHUT DOWN OR TURN ON. ONLY PUBLIC WORK SHALL OPERATE WATER VALVES.
32. IF THE UNDERGROUND CONTRACTOR TAPS THE WATERMAIN FOR A DOMESTIC WATER SERVICE, THE WATER SERVICE SHALL BE EXTENDED FROM THE TAP, TO THE B-BOX IN ONE CONTINUOUS PIECE OF COPPER, AND SHALL BE INSTALLED IN A WATERMAIN QUALITY PROTECTIVE CASING PIPE WHEN INSTALLED UNDER ANY STORM OR SANITARY SEWER. THE CASING PIPE SHALL EXTEND A MINIMUM OF 10' BEYOND EITHER SIDE OF THE SEWER. THE UNDERGROUND CONTRACTOR SHALL PROTECT THE UNUSED THREADED FITTING FOR FUTURE USE.
33. WHEN THE WATER SERVICE IS EXTENDED FROM THE B-BOX TO THE WATER METER, IT SHALL BE RUN IN ONE CONTINUOUS PIECE OF COPPER, AND SHALL BE INSTALLED IN A WATERMAIN QUALITY PROTECTIVE CASING PIPE WHEN INSTALLED UNDER ANY STORM OR SANITARY SEWER. THE CASING PIPE SHALL EXTEND A MINIMUM OF 10' BEYOND EITHER SIDE OF THE SEWER.
34. PROVIDE "LOCKING GASKETS" ON THE LAST 60' OF A DEAD END WATERMAIN.
35. PROVIDE A "RETAINED CAP" AT THE END OF THE WATERMAIN.
36. WATER SERVICE TAPS TO BE INSTALLED BY A LICENSED PLUMBER. CALL 693-7530 TO SCHEDULE A PLUMBING INSPECTION.
37. FAR SIDE SERVICES ARE TO BE ONE CONTINUOUS LENGTH OF COPPER WITH NO FITTINGS BETWEEN THE CORPORATION STOP AND THE B-BOX.
38. AFTER INSTALLING AN UNDERGROUND WATER SERVICE THAT WILL SUPPLY A FIRE SPRINKLER SYSTEM, THE UNDERGROUND CONTRACTOR SHALL FLUSH AND FLOW TEST THE WATER SERVICE TO SATISFY THE ADDISON FIRE PROTECTION DISTRICTS CODE REQUIREMENTS. FLUSH AND FLOW TESTING SHALL BE PERFORMED USING RIDGED PIPING. FLEXIBLE HOSE IS NOT ACCEPTABLE.
39. ALL EXISTING WELLS SHALL BE CAPPED UNDER THE DIRECT SUPERVISION OF THE DU PAGE COUNTY HEALTH DEPARTMENT.

STORM SEWER:

40. MANHOLE AND CATCH BASIN STEPS SHALL BE POLYPROPYLENE COATED STEEL REINFORCING RODS, WITH LOAD AND PULL OUT RATINGS CONFORMING TO OSHA.
41. MAINTAIN A MINIMUM OF 8" BETWEEN ALL PIPES ENTERING A STRUCTURE.
42. OPENINGS IN STRUCTURES SHALL BE CONSTRUCTED SO AS TO PROVIDE TRUE ALIGNMENT AND PROPER GRADE FOR THE INLET OR OUTLET PIPE. IF AN OPENING NEEDS TO BE CREATED OR ENLARGED, A CONCRETE SAW OR CORE DRILL CAPABLE OF SAWING ALL THE WAY THROUGH THE STRUCTURE SHALL BE USED. SLEDGE HAMMERS OR JACKHAMMERS SHALL NOT BE USED TO CREATE OR ENLARGE AN OPENING.
43. ALL FLARED END SECTIONS SHALL BE INSTALLED WITH TRASH GRATES. AN OPEN AREA OF SIX (6) INCHES OR LESS IN HEIGHT WILL BE PERMITTED AT THE END OF THE GRATE. IF THE OPENING IS GREATER THAN SIX (6) INCHES, ADDITIONAL GRATING WILL BE REQUIRED.
44. A MINIMUM HORIZONTAL CLEARANCE OF 10 FEET SHALL BE PROVIDED BETWEEN ANY WATERMAIN OR WATER SERVICE AND/OR EXISTING OR PROPOSED SEWER LINE. IF THE MINIMUM HORIZONTAL CLEARANCE CANNOT BE PROVIDED, THE BOTTOM OF THE WATERMAIN OR WATER SERVICE SHALL BE A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER LINE. IF NEITHER HORIZONTAL NOR VERTICAL CLEARANCE CAN BE MAINTAINED, THE SEWER LINE SHALL BE CONSTRUCTED OF, OR REPLACED WITH, SLIP ON MECHANICAL JOINT DUCTILE IRON PIPE, OR SDR-26PR PIPE AND PRESSURE TESTED AT 150 PSI FOR 2 HOURS TO ASSURE TIGHTNESS.
45. ANY DRAIN TILES OR FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION, OR BETTER, AND/OR CONNECTED TO THE STORM SEWER. ANY DRAIN TILE ENCOUNTERED, SHALL BE ACCURATELY INDICATED ON THE AS-BUILT PLANS.
46. ALL DRAINAGE STRUCTURES AND STORM SEWERS SHALL BE CLEANED BY THE CONTRACTOR PRIOR TO THE PROJECT BEING APPROVED.
47. THE OWNER/DEVELOPER SHALL CONSTRUCT ANY ADDITIONAL STORM SEWERS, INLETS OR FIELD DRAINS IN THE DEVELOPMENT WHICH MAY BECOME NECESSARY IN ORDER TO ELIMINATE CONDITIONS OF STANDING WATER OR EXCESSIVE SATURATION WHICH IN THE OPINION OF THE INSPECTOR COULD BE DETRIMENTAL TO THE GROWTH AND MAINTENANCE OF LAWN GRASSES, OR PAVEMENT.
48. EACH MANHOLE, CATCH BASIN, AND INLET SHALL BE FURNISHED WITH A FRAME AND LID OR GRATE OF CAST IRON. CLOSED FRAMES SHALL BE FURNISHED WITH A TYPE "B" LID DESIGN, AND THE WORD "STORM" IMPRINTED ON THE LID. TYPE 1 FRAMES WITH OPEN GRATES, SHALL BE FURNISHED WITH A TYPE "R-2015" GRATE, WITH THE WORDS "DUMP NO WASTE, DRAINS TO WATERWAYS" IMPRINTED ON THE GRATE. CURB AND GUTTER FRAMES AND GRATES SHALL BE OF HEAVY DUTY CONSTRUCTION, AND SUPPLIED WITH AN R-3278 CURB BOX IMPRINTED WITH THE "FISH" LOGO AND THE WORDS "DUMP NO WASTE, DRAINS TO RIVER". ALL FRAMES SHALL BE FURNISHED WITH BICYCLE SAFE GRATE. PROVIDE "VANE" TYPE GRATES FOR ALL STRUCTURES LOCATED IN THE CURB WHERE THE GRADIENT EXCEEDS 2.0%.

SANITARY SEWER:

49. SANITARY SEWER SERVICES SHALL BE A MINIMUM OF 6 INCHES IN SIZE, WITH A MINIMUM SLOPE OF 1.0% AND MAXIMUM SLOPE OF 33.0%.
50. THE CONTRACTOR SHALL MARK THE ENDS OF ALL SANITARY SEWER SERVICES WITH A POST PAINTED GREEN.
51. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE OR MANHOLE, ON OF THE FOLLOWING METHODS SHALL BE USED.
   A. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOL, "SHEWER TAP" MACHINE (OR SIMILAR), AND PROPER INSTALLATION OF HUB WYE OR HUB TEE SADDLE.
   B. WITH A PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
52. ALL NEW AND ANY EXISTING SANITARY SEWER MANHOLES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE REQUIRED TO HAVE AN EXTERNAL CHIMNEY SEAL (CRETEX OR APPROVED EQUAL).
53. SANITARY SEWERS THAT WILL BECOME THE PROPERTY OF THE VILLAGE SHALL BE PRESSURE TESTED AND TELEVISED. PVC SEWERS SHALL ALSO BE TESTED FOR EXCESSIVE DEFLECTION. TESTING OF ALL SANITARY SEWER PIPE SHALL BE PER SECTION 313 OF THE STANDARD SPECIFICATIONS. MANHOLES SHALL BE TESTED AS TO C-969-94. THE COST OF THIS TESTING SHALL BE PAID FOR BY THE DEVELOPER.
54. SANITARY SEWER MANHOLES SHALL BE PROVIDED WITH A TYPE 1 FRAME, TYPE B LID DESIGN WITH SELF-SEALING WATER TIGHT BOLT-DOWN COVER-HOLES WITH THE WORD "SANITARY" IMPRINTED IN THE LID AND SHALL MEET THE FOLLOWING VILLAGE OF GLEN ELLYN REQUIREMENTS:
   A. STANDARD FRAME AND LID FOR USE IN PAVED AREAS CURB AND GUTTER OR DRIVEWAYS SHALL BE OF CAST IRON HEAVY DUTY CONSTRUCTION AND EQUIVALENT TO NEENAH R-1031 OR NEENAH R-1712-B.
   B. STANDARD FRAME AND LID FOR USE IN PARKWAYS AND OTHER NON-PAVED AREAS SHALL BE OF CAST IRON MEDIUM DUTY CONSTRUCTION AND EQUIVALENT TO NEENAH R-1060 OR NEENAH R-1700.
55. SEPTIC FIELD TO BE ABANDONED AND EXISTING SEPTIC TANK TO BE REMOVED PER IEPA AND DU PAGE COUNTY HEALTH DEPARTMENT REGULATIONS.

GENERAL NOTES FOR SURFACE IMPROVEMENTS

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE VILLAGE OF GLEN ELLYN, AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION ADOPTED JANUARY 1, 2012.
2. THE ENGINEERING DIVISION OF THE VILLAGE OF GLEN ELLYN MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE COMMENCEMENT OF EACH WORK PHASE TO OBTAIN THE LIST OF ITEMS REQUIRING VILLAGE INSPECTION.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SIGNS, BARRICADES, FENCES, ETC. TO KEEP THE CONSTRUCTION SITE IN COMPLIANCE WITH STATE AND FEDERAL LAWS. THE VILLAGE MAY REQUIRE ADDITIONAL SIGNING OR BARRICADES. THE CONTRACTOR SHALL COMPLY WITH ALL SUCH VILLAGE REQUIREMENTS.
4. ALL EXISTING PAVEMENT, SIDEWALK, CURB AND GUTTER TO BE REMOVED SHALL BE SAWCUT ALONG THE LIMITS OF THE PROPOSED REMOVAL BEFORE OPERATIONS BEGIN.
5. ALL TREES WITHIN THE AREA OF GRADING SHALL BE REMOVED AND THE STUMPS REMOVED TO A DEPTH OF AT LEAST 12 INCHES BELOW SUBGRADE OR 12 INCHES BELOW EXISTING GROUND.
6. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A SNOW FENCE AROUND ALL TREES LOCATED WITHIN THE RIGHT-OF-WAY AND ANY ON SITE TREES TO BE SAVED. PROTECTIVE FENCING SHALL BE PLACED IN A CIRCLE AROUND EACH TREE. THE DIAMETER OF THE CIRCLE SHALL BE 10' OR TO THE DRIP LINE, (EXTENT OF FURTHEST EXTENDING BRANCHES) WHICHEVER IS GREATER. THE EXISTING GRADE WITHIN THE FENCE SHALL NOT BE DISTURBED.
7. ALL EXTERIOR P.C. CONCRETE SHALL BE AN SI MIX, AND SHALL ATTAIN A STRENGTH OF NOT LESS THAN 3,500 POUNDS PER SQUARE INCH AFTER A CURING PERIOD OF 14 DAYS. IT SHALL CONTAIN NOT LESS THAN 4 NOR MORE THAN 6 PERCENT AIR-ENTRAPMENT. APPLY A MEMBRANE CURING COMPOUND, WHITE IN COLOR TO ASSURE ADEQUATE COVERAGE TO ALL EXPOSED CONCRETE.
8. PRIOR TO THE PLACEMENT OF THE GRANULAR SUB-BASE MATERIAL, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEERING DEPARTMENT WITH A LOADED TEN WHEELER TRUCK, AND ANY SOFT OR YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6. THE SUBGRADE SHALL THEN BE STRINGLINED IN THE PRESENCE OF THE ENGINEERING DIVISION TO INSURE THAT IT IS GRADED IN ACCORDANCE WITH THE PLANS.
9. PRIOR TO PLACEMENT OF THE BITUMINOUS BASE COURSE, THE GRANULAR SUB-BASE SHALL BE PRIMED AT A RATE OF 0.35 GAL. PER SQUARE YARD.
10. OPEN CUTTING OF A STREET IS NOT PERMITTED.
11. IF AN EMERGENCY ARISES, AND THE STREET HAS TO BE OPEN CUT, A STREET OPENING PERMIT AND BOND WILL BE REQUIRED. CONTACT ENGINEERING DIVISION)
12. ALL PAVEMENT OPENINGS SHALL BE TEMPORARILY PATCHED WITH 3" OF COLD PATCH MIX OR COVERED WITH STEEL PLATES PRIOR TO THE CLOSE OF WORK EACH DAY.
13. NO OPEN HOLES ARE TO BE LEFT IN THE PAVEMENT OR PARKWAY AFTER 3 PM.
14. WHERE STREET PAVEMENT WILL BECOME THE PROPERTY OF THE VILLAGE OF GLEN ELLYN, AN INDEPENDENT TESTING LABORATORY SHALL BE HIRED BY THE DEVELOPER TO TEST THE DENSITY OF THE BINDER AND SURFACE COURSE BY NUCLEAR METHODS AFTER THE BINDER COURSE HAS BEEN COMPACTED AND TESTED, THE TESTING LABORATORY SHALL TAKE CORES FOR DENSITY TO CHECK AGAINST THE NUCLEAR TEST RESULTS, AND TO CHECK THE THICKNESS OF THE PAVEMENT. THE ENGINEERING DIVISION SHALL BE PRESENT FOR THE CORING. COPIES OF ALL THE TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEERING DIVISION. THE COST FOR THIS TESTING SHALL BE PAID FOR BY THE DEVELOPER.
15. CONCRETE SIDEWALKS:
   WIDTH: 5 FEET
   THICKNESS: 5 INCHES P.C. CONCRETE, 6 INCHES WHERE VEHICLES ARE PERMITTED TO CROSS.
   SUB-BASE: 3 INCHES OF COMPACTED SAND, LIMESTONE SCREENINGS OR CRUSHED LIMESTONE.
   EXPANSION JOINTS: 3/4 INCH THICK AT INTERVALS OF NOT MORE THAN 30 FEET.
   CONTRACTION JOINTS: AT 5 FOOT INTERVALS.
16. CONCRETE CURB AND GUTTER:
   WIDTH: MATCH EXISTING CURB AND GUTTER OR AS NOTED ON PLANS.
   THICKNESS: MINIMUM 10 INCH P.C. CONCRETE GUTTER FLAG.
   SUB-BASE: 4 INCHES OF COMPACTED CRUSHED LIMESTONE (CA-6).
   EXPANSION JOINTS: 1 INCH THICK WITH A 5/4 INCH X 18 INCH SMOOTH EPOXY COATED DOWEL BAR AND PINCH CAP. INSTALLED AT RADIUS POINTS AND 5 FEET ON EITHER SIDE OF STRUCTURES LOCATED IN THE CURB. MAXIMUM SPACING OF 75 FEET.
   CONTRACTION JOINT: AT 25 FOOT INTERVALS.
   STEEL REINFORCEMENT: 2 CONTINUOUS NO. 4 BARS CENTERED OVER ALL TRENCH CROSSINGS SO BARS EXTEND 5 FEET BEYOND THE TRENCH ON ALL SIDES.
17. CONCRETE APRONS:
   THICKNESS: 8 INCHES P.C. CONCRETE.
   SUB-BASE: 4 INCHES OF COMPACTED CRUSHED LIMESTONE (CA-6).
   STEEL REINFORCEMENT: 6 INCH X 6 INCH NO. 6 WOVEN WIRE MESH.
18. STREET PAVEMENT:
   SURFACE: 2 INCHES
   BINDER: 2 INCHES
   BAM: 6 INCHES
   PRIME: 0.35 GAL. PER SQUARE YARD.
   SUB-BASE: 4 INCHES OF COMPACTED CRUSHED LIMESTONE (CA-6).
19. CURB SHALL BE MARKED AT EACH CAMPS AND WITH A "W" FOR WATER AND AN "S" OR "▲" FOR SANITARY.
20. ALL DROP-OFFS GREATER THAN 30" WILL REQUIRE A HANDRAIL.
21. DETECTABLE WARNING FOR CURB CAMPS AND OTHER LOCATIONS SHALL BE "TRUNCATED DOMES, COLORED RED".

GENERAL NOTES FOR STREET LIGHTING

1. ALL STREET LIGHTS SHALL BE EQUALLY SPACES, WITH A MAXIMUM SPACING OF 100 FEET FOR COACH LIGHTS.
2. UNDERGROUND ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN A 1-1/4 INCH DIAMETER CABLE DUCT WITH A GROUND WIRE. ELECTRICAL CONDUCTORS SHALL BE A MINIMUM OF #6 AWG XLP / USE COPPER CABLE, WITH TYPE THW, 600 VOLT INSULATION.
3. 2-1/2 INCH DIAMETER GALVANIZED STEEL CONDUIT SHALL BE INSTALLED UNDER ALL EXISTING OR PROPOSED STREETS AND DRIVES. ALL CONDUIT TO BE 36 INCHES BELOW GRADE AND 2 FEET BACK OF CURB. ON THE END OF EACH GALVANIZED STEEL CONDUIT SHALL BE A BAKE-LITE BUSHING. AFTER THE INSTALLATION OF THE WIRES, THE CONDUIT SHALL BE SEALED WITH DUCT SEAL. WHERE STREET LIGHTS ALREADY EXIST, DISCONNECT AND REROUTE STREET LIGHTING CABLE THROUGH THE CONDUIT. SPLICING IS NOT PERMITTED.
4. ALL NEW STREET LIGHTING SYSTEMS SHALL BE PROVIDED WITH A REMOTE DISCONNECT LOCATED BETWEEN THE SERVICE CONNECTION AND THE CONTROLLER.
5. ALL TRENCHES IN LAWN AREAS SHALL BE BACKFILLED, TAMPED, AND RESTORED WITH 4 INCHES OF TOP SOIL AND SOD.
6. CONTACT PUBLIC WORKS (ELECTRICAL DEPARTMENT) 48 HOURS IN ADVANCE OF ANY WORK INVOLVING EXISTING STREET LIGHTS SO THAT APPROPRIATE OSHA LOCKOUT PROCEDURES MAY BE FOLLOWED.
7. ALL NEW, AND ANY EXISTING HANDHOLES THAT ARE TO BE MODIFIED IN ANY WAY, SHALL BE SUPPLIED WITH A GROUND ROD SO THAT THE FRAME AND LID ARE GROUNDED.
8. POLES FOR COACH LIGHTS SHALL HAVE A 14 FOOT MOUNTING HEIGHT, HAPCO PN:77-005 TRANSFORMER BASE, 4 INCH X 3 INCH TAPER, WITH A 0.125 INCH THICKNESS. FUSE EACH POLE AT 2 AMPS.
9. COACH LIGHTS SHALL BE AMERICAN ELECTRIC LIGHTING PN:24710SCAMT2R2AYNR, AMERICAN REVOLUTION SERIES 100 WATT H.P.S.
10. POWER TO THE STREET LIGHTING SYSTEM SHALL BE 240 VAC.
11. STREET LIGHTING MATERIAL CUT SHEETS AND VOLTAGE DROP CALCULATIONS SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT (ATTENTION RICK FEDERIGHI) FOR REVIEW AND APPROVAL PRIOR TO ORDERING.
12. STREET LIGHT POLES SHALL NOT BE LOCATED WITHIN 6 FEET OF DRIVEWAY APRON.

GENERAL NOTES FOR LANDSCAPING

1. THE DEVELOPER SHALL REPLACE ANY DAMAGED, DEAD OR MISSING PARKWAY TREES.
2. PARKWAY TREES SHALL BE PLANTED IN COMPLIANCE WITH VILLAGE OF GLEN ELLYN "STANDARDS SPECIFICATIONS FOR DESIGNS AND CONSTRUCTION", ORDINANCE PARKWAY TREES SHALL BE PROVIDED AT A MAXIMUM SPACING OF 40 FEET (MINIMUM 2-1/2 INCHES IN DIAMETER). MAINTAIN A MINIMUM OF 6 FEET FROM ANY DRIVEWAY TO A PARKWAY TREE.
3. ASH SPECIES (SUSCEPTIBLE TO DISEASE) AND HONEY LOCUST (LARGE PORTION OF OUR PARKWAY TREE POPULATION), ALTHOUGH LISTED IN SECTION 902.2, SHALL NOT BE USED IN PARKWAY TREE PLANTINGS. SUBSTITUTE OTHER ACCEPTABLE TREE SPECIES FOR ASH AND HONEY LOCUST, SUCH AS SHINGLE OAK, ENGLISH OAK (NON-COLUMNAR), SCHUMARD OAK, LIBERTY ELM (ULMUS AMERICANA HERITAS), ACCOLADE ELM (ULMUS MORTON), AUTUMN BLAZE MAPLE (ACER X FREEMANII), OR HACKBERRY. (FOR CLARIFICATION, CONTACT PUBLIC WORKS)
4. AFTER A TREE HAS BEEN SET, THE TOP 3/4 OF THE WIRE BASKET AND ASSOCIATED BURLAP SHALL BE REMOVED, WITH THE REMAINING BURLAP LOOSENED AND SCORED SO AS TO PROVIDE THE ROOT SYSTEM QUICK CONTACT WITH THE SOIL. ALL ROPES OR WIRES SHALL BE REMOVED FROM THE ROOT BALL AND TREE TRUNK.
5. ALL OFF-SITE AND RIGHT-OF-WAY RESTORATION WORK SHALL BE RESTORED WITH 6 INCHES OF TOPSOIL AND SOD.
6. DETENTION AREAS SHALL BE SODDED TO THE 100 YEAR HIGH WATER ELEVATION.
7. ALL ON-SITE CONSTRUCTION AREAS WHICH ARE DISTURBED, SHALL BE RESTORED TO THEIR ORIGINAL CONDITION WITH 6 INCHES OF TOP SOIL, SEED AND MULCH.
8. ALL SLOPES WHICH ARE TO BE GRASSED AFTER CONSTRUCTION AND ARE AT A 5:1 OR STEEPER SLOPE, SHALL BE SODDED AND STAKED INSTEAD OF SEEDED.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES (NORTHERN ILLINOIS GAS, COMMONWEALTH EDISON COMPANY, AMERITECH, CABLE TELEVISION, ETC.) PRIOR TO CONSTRUCTION AND ALL UTILITIES DAMAGED AND/OR DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. LOCATIONS AS SHOWN ARE APPROXIMATE AND BASED UPON THE BEST AVAILABLE INFORMATION.
2. ALL TRENCHES UNDER OR WITHIN TWO (2) FEET OF EXISTING/PROPOSED PAVEMENT SHALL BE BACKFILLED WITH SELECTED GRANULAR BACKFILL MATERIAL.
3. TOPSOIL PLACEMENT FOR LANDSCAPING SHALL BE A MINIMUM DEPTH OF 6 INCHES.
4. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
5. EXISTING SEWERS, WATER MAINS, SEPTIC FIELDS AND WELLS SHALL BE PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR. ANY DAMAGES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF EXCESS EXCAVATION MATERIAL.
7. DISPOSAL OF DEBRIS FROM CLEARING AND TREE REMOVAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND CONSIDERED AS AN INCIDENTAL EXPENSE, IF NECESSARY.
8. NATURAL PLANT COVERING AND TREES SHALL BE RETAINED AND PROTECTED DURING CONSTRUCTION WHERE PRACTICAL, AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE.
9. FINAL SEEDING AND FINISHING SHALL BE DONE AS SOON AS POSSIBLE IN ACCORDANCE WITH SECTION 250 ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. SEEDING SHALL BE CLASS 1A OF 2A.
10. UNLESS OTHERWISE NOTED IN THE SPECIAL PROJECT SPECIFICATION, THE PROJECT SHALL BE BUILT IN ACCORDANCE WITH "ROAD AND BRIDGE CONSTRUCTION FOR ILLINOIS," DATED JULY 1, 2012 OR AS REVISED AND AMENDED FROM TIME TO TIME.
11. CONTRACTORS SHALL USE APPROPRIATE EQUIPMENT TO EXPEDITE COMPLETION OF THE PROJECT WHILE AVOIDING ANY ENCROACHMENT OF NEIGHBORING PROPERTY WITH ANY MATERIAL, EQUIPMENT, OR EXCAVATION.
12. THE CONTRACTOR SHALL NOTIFY ALL GOVERNING MUNICIPALITIES AND ALL UTILITY COMPANIES TWO (2) WORKING DAYS BEFORE CONSTRUCTION IS STARTED IN ANY WORK AREA.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SIGNS, BARRICADES, FENCES, ETC. AS REQUIRED TO INSURE TH

GENERAL

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction" and applicable "Supplemental Specifications and Recurring Special Provisions"; both adopted by the State of Illinois on April 1, 2016 and subsequent revisions thereto, hereinafter referred to as the "IDOT Standard Specifications"; the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways"; and the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", hereinafter referred to as the "Water and Sewer Main Specifications"; and in case of conflict with any part or parts of said Specifications, these Special Provisions shall take precedence and shall govern.

All work shall conform to the Ordinances and Regulations of the Village of Glen Ellyn and be in accordance with the permits received from any agency having specific jurisdictional responsibilities within the project area.

RECORD DRAWINGS

The Contractor shall keep one (1) record copy of all Specifications, Drawings, Addenda, Modifications and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These documents shall be kept current at all times and shall be utilized in the preparation of the "AS-BUILT DRAWINGS" for final approval of the improvements by the Village.

JOB SITE PROTECTION

The Contractor shall be responsible for the proper and safe protection of his work at all times during construction and also during the guarantee period after the acceptance of the completed work by the Owner.

The Contractor will be responsible for all traffic control, including but not limited to barricades, signs, flagmen, etc., to maintain use of the project corridor at all times during the project.

The Contractor shall provide, erect and maintain barricades, red flags, and lights at all places where work is in progress, and wherever else required by the Owner's representative.

The Contractor shall ensure that all traffic control devices installed by him are operational 24 hours a day including Sundays and holidays. This also applies to barricades placed along the sidewalk to provide warning to pedestrian traffic.

Throughout the duration of the project, all existing street and traffic signs shall be maintained by the Contractor

SITE CLEANLINESS, STREET SWEEPING, DUST CONTROL

The Contractor at all times shall keep the public roadways free from accumulation of waste materials or rubbish caused by his operations. In order to minimize the potential damage to parkways, adjoining private property and tree root systems, the Contractor shall remove daily.

The Contractor shall keep roads in and around the construction area clean at all times. The Contractor is responsible to employ a mechanical street sweeper if needed to keep streets clean and safe.

The Contractor shall be responsible for the control of dust resulting from construction operations and is not intended for use in the compaction of earth embankments, as specified under Article 205.06 of the IDOT Standard Specifications.

No equipment cleaning will be allowed on any street, parkway or in any sewer.

PROTECTION OF EXISTING PAVEMENT

The Contractor shall not drive equipment other than rubber tired vehicles across any pavement, curb and gutter, driveways, or sidewalk unless suitable protection is provided in the form of planks or mats, and unless said pavement, curb and gutter, driveways or sidewalk is scheduled to be removed. All surface damaged during construction shall be removed and replaced as directed by the Owner at the Contractor's expense.

DAMAGE TO PROPERTY

The Contractor shall be responsible for any damage to properties caused by the acts of his work in the course of performance of this contract and shall replace or restore to its original condition any such damaged property at no cost to the Owner.

LOCATION OF EXISTING UTILITIES & NOTIFICATION TO UTILITIES

Locations of all utilities shown on the engineering drawings are approximate only, and are not necessarily complete. The Contractor shall make his own investigations as to the locations of all existing underground structures, cables, and pipe lines. The Contractor shall have the responsibility to determine from the public utilities the locations of underground pipes, conduits or cables adjoining or crossing the construction area during all phases of the construction project. The Contractor shall call J.U.L.I.E. at 1-800-892-0123 for utility location and stake-out.

The Contractor shall notify all utility companies including the local electrical, telephone, gas, cable T.V. and Village Street, Water, and Sewer Departments, a minimum of 72 hours prior to beginning any construction or taking any preliminary bores. If utility pole bracing is required, arrangements with the appropriate utility must be made at least six weeks in advance of the time such bracing is required.

If utility pole bracing is required, the Contractor shall make arrangements with the appropriate utility company at least six weeks in advance of the time such bracing is required.

COORDINATION WITH PUBLIC WORKS DEPARTMENT

All construction performed shall be coordinated with the Public Works Department of the Village of Glen Ellyn, to minimize inconvenience to the public.

HOLD HARMLESS

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Engineer, and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim for damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right of obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. In any and all claims against the Owner or any of its agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed, by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

MATERIAL CERTIFICATION

The Contractor shall furnish certifications to the Owner from suppliers stating that all materials comply with the requirements of the IDOT Standard Specifications and Supplemental Specifications. All materials installed with this project shall be new and be manufactured only in the United States. As requested by Owner, the Contractor shall promptly furnish proof that USA only materials are utilized.

QUALITY CONTROL AND QUALITY ASSURANCE MATERIAL TESTING

The project is subject to all IDOT requirements for Quality Control and Quality Assurance Material Testing. The Contractor shall be responsible for performing all required Quality Control Testing.

SOIL CERTIFICATION

The Contractor shall comply with Section 669 of the IDOT Standard Specifications and regulations of 35 Ill. Adm. Code 1100 as amended by the Illinois Pollution Control Board for Clean Construction or Demolition Debris (CCDD

SAWCUTTING

The Contractor shall be responsible for removing the residue created by sawcutting operations within the Public Right of Way in a manner acceptable to the Owner and Village. The resulting surface shall be sufficiently clean so that no tracking of residue by vehicles or pedestrians occurs.

DRIVEWAY PAVEMENT AND SIDEWALK REMOVAL

All existing sidewalk designated for removal within the Public Right of way shall comply with the applicable portions of Section 440 of the IDOT Standard Specifications as modified herein and as shown on the engineering drawings or as directed by the Engineer.

All existing pavement to be removed shall be saw cut full depth along the existing contraction joints or where specified otherwise by the Owner or Village.

Any damage to private driveways shall be repaired at the Contractor's expense. If additional sidewalk is removed or damaged due to negligence on the part of the Contractor, the additional quantity of sidewalk removal and shall be repaired at Contractor's expense. Extent of any repair required shall be determined by the Village.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

Subgrade preparation shall include the removal of unsuitable surface conditions including pavement materials, vegetation, high organic content topsoil, root matter and other deleterious conditions which may be encountered. The subgrade soils (including soils in the conduit trenches) shall be proof-rolled and the soils compacted to a minimum of 95% compaction based on the standard proctor, AASHTO T-99 or ASTM D-698, within 1.0 foot of the surface.

When proof-rolling reveals unstable soil conditions, these soils shall be removed. Removal and Disposal of Unsuitable Material shall conform to applicable portions of Section 202 of the IDOT Standard Specifications. Areas where fill is required shall be prepared as indicated above. The prepared areas should then be filled using porous granular embankment, sub- grade.

POROUS GRANULAR EMBANKMENT, SUB-GRADE

The Porous Granular Embankment, Sub-Grade shall be used as field conditions warrant at the time of construction. If Pourous Granular Embankment, Sub-Grade is required then this work shall consist of removing unsuitable material and furnishing, placing and compacting porous granular material installed on geotextile fabric to the lines and grades shown on the engineering drawings or as directed by the Engineer in accordance with the applicable portions of Section 207 of the Standard Specifications. The material shall be used as a bridging layer over soft, unstable or loose soil areas and for placement under water.

The geotextile fabric shall be in accordance with the specifications contained in Article 1080.02 of the IDOT Standard Specifications. The POE material shall conform to Article 1004.05 of the Standard Specifications except the gradation shall be as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete

Sieve Size	Percent Passing
*6"	97 ± 03
*4"	90 ± 10
2"	45 ± 25
#200	5 ± 5

2. Gravel, Crushed Gravel and Pit Run Gravel

Sieve Size	Percent Passing
*6"	97 ± 03
*4"	90 ± 10
2"	45 ± 25
#4	30 ± 20
#200	5 ± 5

*For undercut greater than eighteen inches (18"), the percent passing the 6" sieve may be 90 ± 10, and the 4" sieve requirements eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is 6" or less or as directed by the Engineer. Each lift of the porous granular material shall be rolled with a vibratory roller meeting the requirements of Article 1101.01 of the Standard Specifications to obtain the desired keying or interlock and compaction. The Owners Representative shall verify that adequate keying has been obtained.

A 3" nominal thickness top lift of capping aggregate having a gradation of CA-6 will be required when Aggregate Sub-Grade is not specified in the contract and Porous Granular Embankment, Sub- Grade will be used under the pavement and shoulders. Capping aggregate will not be required when embankment meeting the requirements of Section 207 of the Standard Specifications or granular sub-base is placed on top of the porous granular material.

Unnecessary construction equipment for the completion of the replacement material will not be allowed on the undercut areas until compaction of the recommended thickness of the porous granular sub-grade.

Full-depth sub-grade undercut should occur at limits determined by the Engineer. A transition slope to the full depth of undercut shall be made outside of the undercut limits at a taper of 1 foot longitudinal per 1 inch depth below the proposed sub-grade or bottom of the proposed aggregate sub-grade when included in the contract.

Removal and disposal of defective existing material shall be the responsibility of the Contractor.

SUB-BASE GRANULAR MATERIAL, TYPE B

Furnishing and placing sub-base granular material on a prepared subgrade shall meet the requirements of Article 1004.04 of the IDOT Standard Specifications except as modified herein. The course aggregate used for this material shall be crushed gravel, crushed stone or crushed concrete, shall have a gradation of CA-6 and shall have a quality of Class D or better. No recycled materials are allowed, except with the Engineers approval of recycled HMA grindings from approved stockpiles.

Construction requirements shall meet the requirements of Section 311 of the IDOT Standard Specifications.

Sub-base granular material shall be measured in place and the area computed in square yards and
shall be paid for at the contract price per square yard for SUB-BASE GRANULAR MATERIAL, TYPE B, of the thickness shown on the drawings. Said price shall include the cost of furnishing, placing and compacting the sub-base granular material.

BITUMINOUS MATERIALS (TACK COAT AND PRIME COAT)

This work shall consist of the application of bituminous materials (prime coat) MC-30 to aggregate base courses, and bituminous materials (tack coat) RC-70 to HMA receiving leveling binder or surface courses.

The bituminous material for priming of aggregate bases shall be prepared and applied in accordance with Article 406.05 of the IDOT Standard Specifications. Prime Coat shall be applied at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft for aggregate bases.

The bituminous material for tacking of concrete or hot-mix-asphalt shall be prepared and applied in accordance with Article 406.05 of the IDOT Standard Specifications. Tack Coat shall be applied at a rate that will provide a residual asphalt rate on the prepared surface of 0.05 lb/sq ft for Milled HMA and 0.025 lb/sq ft for HMA lifts.

Prime coat shall include bituminous material furnished, delivered and applied in place. Payment for such will be at the contract unit price per pound of residual asphalt for BITUMINOUS MATERIALS (PRIME COAT) and BITUMINOUS MATERIALS (TACK COAT).

COMBINATION CONCRETE CURB AND GUTTER

Construction of the combination curb and gutter as shown on the engineering drawings shall be in accordance with Section 606 of the IDOT Standard Specifications and the details shown on the engineering drawings. Curb and gutter in the driveway shall be depressed. The thickness of the gutter section at the pavement edge shall match the pavement cross section as shown on the typical cross-section(s). The concrete shall be Class SI as specified on Article 1020 of the IDOT Standard Specifications.

The Contractor shall machine-sawcut a perpendicular clean joint between that portion of the curb or curb and gutter to be removed and that, which is to remain in place. If the Contractor removes or damages the existing curb or curb and gutter outside the limits designated by the Engineer for removal and replacement, he will be required to remove and replace that portion at his own expense to the satisfaction of the Village.

Expansion joints shall be located at locations where the new curb joins the existing curb. Expansion joints shall consist of two No. 6 plain round bars each 18-inches long with expansion caps on one end of each bar and a 1/2-inch preformed expansion joint filler materials cut to the same shape as the curb or curb and gutter. Contraction joints shall be located at not more than 12-1/2 feet intervals between expansion joints. Contraction joints shall be sawcut 2-inches in depth within 48 hours of the placement of concrete. Joints shall be sealed in accordance with Article 420.12 of the IDOT Standard Specifications and as directed by the Engineer. Curbs constructed over a utility trench shall be reinforced with three #5 reinforcing bars for a length of 10 ft. centered on the trench.
New finished curbing shall be cured by the Membrane Curing Methods in accordance with Section of the IDOT Standard Specifications using Membrane Curing Compound Type II.

In order to protect existing trees and utility poles within the Public Right of Way, the Contractor shall hand form curb and gutter at locations directed by the Owner or Village.

COMBINATION CONCRETE CURB & GUTTER REMOVAL & REPLACEMENT

This work shall consist of the removal and replacement of any existing curb and gutter (various types) at the locations shown on the engineering drawings or as directed and marked by the Engineer in the field in accordance with Sections 202, 351, 440 and 606 of the Standard Specifications for Road and Bridge Construction and as described herein.

The construction of concrete curb and gutter shall include the excavation for and placement of a minimum of 4" CA-6 Aggregate Base in accordance with Sections 202 and 351 of the Standard Specifications, if the existing aggregate base is considered unsuitable by the Engineer. The excavation for the curb and gutter, the placement and compaction of 4" CA-6 Aggregate Base, furnishing and installing tie bars, furnishing and installing expansion joints with dowel bars, the disposal off-site of the excavation material and the curing and protection in accordance with the Standard Specifications shall be the Contractors responsability.

CLASS B PATCHES

Class B Patches shall be performed in conformance with Section 442 of the IDOT Standard Specifications with the following amendment:

Class PP-1 concrete shall be used for all Class B patches.

PORTLAND CEMENT CONCRETE SIDEWALK

This item shall consist of the construction of sidewalks as per the details and at locations shown on the engineering drawings and as directed by the Engineer. The work shall include all required earth excavation, including deepening to accommodate the specified concrete and aggregate base thicknesses, widening, and/or relocating of the sidewalk. Unless otherwise agreed to by the Engineer, the work item shall always include complete replacement of the existing base and any additional excavation to achieve the desired cross section and dimensions. If the profile of the sidewalk is lowered, excavation to bring the existing sidewalk area from its original elevation to the finished grade elevation will be the Contractors responsability.

The Concrete shall conform to Section 1020 of the IDOT Specifications for Class SI Portland Cement Concrete.

Construction shall conform with all the applicable requirements of Section 424 of the IDOT Specifications except as modified herein.

The sidewalk shall be constructed on an aggregate base consisting of a 4-inch (minimum) thickness of compacted CA-6 on a dry natural or compacted subgrade. The sidewalk shall have a minimum thickness of 5 inches which shall be increased to 6 inches at residential driveways and key walks or 8" at commercial driveways.

Formwork for P.C.C. Sidewalk shall be a minimum of 2x6. No 2x4 forms will be allowed during construction.

Sidewalk at driveways shall be reinforced with fiber mesh additive. Fiber mesh shall be as specified under the Special Provision PCC Driveway Pavement.

The sidewalk shall be constructed with contraction joints spaced evenly at five foot intervals. The contraction shall be one inch in depth and may be either saw cut or tooled at the time of finishing.

Expansion joints consisting of 3/4" preformed joint filter shall be placed wherever the sidewalk abuts all curbs, driveways, poles, or other structures. The expansion material shall extend for the full depth of the concrete.

DETECTABLE WARNING (SPECIAL)

This work shall consist of providing all labor, materials, tools and equipment necessary to install cast-in-place detectable warnings with a truncated dome pattern. Detectable warnings shall be a prefabricated, cast-in-place system. Stamped concrete will not be allowed. The color shall be as close a match as possible to Federal Standard Color 30166, Brick Red, as identified using the color chart published by L.M. Scofield Company, or approved equivalent. Detectable warnings shall be cast-in-place systems manufactured by ADA Solutions (Cast-In-Place Systems), Armor Tile (Cast-In-Place Systems), or approved cast-in-place panel from an alternate supplier. Contractor shall provide a sample of the proposed panel for inspection and approval by the Village prior to installation.

Detectable warning panels must be installed across the entire width of the depressed curb, perpendicular to the direction of travel and per the standard details. At locations of curved ramps, additional areas may be required to achieve the required dimensions and direction of truncated dome pattern.

Construction shall conform to the requirements of Section 424 of the IDOT Standard Specifications except as modified herein.

PROTECTIVE COAT AND CURING OF PORTLAND CEMENT CONCRETE

Protective Coat shall be applied to all new concrete gutter flags, faces and tops of curbs, sidewalks and driveway pavements in accordance with the requirements of Article 420.18 of the IDOT Standard Specifications except that it shall be applied regardless of the time of year.

The Portland Cement Concrete surface shall be cured in accordance with Article 1020.13 of the IDOT Standard Specifications with the following exception: "On non-traffic Portland Cement Concrete surface areas, the use of linseed oil emulsion curing compound will be permitted. The linseed oil curing compound shall meet the requirements of Article 1022.01 of the IDOT Standard Specifications. In addition, the oil phase of the emulsion shall consist of 85 percent by volume boiled linseed oil and 15 percent by volume Z-8 bodied linseed oil. The linseed oil emulsion curing compound shall be applied with a mechanical sprayer meeting the requirements of Article 1101.09(b). Membrane curing will not be permitted between November 1 and April 15."

PAVEMENT SMOOTHNESS

The Contractor is advised that the Village is seeking a finished pavement surface that is not only devoid of obvious surface variations but also without slight ripples or waves that can be detected by a vehicle operator. As such, the IDOT Standard Specifications, while serving as a basic guide to the determination of pavement smoothness, will be modified as described below, to emphasize and insure that the smoothest pavement is produced.

The following procedures are established, the cost of which shall be included in the cost of the various hot-mix asphalt (HMA) pavement items and no additional compensation will be allowed.

1. Pre-Paving Meeting - Prior to start of paving operations, the engineer shall meet with the paving foreman and a responsible member of the Contractor's organization to review the Village smoothness criteria and to establish procedures to achieve a smooth pavement.

2. Equipment Review - The Contractor shall verify that the paving equipment is in good working order and that all machine operating parameters are within manufacturer's specifications. Pavement installation procedures will also be reviewed. It should be noted that the paver speed shall not exceed 25 feet per minute unless it can be conclusively demonstrated that a smooth and dense pavement is being constructed.

3. Test Strip - In addition to evaluation HMA mixture properties, a test strip shall be constructed at the start of pavement placement operations to assess the smoothness of the installed pavement. A 16 ft. straightedge shall be provided by the Contractor to test for surface smoothness.

4. Surface Testing - The completed surface course shall be tested for smoothness in the wheel paths with a 16 ft. straightedge provided by the Contractor. Surface variations in the pavement shall not exceed 1/8 inch.

For each variation in the surface course that exceeds1/8 inch, a deduction of 5 tons will be made in the tonnage of surface course mixture measured for payment. If the total deduction for the pavement tested in a section exceeds 25% of the installed surface course tonnage, the entire area shall be removed and replaced at the entire expense of the Contractor, and the section re-tested for smoothness.

BRICK PAVER REMOVAL AND RE-INSTALLATION

This work shall consist of the removal and re-installation of existing brick pavers that are shown to be removed and replaced on the engineering drawings. The contractor shall remove and store existing paving blocks at a location approved by the Engineer. The work shall include excavating for, furnishing, and constructing a 5-inch aggregate base capped with 1-inch of FA-1 (sand), furnishing and installing new brick edging, reinstalling the brick pavers including installing polymeric sand in the paver joints. The work shall be completed as depicted in the drawings and/or as directed by the Engineer. If existing paving blocks are damaged during excavation or additional pavers are required to complete the work, the contractor will be required to furnish brick pavers of the same size, shape, color and texture as the existing.

RESTORATION

Whenever public or private property is damaged or destroyed not included in this contract, the Contractor shall, at his own expense, restore such property to a condition equal to that existing before such damage or injury was done by repairing, rebuilding, or replacing it as may be directed, or he shall otherwise make good such damage or destruction in an acceptable manner. If he fails to do so the Owner may, after the expiration of a period of 48 hours after giving him notice in writing, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof shall be deducted from any compensation due, or which may become due the Contractor under his Contract. Rough or otherwise damaged turf areas shall be neatly restored with four inches of top soil and sodded.

SODDING (PARKWAYS)

This work shall consist of preparing the ground surface, furnishing and placing topsoil to a 4" minimum depth, fertilizing the areas to be sodded as specified and furnishing and placing the sod. The preparation of the ground surface shall include the removal of the existing sod and any excavation, if necessary, of the existing ground to obtain the required 4 inches minimum depth of topsoil. All work shall be performed in accordance with the applicable requirements of Sections 211 and 252 of the IDOT Standard Specifications. All grass areas that are disturbed due to curb and sidewalk replacement, installation of new water services, street resurfacing and appurtenant construction shall be restored by sodding.

180 pounds of fertilizer nutrients per acre shall be applied at a 1:1:1 ratio as follows:

Nitrogen Fertilizer Nutrients	60 lbs./acre
Phosphorus Fertilizer Nutrients	60 lbs./acre
Potassium Fertilizer Nutrients	60 lbs./acre

Watering shall be in accordance with the requirements of Articles 252.08 and 252.09 of the IDOT Standard Specifications.

The sodded areas shall be guaranteed by the Contractor for a period of one year after installation. During this period all defective areas caused by inadequate watering, salt damage, pedestrian and traffic damage, shall be repaired at the Contractor's expense.

TREE MULCHING (PARKWAY TREES)

The Contractor shall provide shredded tree bark mulch meeting the requirements of Article 1081.06 of the IDOT Standard Specifications around all parkway trees adjacent to the limits of construction. The area of mulching will depend on the size, location and adjacent grades, but shall be a minimum of three inches (3") deep. In no cases will the limits of the mulch material be less than the area of existing mulch and/or less than 24" from the face of the tree unless otherwise directed by the Owner or Village.

SEGMENTAL CONCRETE BLOCK WALL

This work shall consist of the designing, furnishing, and construction of a segmental concrete block retaining wall system at locations shown on the engineering drawings and as determined by the Engineer. The segmental concrete block walls will be installed adjacent to sidewalk to achieve compliance with sidewalk longitudinal- and cross-slope requirements with right-of-way accessibility guidelines.

The wall system shall consist of a leveling pad, pre-cast concrete blocks, select granular backfill and drainage system. The wall supplier shall submit shop drawings to the Engineer including cross section sheet(s) and drainage system details, dimensions, quantities and installation procedures. Construction drawings and design calculations for the retaining wall system shall be prepared by a registered structural engineer and shall bear his/her signature and seal, if required. The Contractor shall submit the construction drawings and design calculations to the Engineer for approval prior to beginning construction.

The modular retaining wall system shall be 6-inch blocks as manufactured by Versa-Lok or approved equal with shear pins. Contractor shall submit color samples for Village approval. The external face shall have a natural stone appearance and texture.

The drainage system shall consist of a 4-inch diameter perforated flexible pipe with a continuous fabric liner surrounding the outside. A tee fitting of the same type as the pipe shall be provided for each discharge point. A decorative slotted cover plate shall be provided where the drainage system discharges through the wall.

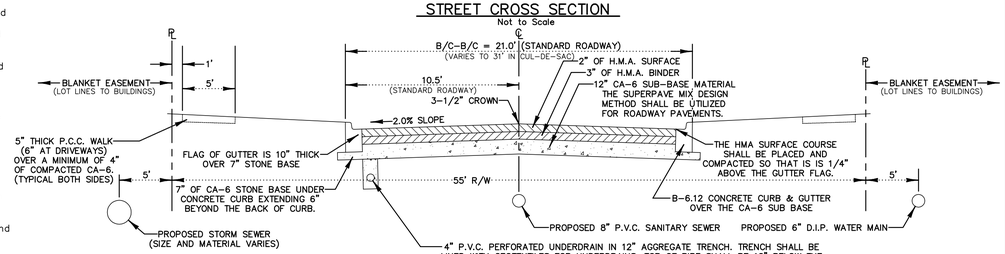
The granular backfill located behind the blocks shall meet a CA-11 gradation, shall extend from the leveling pad to 5 inches below the complete top of wall (cap) for a minimum one-foot behind the back side of the wall and shall be encased in geotechnical fabric meeting Article 1080.05 of the IDOT Standard Specifications.

The leveling pad shall be crushed aggregate meeting a CA-6 gradation and comply with the requirements of Aggregate Base Course, Type B.

If required by the Village or owner, Portions of the retaining wall shall be reinforced with Geogrid as specified and installed in accordance with all manufacturer specifications. The Geogrid shall extend a minimum of 2 feet beyond the back of the retaining wall or further as directed by the Engineer.

STREET CROSS SECTION

Not to Scale



Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	No Scale	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CONSTRUCTION NOTES-GLEN ELLYN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 17 or 25

Project # 895

Harding Townhomes - Engineering, 10/04/2021

DRAWING FILE NAME: 895-MF-SH17

WATER MAIN AND FITTINGS

Polyvinyl Chloride water main shall be C900 DR18 (Pressure Class 235) with elastomeric gasket joints conforming to ASTM F-477. Fittings shall be ductile iron compact fittings with mechanical joints conforming to the requirements of ANSI/AWWA C153/A21.53. All fittings bolts and nuts shall be grade 304 stainless steel with anti-gall coatings.

Ductile iron pipe water main shall be class 52 with push-on joints having a minimum wall thickness of 0.31 inches. Fittings shall be ductile iron compact fittings with mechanical joints conforming to the requirements of ANSI/AWWA C153/A21.53. All fittings bolts and nuts shall be grade 304 stainless steel with anti-gall coatings.

Contractor should be aware that there may be fittings shown on the engineering drawings that require a joint restraint device. This mechanical joint restraint shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1 and shall be MEGALUG as manufactured by EBAA Iron, Inc. or approved equal

Water main shall be laid with 5.5 foot minimum cover to the proposed finish grade unless shown otherwise on the engineering drawings.

All ductile iron water main pipe and fittings shall be laid in a polyethylene encasement as described in these Special Provisions.

Tracer Wire and Detectable Utility Warning Tape
Tracer wire shall be TRACE-SAFE Water Blocker Tracer Wire with TRACE-SAFE Connectors as manufactured by NEPTCO, Pawtucket, RI (www.trace-safe.com). Two tracer wires shall be strapped to the crown of the water main along its entire length (including along water service lines, fire hydrant leads, and fire hydrant barrels) with nylon zip ties spaced at no greater than four feet (4') on center. Tracer wires shall be spliced using the TRACE-SAFE End to End Butt Splice Connector. The tracer wires shall be grounded at the end of all main line runs by connecting the tracer wires to an eight-foot (8') long by 5/8 inch diameter copper bonded grounding rod. Tracer wires shall be extended from the water main to all buffalo boxes and back to the water main using TRACE-SAFE Main to Lateral connectors; the tracer wire shall be double spliced (two connecting wires) and connected to the water service line within two-feet (2') of the b-box using a stainless steel hose clamp; connection to be wrapped with moisture blocking electrical tape. Both tracer wires shall extend from the water main to the lower flange on all fire hydrants and be connected with TRACE-SAFE Fire Hydrant Connectors With Isolation Wing Nuts. Inside of all valve vaults, a tracer wire shall run from both tracer wires at the bottom of the valve vault to the top of the valve vault; the wire shall be terminated with a TRACE-SAFE connecting block and secured to the top of the valve vault cone with a Tapcon bolt and stainless steel washer. Blue Detectable Utility Tape (2-inch wide) Labeled "Buried Water Line" shall be installed over all water main and water service lines at a bury depth of 18-inches.

All existing water mains and other facilities shall be kept in service during construction, except where prior permission is granted otherwise and the construction ia scheduled with the Village.

Upon completion of the pressure test, a leakage test shall be conducted. The duration of the test shall be a minimum of one hour at a nominal pressure of 150 pounds per square inch (gauge). The allowable leakage shall be determined by the formula:

$$L = \frac{SD\sqrt{P}}{133{,}200}$$

Where: L= Allowable leakage in gallons per hour
D = Nominal Diameter of pipe in inches
P = Average test pressure in pounds per square inch (gauge)
S = Length of pipe line tested in feet

Leakage is defined as the quantity of water to be supplied in the section under test which is necessary to maintain the test pressure after the pipe has been filled with water and the air expelled.

POLYETHYLENE ENCASEMENT

All ductile iron or cast iron pipe, fittings, valves, and hydrants shall receive a 8-mil polyethylene encasement in accordance with AWWA C105. Encasement shall be U.S. Pipe V-Bio Enhanced Polywrap or an approved equal.

The encasement material shall be an eight (8) mil thick polyethylene tube designed for water main application and in the size recommended by the manufacturer for the size of force main or water main installed. The casing shall be lapped 12 inches and held in place with polyethylene adhesive tape. Repair any rips, punctures, or other damage to the polyethylene with tape or cutting open a short length of tube, wrapping it around the pipe and securing with tape.

Wrap valves, tees, crosses, and special fittings with a flat sheet obtained by splitting open a length of polyethylene tube. Pass the sheet under the valve of fitting and bringing it up around the body. Join the seams by bringing the edges together, folding over twice and securing in place with tape. The sheet shall be adequate to provide a 12-inch lap with the tubing.
The backfill material shall be free of rocks and debris which may damage the polyethylene.

GATE VALVES, VALVE VAULTS, AND VALVE BOXES

All main line valves size 4" to 12" shall be Mueller A 2360-20 or Waterous 500RW resilient wedge, fused epoxy coated with stainless steel bonnet bolts.

Fire hydrant auxiliary valves shall be resilient seat gate valves with mechanical joint connections or attached directly to the hydrant with a flanged connection. These valves shall meet the requirements of Article 42-2.01, and 42-2.02 of the Water and Sewer Main Specifications.

All valves shall be furnished with either cast iron valve boxes or installed in precast reinforced concrete valve manholes with frame and lid, as shown on the engineering drawings. Valve boxes shall be Tyler 664- S, 3-piece, screw type with 5-1/4" shaft and no-tilt drop cover marked with the legend "WATER" and installed with a rubber stabilizer manufactured by Adaptor Inc. or approved equal. Valve vault frame and cover shall be East Jordan Iron Works (EJIW) Catalog Number 1022-2 with Heavy Duty solid Cover (minimum assembled weight of 300 lbs.) or approved equal. "VILLAGE OF GLEN ELLYN" and the word "WATER" shall be cast in the cover in 2-inch raised letters.

Compacted crushed stone (CA-6 gradation) shall be utilized to backfill all around the base of valve box to prevent mud from entering the valve box.

All valves not in manholes shall be encased in polyethylene.

FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

This work shall consist of furnishing and installing a Mueller Super Centurion 250, A-423 fire hydrant approved by the Village of Glen Ellyn in accordance with Section 45 of the Illinois Water and Sewer Main Specifications and the details included in the engineering drawings, complete with auxiliary resilient seat gate valve, valve box, and 6" connecting pipe. Hydrants shall be OPEN LEFT and have National Standard Threads. Hydrants shall be painted yellow.

Fire hydrant valves shall be Tyler 664-S, 3 piece, screw type with five and one-quarter (5-1/4") inch shaft and no-tilt drop cover marked with the legend "WATER".

Connecting pipe shall be Class 52 ductile iron pipe with push-on joints having a minimum wall thickness of 0.31 inches. Fittings shall be ductile iron reduced fittings with mechanical joints conforming to the requirements of ANSI/AWWA C153/A21.53.

All water main pipe and fittings shall be laid in a polyethylene encasement as described in these Special Provisions.

CONNECTION TO EXISTING WATER MAIN

This work shall consist of all labor, material and equipment required to connect the proposed water main to the existing main at locations indicated on the engineering drawings and as shown on the details and in accordance with the Illinois Water & Sewer Specifications. Also included shall be other work required to complete the installation of the water main connection including pipe, reducer, fittings, solid sleeve coupling (Duo-Sleeve or equal), thrust blocks, polyethylene encasement, excavation, trench backfill and legal disposal of all excess material.

WATER SERVICE CONNECTIONS

This work shall consist of all labor, equipment and materials required to provide and install new water services of the specified size as per plan details and at locations shown on the engineering drawings and as directed by the Engineer. Included in this item are the excavation, directional boring (where required by the Engineer), water service line, tapping, saddles, repair sleeves, corporation stops, curb stops, domestic water service boxes, pipe fittings, joint materials, trench backfill, and all necessary and collateral work required to complete the work as specified herein.
Pay item for the water service connection shall be categorized into:

1. WATER SERVICE CONNECTIONS TO NEW MAIN (LONG SIDE) are new services that cross the street from the far side to connect to the new water main as shown on the engineering drawings.

2. WATER SERVICE CONNECTIONS TO NEW MAIN (SHORT SIDE) are new services close to the new water main as shown on the engineering drawings.

3. WATER SERVICES TO EXISTING MAIN (LONG SIDE) are new services that cross the street from the far side to connect to an existing water main as shown on the engineering drawings..

Water service line shall be copper, Type K, soft temper for underground service, conforming to the requirements of ASTM Standards B88 and B251. The pipe shall be marked with the manufacturer's name or trade mark and a mark indicative of the type of pipe. The outside diameter of the pipe shall conform to ASTM Standard B251, Table 2.

Trench backfill shall be selected granular backfill conforming to the requirements of these Special Provisions.

Corporation stops and curb stops shall be fabricated of brass and provided with outlets suitable for copper connection in accordance with the requirements of AWWA Standard C-800. Curb stops shall be of the round-way type. Tapping saddles shall be utilized: for new 6-inch and larger DIP mains, the saddle shall be Mueller BR2B Series, bronze double strap with AWWA taper thread (CC); for existing water mains and new PVC mains, the saddle shall be Smith-Blair 372 Series "TaperSeal" stainless steel service saddle, double bolt, CC thread. Fittings for water service line shall be copper and of the compression type.

Domestic water service curb boxes shall be cast iron, screw-type, with the base set over the curb stop and of such construction that it can be extended in length to fit the particular location with 18" of adjustment left. The cover of the domestic water service box shall be marked "WATER".

Water service connections shall be installed in accordance with the requirements of Sections 41-2.12 and 41-2.13 of the Water and Sewer Specifications and the details included in the engineering drawings. The proposed water main shall be tapped at an angle of 45 degrees with the vertical, and the stop turned so that the T-handle is on top. The water service line shall extend horizontally at right angles with the water main to the proposed curb stop and/or point of connection. The copper tubing shall be one continuous length (no coupling of the new copper tubing will be allowed) laid in the trench sufficiently weaving to allow not less than one (1) foot of extra length between the corporation and curb stops. Water service lines shall be directionally drilled as shown on the project engineering drawings; open cuts through the pavement will be allowed at all other locations. A new domestic water service box shall be set over the proposed curb stop at the location shown on the engineering drawings or as directed by the Engineer. The new copper water service line shall be flushed to remove all debris

The Contractor shall minimize any interruption of service to customers in order to install new water service connections. A minimum of 2 hours notice shall be made to the Village prior to connection to the main.

Village specifications for water service lines 2-inches or less:

Item		Specification		
Service Line and Meter Size		For potable usage, per Illinois Plumbing Code (Appendix A-Table N); One inch (1") minimum diameter pipe size		
Saddle		REQUIRED For PVC pipe (and as required or specified for ductile/cast iron pipe): Smith-Blair 372 Series "TaperSeal" stainless steel service saddle, double bolt, CC thread. With permssion of the Utilities Division for DIP only, Mueller BR2B Series, bronze double strap with AWWA taper thread (CC)		
Pipe Material		Type K Copper		
Fittings-Must meet No-Lead Brass Requirement and have "NL" marking		Mueller	Ford	McDonald
Corporation Stop		Corporation stop shall be Mueller B-25000, with Ford L04-665-NL(90°)/L404-665-NL(45°) or A.Y. McDonald 74776-ST-66(90°)/74750-ST-66(45°) or approved equal flare x compression mechanical bend that is securely blocked or Mueller B-25008 or approved equal, 1 to 2 inch size.		
Curb Stop (Quarter Turn Check and Minneapolis Top Thread)	1"	B-25155	B44-444M	6100T or -22 6100WT or -22
	1-1/4"	H-10287 + two H-15428	B44-555M	6105+(4753T or -22, 6104-55, 6110-55)
	1-1/2"	B-25155	B44-666M	6100-33, 6104-33
	2"	B-25155	B44-777M	6100-44, 6104-44
Curb Box (Minneapolis Pattern 1-1/2" diameter; cast iron top and pentagon plug)	5.5' Bury	H-10302	EM2-55-67	5622, 5623
	6' Bury	H-10302	EM2-60-67	5622, 5623
	6.5' Bury	H-10302	EM2-65-67	5610, 5611
Unions		Use Appropriate Mueller, Ford or McDonald Couplings		
Fittings that are in vaults should be flare connections.				

WATER MAIN BORED IN PLACE

This work shall consist of boring ductile iron pipe water main under trees and at the locations shown on the plans or as directed by the Engineer.

Ductile iron pipe water main shall be constructed in accordance with the applicable requirements of ANSI/AWWA and the Special Provisions "Water Main" included herein.

When sheeting and bracing have been used, sufficient bracing shall remain in place during the backfill operation to prevent caving or settlement of the sides of the boring pit. Bracing may be removed as backfilling proceeds. Depressions that develop in the area involved in construction operations due to settlement of the tunneling and/or backfilling shall be filled in a manner meeting the approval of the Engineer.

DISINFECTION OF WATER MAINS

Upon completion of the newly installed water main the new water main shall be flushed by the Contractor, prior to chlorination, at its extremities at a rate of not less than 2.5 fps, to remove any foreign matter that might be in the main. Following chlorination, all treated water shall be thoroughly flushed from the newly laid water main at its extremities until the replacement water throughout its length shall equal in quality, both chemically and bacteriologically, the water to be served to the public by the water system. This work shall be in accordance with AWWA Specification C651 as well as State and Municipal Specifications and shall be accomplished in a manner acceptable to the State Board of Health.

The contractor shall demonstrate how adequate flushing velocities will be obtained for all pipe segments. As required, temporary flushing hydrants shall be installed to achieve adequate flushing of mains.

Only first-day samples in the two-sample testing protocol may be taken Monday through Wednesday upon adequate notice from the Contractor that the water main is ready for sampling and there are no holidays during the week. If the water main segment fails to pass the second disinfection test, the Contractor will be charged a water sample testing fee according to the following schedule, such fees to be paid to the Village by the Owner deducted by the Owner from monies owned to the Contractor.

Test Series Number	Water Sample Testing Fee Charged to Contractor
1	$0
2	lab costs only
3	$2,500 plus lab costs
4	$5,000 plus lab costs
5 and subsequent tests	$10,000 + $5,000 plus lab costs for each test beyond 5

Corporation stop used for flushing shall be included in the price of the water main. Type of corporation stop shall be as specified by the Glen Ellyn Public Works Department. All mains will be DECHLORINATED at the furthest extremity following chlorination and prior to flushing and sampling.

STORM SEWERS

Storm sewers shall be constructed of reinforced concrete pipe (RCP), Ductile Iron Pipe (DIP) or Polyvinyl Chloride (PVC, as shown on the engineering drawings.

A. REINFORCED CONCRETE PIPE

Except as otherwise specified, reinforced concrete pipe shall conform to ASTM C-76.

The sewer shall be constructed with rubber gasketed (O-ring) joints meeting the requirements of ASTM C-361 for Reinforced Concrete Low Head Pressure Pipe. The bell and spigot or tongue and groove ends shall be formed on machine rings formed to ensure accurate joint surfaces and shall be stepped to accommodate a round compression type rubber gasket.

Rubber gaskets shall be extruded or molded in such a manner that any cross section will be dense, homogeneous, and free of porosity, blisters, pitting and other imperfections. The gaskets shall be fabricated from a high grade rubber compound containing no reclaimed rubber. The basis polymer shall be natural rubber, synthetic rubber or a blend of both. The physical properties of the rubber gaskets and the permissible variations in dimensions shall conform to the requirements of those specified in the specifications for Rubber Gaskets, ASTM Designation C361.

The gaskets shall be seated on the joint in accordance with the manufacturer s specifications. Where adhesive is required to properly seat the gasket, the gasket shall be applied not less than 24 hours prior to installing the pipe.

When the pipe is lowered into the trench, installers shall make certain that no dirt is clinging to the jointing surface or lodged under the gasket. The gasket and inside surface of the groove shall be thoroughly lubricated as specified by the gasket manufacturer. The tongue end shall be carefully centered in the groove so as to avoid the displacement of the gasket, and the pipe shall be driven home, fully deforming the gasket, by use of a cable and winch set inside the pipeline, at least two pipe lengths back, or by other methods approved by the Engineer. Adjustment to line and grade shall be made in such a manner as not to disturb the deformed gasket.

B. DUCTILE IRON PIPE

Ductile iron pipe shall be Class 52 with push-on joints having a minimum wall thickness of 0.31 inches. Fittings shall be ductile iron compact fittings with mechanical joints conforming to the requirements of ANSI/AWWA C110/A21.10.

C. PVC Pipe

PVC storm sewer pipe shall meet the requirements of ASTM Specification D2241, with a Standard Dimension Ratio (SDR) of 26 or as specified on the engineering drawings.

The pipe joints shall be elastomeric gasket (push-on) type in compliance with the requirements of ASTM D3139.

Storm sewers shall be tested by closed circuit T.V. before acceptance

STORM DRAINAGE STRUCTURES

All manholes, inlets and catch basins shall be constructed of precast reinforced concrete in accordance with the details shown on the engineering drawings, and shall be furnished complete with a cast iron frame and grate, frame and lid or curb box, as shown on the engineering drawings.

All work shall be performed in accordance with the applicable requirements of Section 602 of the IDOT Standard Specifications.

The construction of INLETS, CATCH BASINS or MANHOLES of the type or type and diameter specified, and with the type of frame and grate or frame and lid specified, shall include all frames, grates, curb boxes, lids, sand cushion, flat slab tops, and all excavation, backfilling and connected to sewer.
Standard Village manhole frame and cover shall be East Jordan Iron Works (EJIW) Catalog Number 1022-2 with Heavy Duty solid Cover (minimum assembled weight of 300 lbs.) or approved equal. "VILLAGE OF GLEN ELLYN" and the word "STORM" shall be cast in the cover in 2-inch raised letters.

The designations for frames and grates to be installed in the curb and gutter are East Jordan Iron Works catalog numbers and are provided to establish the style and weight of casting desired. Equivalent castings by other manufacturers will be permitted, but the Contractor shall submit details of any substitution to the Owner and Village for approval. Open lid structures shall have "DUMP NO WASTE" and "DRAINS TO RIVER" cast into the frame.

For most conditions with barrier curb: EJIW 7000 with Type T1 Back and Type M1 Grate (Neenah R-3275). In depressed curb situations, use EJIW 7000 with Type M3 Flat Grate. For B-6.12 curb applications, widen gutter section to accommodate the larger grate section.

For continuous slope conditions greater than 4% with barrier-type curb, use EJIW 7220 with T1 Back and M4 Grate and widen gutter section as necessary for B-6.12 curb applications. Verify use of vane grates with the Engineer.

For lawn areas: Beehive-type, EJIW 6527 (Neenah R-4340-B)

For ditches: Ditch Grate, Stool Type, EJIW 6489 (Neenah R-4342)

In addition to being bolted to the frame, curb opening castings shall be supported against the structure and/or adjusting rings with concrete wedges mortared in place to prevent settlement of the curb opening casting.

CONNECTION OF 6" STORM SEWER

The connection of the proposed 6" PVC storm sewer to the new sewer shall include all labor, material and equipment required for the installation of a PVC cleanout at the end of the new storm sewer service. When the connection is directly to the storm sewer main pipe, the host pipe will be cored and the 6" PVC storm sewer connected with an INSERTA-TEE connection or approved equal. When the connection is to a storm sewer manhole, inlet or catch basin, the host structure shall be cored and the 6" PVC storm sewer installed using a flexible boot or inserted into place with hydraulic cement. Connection to existing or proposed manholes and structures by new storm sewers 8" in diameter and larger will be considered incidental to the proposed storm sewer pipe item.

The cleanout tee shall be a 6" X 6" X 4" PVC tee installed at the location directed by the Engineer. The cleanout riser pipe shall be 4" PVC with a 4" PVC cap and screw plug installed with the square nut in the inverted position. A 3' long piece of #6 steel rebar shall be driven into the lawn area adjacent to the cleanout to aid in future locating of the cleanout. The cleanout tee shall be plugged on the future-use side (house side) with a water-tight plug or be connected to an existing storm sewer service line if one already exists at the location of the proposed cleanout.

INLET AND PIPE PROTECTION

Inlet and Pipe Protection shall be in accordance with Section 280 of the Standard Specifications except as modified herein.

The Inlet Protector shall be a reinforced sediment bag with a frame that is inserted between the existing frame and grate. The Inlet Protector shall have an overflow feature to prevent ponding during heavy storms.

The Village has pre-approved the IPP Inlet Filter as manufactured by Inlet & Pipe Protection, Inc., 1635 Tonne Road, Elk Grove Village, IL (847) 228-3884. Other manufacturers may be used with prior approval from the Village.

Protection for flared end sections shall be in conformance with IDOT Highway Standard 280001-07.

SANITARY SEWERS

Sanitary sewers of sizes 6" through 12", shall be constructed with Polyvinyl Chloride (PVC) pipe having a Standard Dimension Ratio (SDR) of 26. Fittings shall meet the requirements of ASTM D3212. The pipe shall meet the requirements of ASTM D2241. The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM D3139. Connections to existing mains shall be made with a No-Shear Flex Coupler with two stainless steel bands at a point where the coupling cannot shift.

In addition to the applicable testing requirements of Article 31-1.12 of the Illinois Water and Sewer Main Specifications, PVC sanitary sewer main shall be tested by the Contractor as follows:

Deflection Test:

A. The pipeline shall be tested for excess deflection by pulling a "go-no-go" mandrel through the pipe from manhole to manhole. The mandrel shall be sized as described below. A "deflectometer" may also be used to check and record deflection. Deflection of Polyvinyl Chloride (PVC) pipe shall not exceed 5.0% of the "Base I.D." (internal diameter) of the pipe. "Base I.D." shall be calculated in accordance with the following:
Avg ID = AVG OD - 2(1.06)t
Tolerance package = (A2+B2+B2+C2)1/2

Where:
A = OD tolerance (per ASTM D2241)
B = Excess Wall Thickness Tolerance = 0.6t
C = Out-of-Roundness Tolerance = 0.015 (avg. OD)
t = Minimum Wall Thickness (per ASTM D2241)

Base ID = Avg. ID - Tolerance Package

B. Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

C. Where deflection is found to be in excess of Allowable Testing Limits, the Contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be re-tested for deflection. However, should after the initial testing the deflected pipe fail to return to the original size (inside diameter) the line shall be replaced.

The deflection test shall not be performed sooner than 7 days after sewer installation.

Television Test:

All sanitary sewers shall be tested by closed circuit T.V. before acceptance and shall be included with TELEVISING OF SEWERS (See Special Provision TELEVISING OF SEWERS).

Testing Live Sanitary Sewers:

The Contractor shall be required to individually air test all new sanitary sewer joints, except for sanitary services. The Engineer or his representative shall witness the air test.

The joints in the sanitary sewer shall be pressure tested by applying pressure equivalent to static
water head of 2/3rd average depth of sanitary sewer to the joint, in no case will this pressure be less than 4.6 psig. After the required pressure has been applied to the joint, the applied pressure shall be shut off and the pressure observed for 30 seconds. If the pressure drops 1 psig within 30 seconds, then the joint shall be considered to be defective. Necessary repairs shall be made and the air test repeated until satisfactory results are obtained.

Acceptance:

Acceptance will be based on completed sewers, which have been flushed, inspected, and tested, and found acceptable by the Village.

BEDDING AND BACKFILL FOR UNDERGROUND CONDUITS

All PVC sewer pipe, shall be placed in granular bedding extending from 6 inches below the pipe to 12 inches above the pipe. Bedding for DIP or concrete pipe shall extend 6 inches below the pipe to the pipe spring line. Bedding material shall be crushed stone or crushed gravel of gradation CA- 7 or CA-11 conforming to ASTM D2321 for Class I material. Granular bedding shall not be paid for separately, but shall be considered incidental to the cost of the water main or sewer pipe.

Selected Granular Backfill shall be required wherever a conduit crosses any pavement, curb and gutter, driveway, or sidewalk. Where the trench crosses a surfaced area transversely, the selected granular backfill shall extend 2 feet beyond the surface. Where the trench is parallel to the surfaced area, selected granular backfill shall be required when the trench wall is within 2 feet of the surface.

All trenches, including water and sewer services outside the pavement, shall be backfilled and compacted with Selected Granular Backfill in accordance with Article 20-4.06 of the Illinois Water and Sewer Main Specifications. This material shall be crushed stone, gradation CA-6, meeting the requirements of Article 1004.05 of the IDOT Standard Specifications. Recycled concrete materials from approved and tested stockpiles will be allowed if approved by the Engineer. The material shall be deposited in uniform layers not exceeding six inches thick (loose measure) and each layer shall be compacted by mechanical ramming or tamping in a manner approved by the Engineer. Compaction shall be not less than 95% of the standard proctor laboratory density.

SANITARY MANHOLES

Sanitary manholes shall be constructed of precast reinforced concrete in accordance with the detail shown on the Plans. All manhole sections, adjusting rings, and cast iron frames shall be set in butyl rope beds as per detail shown on the Plans. Manholes shall be furnished complete with cast iron frame and self-sealing lid, external joint wrap and chimney seal, exterior joint collar and flexible rubber manhole sleeves.

The joint wrap and chimney seal shall be Wrapid Seal Manhole Encapsulation System. The frame and cover shall be EJIW 1022-2 with heavy-duty solid cover (min. 300 lb.) With the word "SANITARY" cast in the cover. The sanitary manhole lid shall be self-sealing solid lid with watertight gasket and concealed pickhole. The Manhole shall be tested for watertightness using a vacuum test or other testing method as approved by the Engineer.

EXPLORATORY EXCAVATION

Exploratory Excavation shall consist of excavating an area within the Public Right of Way or Easement areas for the purpose of locating existing utilities within the construction limits of the proposed improvement. This work shall be performed as directed by the Owner, Engineer or Village.

After the excavation has been inspected, it shall be backfilled as directed by the Village. If it is located in a paved area (existing or proposed), the excavation shall be backfilled with Selected Granular Backfill as specified by the Village. Otherwise, the excavation shall be backfilled with excavated material compacted to the satisfaction of the Village. Any excess material shall be disposed of in accordance with Article 202.03 of the IDOT Standard Specifications.

SANITARY SEWER SERVICE

Sanitary services shall be constructed using PVC SDR 26 ASTM D2241, and per the details shown on the engineering drawings. The sanitary services will include a new factory wye or tee-wye fitting to the sewer main and new 6" pipe.A service line cleanout may be required for excessive length services or when bends in the service line are necessary.

A. SANITARY SERVICE CONNECTION TO EXISTING SEWER MAIN

Sanitary service pipe connection to an existing Sewer Main shall consist of all labor, material and equipment required establish a new tee/wye connection at the existing main.

If the existing Sewer Main is clay pipe then the installation of five feet of 8" PVC sanitary sewer main line pipe will be required. The connection to the existing pipe shall be made with a No-Shear Flex Coupler secured with stainless steel bands. Contractor shall take extra care in connecting to the existing clay pipe sanitary sewer main

B. SANITARY SEWER SERVICE PIPE

All 6" sanitary sewer PVC service pipe and and fittings shall be 6" PVC SDR26 ASTM D2241 and shall include all excavation, bedding and backfill (including trench backfill up to the existing pavement or ground). The lateral pipe will be installed as shown on the details in the engineering drawings. The extent of the sanitary sewer service pipe shall generally be to a point 3 ft. beyond the Right of Way.

C. SANITARY SEWER SERVICE CLEANOUT

If required, this shall consist of all labor, material and equipment necessary to excavate and install six inch tee, riser with frame and cover. An EJIW 1566 (NEENAH R-1975-A2) cast iron frame and cover (cast with the letter "S") shall be utilized for all sanitary cleanouts located in driveway areas. For cleanouts in lawn areas, a 6" brass cleanout flush plug with square head, Sioux 877-60 or approved equal, shall be utilized. In addition, a 3' long piece of #6 rebar shall be driven into the lawn area adjacent to the cleanout.

RECONSTRUCT SANITARY MANHOLE

Reconstruction of an existing sanitary manhole may be required when the grade at the existing manhole changes beyond rim adjustment allowances, or the existing manhole that is being connected to is found to be in need of repair for the connection.

This work may include replacement of a cone or barrel section or rebuilding brick masonry of the structures. Existing frame and lid shall be replaced with new frame and lid (if required by the Village) and adjusted to the required rim elevation and will have a chimney seal specified in these Special Provisions or as approved by the Village.

Materials and construction requirements shall be as per applicable articles of Section 602 of the IDOT Standard Specifications.

TELEVISING OF SEWERS

All newly installed sanitary and storm sewer mains within the project limits shall be inspected by closed circuit TV before acceptance. All testing of sanitary sewers shall be witnessed and approved by the Village before final acceptance. The entire length between manholes of sewer sections shall be televised.

The Contractor shall submit one color digital record (in DVD format) of the sewer and 2 copies of the televising report to the Owner, showing distance between manholes, location of service connections, direction of flow and direction of TV camera during televising.

Prior to televising, the Contractor shall flush and clean all sewers. If the sewers are found not to be clean during televising, the Contractor will be required to flush and clean and re-televise said sewers found not to be clean.

Unless otherwise specified, sewers must be straight between manholes. They may be tested for straightness by flashing a light from manhole to manhole, lamping, or by other suitable means.

The timing of the televising of sewers is of the utmost importance. No roadway work will be allowed until the video records have been viewed and accepted with the approval of the Village.

STRUCTURES TO BE ADJUSTED WITH OR WITHOUT NEW FRAME AND CLOSED LID

This work shall be done by removing the existing masonry between top of corbel and bottom of frame for an existing structure. Adjustment of frames for new structures is incidental. Install new concrete adjusting rings set in a ready-to-apply butyl rope. Set specified frame and lid to match the proposed grade on a ready-to-apply butyl rope. All joints shall be buttered with mortar.

All adjusted sanitary manholes will have new frame and lid, and chimney shall be sealed with "Wrapid Seal" Manhole Encapsulation System manufactured by Canusa-CPS, Texas, USA or system approved equal by the Village. Sealing shall be sized to extend 3"-4" above and below the upper and lower joints of the cone section, grade rings and frame. Materials and installation procedure shall be as per manufacturer's specifications.

If the Structure is within an existing roadway,after the castings have been adjusted, the surrounding space shall be filled with class SI concrete to the elevation of the base course. The concrete shall be cured for for a period of not less than 72 hours. The cost for the concrete work will be included in the cost of the adjustment.

Harding Townhomes - Engineering, 10/04/2021

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	No Scale	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CONSTRUCTION NOTES-GLEN ELLYN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 18 or 25
Project # 895

DRAWING FILE NAME: 895-MF-SH18

FOR LEGAL DESCRIPTIONS OF PARCELS SEE SHEET 1

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY (100' R/W)

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

EXISTING CONCRETE WALK

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

EXISTING APARTMENT BUILDING

(N 90°00'00" E)
(217.73')

SITE

(33.00')
(N 00°31'55" W)

46.75'
(N 90°00'00" E)

HARDING AVE.

WOOD DECK

EXISTING RESIDENCE

CONC. PATIO

BITUMINOUS DRIVEWAY

BRICK PATIO

FRAME SHED

BITUMINOUS ROADWAY

EXISTING GARAGE

WOOD PORCH

(166.75')
(N 00°00'00" E)

PROPOSED DRIVEWAY

PROPOSED RESIDENCE

EXISTING DRIVEWAY

UNDER CONSTRUCTION RESIDENCE

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

STONE PATIO

CONCRETE DRIVEWAY

EXISTING DRIVEWAY

(289.00')
(N 89°57'19" E)

BRICK PATIO

EXISTING RESIDENCE

WOOD DECK

BITUMINOUS DRIVEWAY

FRAME SHED

GLENBARD RD. (66' R/W)

BITUMINOUS ROADWAY

BRENTWOOD COURT

Date Of Field Work:	11/03/20	Drawn By:	JW
Scale:	1" = 30'	Checked By:	EAC
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06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SURROUNDING CONDITIONS EXHIBIT

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 19 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH19

Harding Townhomes - Engineering, 10/04/2021

CROSS SECTION DETAIL

SCALE: 1"=10' (HORIZONTAL)
1"=5' (VERTICAL)

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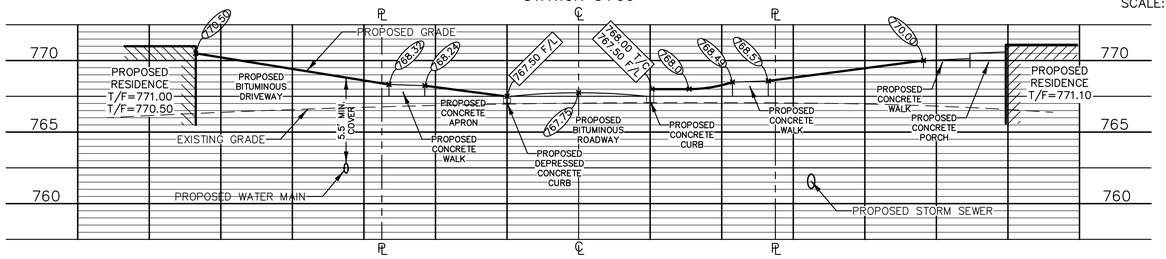

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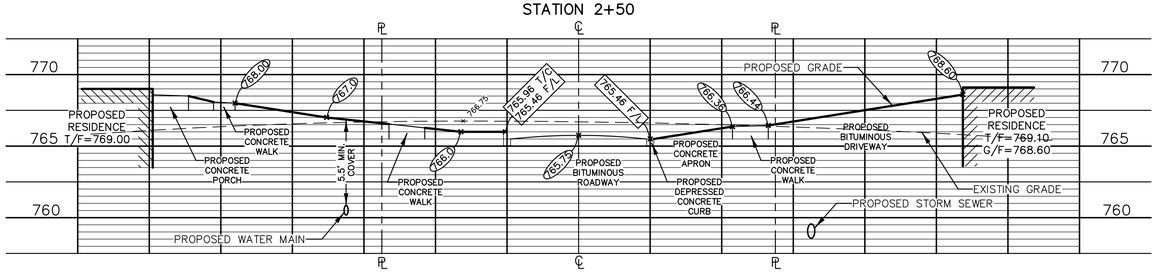

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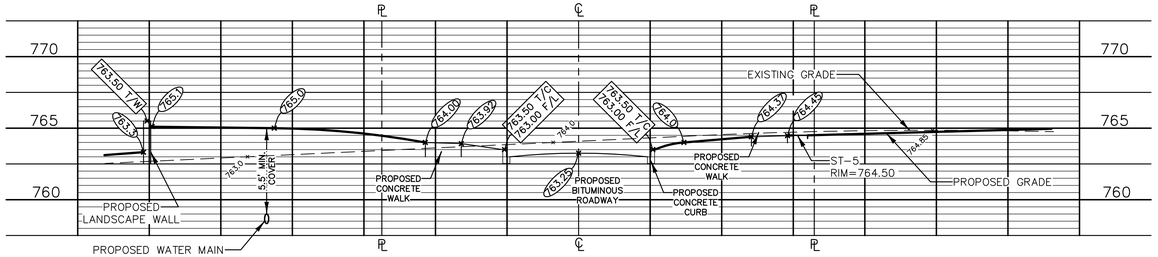

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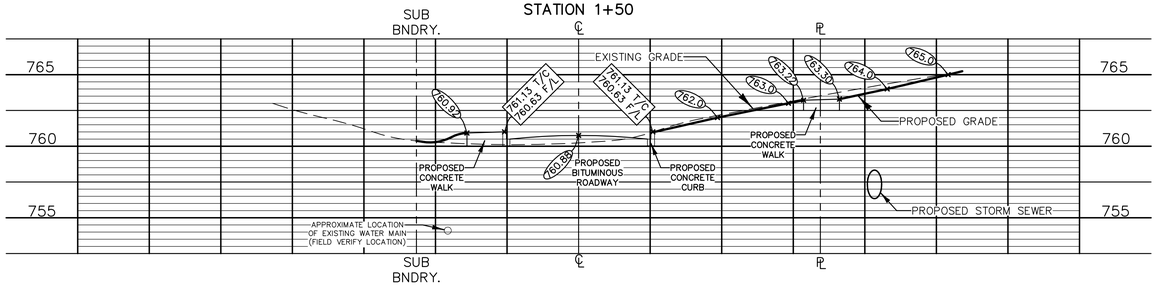

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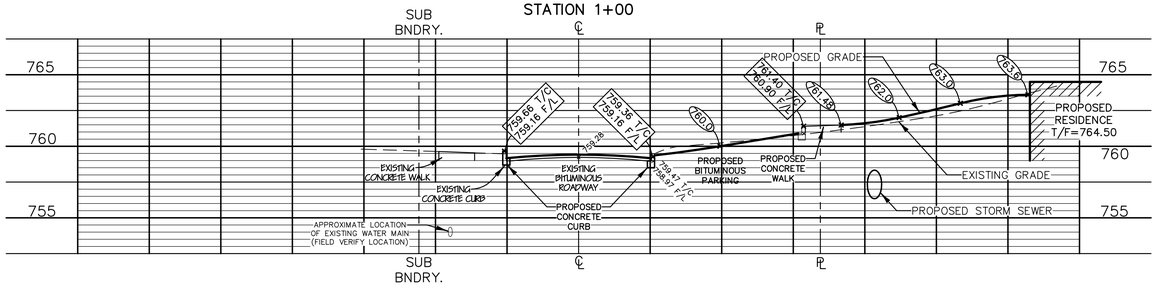

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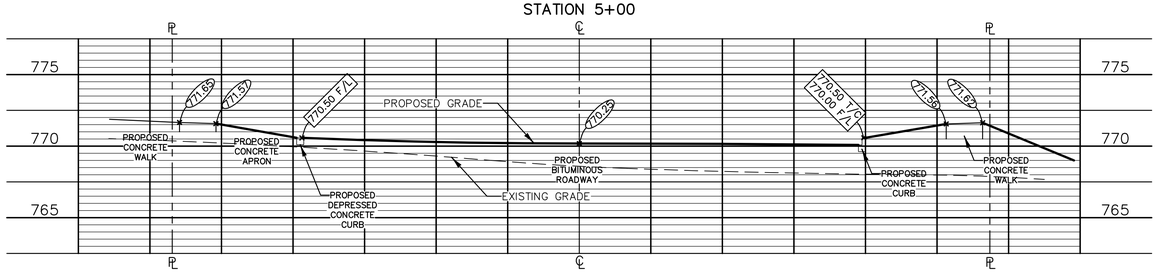

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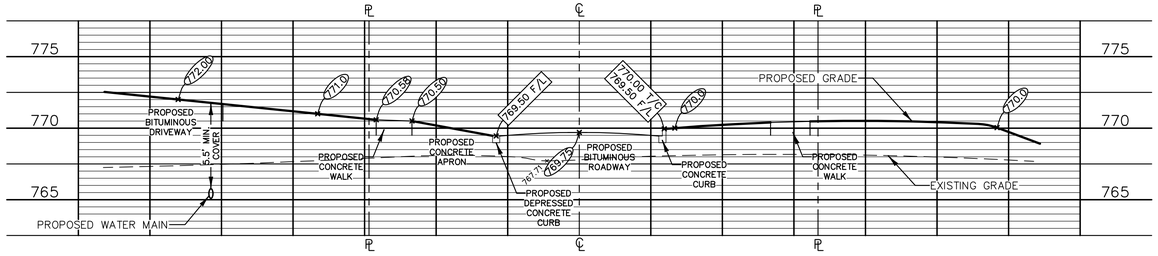

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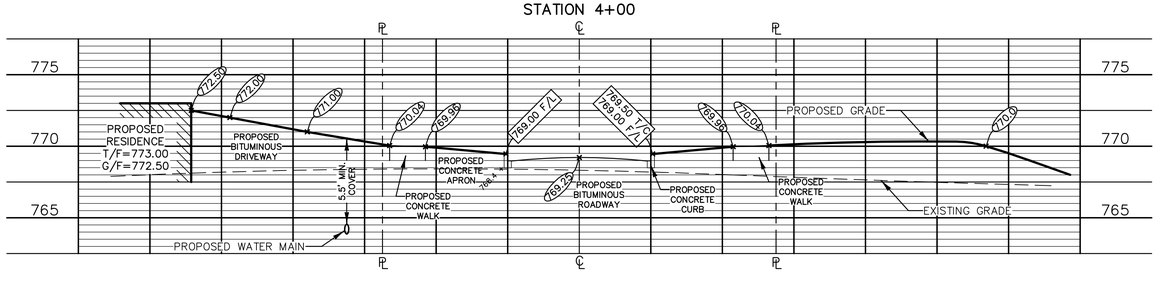

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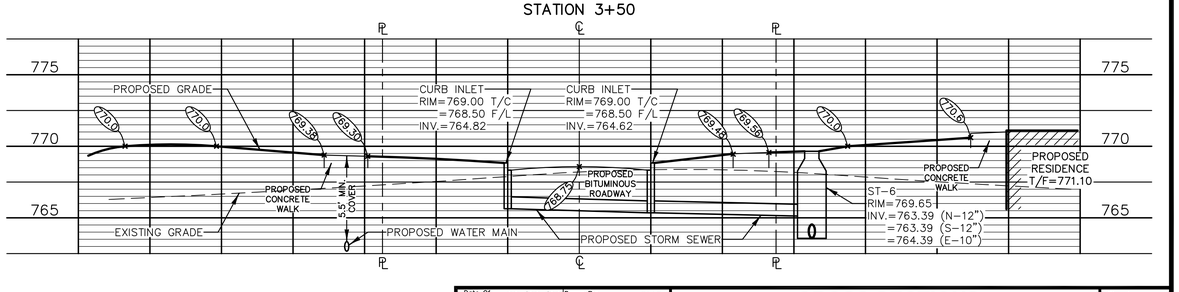

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Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CROSS SECTIONS
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 20 of 25

Project # 895

DRAWING NAME: 895-MF-SH20.DWG

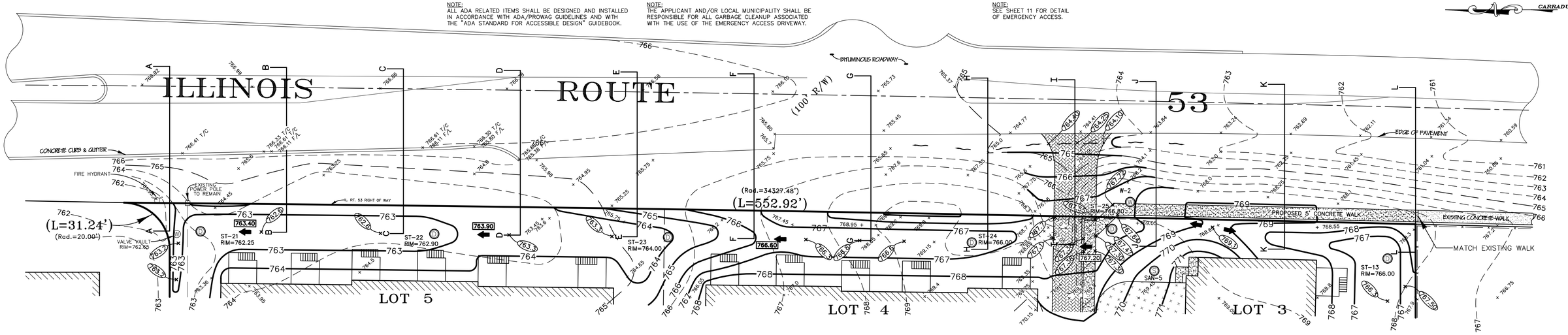
Harding Townhomes - Engineering, 10/04/2021

NOTE:
ALL ADA RELATED ITEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ADA/PROWAG GUIDELINES AND WITH THE "ADA STANDARD FOR ACCESSIBLE DESIGN" GUIDEBOOK.

NOTE:
THE APPLICANT AND/OR LOCAL MUNICIPALITY SHALL BE RESPONSIBLE FOR ALL GARBAGE CLEANUP ASSOCIATED WITH THE USE OF THE EMERGENCY ACCESS DRIVEWAY.

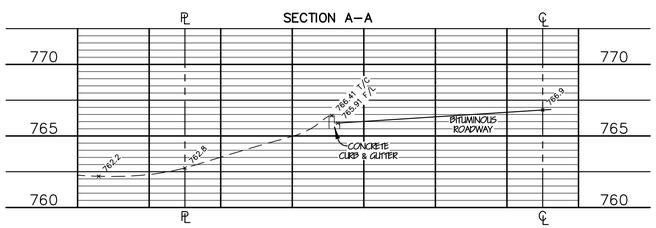
NOTE:
SEE SHEET 11 FOR DETAIL OF EMERGENCY ACCESS.

CARRADUS



CROSS SECTION DETAIL

SCALE: 1"=10' (HORIZONTAL)
1"=5' (VERTICAL)



Date Of Field Work:	02/26/20	Drawn By:	CMG
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09/10/21		VILLAGE REVIEW	

IL. RT. 53 CROSS SECTIONS
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
100 Bridge Street Suite 1, Wheaton, Illinois 60187
(630) 588–0416 (FAX) 653–7682

Sheet 21 of 25

Project # 895

DRAWING FILE NAME: 895–MF–SH21

Harding Townhomes - Engineering, 10/04/2021

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

HEAVY BRUSH ALONG RIGHT OF WAY SHALL BE REMOVED AS NEEDED FOR SIDEWALK CONSTRUCTION WITHIN ROUTE 53 RIGHT OF WAY

(L=31.24')
(Rad.=20.00')

(Rad.=34327.48')
(L=552.92')

EXISTING CONCRETE WALK

LOT 5

LOT 4

LOT 3

LOT 2

LOT 1

HARDING AVE.

HARDING COURT

(N 90°00'00" E)
(217.73')

(N 00°31'55" W)
(33.00')

(N 90°00'00" E)
46.75'

(166.75')
(N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(N 89°57'19" E)
(289.00')

FRAME SHED

WOOD DECK

EXISTING RESIDENCE

SIGN

BITUMINOUS ROADWAY

TREE LEGEND

DECIDUOUS TREE TO BE REMOVED
#1 TREE NUMBER
29" TREE D.B.H.

CONIFEROUS TREE TO BE REMOVED
#1 TREE NUMBER
29" TREE D.B.H.

Date Of Field Work:	02/26/20
Scale:	1" = 20'
Fld Bk Pg:	48-00

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

Drawn By: CMG
Checked By: EAC
Approved: ADC

TREE PRESERVATION PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 22 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH24

Harding Townhomes - Engineering, 10/04/2021

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/01/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

IDOT TRAFFIC CONTROL DETAILS

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

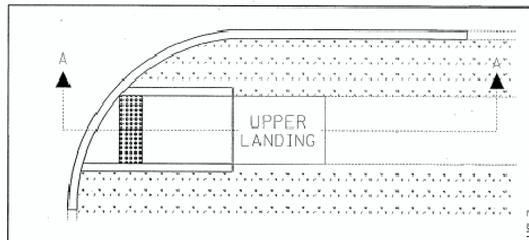
Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 23 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH23

Harding Townhomes - Engineering, 10/04/2021



15 FT RULE (R304/BDE 58-1.09):

"The running slope of the curb ramp shall be 5% minimum and 8.3% max BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FT"

i.e. There is no max length of curb ramp if using 8.3% max; however to avoid "chasing the existing grade" indefinitely, when the 8.3% max exceeds 15 FT, you can alternately utilize a max length of 15 FT and utilize any grade desired.

IDOT'S Highway Standard requires level (i.e. 2% max) upper and lower landings. PROWAG allows the lower landing to meet 5% or the grade of the road and does not require an upper landing. Under the 15 ft rule, provision of an upper landing is up to designer's discretion.

NOTE 1: AFTER THE LANDING USE SLOPE REQUIREMENTS FOR:

SIDEWALK / SIDEPATH (R302.5/BDE 58-1.06)

"Grade shall not exceed the GENERAL GRADE OF ADJACENT STREET. Where PAR is not contained within a street or highway ROW the grade of the PAR SHALL BE 5% MAX."

OR

TRANSITIONAL SEGMENTS (R202.3.2):

Beyond the landing, you are allowed to have a transition zone into the existing sidewalk/path. Use engineering judgement to provide the ADA/PROWAG requirements to the maximum extent practicable. This transition zone does not require a Maximum Extent Practicable Form (BDE 3101) or a Construction Concurrence Form (BDE 5801). As a matter of engineering judgement guidance only, you may use the sidewalk ramp grades shown below.

SIDEWALK RAMP (R407/BDE 58-1.08) (i.e. NOT CURB RAMP):

- The 15 FT rule does not apply to Sidewalk Ramps
- Running slope between 5% and 8.3% for new facility. Existing facilities can use the following:
  - Max Rise=6 IN - >8.3% but ≤ 10%
  - Max Rise=3 IN - >10% but ≤ 12.5%
- Requires 5 FT level landings at top and bottom
- The Max vertical rise shall be 2.5 FT (30 IN), afterwhich a 5 FT landing is required prior to introducing another ramp to reach desired elevation
- Requires handrails if vertical rise is > 6 IN or length >72 IN
  - However, avoid the use of handrails whenever possible

NOTE 2:

If the curb ramp running slope is ≤ 5% no landing is required unless a turning space is required for an intersecting sidewalk

NOTE 3

All slopes shown in this exhibit are running slopes.

FILE NAME =	USER NAME = fdickinson	DESIGNED -		REVISED -	CAF 08-02-2019	REVISED -	CAF - 08/31/2022
	PLOT SCALE = 50.0000 ' / in.	DRAWN -		REVISED -		REVISED -	
Default	PLOT DATE = 8/31/2022	CHECKED -		REVISED -		REVISED -	
		DATE -		REVISED -		REVISED -	

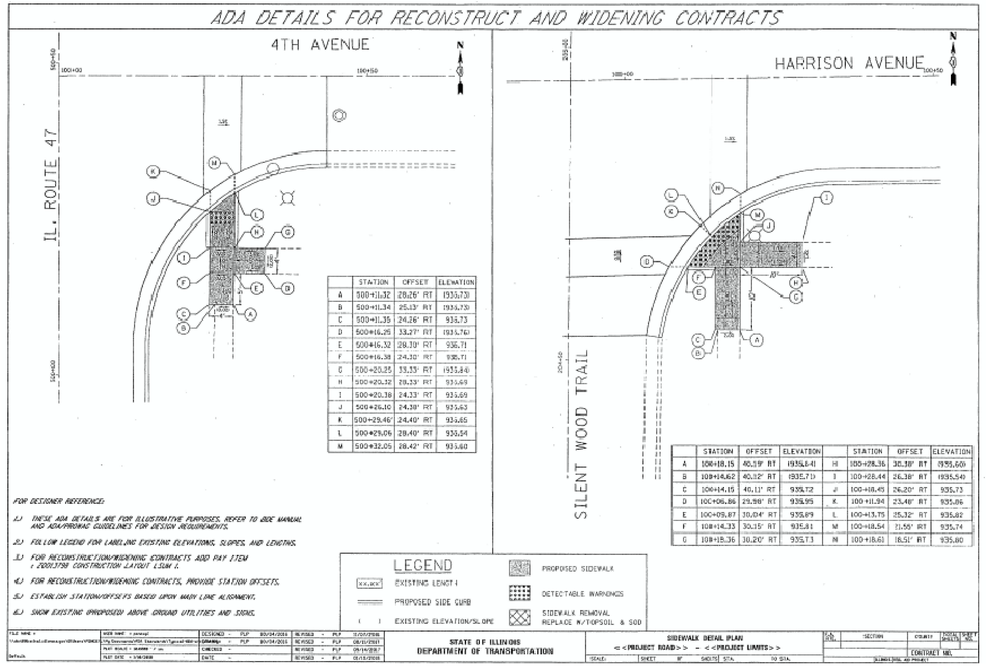
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADA/PROWAG 15 FT CURB RAMP RULE

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CONTRACT NO.	
		ILLINOIS FED. AID PROJECT	

ADA DETAILS FOR RECONSTRUCT AND WIDENING CONTRACTS



	STATION	OFFSET	ELEVATION
A	100+00.32	28.26' RT	(935.73)
B	100+11.34	25.13' RT	935.73
C	100+11.35	24.26' RT	935.73
D	100+16.25	23.27' RT	(935.76)
E	100+16.32	24.19' RT	935.71
F	100+16.38	24.32' RT	935.71
G	100+20.25	23.33' RT	(935.84)
H	100+20.32	23.33' RT	935.69
I	100+20.38	24.33' RT	935.69
J	100+26.10	24.38' RT	935.63
K	100+29.46	24.40' RT	935.65
L	100+29.06	28.40' RT	935.54
M	100+32.05	28.42' RT	935.60

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	106+18.15	40.19' RT	(935.61)	H	100+28.36	30.38' RT	(935.60)
B	109+14.62	40.12' RT	(935.71)	I	100+28.44	26.38' RT	935.54
C	106+14.15	40.11' RT	935.72	J	100+18.45	26.20' RT	935.73
D	10C+06.86	29.98' RT	935.95	K	100+11.94	23.48' RT	935.86
E	10C+03.87	30.04' RT	935.89	L	100+13.75	25.32' RT	935.82
F	10B+14.33	30.15' RT	935.81	M	100+18.54	31.56' RT	935.74
G	10B+15.36	30.20' RT	935.73	N	100+18.61	18.51' RT	935.80

FOR DESIGNER REFERENCE:

1.) THESE ADA DETAILS ARE FOR ILLUSTRATIVE PURPOSES. REFER TO BDE MANUAL AND ADA/PROWAG GUIDELINES FOR DESIGN REQUIREMENTS.

2.) FOLLOW LEGEND FOR LABELING EXISTING ELEVATIONS, SLOPES, AND LENGTHS.

3.) FOR RECONSTRUCTION/WIDENING CONTRACTS ADD PAY ITEM : (2001798 CONSTRUCTION LAYOUT (SIGN.).

4.) FOR RECONSTRUCTION/WIDENING CONTRACTS, PROVIDE STATION OFFSETS.

5.) ESTABLISH STATION/OFFSETS BASED UPON MAIN LINE ALIGNMENT.

6.) SHOW EXISTING UNPROPOSED ABOVE GROUND UTILITIES AND SIGNS.

LEGEND

- XX.XX EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

FILE NAME =	USER NAME = jennyl	DESIGNED -	PLP	10/04/2016	REVISED -	PLP	11/07/2016
	PLOT SCALE = 40.0000 ' / in.	DRAWN -	PLP	10/04/2016	REVISED -	PLP	08/01/2017
Default	PLOT DATE = 1/18/2018	CHECKED -			REVISED -	PLP	09/19/2017
		DATE -			REVISED -	PLP	01/18/2018

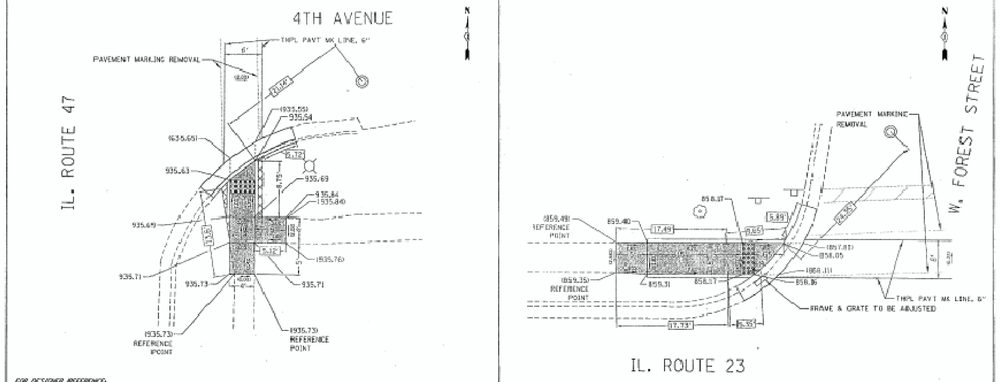
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CONTRACT NO.	
		ILLINOIS FED. AID PROJECT	

ADA DETAILS FOR RESURFACING AND ADA STAND ALONE CONTRACTS



FOR DESIGNER REFERENCE:

1.) THESE ADA DETAILS ARE FOR ILLUSTRATIVE PURPOSES. REFER TO BDE MANUAL AND ADA/PROWAG GUIDELINES FOR DESIGN REQUIREMENTS.

2.) FOR RESURFACING /ADA STAND ALONE CONTRACTS, A MINIMUM OF 2 REFERENCE POINTS PER CORNER MUST BE PROVIDED. REFERENCE POINTS CANNOT BE IN LOCATIONS TO BE REMOVED. TYPICALLY PROVIDE AT END OF SIDEWALK REPLACEMENT.

3.) EXISTING DISTANCE TO EACH REFERENCE POINT MUST BE PROVIDED.

4.) FOLLOW LEGEND FOR LABELING EXISTING ELEVATIONS, SLOPES, AND LENGTHS. PROVIDE ELEVATIONS AT GRADE BREAKS; BENCHMARKS MUST BE (NAD 1983)

5.) DO NOT SHOW LOCATIONS OF PATCHING, BUT INCLUDE IN QUANTITIES AS REQUIRED(4 FT WIDE FULL DEPTH PATCHES RECOMMENDED)

6.) IF ADA/PROWAG REQUIREMENTS CANNOT BE MET BY MODIFYING OTHER DESIGN ELEMENTS, AS A LAST OPTION YOU CAN MODIFY CURB GUTTER FLAC SLOPE FROM -5% TO +5% TO GET CROSS SLOPE BELOW 2%, BUT MAKE SURE GUTTER WATER FLOWS AWAY OR TO EXISTING STRUCTURES. IF THIS IS PURSUED, ADD ELEVATIONS AT FACE OF PAVEMENT, FLOW LINE, AND BACK OF CURB AS REQUIRED.

7.) FOR RESURFACING /ADA STANDALONE CONTRACTS ADD PAY ITEM : CONSTRUCTION LAYOUT (SPECIAL) , LSUM 1.

8.) QUANTITIES CAN BE SHOWN ON DETAIL OR PROVIDE SCHEDULE OF QUANTITIES.

REFERENCE BENCHMARK ELEV 935.33

BENCHMARK : PK NAIL IN CENTERLINE OF IL 47

LOCATION : 57 FT SOUTH OF 3RD AVENUE

LEGEND

- XX.XX EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

REFERENCE BENCHMARK ELEV 856.16

BENCHMARK : "X" CUT ON NORTH WESTERNLY LOWER FLANGE BOLT OF HYDRANT

LOCATION : ON NORTH WEST CORNER OF IL ROUTE 23 AND FOREST STREET

FILE NAME =	USER NAME = jennyl	DESIGNED -	PLP	10/04/2016	REVISED -	PLP	11/07/2016
	PLOT SCALE = 40.0000 ' / in.	DRAWN -	PLP	10/04/2016	REVISED -	PLP	08/01/2017
Default	PLOT DATE = 1/18/2018	CHECKED -			REVISED -	PLP	09/19/2017
		DATE -			REVISED -	PLP	01/18/2018

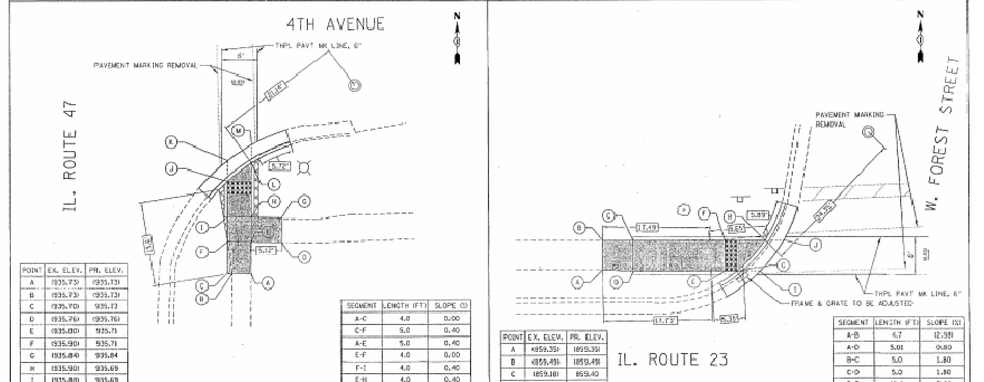
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CONTRACT NO.	
		ILLINOIS FED. AID PROJECT	

ADA DETAILS FOR RESURFACING AND ADA STAND ALONE CONTRACTS - WITH TABLES



POINT	EX. ELEV.	PR. ELEV.
A	(935.73)	(935.73)
B	(935.73)	(935.73)
C	(935.76)	935.73
D	(935.76)	(935.76)
E	(935.80)	935.71
F	(935.90)	935.71
G	(935.84)	935.84
H	(935.90)	935.69
I	(935.80)	935.69
J	(935.68)	935.63
K	(935.65)	(935.65)
L	(935.75)	935.54
M	(935.55)	(935.55)

SEGMENT	LENGTH (FT)	SLOPE (%)
A-C	4.0	0.00
C-F	5.0	0.40
A-E	5.0	0.40
E-F	4.0	0.00
F-I	4.0	0.40
E-H	4.0	0.40
E-D	5.0	1.00
D-G	4.0	(2.00)
H-G	5.0	3.00
H-L	8.74	1.72
M-I	4.0	0.00
I-J	5.73	1.05

POINT	EX. ELEV.	PR. ELEV.
A	859.39	859.39
B	(859.49)	859.49
C	859.18	859.40
D	(859.11)	859.31
E	858.40	858.17
F	(858.25)	858.17
G	858.35	858.16
H	857.83	858.05
I	(858.10)	858.11
J	(857.81)	857.88

SEGMENT	LENGTH (FT)	SLOPE (%)
A-B	6.7	(2.98)
A-D	5.01	0.80
B-C	5.0	1.80
C-D	5.0	1.80
D-E	15.0	7.60
C-F	15.0	8.20
E-F	5.0	0.00
F-H	6.65	1.80
E-G	2.0	0.50
G-H	6.86*	1.60
I-J	6.32*	3.64

* = ARC LENGTH

NOTES:

1.) TABLES ARE AN ACCEPTABLE ALTERNATIVE FOR RESURFACING AND ADA STAND ALONE CONTRACTS

REFERENCE BENCHMARK ELEV 935.33

BENCHMARK : PK NAIL IN CENTERLINE OF IL 47

LOCATION : 57 FT SOUTH OF 3RD AVENUE

LEGEND

- XX.XX EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

REFERENCE: BENCHMARK ELEV 856.66

BENCHMARK : "X" CUT ON NORTH WESTERNLY LOWER FLANGE BOLT OF HYDRANT

LOCATION : ON NORTH WEST CORNER OF IL ROUTE 23 AND FOREST STREET

FILE NAME =	USER NAME = jennyl	DESIGNED -	PLP	10/04/2016	REVISED -	PLP	11/07/2016
	PLOT SCALE = 40.0000 ' / in.	DRAWN -	PLP	10/04/2016	REVISED -	PLP	08/01/2017
Default	PLOT DATE = 1/18/2018	CHECKED -			REVISED -	PLP	09/19/2017
		DATE -			REVISED -	PLP	01/18/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CONTRACT NO.	
		ILLINOIS FED. AID PROJECT	

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
09/10/21	VILLAGE REVIEW

IDOT CONSTRUCTION DETAILS
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

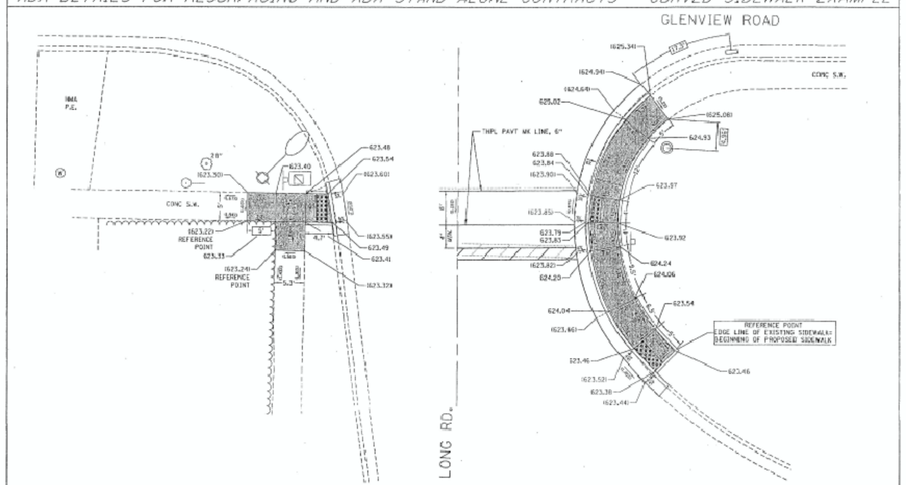
Sheet 24 or 25

Project # 895

DRAWING FILE NAME: 895-MF-SH24

Harding Townhomes - Engineering, 10/04/2021

ADA DETAILS FOR RESURFACING AND ADA STAND ALONE CONTRACTS - CURVED SIDEWALK EXAMPLE



REFERENCE BENCHMARK ELEV 626.077

BENCHMARK : TOP OF FIRE HYDRANT

LOCATION : NORTH WEST CORNER OF LONG ROAD AND GLENVIEW ROAD

LEGEND

XX.XX EXISTING LENGTH

PROPOSED SIDE CURB

( ) EXISTING ELEVATION/SLOPE

PROPOSED SIDEWALK

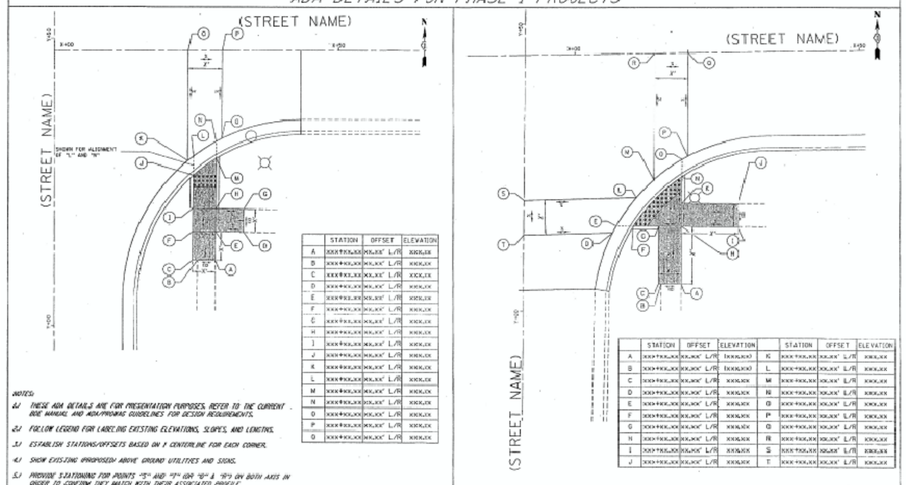
DETECTABLE WARNINGS

SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

ADA DETAILS FOR PHASE 1 PROJECTS



	STATION	OFFSET	ELEVATION
A	XXX+XX.XX	XX.XX' L/R	XXX.XX
B	XXX+XX.XX	XX.XX' L/R	XXX.XX
C	XXX+XX.XX	XX.XX' L/R	XXX.XX
D	XXX+XX.XX	XX.XX' L/R	XXX.XX
E	XXX+XX.XX	XX.XX' L/R	XXX.XX
F	XXX+XX.XX	XX.XX' L/R	XXX.XX
G	XXX+XX.XX	XX.XX' L/R	XXX.XX
H	XXX+XX.XX	XX.XX' L/R	XXX.XX
I	XXX+XX.XX	XX.XX' L/R	XXX.XX
J	XXX+XX.XX	XX.XX' L/R	XXX.XX
K	XXX+XX.XX	XX.XX' L/R	XXX.XX
L	XXX+XX.XX	XX.XX' L/R	XXX.XX
M	XXX+XX.XX	XX.XX' L/R	XXX.XX
N	XXX+XX.XX	XX.XX' L/R	XXX.XX
O	XXX+XX.XX	XX.XX' L/R	XXX.XX
P	XXX+XX.XX	XX.XX' L/R	XXX.XX
Q	XXX+XX.XX	XX.XX' L/R	XXX.XX

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	XXX+XX.XX	XX.XX' L/R	XXX.XX	K	XXX+XX.XX	XX.XX' L/R	XXX.XX
B	XXX+XX.XX	XX.XX' L/R	XXX.XX	L	XXX+XX.XX	XX.XX' L/R	XXX.XX
C	XXX+XX.XX	XX.XX' L/R	XXX.XX	M	XXX+XX.XX	XX.XX' L/R	XXX.XX
D	XXX+XX.XX	XX.XX' L/R	XXX.XX	N	XXX+XX.XX	XX.XX' L/R	XXX.XX
E	XXX+XX.XX	XX.XX' L/R	XXX.XX	O	XXX+XX.XX	XX.XX' L/R	XXX.XX
F	XXX+XX.XX	XX.XX' L/R	XXX.XX	P	XXX+XX.XX	XX.XX' L/R	XXX.XX
G	XXX+XX.XX	XX.XX' L/R	XXX.XX	Q	XXX+XX.XX	XX.XX' L/R	XXX.XX
H	XXX+XX.XX	XX.XX' L/R	XXX.XX	R	XXX+XX.XX	XX.XX' L/R	XXX.XX
I	XXX+XX.XX	XX.XX' L/R	XXX.XX	S	XXX+XX.XX	XX.XX' L/R	XXX.XX
J	XXX+XX.XX	XX.XX' L/R	XXX.XX	T	XXX+XX.XX	XX.XX' L/R	XXX.XX

NOTES:

1. THESE ADA DETAILS ARE FOR PRESENTATION PURPOSES, REFER TO THE CURRENT IDOT MANUAL AND ADA/PROWAG GUIDELINES FOR DESIGN REQUIREMENTS.
2. FOLLOW LEGEND FOR LABELING EXISTING ELEVATIONS, SLOPES, AND LENGTHS.
3. ESTABLISH STATIONS/OFFSETS BASED ON # CENTERLINE FOR EACH CORNER.
4. SHOW EXISTING APPROXIMATELY ABOVE GROUND UTILITIES AND SIGNS.
5. PROVIDE STATIONING FOR POINTS "S" AND "T" ON "R" & "G" ON BOTH AXES IN ORDER TO CONFORM THEY MATCH WITH THEIR ASSOCIATED PROFILE.
6. DO NOT DESIGN TO THE MAXIMUM ALLOWABLE CROSS-SLOPES AND RUNNING SLOPES SO AS TO ALLOW FOR CONSTRUCTION TOLERANCES.
7. SUBMIT PLANS SIZED AT 1"=20' (FULL SIZED) OR 1"=10' (HALF), 1 OR 2 RADII OF RETURN SHOULD BE PROVIDED PER SHEET.
8. IF PARALLEL SIDEWALK SLOPES DO NOT MATCH, LABEL BOTH SLOPES. FOR EXAMPLE, IF 4% DOES NOT MATCH 6%, BOTH SLOPES SHOULD BE LABELED.

LEGEND

XX.XX EXISTING LENGTH

PROPOSED SIDE CURB

( ) EXISTING ELEVATION/SLOPE

PROPOSED SIDEWALK

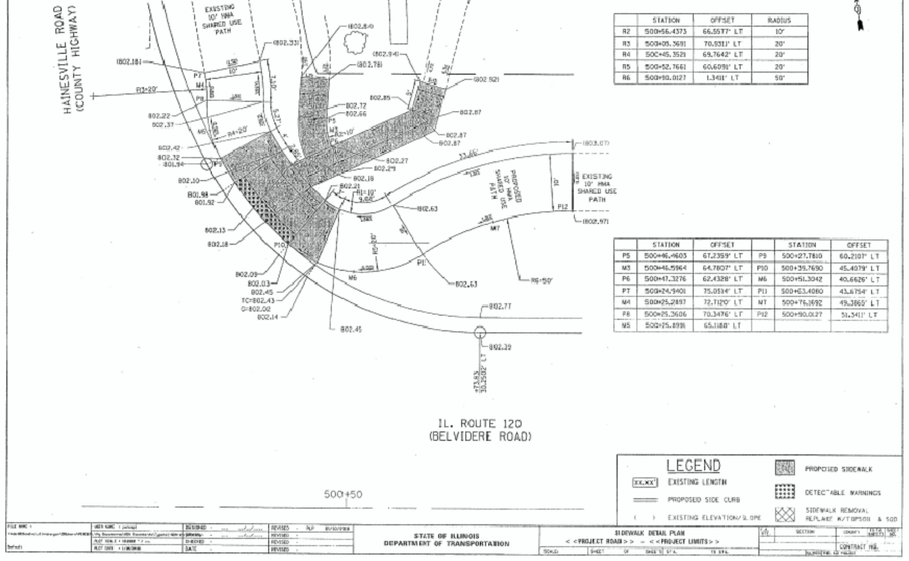
DETECTABLE WARNINGS

SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

ADA DETAILS FOR RECONSTRUCT AND WIDENING CONTRACTS - CURVED SIDEWALK EXAMPLE



	STATION	OFFSET	RADIUS
R2	500+56.4373	66.5577' LT	10'
R3	503+05.3691	70.5311' LT	20'
R4	504+45.3521	69.7642' LT	20'
R5	505+52.7661	60.6078' LT	20'
R6	508+90.0127	1.3418' LT	50'

	STATION	OFFSET		STATION	OFFSET
P5	500+46.4603	67.2359' LT	P9	500+27.7860	60.2107' LT
M3	500+45.5964	64.7803' LT	P10	500+39.7690	45.4079' LT
P6	500+47.3276	62.4388' LT	M6	500+51.3042	40.6626' LT
P7	500+24.9401	75.0514' LT	P11	500+63.4080	43.8754' LT
M4	500+25.2897	72.7170' LT	M7	500+76.1692	49.3865' LT
P8	500+25.2606	70.3476' LT	P12	500+90.0127	51.3411' LT
M5	500+25.8918	65.5180' LT			

LEGEND

XX.XX EXISTING LENGTH

PROPOSED SIDE CURB

( ) EXISTING ELEVATION/SLOPE

PROPOSED SIDEWALK

DETECTABLE WARNINGS

SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN
<<PROJECT ROAD>> - <<PROJECT LIMITS>>

Date Of Field Work:	02/26/20
Scale:	1" = 20'
Fld Bk Pg:	48-00
Drawn By:	CMG
Checked By:	EAC
Approved:	ADC

Date:	Revision:
09/10/21	VILLAGE REVIEW

IDOT CONSTRUCTION DETAILS

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

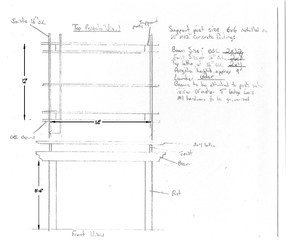
Sheet 25 of 25

Project # 895

DRAWING FILE NAME: 895-MF-SH25

Harding Townhomes - Engineering, 10/04/2021

PERGOLA DETAIL



FENCE NOTES :

1) FENCE IS 'ACTIVE YARDS' WHITE VINYL 6' FENCE
2) ALL POSTS SET IN CONCRETE 36" DEEP
3) INCLUDES 20' BARRIER GATE

RETAINING WALL NOTES :

1) RETAINING WALL WILL BE CONSTRUCTED USING PISA 2 CONCRETE BLOCK WALL SYSTEM.
2) RETAINING WALL ALONG CENTER PORTION OF WEST PROPERTY LINE WILL HAVE 4" PERFORATED DRAIN TILE IN GRAVEL BED BEHIND WALL AND OUTLETS AT EITHER END.
3) SEE DETAIL ABOVE FOR WALL CONSTRUCTION DETAIL.
4) ALL WALLS ARE UNDER 36" AND DO NOT REQUIRE GEOGRID REINFORCEMENT.

Pisa2™

		4L Tapered	Coping	Tapered	Corner
	Nicolock Type	SINGLE	DOUBLE	DOUBLE	DOUBLE
	Finishes	Smooth	Smooth	Smooth	Smooth
	Thickness mm	150MM	150MM	150MM	150MM
	Dimensions mm	400MM(L) 150MM (H) 200MM (D)	300mm (L) 150mm (H) 300mm (D)	400mm (L) 150mm (H) 300mm (D)	300mm (L) 150mm (H) 300mm (D)
	Dimension imperial	15.8" (L) X 5.9" (H) X 7.9" (D)	11.8" (L) X 5.9" (H) X 11.8" (D)	15.8" (L) X 5.9" (H) X 11.8" (D)	11.8" (L) X 5.9" (H) X 11.8" (D)
FOOTER	Nicolock Code	21.50	22.24	21.50	22.01
	Unit Weight kg	13.6000	24.0000	13.9100	14.0000
	Pieces per Sq. Meter	3.57	3.38	3.57	3.57
TOP BLOCK	Nicolock Code	4.50	7.28	7.50	7.55
	Unit Weight kg		13.90	7.50	9.50
CAP/TOP	Nicolock Code	42.17	42.18	42.17	
	Pieces per Sq. Meter	1.33	1.27	1.33	
UNITS PER	Nicolock Code	7.50	7.28	7.50	7.55
	Pieces per Sq. Meter		21.36	10.00	3.38
	Nicolock Code	10.00	10.28	10.00	10.01
LBS PER	Nicolock Code	109	411	150	161
	Pieces per Sq. Meter		147	139	214
	Nicolock Code	1,379	1,373	1,400	1,384

Mechanical Survey Editorial & Typography Version Nov 2021 US

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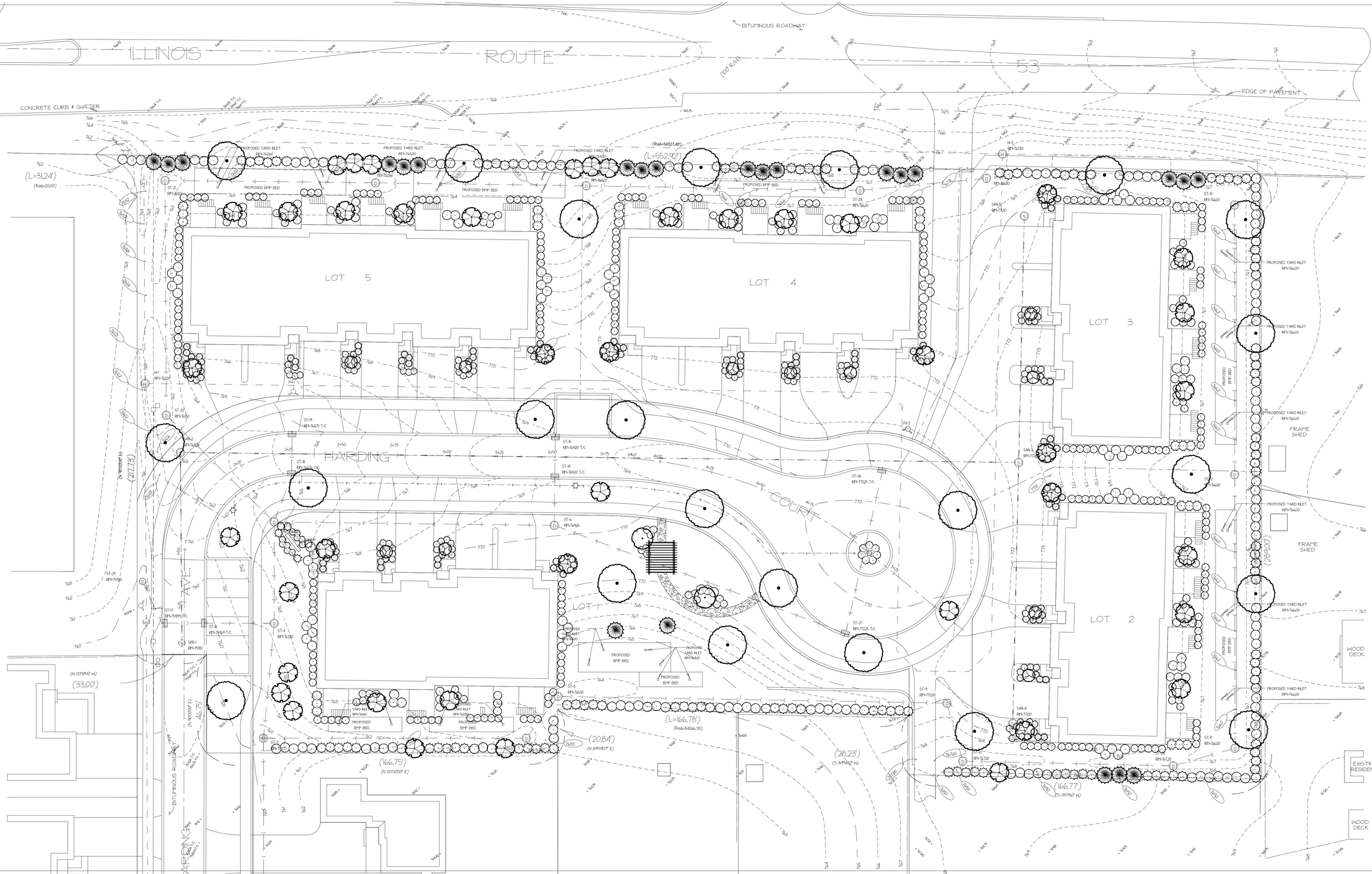

HARDING CUSTOM HOMES SUBDIVISION UNIT 2

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SCALE: 1" = 20' (APPROX)

LANDSCAPE & UTILITIES

DESIGNED BY: BRIAN O'MALLEY, CLD
SALES: GENE GRANT
DATE: 4-26-21
SHEET NO.: 5 OF 5

NORTH

REVISIONS		
NO.	DATE	DESCRIPTION
1	6-7-21	REMOVE ONE TREE WITH SEWER CONFLICT
2	8-19-21	CORRECT LOCATION OF PERGOLA

LANDSCAPE NARRATIVE :

THE PROPOSED LANDSCAPE PLAN AT HARDING COURT ACHIEVES MANY GOALS. IT COMPLIMENTS AND MAKES FUNCTIONAL THE LAYOUT CREATED BY THE NEW PROPOSED SUBDIVISION. IT PROVIDES AMPLE LANDSCAPING AND SCREENING ALONG THE PERIMETER PROPERTY LINES, UTILIZING PROVEN PLANT SPECIES. IT INCLUDES A LARGE NUMBER OF TREES TO SOFTEN THE EAST PROPERTY LINE ABUTTING ILLINOIS ROUTE 53, AND EXCEEDS THE NUMBER OF TREES AND GREEN SPACE REQUIRED, LEADING TO AN ENVIRONMENTALLY FRIENDLY SPACE, BLENDING IN WITH SURROUNDING EXISTING LANDSCAPES.

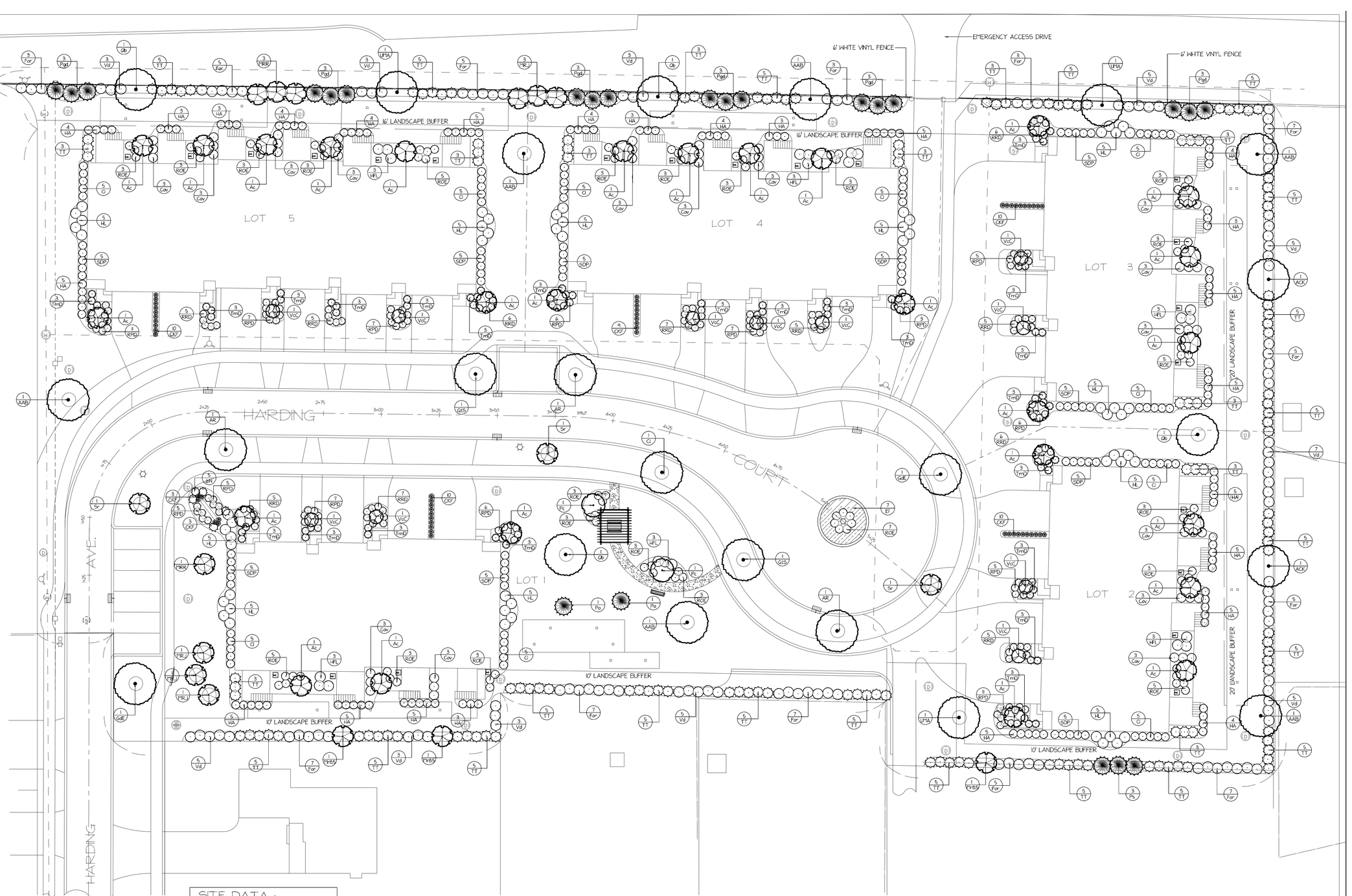
LANDSCAPE NOTES :

1. ALL PLANT MATERIALS SHALL BE NURSERY GROWN STOCK AND SHALL BE FREE FROM DISEASE OR INSECT DAMAGE.
2. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS, WHICH SHALL BE VERFIED BY MUNICIPAL AUTHORITIES.
3. ALL PLANTING SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES INCLUDING PLANTING BED PREP, PRUNING, STAKING, FERTILIZING, AND ADEQUATE MAINTENANCE OF MATERIALS DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
5. ANY EXISTING TREES SHALL BE PROTECTED FROM SOIL COMPACTION AND OTHER DAMAGES PER VILLAGE REQUIREMENTS.
6. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN NURSER AND LANDSCAPE ASSOCIATION.
7. PLANT MATERIAL ON THIS PLANTING PLAN REPRESENTS THE INTENTION OF THE PROPOSED LANDSCAPE MATERIAL. EXACT SPECIES AND LOCATIONS MAY VARY IN THE FIELD DUE TO MODIFICATIONS IN SITE IMPROVEMENTS AND THE AVAILABILITY OF PLANT MATERIAL AT THE TIME OF INSTALLATION. ANY SUCH CHANGES MUST FIRST BE APPROVED BY THE VILLAGE IN WRITING.
8. TREES NOT IN BEDS RECEIVE 6' MULCH RING
9. ALL BEDS SHALL BE AMMENDED WITH COMPOST, MULCHED WITH A SHREDDED BARK MATERIAL TO A DEPTH OF 3", AND EDGED.
10. FINISH GRADE AND SEED ALL TURF AREAS (47,142 SQ.FT.) APPLY EROSION BLANKET TO ALL SEED AREAS. ALL REFERENCES TO TURF INDICATE NATURAL GRASS, NOT ASTRO-TURF.
11. LANDSCAPE ARCHITECT AND CONCTRACTOR IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
12. THIS LANDSCAPE PLAN ASSUMES THE SITE WILL BE PREPARED WITH TOPPSOIL SUITABLE FOR THE ESTABLISHMENT OF THE LANDSCAPE MATERIAL PRESENTED ON THIS PLAN.
13. TREES AND SHRUBS SHALL BE SEPARATED BY DISTANCES RECOMMENDED BY VILLAGE CODE UNLESS OTHERWISE NOTED. UPRIGHT GROWING OR NARROW PLANT SPECIES MAY BE PLANTED CLOSER THAN VILLAGE RECOMMENDATIONS TO ENHANCE SCREENING EFFECTS.
14. ALL TREES AND SHRUBS SHALL MEET THE MINIMUM SIZE REUREMENTS FOR THE VILLAGE AT TIME OF INSTALLATION.

Key	Qty.	Botanical Name	Common Name	Size/Condition
PARKWAY TREES				
AR	3	Acer 'Redpointe'	REDPOINTE MAPLE	2.5"
GdE	2	Gymnocladus dioica 'Espresso'	KENTUCKY COFFEE TREE	2.5"
GlS	2	Gleditsia triacanthos 'Skyline'	SKYLINE HONEYLOCUST	2.5"
Sr	3	Syringa reticulata	JAPANESE TREE LILAC	2.5"
TREES				
AAB	6	Acer 'Autumn Blaze'	AUTUMN BLAZE RED MAPLE	3"
Ack	2	Acer platanoides 'Crimson King'	CRIMSON KING MAPLE	4.5"
Ac	25	Amelanchier canadensis	SERVICEBERRY	6'
MRJ	6	Malus 'Red Jewel'	CLUMP RED JEWEL CRABAPPLE	6'
MRR	4	Malus Royal Raindrops'	CLUMP ROYAL RAINDROPS CRABAPPLE	6'
MRR5	3	Malus 'Royal Raindrops'	CLUMP ROYAL RAINDROPS CRABAPPLE	8.5'
Pc	2	Pyrus calleryana 'Chanticleer'	CHANTICLEER PEAR	4.5"
Qb	4	Quercus bicolor	SWAMP WHITE OAK	2.5"
UMA	3	Ulmus 'Morton Accolade'	MORTON ACCOLADE ELM	2.5"
CONIFERS				
Pa	2	Picea abies	NORWAY SPRUCE	10.5'
Pgd	18	Picea glauca densata	BLACK HILLS SPRUCE	6'
Ps	3	Pinus strobus	WHITE PINE	8.5'
TmD	69	Taxus x media 'Densiformis'	DENSE YEW	18"
TT	138	Thuja 'Techny'	TECHNY ARBORVITAE	5'
JsN	5	Juniperus procumbens 'Nana'	JAPANESE GARDEN JUNIPER	5G
SHRUBS				
Cl	50	Cornus 'Isanti'	ISANTI REDTWIG DOGHOOD	5G
Cav	45	Cotoneaster apiculatus var. laxiflo	PEKING COTONEASTER	5G
For	67	Forsythia x intermedia	BORDER FORSYTHIA	4'
HA	106	Hydrangea 'Annabelle'	ANNABELLE HYDRANGEA	5G
HFL	18	Hydrangea 'Fire Light'	FIRE LIGHT HYDRANGEA	3G
HL	58	Hydrangea 'Limelight'	LIMELIGHT HYDRANGEA	5G
ROE	81	Rosa 'Oso Easy Double Red'	OSO EASY DOUBLE RED ROSE	3G
RPD	91	Rosa 'Pink Drift'	PINK DRIFT ROSE	2G
RRD	62	Rosa 'Red Drift'	RED DRIFT ROSE	2G
SDP	50	Spirea 'Double Play Red'	DOUBLE PLAY RED SPIREA	3G
Vd	47	Viburnum dentatum	ARROWWOOD VIBURNUM	3'
VcC	11	Viburnum x carlcephalum 'Cayuga'	CAYUGA FRAGRANT VIBURNUM	2'
ORNAMENTAL GRASSES				
CKF	55	Calamagrostis 'Karl Foerster'	KARL FOERSTER FEATHER REED GRASS	1G
PERENNIALS AND ANNUALS				
Ef	7	Euonymus fortunei	PURPLELEAF WINTERCREEPER	24FLAT

PLANT SCHEDULE NOTES :

1. CONTAINERIZED SHRUBS TO BE MINIMUM 24" HEIGHT AT TIME OF INSTALLATION (EXCLUDES ROSES AND SPIREA)



SITE DATA :

SITE OPEN SPACE:
REQUIRED:
PROVIDED: 49,559 S.F.
TREES:
REQUIRED: 32
PROVIDED: 77

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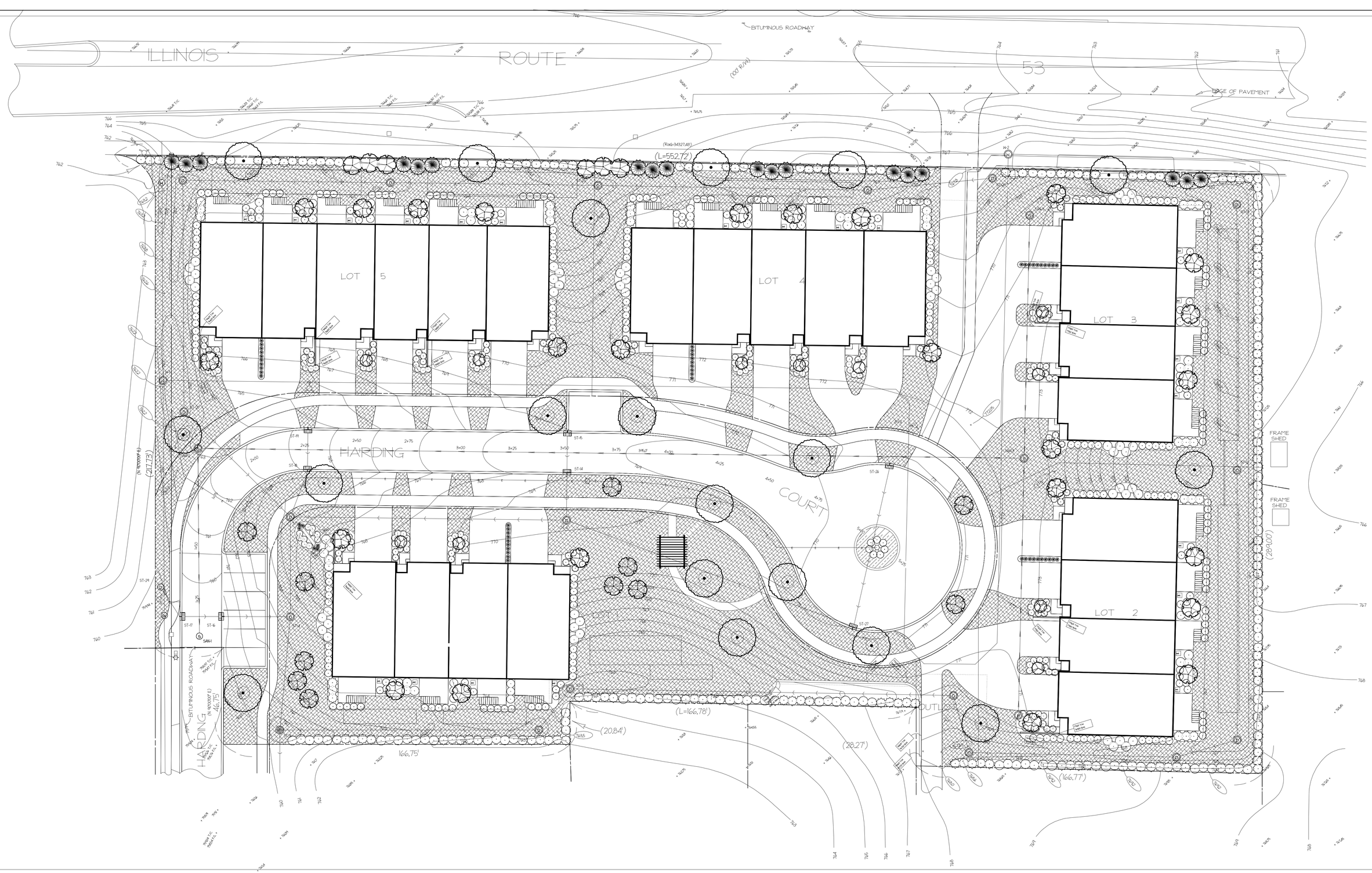
SCALE: 1" = 20' (APPROX)

LANDSCAPE PLANTINGS

DESIGNED BY: BRIAN O'MALLEY, CLD
SALES: GENE GRANT
DATE: 12-28-20
SHEET NO: 1 OF 5

NORTH

REVISIONS NO.	DATE	DESCRIPTION
1	4-27-21	VARIOUS
2	6-7-21	REMOVE ONE TREE WITH SEWER CONFLICT
3	8-19-21	CORRECTLY REMOVE TREE WITH SEWER CONFLICT



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SCALE: 1" = 20' (APPROX)

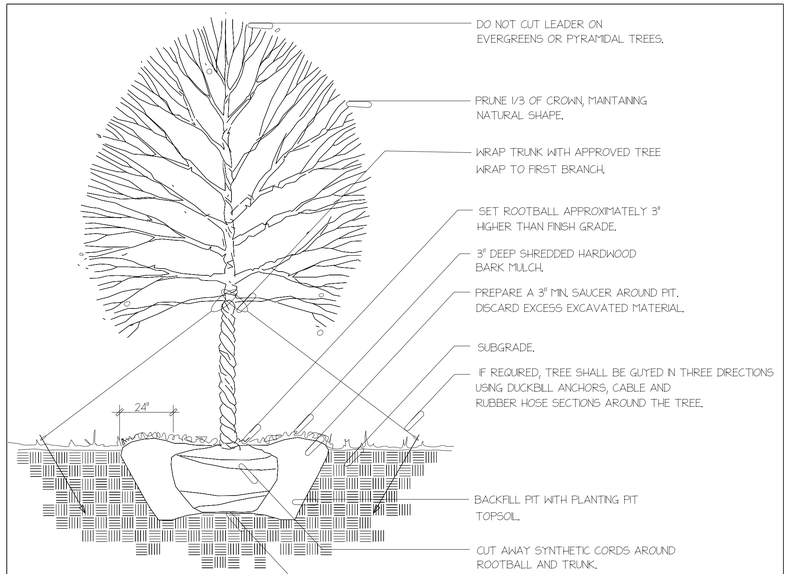
TURF AREA (SHADED)

DESIGNED BY: BRIAN O'MALLEY, CLD
SALES: GENE GRANT
DATE: 12-28-20
SHEET NO.: 3 OF 5

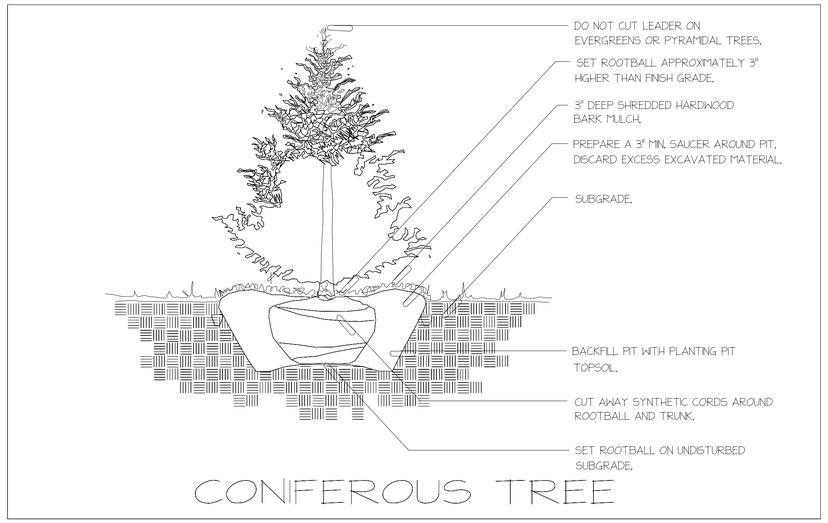
NORTH

REVISIONS NO.	DATE	DESCRIPTION
1	8-19-21	POSITION PERGOLA

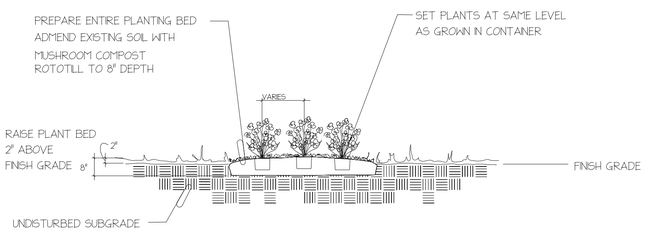
PLANT INSTALLATION DETAILS



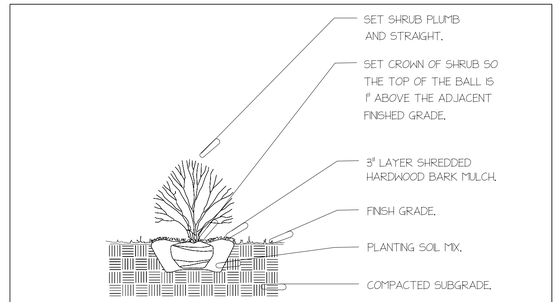
SHADE / ORNAMENTAL TREE



CONIFEROUS TREE



PERENNIAL



DECIDUOUS / EVERGREEN SHRUB

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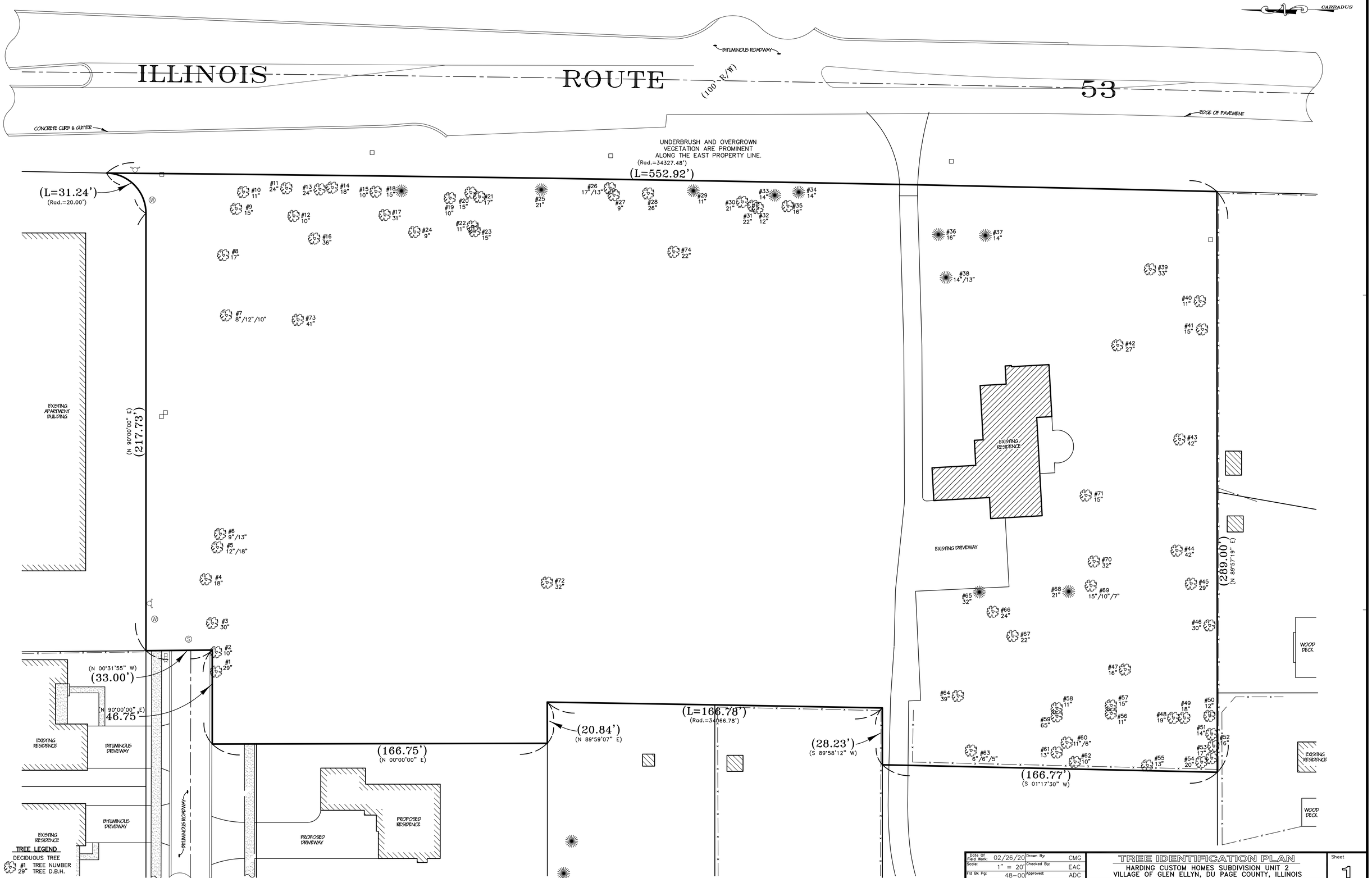
SCALE: PLANTING DETAIL

DESIGNED BY: BRIAN O'MALLEY, CLD
SALES: GENE GRANT
DATE: 3-24-20
SHEET NO: 4 OF 5

NORTH

REVISIONS

NO.	DATE	DESCRIPTION



TREE NOTES:
- SEE SHEET 13 FOR TREE PROTECTION NOTES & DETAILS.
- SEE LISTING SUBMITTED WITH THE APPLICATION OF TREE SPECIES AND DESCRIPTION.
- TREE NUMBERS AND SIZES CORRESPOND WITH THE IDENTIFICATION REPORT PROVIDED BY DAVE COULTER.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC
Date:		Revision:	
03/30/21	VILLAGE REVIEW		

TREE IDENTIFICATION PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 Of

Project # 895

DRAWING FILE NAME: 895-MF TREE IDENTIFICATION

TREE ACTION PLAN

Project Address: Harding Glen Townhomes, Harding Avenue & Illinois Route 53
Contact Name: Walt Arway
Contact Telephone (630) 790-8144
Field Verifications By: Dave Coulter, Osage, Inc., P.O. Box 3144, Oak Park, IL 60303-3144, (708) 359-7209
Field Verification Date: 12/14/2020
From Copy of Village Form D 12/22/2014

Tree Description				Classification							Action				
Original Tree Number	Species	Condition	Diameter At Breast Height	Public Tree	Private Tree	Adjcent Property Tree	Border Tree	Impacted Tree	Protected Tree	Significant Tree	Remove	Crown / Prune	Fertilize	Tree Number	Physical Conflicts
1	Black Cherry	Poor	29		Private						Remove			1	New Street
2	Mulberry	Poor	10		Private						Remove			2	New Street
3	Mulberry	Poor	30				Border				Remove			3	New Street
4	Mulberry	Poor	18	Public							Remove			4	New Street
5	Mulberry	Poor	12 / 18		Private						Remove			5	New Street
6	Mulberry	Below Average	13 / 9		Private						Remove			6	New Street
7	Black Cherry	Poor	18/12/10		Private						Remove			7	Building 5
8	Black Cherry	Dead	17		Private						Remove			8	Building 5
9	Buckthorn	Poor	15		Private						Remove			9	Topo Changes
10	Siberian Elm	Poor	11		Private						Remove			10	Utilities
11	American Elm	Below Average	24		Private						Remove			11	Utilities
12	Buckthorn	Poor	10		Private						Remove			12	Building 5
13	Siberian Elm	Poor	24		Private						Remove			13	Utilities
14	American Elm	Dead	18		Private						Remove			14	Utilities
15	Austrian Pine	Below Average	10		Private						Remove			15	Utilities
16	American Elm	Poor	36		Private						Remove			16	Building 5
17	Pin Oak	Dead	31		Private						Remove			17	Building 5
18	Austrian Pine	Below Average	15		Private						Remove			18	Utilities
19	American Elm	Below Average	10		Private						Remove			19	Topo Changes
20	American Elm	Average	15		Private						Remove			20	Storm Sewer & BMP
21	Siberian Elm	Below Average	17		Private						Remove			21	Topo Changes
22	American Elm	Poor	11		Private						Remove			22	Building 5
23	Mulberry	Below Average	15		Private						Remove			23	Building 5
24	American Elm	Below Average	9		Private						Remove			24	Building 5
25	Norway Spruce	Dead	21		Private						Remove			25	Utilities
26	Mulberry	Poor	17 / 13		Private						Remove			26	Utilities
27	American Elm	Good	9		Private						Remove			27	Storm Sewer
28	Mulberry	Poor	26		Private						Remove			28	Utilities

29	Colorado Spruce	Poor	11		Private						Remove			29	Utilities
30	Cottonwood	Dead	21		Private						Remove			30	Topo Changes
31	American Elm	Below Average	22		Private						Remove			31	Topo Changes
32	Norway Maple	Average	12		Private						Remove			32	Storm Sewer & BMP
33	Colorado Spruce	Dead	14		Private						Remove			33	Utilities
34	Colorado Spruce	Poor	14		Private						Remove			34	Utilities
35	Norway Maple	Poor	16		Private						Remove			35	Topo Changes
36	Colorado Spruce	Poor	16		Private						Remove			36	Emergency Access
37	Colorado Spruce	Dead	22		Private						Remove			37	Driveway 3
38	Austrian Pine	Poor	14 / 13		Private						Remove			38	Emergency Access
39	Pin Oak	Average	33		Private						Remove			39	Building 3
40	Mulberry	Below Average	11		Private						Remove			40	Utilities
41	Sugar Maple	Dead	15		Private						Remove			41	Utilities
42	Ginko	Good	27		Private						Remove			42	Building 3
43	American Elm	Dead	42		Private						Remove			43	Topo Changes
44	Norway Maple	Below Average	42		Private						Remove			44	Topo Changes
45	Norway Maple	Poor	29		Private						Remove			45	Topo Changes
46	Norway Maple	Dead	30		Private						Remove			46	Utilities
47	Pear	Poor	16		Private						Remove			47	Building 2
48	Mulberry	Below Average	19		Private						Remove			48	Topo Changes
49	Mulberry	Below Average	18		Private						Remove			49	Topo Changes
50	Mulberry	Below Average	12		Private						Remove			50	Utilities
51	Tree of Heaven	Poor	14		Private						Remove			51	Utilities
52	Tree of Heaven	Below Average	16		Private						Remove			52	Utilities
53	Tree of Heaven	Below Average	17		Private						Remove			53	Utilities
54	Mulberry	Poor	20		Private						Remove			54	Utilities
55	Tree of Heaven	Average	13		Private						Remove			55	Utilities
56	Tree of Heaven	Below Average	11		Private						Remove			56	Building 2
57	Tree of Heaven	Good	15		Private						Remove			57	Building 2
58	Tree of Heaven	Good	11		Private						Remove			58	Building 2
59	Tree of Heaven	Average	9 / 7		Private						Remove			59	Building 2
60	Tree of Heaven	Average	11 / 6		Private						Remove			60	Building 2
61	Hackberry	Average	13		Private						Remove			61	Storm Sewer
62	Black Walnut	Good	10		Private						Remove			62	Storm Sewer
63	Box Elder	Below Average	6 / 6 / 5		Private						Remove			63	Utilities
64	Mulberry	Poor	39		Private						Remove			64	Driveway 2
65	Norway Spruce	Average	32		Private						Remove			65	Driveway 2
66	Green Ash	Dead	24		Private						Remove			66	Driveway 2
67	Sugar Maple	Average	22		Private						Remove			67	Driveway 2
68	Norway Spruce	Very Good	21		Private						Remove			68	Building 2
69	American Elm	Poor	15 / 19 / 7		Private						Remove			69	Building 2
70	Catalpa	Below Average	32		Private						Remove			70	Building 2
71	Tulip	Excellent	15		Private						Remove			71	Building 2
72	Siberian Elm	Poor	32		Private						Remove			72	Building 1
73	Sugar Maple	Dead	30		Private						Remove			73	Building 5
74	White Pine	Average	22		Private						Remove			74	Building 4

Hampton, Lenzini and Renwick, Inc.
Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hlrengineering.com

January 28, 2021

Rite-Way Custom Homes, LLC
ATTN: Marv Ritter
540 Duane Street, 2nd Floor
Glen Ellyn, IL 60137

RE: Harding Custom Homes Subdivision Unit 2
Tree Action Plan Review

Dear Mr. Ritter,

A letter from HLR was sent on October 1, 2020 regarding the Harding Custom Homes Subdivision Unit 2 development and the demolition of the structure at 138 S. Route 53. The letter asked that a justification for each proposed removed tree be provided in an updated Tree Action Plan. A revised Tree Action Plan dated December 14, 2020 included a justification of removal for each tree in a column titled “Physical Conflicts”. HLR conducted a review of this Tree Action Plan on January 28, 2021.

There were six trees that were initially recommended for preservation. Tree #39 is a significant tree, as it is a Pin Oak measuring 33 inches and is in excellent condition. The Tree Action Plan exhibited that this tree is within the footprint of Building 3. Tree #42 is a Ginkgo measuring 27 inches in good condition. Building 3 presents a physical conflict for preservation of this tree. Tree #44 is a 42-inch Norway Maple. Considering its height, symmetrical crown, condition, and placement on the property, this tree would serve as an excellent aesthetic accessory. It was explained that topographic changes would prevent retainment of this tree. Tree #67 is a 22-inch Sugar Maple in fairly good condition. Removal was rationalized by the conflicting footprint of Driveway 2. Tree #68 is a 21-inch Norway Spruce in good condition. The updated Tree Action Plan clarified that this tree is in the footprint of Building 2. Tree #71 is a 15-inch Tulip tree in excellent condition measuring 15 inches. The Tree Action Plan clarifies that it is located within the footprint of Building 2.

The revised Tree Action Plan and Tree Preservation Plan have been approved. It is our understanding that all trees listed are to be removed. Considering no trees are being retained on site, no tree protection fence is required. If you have any questions or concerns regarding the contents of this letter, please do not hesitate to contact me at (847) 531-0288 or phickey@hlreng.com.

Yours truly,

HAMPTON, LENZINI AND RENWICK, INC.

Patrick Hickey

Patrick Hickey, Certified Arborist #IL-1385A
Senior Environmental Scientist

380 Shepard Drive
Elgin, Illinois 60123-7010
Tel. 847.697.6700
Fax 847.697.6753

6825 Hobson Valley Drive, Suite 302
Woodridge, Illinois 60517
Tel. 847.697.6700
Fax 847.697.6753

3085 Stevenson Drive, Suite 201
Springfield, Illinois 62703
Tel. 217.546.3400
Fax 217.546.8116

323 W. Third Street, P.O. Box 160
Mt. Carmel, Illinois 62863
Tel. 618.262.8651
Fax 618.263.3327

Buechel Stone Stratford Cross veneer on block wall. Genuine or Synthetic Slate panel recessed in bric
Two-sided sign
Foundation is 2' deep with brick expected to project an additional 3" per side for a total thickness of 2' - 6"
and a wdith to accomodate 6' overall width.

Letters 1/2" thick laser-cut acrylic letters painted white, stud mounted

Base of sign to be landscaped with a mixture of deciduous and evergreen plants, shrubs, and/or foliage.

Proposed sign is non-illuminated.
(If future H.O.A. chooses to install lighting such will need to comply with all Village of Glen Ellyn code requirements)

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF
*	92	MLLG-OW-LED-WPSD-9-3	SINGLE	834.55	1.000

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Area 1	Illuminance	Fc	0.34	17.0	0.0	N.A.	N.A.
Area 2	Illuminance	Fc	0.27	8.8	0.0	N.A.	N.A.
Area 3	Illuminance	Fc	0.34	6.1	0.0	N.A.	N.A.
Area 4	Illuminance	Fc	0.28	3.4	0.0	N.A.	N.A.
Area 5	Illuminance	Fc	0.21	6.5	0.0	N.A.	N.A.
Area 6	Illuminance	Fc	0.44	8.8	0.0	N.A.	N.A.

Luminaire Location Summary					
Label	X	Y	Z	Orient	Tilt
MLLG-OW-LED-WPSD-9-3	242	169	6	90	0
MLLG-OW-LED-WPSD-9-3	226	169	6	90	0
MLLG-OW-LED-WPSD-9-3	219	163	6	90	0
MLLG-OW-LED-WPSD-9-3	217	169	6	90	0
MLLG-OW-LED-WPSD-9-3	199	169	6	90	0
MLLG-OW-LED-WPSD-9-3	192	163	6	90	0
MLLG-OW-LED-WPSD-9-3	190	169	6	90	0
MLLG-OW-LED-WPSD-9-3	171	169	6	90	0
MLLG-OW-LED-WPSD-9-3	162	163	6	90	0
MLLG-OW-LED-WPSD-9-3	246	169	6	90	0
MLLG-OW-LED-WPSD-9-3	263	169	6	90	0
MLLG-OW-LED-WPSD-9-3	272	163	6	90	0
MLLG-OW-LED-WPSD-9-3	178	113	8	270	0
MLLG-OW-LED-WPSD-9-3	204	113	8	270	0
MLLG-OW-LED-WPSD-9-3	230	113	8	270	0
MLLG-OW-LED-WPSD-9-3	260	112	8	270	0
MLLG-OW-LED-WPSD-9-3	562	180	8	0	0
MLLG-OW-LED-WPSD-9-3	562	155	8	0	0
MLLG-OW-LED-WPSD-9-3	561	130	8	0	0
MLLG-OW-LED-WPSD-9-3	561	103	8	0	0
MLLG-OW-LED-WPSD-9-3	560	243	8	0	0
MLLG-OW-LED-WPSD-9-3	561	269	8	0	0
MLLG-OW-LED-WPSD-9-3	562	295	8	0	0
MLLG-OW-LED-WPSD-9-3	562	321	8	0	0
MLLG-OW-LED-WPSD-9-3	426	326	8	90	0
MLLG-OW-LED-WPSD-9-3	399	327	8	90	0
MLLG-OW-LED-WPSD-9-3	373	327	8	90	0
MLLG-OW-LED-WPSD-9-3	346	328	8	90	0
MLLG-OW-LED-WPSD-9-3	320	328	8	90	0
MLLG-OW-LED-WPSD-9-3	246	329	8	90	0
MLLG-OW-LED-WPSD-9-3	220	329	8	90	0
MLLG-OW-LED-WPSD-9-3	194	330	8	90	0
MLLG-OW-LED-WPSD-9-3	167	329	8	90	0
MLLG-OW-LED-WPSD-9-3	141	330	8	90	0
MLLG-OW-LED-WPSD-9-3	115	331	8	90	0
MLLG-OW-LED-WPSD-9-3	108	274	6	270	0
MLLG-OW-LED-WPSD-9-3	125	274	6	270	0
MLLG-OW-LED-WPSD-9-3	98	281	6	270	0
MLLG-OW-LED-WPSD-9-3	152	280	6	270	0
MLLG-OW-LED-WPSD-9-3	129	274	6	270	0
MLLG-OW-LED-WPSD-9-3	145	274	6	270	0
MLLG-OW-LED-WPSD-9-3	154	274	6	270	0
MLLG-OW-LED-WPSD-9-3	171	274	6	270	0
MLLG-OW-LED-WPSD-9-3	179	280	6	270	0
MLLG-OW-LED-WPSD-9-3	182	273	6	270	0
MLLG-OW-LED-WPSD-9-3	199	273	6	270	0

Luminaire Location Summary					
Label	X	Y	Z	Orient	Tilt
MLLG-OW-LED-WPSD-9-3	205	280	6	270	0
MLLG-OW-LED-WPSD-9-3	207	275	6	270	0
MLLG-OW-LED-WPSD-9-3	224	274	6	270	0
MLLG-OW-LED-WPSD-9-3	233	279	6	270	0
MLLG-OW-LED-WPSD-9-3	235	273	6	270	0
MLLG-OW-LED-WPSD-9-3	252	273	6	270	0
MLLG-OW-LED-WPSD-9-3	263	279	6	270	0
MLLG-OW-LED-WPSD-9-3	302	279	6	270	0
MLLG-OW-LED-WPSD-9-3	313	272	6	270	0
MLLG-OW-LED-WPSD-9-3	330	272	6	270	0
MLLG-OW-LED-WPSD-9-3	333	272	6	270	0
MLLG-OW-LED-WPSD-9-3	350	272	6	270	0
MLLG-OW-LED-WPSD-9-3	358	278	6	270	0
MLLG-OW-LED-WPSD-9-3	360	271	6	270	0
MLLG-OW-LED-WPSD-9-3	378	271	6	270	0
MLLG-OW-LED-WPSD-9-3	384	277	6	270	0
MLLG-OW-LED-WPSD-9-3	386	271	6	270	0
MLLG-OW-LED-WPSD-9-3	404	271	6	270	0
MLLG-OW-LED-WPSD-9-3	411	276	6	270	0
MLLG-OW-LED-WPSD-9-3	414	270	6	270	0
MLLG-OW-LED-WPSD-9-3	431	270	6	270	0
MLLG-OW-LED-WPSD-9-3	441	276	6	270	0
MLLG-OW-LED-WPSD-9-3	513	339	6	180	0
MLLG-OW-LED-WPSD-9-3	505	329	6	180	0
MLLG-OW-LED-WPSD-9-3	505	312	6	180	0
MLLG-OW-LED-WPSD-9-3	505	307	6	180	0
MLLG-OW-LED-WPSD-9-3	505	292	6	180	0
MLLG-OW-LED-WPSD-9-3	510	284	6	180	0
MLLG-OW-LED-WPSD-9-3	505	281	6	180	0
MLLG-OW-LED-WPSD-9-3	505	267	6	180	0
MLLG-OW-LED-WPSD-9-3	511	257	6	180	0
MLLG-OW-LED-WPSD-9-3	504	254	6	180	0
MLLG-OW-LED-WPSD-9-3	504	238	6	180	0
MLLG-OW-LED-WPSD-9-3	510	228	6	180	0
MLLG-OW-LED-WPSD-9-3	513	198	6	180	0
MLLG-OW-LED-WPSD-9-3	506	187	6	180	0
MLLG-OW-LED-WPSD-9-3	505	172	6	180	0
MLLG-OW-LED-WPSD-9-3	505	167	6	180	0
MLLG-OW-LED-WPSD-9-3	505	153	6	180	0
MLLG-OW-LED-WPSD-9-3	511	145	6	180	0
MLLG-OW-LED-WPSD-9-3	506	142	6	180	0
MLLG-OW-LED-WPSD-9-3	506	126	6	180	0
MLLG-OW-LED-WPSD-9-3	511	118	6	180	0
MLLG-OW-LED-WPSD-9-3	504	115	6	180	0
MLLG-OW-LED-WPSD-9-3	504	99	6	180	0
MLLG-OW-LED-WPSD-9-3	511	88	6	180	0

Additional Notes:

MLLG-OW-LED-WPSD-9-3 is the same fixture as ASD-OLCLR-IN930-BZ

Area 1 is the East side of Buildings D & E (Units 13-23)
Area 2 is the South side of Buildings B &C (Units 5 - 12)
Area 3 is the North side of Buildings B & C (Units 5 -12)
Area 4 is the East side of Building A (Units 1-4)
Area 5 is the West side of Buildings D & E (Units 12 - 23)
Area 6 is the West side of Building A (Units 1 - 4)

Rite-Way Custom Homes

DRK Enterprises LLC / LED Lighting Supply
1 Chestnut Street, 4M
Nashua, NH 03060
(888) 423-3191
www.ledlightingsupply.com

LED LIGHTING SUPPLY

AGI32® Version 19.15.0

DATE: 6/7/2021
REF NO. RiteWay-Homes.AGI
SCALE: AS SHOWN

Lighting Specialist
Charles Debeau
charlie@ledlightingsupply.com

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
2) CALCULATIONS SHOW THE EFFECT OF SHADOWING CAUSED BY OBJECTS WITHIN THE AREA.
3) READINGS SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES TAKEN AS SHOWN IN NUMERIC SUMMARY
4) FIXTURE ORIENTATION IS SUCH THAT 0 IS TO THE RIGHT OF THE DRAWING AND 90 IS TO THE TOP OF THE DRAWING AS SHOWN.
5) TILT ANGLE IS THE RAISING AND LOWERING OF THE FIXTURE HEAD.
6) THE LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
7) CHECK GRAPHIC SCALE. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY OCCUR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.
8) LUMINAIRE LUMENS = LUMENS LEAVING LUMINAIRE WITH EFFICIENCY CONSIDERED.

NOTICE: THIS DRAWING IS THE EXCLUSIVE PROPERTY OF DRK ENTERPRISE LLC/LED LIGHTING SUPPLY (LLS). ITS ACCEPTANCE CONSTITUTES AN AGREEMENT THAT THE DRAWING WILL BE TREATED AS CONFIDENTIAL. THIS DRAWING IS TO BE USED FOR NO PURPOSE OTHER THAN AS DETAILED INFORMATION CONCERNING THE OPERATION OF UNITS FURNISHED BY LLS. IT IS TO BE RETURNED UPON REQUEST AND IS NOT TO BE COMMUNICATED, DISCLOSED OR COPIED; EXCEPT AS EXPRESSLY AUTHORIZED BY DRK ENTERPRISE LLC/LED LIGHTING SUPPLY.
NOTICE: THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION OF LIGHTING FIXTURES PROVIDED BY DRK ENTERPRISE LLC/LED LIGHTING SUPPLY. IT IS PROVIDED USING FIXTURE PHOTOMETRICS FURNISHED BY DRK ENTERPRISE LLC/LED LIGHTING SUPPLY. ANY VARIATION IN FIXTURE PERFORMANCE FROM PERFORMANCE SHOWN IN IES FILE IS THE RESPONSIBILITY OF THE MANUFACTURER. IT'S USE FOR ANY OTHER PURPOSE IS NOT AUTHROIZED BY DRK ENTERPRISE LLC/LED LIGHTING SUPPLY.

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Rite-Way Custom Homes

DATE: 6/7/2021

REF NO. RiteWay-Homes.AGI

SCALE: AS SHOWN

Lighting Specialist

Charles Debeau

charlie@ledlightingsupply.com

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LED LIGHTING SUPPLY

AGi32® Version 19.15.0

Table of Contents - LED Outdoor Wall Sconce

9W Outdoor LED Wall Sconce - MLLG-AL-LED-WPSD-9-30-BZ / ASD-OLCLR-IN930-BZ 1

LED LIGHTING SUPPLY
FORMERLY MY LED LIGHTING GUIDE

9W Outdoor LED Wall Sconce

Replaces: 50W Metal Halide

Models and Specifications

Part Number	Watts	Lumens
MLLG-AL-LED-WPSD-9-30-BZ ASD-OLCLR-IN930-BZ	9	750

Replaces	50W Metal Halide
Lumens Per Watt	83
Voltage	120V
Frequency	50-60Hz
Power Factor	> .9
THD	< 20%
Life Hours	50,000 hours
Color Temp	3000K | 5000K
CRI	80+
Beam Angle	120°
Operating Temp	-13°F to +113°F
IP Rating	IP65
Dimmable	No
Housing	Die cast Aluminum body with protecting Glass lens.
Mounting	Wall
Dimensions	7 1/8 in X 4 1/2 in X 11 13/16 in
Weight	2.87 lbs
Warranty	5 years

HARDING CUSTOM HOMES, LLC
540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137 (630) 790-8144

July 21, 2021

Ms. Kelly Purvis, Planning Manager
and Plan Commission Members
c/o Village of Glen Ellyn
Planning and Development Department
535 Duane Street
Glen Ellyn, IL 60137

HARDING GLEN TOWNHOMES, GLEN ELLYN, IL

CONSTRUCTION / PHASING SCHEDULE

Dear Kelly,

As part of our application to develop townhomes on our Harding Avenue townhome property we have been asked to provide a construction / phasing schedule per Section 10-7-6.

- Upon approval of the project re-zoning and site engineering, we will request a demolition permit to remove the uninhabited single family home (the "Carlson Home") located on the southern one acre of the development. We intend to complete the demolition shortly after the demolition permit is approved.

- Upon approval of the project re-zoning and site engineering, we will apply for permits to complete the roadway and site development portions of the project. Our intention is to begin construction on the roadway and site development portions of the project shortly after the respective building permits have been approved.

- We anticipate a phased approach to constructing the buildings. We anticipate starting with the two southern buildings on Lots 2 and 3. As these buildings near completion and experience sales success in contracting for the sale of individual units, we will obtain permits and begin construction on subsequent buildings, likely on Lots 4, 5 then 1.

- Our understanding is the following items will apply:

1. *A building permit must be issued for the first lot to be developed within 2 years of zoning approval.*

2. *Within 2 years of site development permit issuance, the roadway (with the exceptionof final lift of asphalt), curb & gutter, utilities, lighting, sidewalks, emergency exit, building pads and pergola amenity will be constructed.*

3. *All lots for which a building permit has not been pulled will be graded, seeded and sodded.*

4. *The remaining 4 lots must be fully developed within 5 years of zoning approval. If market conditions do not allow for the project to be substantially complete within 7 years (approximately) from zoning approval, an extension can be requested.*

Due to the nature of the sales cycle and the construction times, it is not possible to predict the completion date at this time.

Very truly yours,

Marvin K. Ritter

HARDING CUSTOM HOMES, LLC
540 Duane Street, Glen Ellyn, IL 60137 (630) 790-8144

May 9, 2021

Evidence of capability to complete the proposed development per Section 10-10-15(B)(3)(k). This should consist of a narrative statement and examples of similar projects completed.

Harding Custom Homes, LLC is a private entity owned by Mark and Diane White of St. Petersburg, Florida. Although the principals have been involved in a number of real estate projects throughout their lifetimes, they have not undertaken a development project of this nature.

Mark and Diane (through Harding Custom Homes, LLC) have engaged Rite-Way Custom Homes, LLC to manage the project. Rite-Way is a custom home builder based in Glen Ellyn, IL. Rite-Way's management team includes Walt Arway, Marv Ritter and Terri Smith-Pfeiffer. Rite-Way has not completed a roadway project such as this, but will oversee experienced land, utility and roadway sub-contractors to install the necessary infrastructure. Rite-Way's experience in residential building however is directly related to its ability to construct townhomes.

Since 1990, Rite-Way has completed 70 single family homes in Glen Ellyn ranging from 2,600 finished square feet to 9,400 with individual values exceeding $2,000,000. In addition to single family homes, Rite-Way has completed approximately 80 addition / renovation projects within Glen Ellyn. A map showing many of Rite-Way's Glen Ellyn area projects is attached. Throughout the western suburbs of Chicago, Rite-Way and its team have built more than 300 single family homes.

Walt Arway grew up on the east coast as the son of a homebuilder and remodeler. He has been building custom homes, townhomes and condos on a full time basis since graduating college. Since 1990, Walt has overseen the construction of every Rite-Way project in the western suburbs of Chicago.

Marv Ritter co-founded Rite-Way with Walt in the early 1990s and has been involved with every Rite-Way project. Prior to joining Rite-Way on a full time basis in 2011, Marv actively participated in budgeting, designing and overseeing employees and sub-contractors for office build outs in more than 100 countries during a sixteen year period as the CIO and CTO of a four billion dollar professional services firm.

Terri Smith-Pfeiffer has worked in several real estate roles, including as the Financial Manager for Marshall Field's construction department and for another home builder before joining Rite-Way in 2004 as its CFO. Terri oversees all financial aspects of Harding Custom Homes and Rite-Way. Terri actively volunteers in Glen Ellyn with PADS and was the Treasurer of the Glen Ellyn Chamber of Commerce for four years. Terri currently is serving a three year term as the President of the Glen Ellyn Chamber of Commerce.

Walt, Terri and Marv actively share their building expertise with potential clients, Realtors, real estate attorneys, competing builders and other interested parties through four books they have written:

- **"Building An Extraordinary Custom Home - What You Need to Know"**, 150+ pages (2019)

- **"What to Expect When Building A Custom Home - Answers to the Questions Smart Homebuyers Ask Their Builder"**, 140+ pages (2011)

- **"50 Steps to a Custom Home – Learn The Sequential Process Before You Begin"**, 120 pages (2021)

- **"IN HOUSE – Creating Your Dream Home, Room By Room"**, 160+ pages (Fall 2021 / Spring 2022 anticipated publishing date.)

Although our experiences are not all directly related to the project at hand, they demonstrate our abilities to manage complex projects and situations.

Rite-Way is currently constructing new homes in Glen Ellyn at:

- 685 Riford (on behalf of Prairie Path Homes, LLC)
- 761 Harding Avenue
- 773 Harding Avenue
- 779 Harding Avenue

and has five other active projects outside of the Glen Ellyn area.

In 30 years, Rite-Way has never built the same home twice. The following pictures showcase several homes we have completed in Glen Ellyn. It is likely one or more of them are in or near your neighborhood.

511

529

541

677

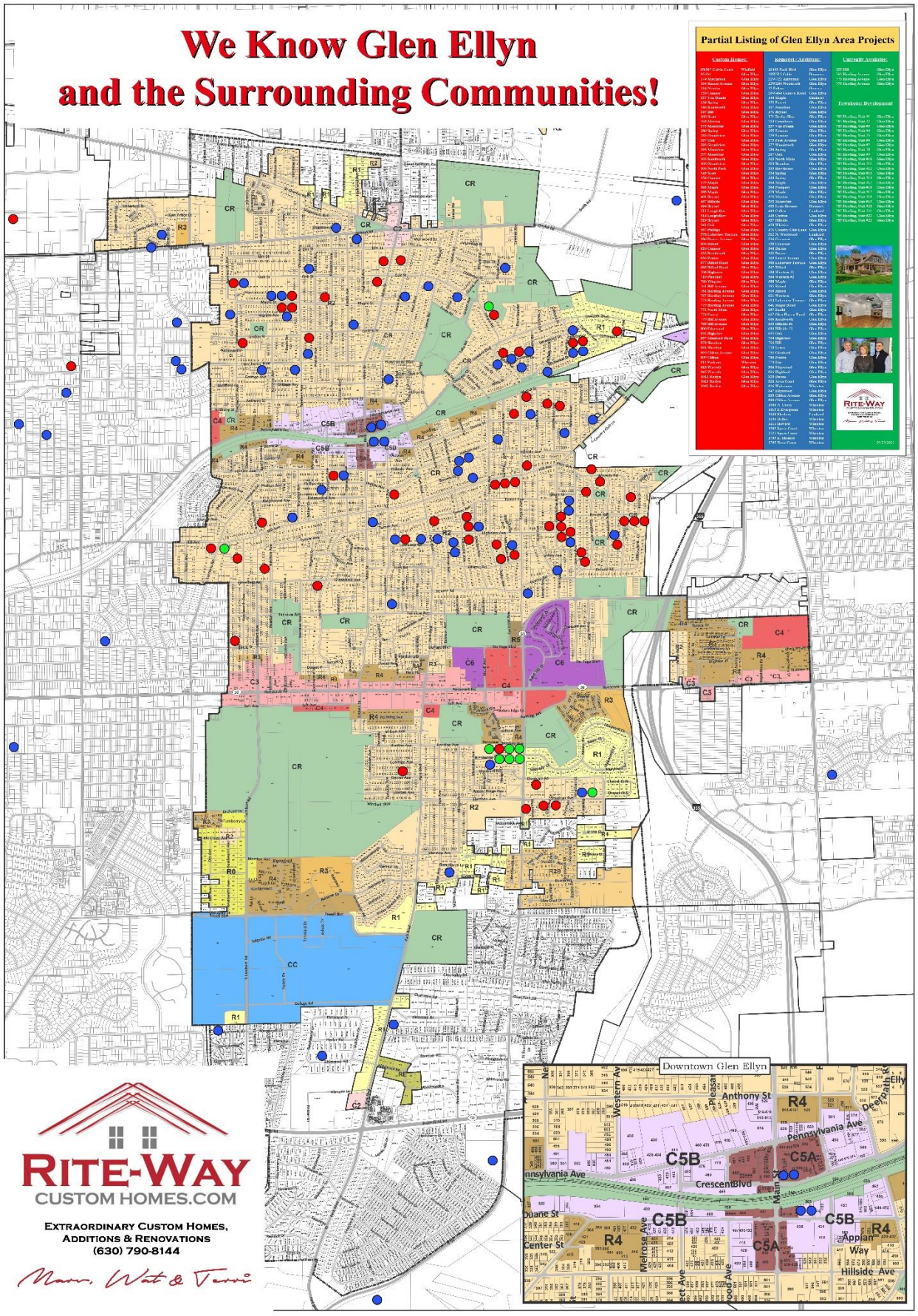
760

761

772

785

285


We Know Glen Ellyn
and the Surrounding Communities!
Partial Listing of Glen Ellyn Area Projects
Downtown Glen Ellyn
RITE-WAY
CUSTOM HOMES.COM
EXTRAORDINARY CUSTOM HOMES,
ADDITIONS & RENOVATIONS
(630) 790-8144
Mann, Watt & Terri

TRACY CROSS & ASSOCIATES, INC.

RESIDENTIAL MARKET ANALYSIS: A SUMMARY OF FINDINGS
-- HARDING COURT: TOWNHOMES --
GLEN ELLYN, ILLINOIS

TO: Mr. Marv Ritter / Harding Custom Homes, LLC

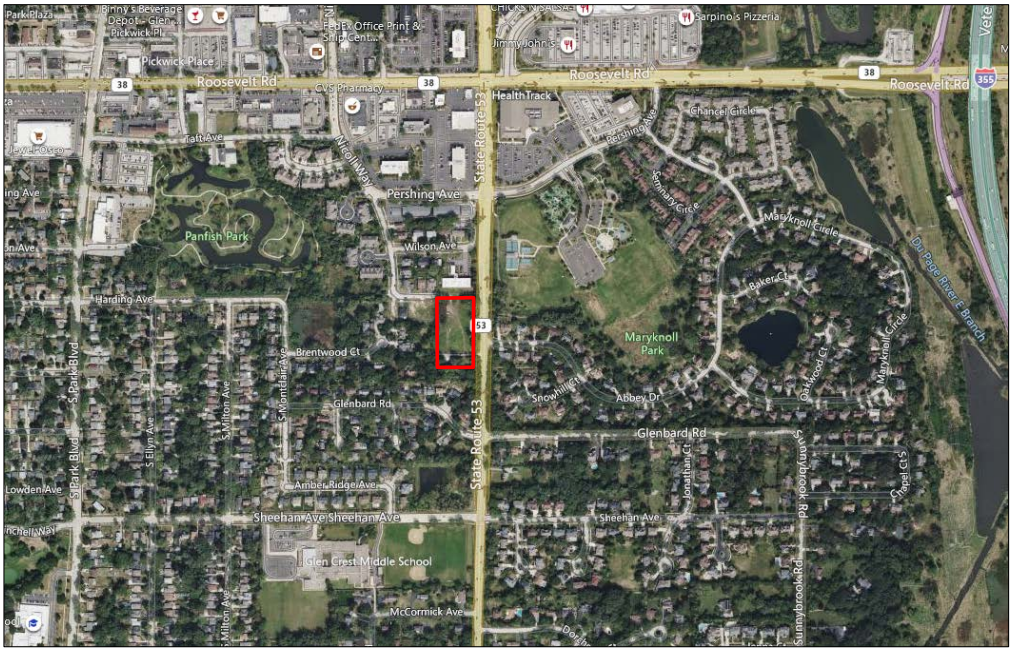
FROM: Mr. Erik A. Doersching / Tracy Cross & Associates, Inc.

DATE: July 28, 2021

At the request of Harding Custom Homes, LLC, Tracy Cross & Associates, Inc. evaluated the market potential for new construction residential development in Glen Ellyn, DuPage County, Illinois. Specifically focusing on the proposed 23-unit *Harding Court* townhome community, this executive summary memorandum provides an assessment of the market, an evaluation of the proposed development's overall marketability, and an absorption forecast for the townhome community based upon Harding Custom Homes' conceptualized product line and proforma price points.

THE SUBJECT PROPERTY

The subject property consists of an approximate 3.3-acre land parcel located immediately west of IL-53, one-quarter mile south of Roosevelt Road in the village of Glen Ellyn, Illinois. The site, itself, is currently vacant with the exception of an older (former) residential structure which will be raised as a part of the development process. Several stands of mature trees are located on site, most notably along the property's western perimeter – currently creating natural buffer to IL-53.



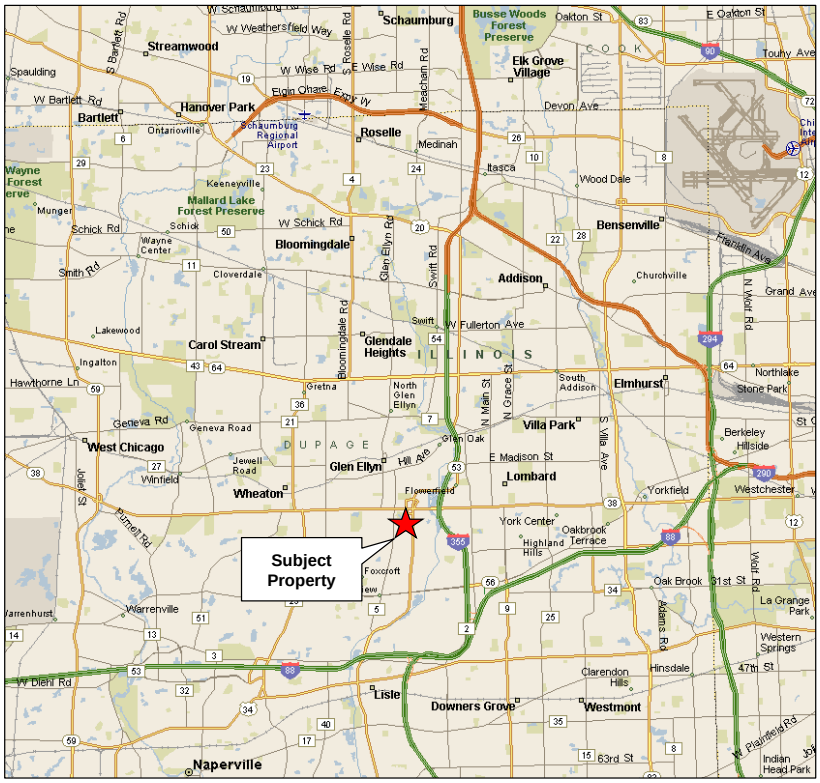
REAL ESTATE MARKET ANALYSIS
1375 E. WOODFIELD ROAD, SUITE 520
SCHAUMBURG, IL 60173
t 847.925.5400 f 847.925.5415
www.tcrossinc.com

With a location aligning IL-53, just south of Roosevelt Road, the subject property is within minutes of numerous shopping facilities, primarily to the east and west along Roosevelt Road. Here, consumers will find most major retail categories and service providers ranging from grocery, gas, restaurants, and convenience items to various "big box" venues. In addition, the subject property is within a short drivetime to several recreational facilities including parks, open space areas, and golf courses, along with a wide variety of localized employment concentrations throughout Glen Ellyn and nearby municipalities.

The Harding Court property is also enhanced by its location just 1.5 miles south of downtown Glen Ellyn's business/shopping district featuring a variety of localized employment, along with an abundance of convenience stores, specialty boutiques, service-oriented shops, grocers, and restaurants. Known as the *Village of Volunteers*, Glen Ellyn has small-town charm and a sense of civic pride. A variety of organizations, churches and volunteer groups make up the fabric of this established community of more than 27,000 residents. The pedestrian-friendly downtown area of Glen Ellyn hosts a number of summer events and festivals including a Farmer's Market every Friday from May through October.

Relative to regional transportation, future residents of the proposed townhome community will be within a short two-minute drive time of Interstate 355 (via Roosevelt Road). This regional expressway, together with its connection with Interstate 88 three miles to the south, provides connectivity with major satellite employment centers from Oak Brook through Naperville. To the north, the Hamilton Lakes and Woodfield areas of Itasca and Schaumburg are also reachable within a reasonable commute (via I-355).

GEOGRAPHIC DELINEATION OF THE SUBJECT PROPERTY
GLEN ELLYN, ILLINOIS



Source: Microsoft Streets & Trips and Tracy Cross & Associates, Inc.

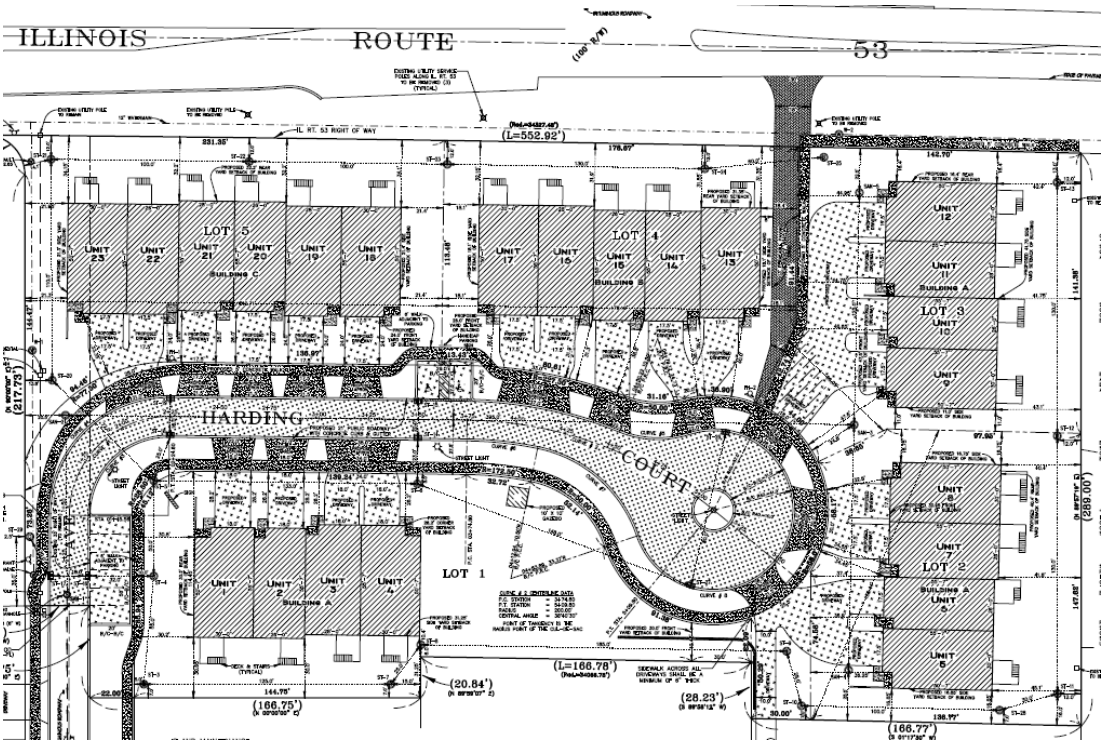
Relative to public transportation, situated in downtown Glen Ellyn is a Metra commuter train station served by the Union Pacific-West Line. Express trains from this location reach the city of Chicago's Ogilvie Transportation Center in 35 minutes.

Land uses adjacent to, and immediately surrounding, the site are primarily residential including new infill single family detached offerings directly to the west where two homes (under construction) are currently under contract at prices of $815,000 and $900,000, respectively, along with older, but well kept, condominiums to the north (circa 1979). In addition, to the northwest along Harding Avenue and Nicoll Way are several luxury townhome units constructed 10-15 years ago with resale values extending, generally, from the mid $300,000s to over $600,000.

Overall, Glen Ellyn is a highly desirable residential area. It boasts numerous established tree-lined neighborhoods consisting, primarily, of single family homes, along with several larger lot subdivisions concentrated in its southern quadrants. As a more mature western suburb of Chicago, Glen Ellyn experienced its strongest growth period during the post-war era of the 1950s through the 1970s when roughly 60 percent of its housing stock was constructed. Reflecting this mature, generally built-out nature, residential construction of late primarily reflects single family teardown/replacement activity, along with a modicum of newer attached for sale townhome development.

THE PROPOSED DEVELOPMENT

The Harding Court townhome community will be comprised of 23 luxury attached residences, each with a two-car (front-load) garage and an unfinished basement. The townhomes will be configured in a series of four-, five- and six-unit buildings within an enclave-oriented, cul-de-sac environment.



Three different unit types will be offered at Harding Court with individual floorplans consisting of two traditional interior townhome styles (bedrooms on the second floor), along with an end-unit residence with a first-floor master bedroom.

As highlighted in the following text table, the plans will range in size from 2,174 to 2,362 square feet (not including the basement) with estimated closing prices extending from $520,000 to $570,000. Across the group, the average townhome unit at Harding Court will contain 2,265 square feet of living space and a closing price of roughly $550,000. This translates to a value ratio of $242.83 per square foot.

PROPOSED TOWNHOME PRODUCT LINE
HARDING COURT: GLEN ELLYN, ILLINOIS

Plan Designation	Number of Units	Percent of Total	Plan Style	Unfinished Basement	Garage Condition	Bedroom/ Bath Mix	Plan Size (Sq. Ft.)	Estimated Closing Price
Unit 1	6	26.1	Two-Story	Incl.	2-Car (Front)	3/2.5	2,174	$520,000
Unit 2	7	30.4	Two-Story	Incl.	2-Car (Front)	3+Loft/2.5	2,362	$548,000
Unit 3	10	43.5	Two-Story (Master Down)	Incl.	2-Car (Front)	3+Loft/2.5	2,251	$570,000
Total/Weighted Average	***23***	***100.0***	***---***	***---***	***---***	***---***	***2,265***	***$550,000***

Source: Harding Custom Homes, LLC

All townhome units at Harding Court will maintain tastefully appointed, highly stylized exterior elevations and provide high-quality interior appointments including items such as granite or quartz kitchen countertops; luxury flooring; energy-efficient stainless-steel appliances; designer baths; upgraded cabinets, lighting, and fixtures; custom millwork; and smart-home technology.

From a marketing perspective, Harding Custom Homes, LLC will maintain an on-site sales presence with two decorated models at all times, together with directional signage, a significant website presence and local broker representation/participation.

MARKET POTENTIAL AND SALES FORECAST

Giving full consideration to the location of the subject property, together with the proposed development concept, and factoring current/expected economic, demographic and residential market conditions in and around Glen Ellyn, the potential to develop 23 luxury townhome units within the site is viewed as *favorable*. Specifically, at the proposed closing prices, Harding Custom Homes, LLC will achieve an average sales rate of 10 units annually (0.8 per month), thus enabling the community to reach final sellout with a reasonable 28- to 29-month period.

SUPPORTIVE RATIONALE

Factors supporting the overall marketability of the Harding Court townhome community, along with rationale supporting our sales forecast is provided in the following bullet-point summary:

- First and foremost, the subject property's location is considered strong relative to transportation systems, concentrations of employment, shopping, and recreation/entertainment. At the same time, the proposed product line is viewed as excellent with three separate custom-type plan offerings to choose from, complimented by its high-end features and finishes. Moreover, the single (cul-de-sac) access point to the community will allow for a secluded, enclave-oriented environment, a value-added enhancement compared to developments with "through streets." In other words, enclave or niche-type land plans like that conceptualized for Harding Court are not readily duplicated competitively and offer an element of true value to lifestyle homebuyers, especially those with discretionary incomes.

- The village of Glen Ellyn is an affluent western suburb of Chicago. Among an estimated 10,571 existing households, a median household income of $122,124 is represented, a level some 58 percent higher than the $77,437 median noted for the Chicago region as a whole. Moreover, among the existing household base in Glen Ellyn, 4,328 earn incomes of $150,000 or more, reflecting an adequate localized pool of qualifying households for the Harding Court townhome community. In the broader Glen Ellyn Market Area, which is defined as an approximate five-mile radius from the site including Glen Ellyn and other nearby municipalities generally aligning I-355 such as Wheaton, Winfield, Lombard, Villa Park, Glendale Heights, Carol Stream, Oakbrook Terrace, Villa Park, and portions of Warrenville, Addison, Bloomingdale, Lisle and Downers Grove, there are currently 32,140 households earning incomes of $150,000 and above.

- The Harding Court townhome community will face limited direct competition. Currently, only one *attached sector* development (i.e., townhome, duplex, or condominium community) is actively selling new construction units in Glen Ellyn. Moreover, this one competitor, while more proximate to downtown Glen Ellyn, consists of a smaller-scale (4-unit) townhome development along Duane Street where its 3-story product is currently priced some $100,000 *higher* than where Harding Court will be positioned for comparable square footage and considering standard feature differences.

- Additionally, other than Harding Court, there are currently no other attached sector for sale developments in the planning pipeline in the village of Glen Ellyn.

- Elsewhere in the Glen Ellyn Market Area, competition is also limited, primarily resulting from the built-out nature of this portion of the Chicago region. Excluding the 4-unit Duane Street townhome community in Glen Ellyn, just six other attached sector developments (all townhome communities) were actively selling new construction units during the 2nd Quarter 2021. These include Gagliano's Woodland Estates in Addison, Pulte's Bloomingdale Walk-Terraces in Bloomingdale, Donven Homes' Woodmoor in Lombard, Lexington Homes' Lexington Trace-Club and Lexington Trace-

Mews projects in Warrenville, and MI Homes' Everton, also in Warrenville. In addition, all of the above referenced townhome competitors reflect production-type (non-custom) communities unlike that conceptualized by Harding Custom Homes, LLC for Glen Ellyn.

- Additive to the lack of direct competition locally, Harding Court will benefit from an overall new construction housing market that is improving despite the current/recent coronavirus pandemic. In the entire west suburban area of Chicago, the average per project sales rate among active *attached sector* communities during the 1st Half 2021 stood at 24.02 units on an annualized basis (2.0 units monthly). This pace reflected the *highest* per project sales volume in the last 16 years.

- Contributing, in large part, to the increase in per project sales among new construction duplex, townhome and condominium developments in west suburban Chicago is the *limit level of supply*. In other words, demand is currently outstripping supply in the western suburbs – and throughout all of suburban Chicago for that matter. In fact, since the number of active attached sector communities in the western suburbs dropped below 50 starting in 2013, annual per project sales rates have reached double digits each year as highlighted in the following text table:

SALES TRENDS
TOWNHOME/DUPLEX/CONDOMINIUM DEVELOPMENTS
WEST SUBURBAN CHICAGO: 1999-1ST HALF 2021

Year	Number of Active Developments	Total Sales	Average Annualized Sales Rate Per Development
1999	116	2,332	26.51
2000	122	2,501	26.88
2001	131	3,367	34.68
2002	119	2,802	28.66
2003	130	2,723	27.64
2004	138	2,925	27.90
2005	163	3,188	28.20
2006	164	2,607	19.48
2007	159	1,509	10.61
2008	151	532	3.92
2009	129	355	3.09
2010	100	440	4.79
2011	81	418	5.78
2012	60	391	7.36
2013	45	478	12.90
2014	34	281	11.06
2015	35	317	11.68
2016	39	359	11.48
2017	44	393	11.76
2018	47	434	13.60
2019	49	481	12.01
2020	48	622	15.32
1st Half 2021	40	534	24.02 (1)

(1) Seasonally adjusted, annualized rate.

Source: Tracy Cross & Associates, Inc.

- In the local existing home market, i.e., resale sector, current conditions lend further support to the development of new townhome product within the subject property. For example, as highlighted in the following text table, the median sales price of an attached sector closing in the Glen Ellyn Market Area, i.e., townhomes, duplexes, and condominiums, rose 8.5 percent annually between

2020 and the first six months of 2021, while *time on market* dropped from 49 days in 2020 to just 39 days during the January-June 2021 period. For reference, the typical marketing timeframe for an attached sector unit region-wide stands at approximately 90 days. *Moreover, the number of townhomes/duplexes/condominiums closed annually at price points of $500,000 and above has almost doubled over the past two years as highlighted in the following table:*

TOWNHOME/DUPLEX/CONDOMINIUM RESALE CLOSINGS
GLEN ELLYN MARKET AREA
2019 - 1ST HALF 2021

Price Range	2019		2020		1st Half 2021 (Annualized)	
	Number of Closings	Percent of Total	Number of Closings	Percent of Total	Number of Closings	Percent of Total
Under $100,000	136	7.1	115	5.7	120	5.2
100,000 - 149,999	581	30.2	531	26.4	568	24.8
150,000 - 199,999	495	25.7	562	27.9	480	21.0
200,000 - 249,999	316	16.4	349	17.4	478	20.9
250,000 - 299,999	167	8.7	184	9.2	236	10.3
300,000 - 349,999	94	4.9	118	5.9	202	8.8
350,000 - 399,999	49	2.6	62	3.1	94	4.1
400,000 - 499,999	56	2.9	56	2.8	58	2.5
500,000 & Above	29	1.5	32	1.6	56	2.4
Total	***1,923***	***100.0***	***2,009***	***100.0***	***2,292***	***100.0***
Median	***$174,707***		***$182,078***		***$197,618***	
Average Days on Market	***57***		***49***		***39***	

Source: Midwest Real Estate Data, LLC

❑ Internal Glen Ellyn, recent townhome resale activity shows demand for higher-end, luxury product. As highlighted below, in the last 12 months, 11 resale townhome closings were recorded in Glen Ellyn at price points over $475,000. Among the group, the average time on market stood at just 30 days.

RECENT HIGHER-END TOWNHOME CLOSINGS
GLEN ELLYN, ILLINOIS

Address	Closing Date Mo./Yr.	Year Built	Average Days On Market	Average Unit Size (Sq. Ft.)	Average Closing Price	
					$	$/Sq. Ft.
Harding Court (As Proposed)	---	---	---	***2,265***	***$550,000***	***$242.83***
470 Pennsylvania Avenue	6/21	2012	6	2,872	$715,000	$248.96
462 Pennsylvania Avenue	6/21	2011	75	3,145	750,000	238.47
486 Newton Avenue	5/21	2018	7	2,217	515,000	232.30
793 Parkview Court	5/21	2008	27	2,260	523,000	231.42
490 Newton Avenue	4/21	2018	17	2,995	605,000	202.00
791 Parkview Court	3/21	2008	61	2,418	482,500	199.55
468 Pennsylvania Avenue	1/21	2010	5	2,689	719,000	267.39
482 Newton Avenue	10/20	2016	59	2,201	477,500	216.95
468 Pennsylvania Avenue	10/20	2007	35	3,886	960,000	247.04
460 Pennsylvania Avenue	9/20	2007	38	3,071	631,000	205.47
80 Waters Edge Court	7/20	2007	24	2,570	478,250	186.09
705 Kingsbrook Glen	7/20	2006	1	2,284	505,000	221.10
Average:	---	---	**30**	**2,717**	**$613,438**	**$225.78**

Source: Tracy Cross & Associates, Inc.

- Proximate to the subject property just to the northwest along Kingsbrook Glen (off Nicoll Way), a townhome residence similar in product form to that proposed at Harding Court recently closed at price point of $505,000 for a residence containing 2,284 square feet. This townhome unit was on the market for just one (1) day.

- As mentioned earlier, there are currently only six townhome communities actively marketing new construction product in the entire Glen Ellyn Market Area, none of which reflect higher-end, custom-oriented developments. In other words, all six townhome developments in the market are more production-oriented projects with closing prices ranging from the high $300,000s to the mid $400,000s. At these prices, however, the average development (among the six) is currently selling units at a pace of 31 annually. With estimated closing prices in the $500,000s, our sales forecast for Harding Court can be substantiated on the basis of price/value.

- While there are currently no *higher-end, custom-oriented* attached sector developments (of scale) actively marketing new construction product within a five-mile radius of the site from which to fully gauge absorption, our forecast is consistent with "like" communities elsewhere in suburban Chicago. As highlighted in the following text table, among 19 active higher-end townhome development, the average project is selling units at a pace of 8 annually (0.7 per month), which compares with our forecast of 10 units per year (0.8 monthly). Among this group of comparable higher-end suburban townhome developments, the average community supports a closing price of $578,793 for a unit containing 2,384 square feet of living space. This translates to a value ration of $242.78 per square foot.

COMPOSITE SUMMARY
COMPARABLE NEW CONSTRUCTION TOWNHOME COMMUNITIES: SUBURBAN CHICAGO
2ND QUARTER 2021

Development/Location	Total Units	Average Monthly Sales Rate Since Opening	Average Unit Size (Sq. Ft.)	Average Closing Price	
				$	$/Sq. Ft.
Harding Court/Glen Ellyn	***23***	***0.8 (Forecast)***	***2,265***	***$550,000***	***$242.83***
Lexington Heritage/Arlington Heights	29	0.7	1,649	$452,520	$274.42
Sigwalt 16/Arlington Heights	16	0.9	2,718	766,891	282.15
Mycroft Row/Clarendon Hills	12	0.4	2,800	887,500	316.96
Abbey Woods/Frankfort	16	0.4	2,450	628,950	256.71
Lakewood Estates/Glenview	34	0.5	3,150	636,210	201.97
Park Place/Glenview	14	0.4	2,115	580,120	274.29
Mason Pointe/LaGrange	58	1.5	2,080	454,680	218.60
Estates of Montefiori/Lemont	52	0.3	1,785	472,392	264.65
Parkside/Libertyville	56	1.2	2,110	468,737	222.15
Lincolnshire Trails/Lincolnshire	31	1.3	2,110	541,035	256.41
Townhomes of the Oaks/Mokena	20	0.9	1,987	466,452	234.75
Linden Woods/Naperville	19	0.3	2,424	491,395	202.72
Gateway/Northbrook	68	0.3	2,430	691,750	284.67
Provenance-Terraces/Northbrook	82	1.0	2,543	596,715	234.65
Sterling Place/Northbrook	84	1.9	2,072	464,030	223.95
Bluff Pointe/Orland Park	38	0.6	2,440	488,612	200.25
The Promenade/River Forest	29	0.3	2,552	539,460	211.39
Luxury on Lincoln/Skokie	16	0.5	3,000	611,000	203.67
Timber Trails-Pinehurst II/Western Springs	87	0.7	2,888	758,615	262.68
Average:	**---**	**0.7**	**2,384**	**$578,793**	**$242.78**

Source: Tracy Cross & Associates, Inc.

- The most recent townhome community to be marketed in Glen Ellyn was MI Homes' 21-unit Maple Wood Estates program – a more mainstream, production-oriented development which sold out during the 1st Quarter 2020. This community's average closing price hovered around $440,000 for 2,100 square feet, or $214 per square foot. With Maple Wood Estates generating 1.1 sales monthly, our forecast of 0.8 units per month can be supported on the basis of price/value, counterbalanced by Harding Court's superior features and custom finishes compared to MI Homes' more base-grade standards.

- During the first six months of 2021, the number of townhome closings that occurred in the Glen Ellyn Market Area at price points above $500,000 totaled 56 *on an annualized basis*. At our sales forecast of 10 units per years (0.8 per month), Harding Court would capture between 15 and 20 percent of the higher-end townhome market, a share position viewed as reasonable and realistic, especially considering the lack of new construction, luxury product in the local market.

- With estimated closings prices just over $500,000, Harding Court will fall inside the threshold of older-stock single family resales. For example, in Glen Ellyn Market Area, over 1,000 "older" single family homes are being sold/closed on an annual basis at price points of $500,000 and above. Representing the principal source of demand for the master-down end units at Harding Court, and possibly the interior units as well, the more mature purchaser, i.e., empty-nester, moving from an older single family home in the local area will typically move down, or, at best, laterally in price.

- Demographically, not only is there a sizeable base of households in the prime homebuying age categories of 35-74 throughout the Glen Ellyn Market Area, but the 55-74 age segment which, again, is one of the prime homebuying profiles for the Harding Court townhome community, will increase significantly over the next five years. As highlighted in the following text table, the number of 55 and older households in the Glen Ellyn Market Area will grow from a current base of 41,910 to 42,947 by 2026.

HOUSEHOLDERS AGED 35-74
-- GLEN ELLYN MARKET AREA --

	Glen Ellyn Market Area		Village of Glen Ellyn	
Age Range	**2021**	**2026**	**2021**	**2026**
35-54	41,542	41,984	3,464	3,543
55-74	41,910	43,947	4,188	4,492
Total	***83,452***	***85,931***	***7,652***	***8,035***

Source: Environics Analytics: 2021 Demographic Snapshot Report.

ALTERNATIVE PRICING/ABSORPTION SCENARIOS

While our sales forecast for the proposed townhome community has been carefully established based upon Harding Custom Homes' estimated closing prices, this is certainly not to suggest that a higher or even lower sales pace would not ultimately yield a stronger level of economic return as a different pricing strategy may prove to be more advantageous. With this said, the following text table simply provides a variety of alternative pricing/absorption scenarios for the purposes of financial modeling:

MONTHLY SALES FORECASTS AT VARYING CLOSING PRICES
HARDING COURT (23 TOWNHOME UNITS): GLEN ELLYN, ILLINOIS

Average Closing Price For A 2,265 Sq. Ft. Luxury Townhome	Variance From Average Closing Price	Anticipated Sales Annually (In Units)	Marketing Life (In Months) For 23 Total Units
$600,000	+$50,000	6	46.0
575,000	+25,000	8	34.5
550,000	***Proposed***	***10***	***28.9***
525,000	-25,000	12	23.0
500,000	-50,000	14	19.7

Source: Tracy Cross & Associates, Inc.

GENERAL LIMITING CONDITIONS

Tracy Cross & Associates, Inc. has made extensive efforts to confirm the accuracy and timeliness of the information contained in this study. Such information was compiled from a variety of sources, including interviews with developers and their agents, government officials, and other third parties. Although Tracy Cross & Associates, Inc. believes all information in this study is correct, it does not warrant the accuracy of such information and assumes no responsibility for inaccuracies in the information provided by third parties.

Conclusions and recommendations established in this analysis represent a professional opinion and are based upon forecasts into the future which could be significantly altered by outside occurrences. These include, among others, the possible interplay of unforeseen social, economic, physical/environmental, and governmental actions. In this regard, Tracy Cross & Associates, Inc., its owners, and its employees shall be held harmless of changes in conditions that may materially result from these occurrences.

HARDING CUSTOM HOMES, LLC
540 Duane Street, 2nd Floor, Glen Ellyn, IL 60137 (630) 790-8144

January 18, 2021

Ms. Katie Ashbaugh, Village Planner
and Plan Commission Members
c/o Village of Glen Ellyn
Planning and Development Department
535 Duane Street
Glen Ellyn, IL 60137

HARDING GLEN TOWNHOMES, GLEN ELLYN, IL

PUBLIC IMPROVEMENTS LIST

Dear Katie,

This following is a list of the public improvements anticipated for the Harding Glen Townhomes project:

1. Extension of Harding Avenue including the cul-de-sac
2. Curbs on both sides of Harding Avenue and the new cul-de-sac
3. Parkways along the perimeter of the street curbs
4. Parkway trees
5. Storm sewers with curb inlets
6. Sanitary sewers with 23 connections
7. Water mains with 23 connections
8. (2) fire hydrants
9. Street signs
10. Concrete driveway approaches for 23 townhomes and 1 single family home
11. 5’ concrete sidewalks on both sides of Harding Avenue and the new cul-de-sac
12. 5’ concrete sidewalk from the cul-de-sac to Route 53 (as an easement)
13. 5’ wide concrete sidewalk along Route 53 from the emergency access gate south to the end of the property
14. (3) street lights
15. (7) parkway standard parking spaces
16. (1) parkway handicap parking space
17. Gas mains with 23 connections
18. Electric trunk lines with distribution to 23 units, including pedestals and transformers as necessary
19. Telephone line distribution to 23 units

20. Cable tv and internet connections to 23 units
21. Emergency access gate where the emergency driveway meets Route 53 property line
22. Mailboxes in either a central location or on each unit as prescribed by USPS
23. Property easements as noted on engineering documents

Very truly yours,

Marvin K. Ritter

Fire Chief
Chris Clark
chief@glenellynfire.org

Administrator
Nicole Shanley
admin@glenellynfire.org

Station 61
524 Pennsylvania Ave
Glen Ellyn, IL 60137

Administration
630-469-5265

General
630-469-5255

Station 62
681 Taft Ave
Glen Ellyn, IL 60137

General
630-469-2500

Mailing Address
PO Box 460
Glen Ellyn, IL 60138

Board of Directors
Chris Clark, President
Scott Parrish, Vice President
Tom Hefler, Secretary
Paul Voswinkel, Treasurer
Kevin McCoy, Financial Secretary
Frank Modruson
Matt Andris

Deputy Chief
Scott Parrish

Assistant Chiefs
Jim Sisson
Bob Bessler
Kirk Odiet
Joe Pierotti

May 21, 2021

Marvin Ritter
Harding Custom Homes, LLC
540 Duane St, 2nd Floor
Glen Ellyn, IL 60137

Dear Mr. Ritter,

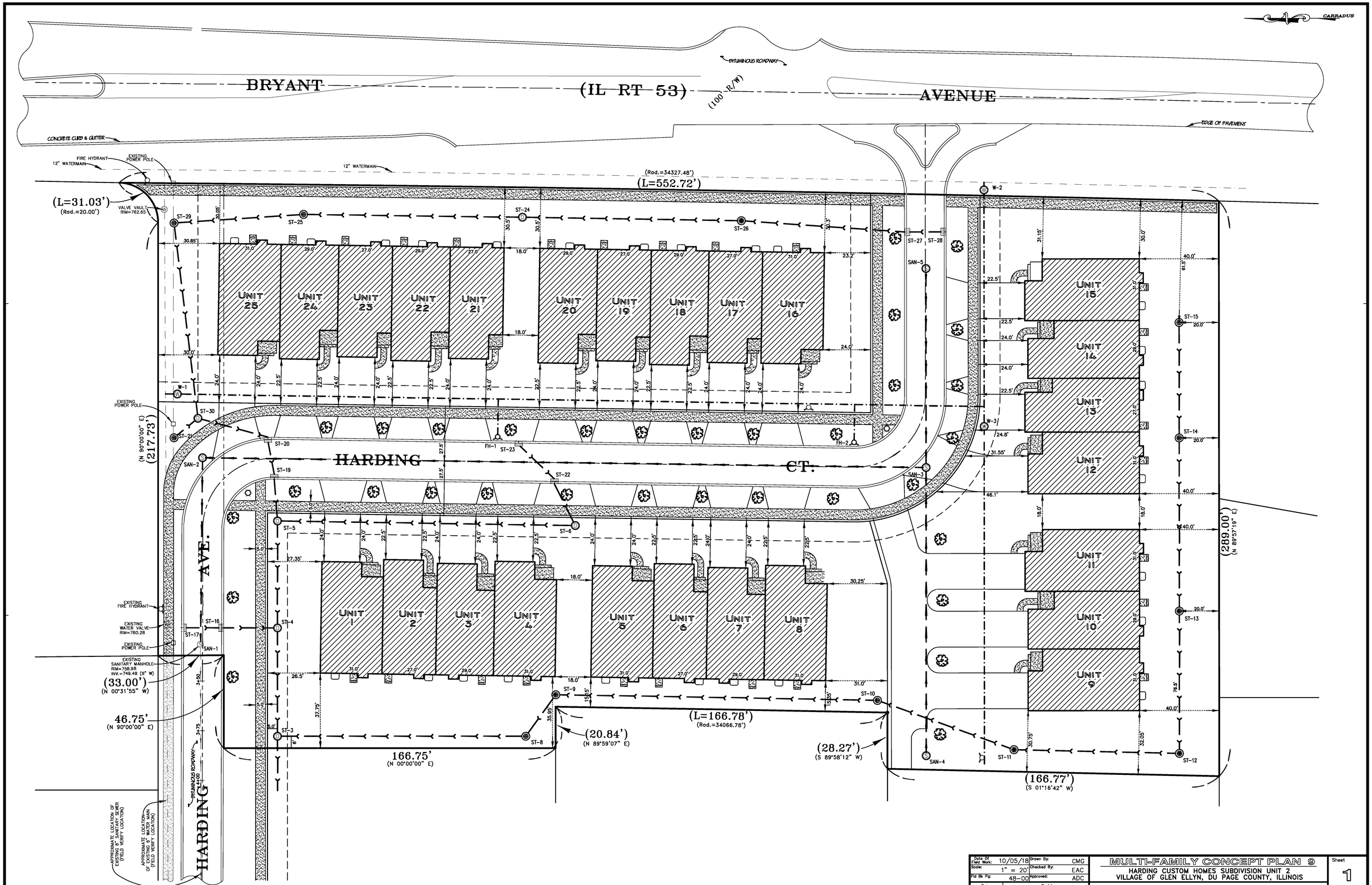
Glen Ellyn Volunteer Fire Company Chief Chris Clark has reviewed the plans provided for the Harding Glen Townhomes development at IL-53 and Harding. The fire company approves the proposed plan including emergency access to IL-53.

Please let me know if there is anything further you need from the Fire Company in order to move forward with the project.

Sincerely,

Nicole Shanley

Nicole Shanley
Fire Company Administrator
admin@glenellynfire.org



Townhome SW Corner Alternatives, v9, 2018_10_11, Harding Custom Homes, LLC

Date Of Field Work: 10/05/18	Drawn By: CMG	MULTI-FAMILY CONCEPT PLAN 9	Sheet 1 of 1
Scale: 1" = 20'	Checked By: EAC	HARDING CUSTOM HOMES SUBDIVISION UNIT 2 VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS	
Fld Bk Pg: 48-00	Approved: ADC		
Date:	Revision:	Prepared For: HARDING CUSTOM HOMES, LLC.	
		Prepared By: CARRADUS LAND SURVEY, INC. 100 Bridge Street Suite 1, Wheaton, Illinois 60187 (630) 588-0416 (FAX) 653-7682	Project # 895

DRAWING FILE NAME: 895-MF-CONCEPT-PLAN 9

October 16, 2019

Village of Glen Ellyn
535 Duane St.
Glen Ellyn, IL 60137

Re: Harding Development

To all parties concerned:

This letter comes on behalf of the homeowners of Brentwood Court, including those adjacent to the Harding Townhome Development being proposed by Harding Custom Homes, LLC ("Harding"). You may be aware that our group has strenuously objected to the project from day one and historically took the position that the parcels in question should remain zoned for single family homes. We have also raised numerous complaints about the project manager, Rite-Way Custom Homes, LLC ("Rite-Way") and the handling of the project site. However, over the past couple of months, Harding and Rite-Way have engaged our group to have meaningful talks and negotiations about the project, the community and the responsibilities to the neighboring properties.

We believe the plan presented to you is a reasonable compromise and will serve the interest of our community and Glen Ellyn. Harding and Rite-Way have presented multiple variations of their plans to our group, including a "Z" street design with a right in / right out connection to Illinois Route 53. Our group adamantly rejected that plan and because of the number and positioning of the townhomes, we would pursue litigation if that plan was presented and approved by the Village.

Harding and Rite-Way then, as a gesture of compromise, presented the plan now before you with less units, a cul-de-sac design, and a layout which minimized interference with Brentwood Court. We believe this plan is a better design for the community and reduces the overall density. We also believe that this will maximize the green space and allow for better water drainage by the system they are putting into place and the natural space allotted. The cul-de-sac, with an emergency access, also addresses the concerns about increased traffic flow from the community members living on Harding. Our group *will not* challenge this plan during the review process with the village, nor would we pursue litigation.

Our group has not taken this process lightly. We have been vocal at meetings, not shy to express our displeasure or disapproval of an idea, and organized to the extent we have experts on retainer and legal representation. We are sincere in stating that the plan before you is a fair compromise that will benefit Glen Ellyn. Please note that our approval is conditioned upon Harding and Rite-Way complying with the Village drainage plan, our experts review of that plan and Harding and Rite-Way meeting certain landscaping criteria. Based on our recent productivity, we believe that Harding and Rite-Way will continue to cooperate to finalize those details and conditions.

We recommend that the Village approve the plan currently submitted, and agree we will not pursue legal action to stop or delay its implementation. If you have any questions or desire further input, I can be reached at 630-991-1486.

Sincerely,

Nicolas Nelson, on behalf of the members of Brentwood Court

Cc: Robert Jorgensen, Anne Jorgensen, Rebecca Nelson, Joseph Donat, Ashley Donat, Chad Husnick, Stephanie Husnick, Thomas Hull, Nancy Hull, Kimberly Sammarco, Brian Sammarco, Brian Milnamow, Nicole Milnamow, Susan Reijula, Peter Reijula, Carol Asselmeier, Brian Watterson, Rita Leamy, Martin Leamy, Steven Powers, Adrian Powers and Christina Morrison

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701
www.gha-engineers.com

Traffic Impact Study

To: **Marv Ritter**
Harding Custom Homes

From: Bill Grieve, P.E., PTOE
Senior Transportation Engineer

Date: July 7, 2020

Subject: ***Proposed Residential Development***
Glen Ellyn, Illinois

Part 1 – Project Context and Summary of Findings

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact Study (TIS) for the above referenced project. As proposed, 23 townhomes and 4 single family homes would be developed on an approximate 4.4-acre site on the west side of IL 53 in Glen Ellyn, Illinois. Access to these homes would be provided via a cul-de-sac extension to Harding Avenue.

The following summarizes our findings and provides various recommendations for your consideration. *Exhibits* and *Appendices* referenced are located at the end of this document. Briefly summarizing, we believe that development traffic generated can be integrated on the adjacent streets. Reasons include:

- The site is located just west of IL 53, which is a north-south arterial route. The IL 53 / Pershing Avenue intersection will provide excellent route selection flexibility for site traffic.
- The development's traffic impacts will be very limited in comparison to the volumes currently traveling on the adjacent streets / roads.
- The proposed cul-de-sac eliminates the potential for some vehicles to use Harding Avenue as a cut-through route to IL 53.

Part II - Background Information

Site Location Aerial and Photo Inventory

Exhibit 1 provides an aerial location map and a photo inventory of current traffic operations is provided in *Appendix A*. Pertinent comments regarding land uses, the roadway network, and pedestrian mobility include:

Land Uses

- The approximate 4.4-acre site is located on the west side of IL 53 in Glen Ellyn, Illinois.
- Various residential uses are located in the immediate site vicinity. Multi-family residential buildings are located to the north that has access to Wilson Avenue and on the west side of Nicoll Avenue. Single family homes are on the north side of Harding Avenue.
- The Mary Knoll Park complex is located in the southeast corner of the IL 53 / Pershing Avenue intersection.

- Commercial uses are found to the north of the IL 53 / Pershing Avenue intersection (e.g. fitness center) approaching the Roosevelt Road (IL 38) corridor.

Roadway Network

- IL 53 is a north-south route that is classified as an "Other Principal Arterial" on the IDOT functional classification map. IL 53 has one travel lane in each direction adjacent to the site but widens at its signalized intersection with Pershing Avenue to provide a through lane, a shared through / right turn lane, and a separate left turn lane on both approaches. The posted speed limit is 40-mph
- Pershing Avenue is a local east-west route that is classified as an "Other Principal Arterial" on the IDOT functional classification map west of IL 53, as part of the "loop route" with Nicoll Way that serves as access for the IL 53 / Roosevelt Road (IL 38) interchange. Pershing Avenue has one travel lane in each direction but widens at its signalized intersection with IL 53 to provide separate left turn lanes on both approaches. Pershing Avenue bends to the north east of IL 53 as a local street, where it ends as a right turn in/out only intersection at Roosevelt Road. The posted speed limit is 30-mph.
- Nicoll Way is a local north-south street that is classified as an "Other Principal Arterial" on the IDOT functional classification map north of Pershing Avenue. Nicoll Way has one travel lane in each direction but widens north of Pershing Avenue to provide separate left turn lanes at intersecting streets. Nicoll Way has its southern terminus at Harding Avenue. The northbound and eastbound approaches have Stop control at the Pershing Avenue / Nicoll Way / Waters Edge Court intersection. The posted speed limit is 30-mph.
- Harding Avenue is a local east-west street that has its western terminus at Nicoll Way and currently ends a few homes to the east.
- Abbey Drive is a local east-west oriented route that "collects" traffic from the adjacent neighborhood. It has one travel lane in each direction with a posted speed limit of 30-mph. Abbey Drive has Stop control at IL 53.

Pedestrian Mobility

- There are sidewalks provided on the north side of Harding Avenue, on the west side of Nicoll Way, and the south side of Pershing Avenue. There are no sidewalks on either side of IL 53.
- There are crosswalks and pedestrian countdown timers provided at the signalized Pershing Avenue / IL 53 intersection.
- Pace Bus Route #301 runs on Roosevelt Road (IL 38) a few blocks to the north.
- The Mary Knoll path connects the various park facilities with Pershing Avenue and Abbey Drive.

Existing Traffic

GHA conducted weekday morning (6:00-9:00 AM) and evening (4:00-7:00 PM) peak period traffic counts at the IL 53 intersections with Pershing Avenue and Abbey Drive and the Pershing Avenue / Nicoll Way intersection on Tuesday, August 29, 2017. No unusual activity occurred that would have influenced the traffic counts, such as road construction, inclement weather, or extended emergency vehicle activity.

Exhibit 2 illustrates the existing weekday morning and evening peak hour traffic volumes, which occurred from 7:00 to 8:00 AM and from 5:00 to 6:00 PM. Also shown are the 24-hour or Average Daily Traffic (ADT) volumes, as obtained from the IDOT website. The traffic count summary sheets are provided in *Appendix B*.

Future No-Build Traffic

IDOT generally requires that the existing volumes be increased to reflect other growth in the area for a "Build-out + 5 years" analysis. CMAP was contacted to obtain their Year 2040 ADT projections. Their response is provided in *Appendix C*. The residential development is expected to be constructed and fully occupied by the Year 2021. Per the CMAP projections, the IL 53 and Pershing Avenue volumes were both increased by 4%. The resulting "No-Build" morning and evening peak hour traffic volumes for the Year 2026 are provided in *Exhibit 3*.

Part III – Traffic Evaluation

Site Plan

Exhibit 4 is the site plan dated February 26, 2020 for the development prepared for Harding Homes. As proposed, Harding Avenue would extend east into Harding Court and terminate south via a cul-de-sac. 23 new townhomes would be constructed along this extension with one existing single-family home connecting to the new cul-de-sac. Additionally, 4 new single-family homes would be constructed along the south side of Harding Avenue.

Project Traffic Characteristics

Exhibit 5 – Part A tabulates the traffic generation calculations for the proposed development. The traffic generations are based on historically surveyed trip rate data published by the Institute of Transportation Engineers (ITE) in the most recent, 10th Edition of the manual *Trip Generation*. The ITE pages are provided in *Appendix D*.

Exhibit 5 – Part B presents the anticipated trip distribution, which is primarily based on the anticipated vehicle travel patterns and the existing traffic volumes on the existing streets.

> *Discussion Point.* As expected, the majority of project traffic will use the convenience of the traffic signals at the IL 53 / Pershing Avenue intersection.

Traffic Assignments

Exhibit 6 illustrates the site traffic assignment, which is based on the project characteristics summarized in *Exhibit 5* (e.g. traffic generations and trip distribution) and the site access. Site traffic and the No-Build Year 2026 volumes (see *Exhibits 6 and 3*) were combined to produce the Year 2026 Total Traffic assignment, which is illustrated in *Exhibit 7*.

> *Discussion Point.* Per the site plan, an existing single-family home would connect to the new cul-de-sac. As such, *Exhibit 6 and 7* includes the traffic from the existing single-family home that would connect to the new cul-de-sac.

Capacity Analyses

Intersection capacity analyses were conducted using the Highway Capacity Software (HCS) and results are shown in *Exhibit 8*. The analysis parameters are listed in Part A, as published in the Transportation Research Board's (TRB) *Highway Capacity Manual – 6th Edition*, 2016 (HCM). At signalized intersections, Level of Service (LOS) "reports" traffic operations using the letter designations "A" (best) through "F" (worst). LOS reports operations based on the average control delay per vehicle in seconds.
LOS C is often referred to as the intersection "design" guideline and LOS D is usually considered as providing the lower threshold of "acceptable" operations. LOS E and F are usually considered "unacceptable". At unsignalized intersections where the minor approaches have stop control, the HCS measurement is approach delay in seconds.

Capacity analyses were conducted at the IL 53 intersections with Pershing Avenue and Abbey Drive. The results are summarized in *Exhibit 8*. The HCS summary printouts are provided in *Appendix E*.

Key Finding. As can be seen from *Exhibit 8*, the residential development will have a negligible impact on traffic operations along IL 53 at Pershing Avenue and Abbey Drive. The increase in delays from Year 2026 No-Build to Year 2026 Total Traffic are less than one second.

Traffic Impact Discussion

Reviewing the existing traffic volumes (see *Exhibit 2*), the site traffic characteristics and assignment, and the total traffic assignment (see *Exhibits 5, 6, and 7*) indicates that:

- There are currently almost 2,190 vehicles traveling through the IL 53 / Pershing Avenue intersection during the morning peak hour or over 35 vehicles per minute. The residential development will add only 16 trips or about 1 trip every 3-4 minutes.
- There are currently over 2,660 vehicles traveling through the IL 53 / Pershing Avenue intersection during the evening peak hour or almost 45 vehicles per minute. The residential development will add only 16 trips or about 1 trip every 3-4 minutes.

Key Finding. Based on the above findings, the development's traffic impacts are very small. Thus, our recommendations focus on the site plan elements.

Recommendations

Harding Avenue

- Harding Avenue will be extended as a two-way public street, with a 21-foot pavement (back-of-curb dimensions), within a 55-foot right-of-way (ROW).
- Parking should be allowed on only one side of the street, if at all.
- Sidewalks will be provided on both sides of Harding Avenue.

Harding Court

- Harding Court will extend south from Harding Avenue as a two-way public street, with a 21-foot pavement (back-of-curb dimensions), within a 55-foot right-of-way (ROW).
- Parking should be allowed on only one side of the street, if at all. Parking should be prohibited within the cul-de-sac.

- Sidewalks will be provided on both sides of Harding Court. A sidewalk connection is to be established to IL 53 at the southeast side of the cul-de-sec.
- A grasscrete emergency vehicle only driveway will be provided that will connect the cul-de-sac with IL 53.
- The cul-de-sac should be designed so that emergency vehicles can successfully maneuver in and out. *Appendix F* shows the AutoTurn analysis for both a firetruck and a garbage truck.

Part IV - Technical Addendum

The following *Exhibits* and *Appendix* were previously referenced. They provide technical support for our observations, findings, and recommendations discussed in the text.

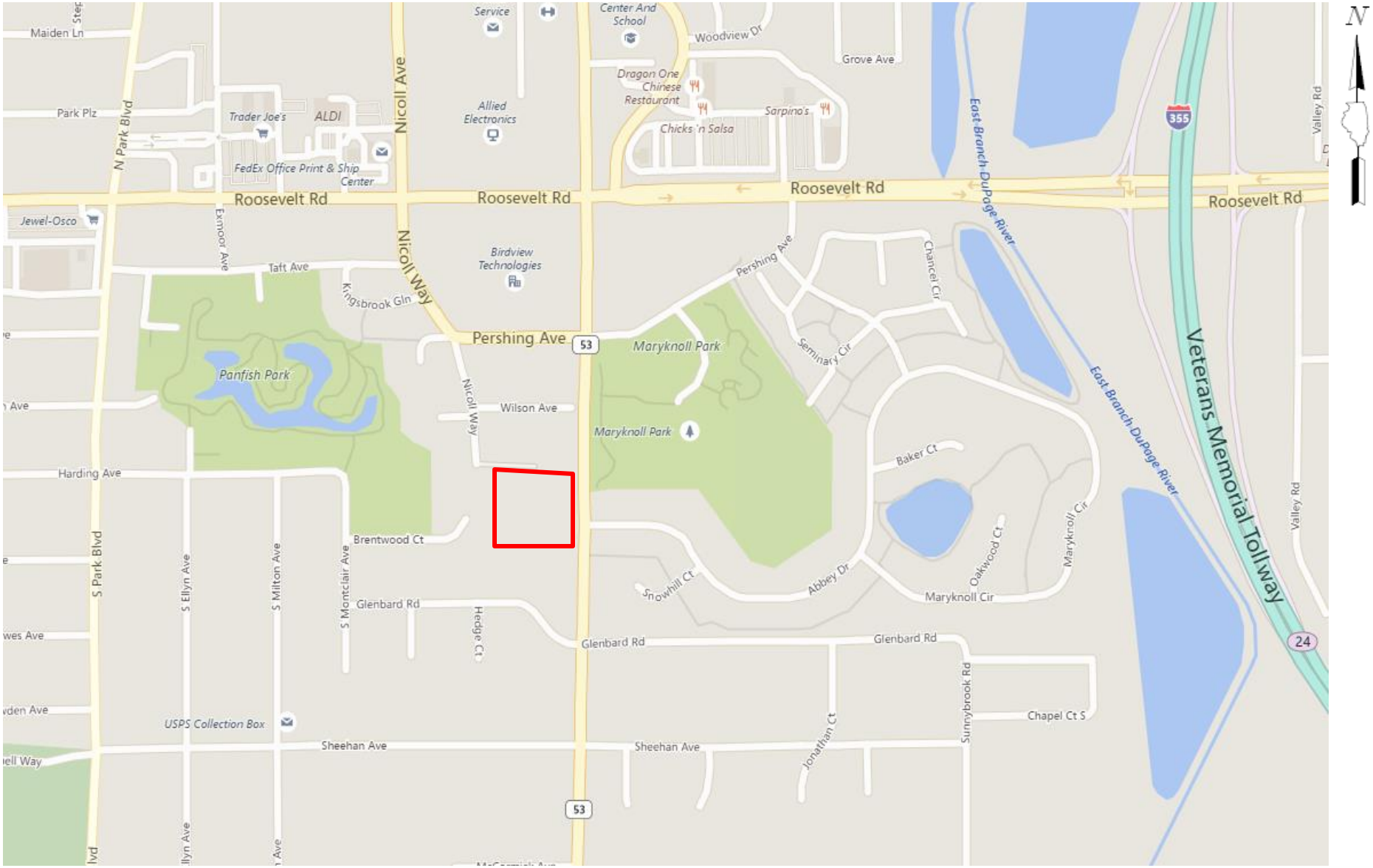
Exhibits

1. Site Location Map
2. Existing Traffic
3. No-Build Traffic – Year 2026
4. Site Plan
5. Project Traffic Characteristics
6. Site Traffic
7. Total Traffic – Year 2026
8. Intersection Capacity Analyses

Appendices

A. Photo Inventory
B. Traffic Count Summary Sheets
C. CMAP Correspondence
D. ITE Trip Generation Pages
E. Capacity Analyses Worksheets
F. AutoTurn Analysis

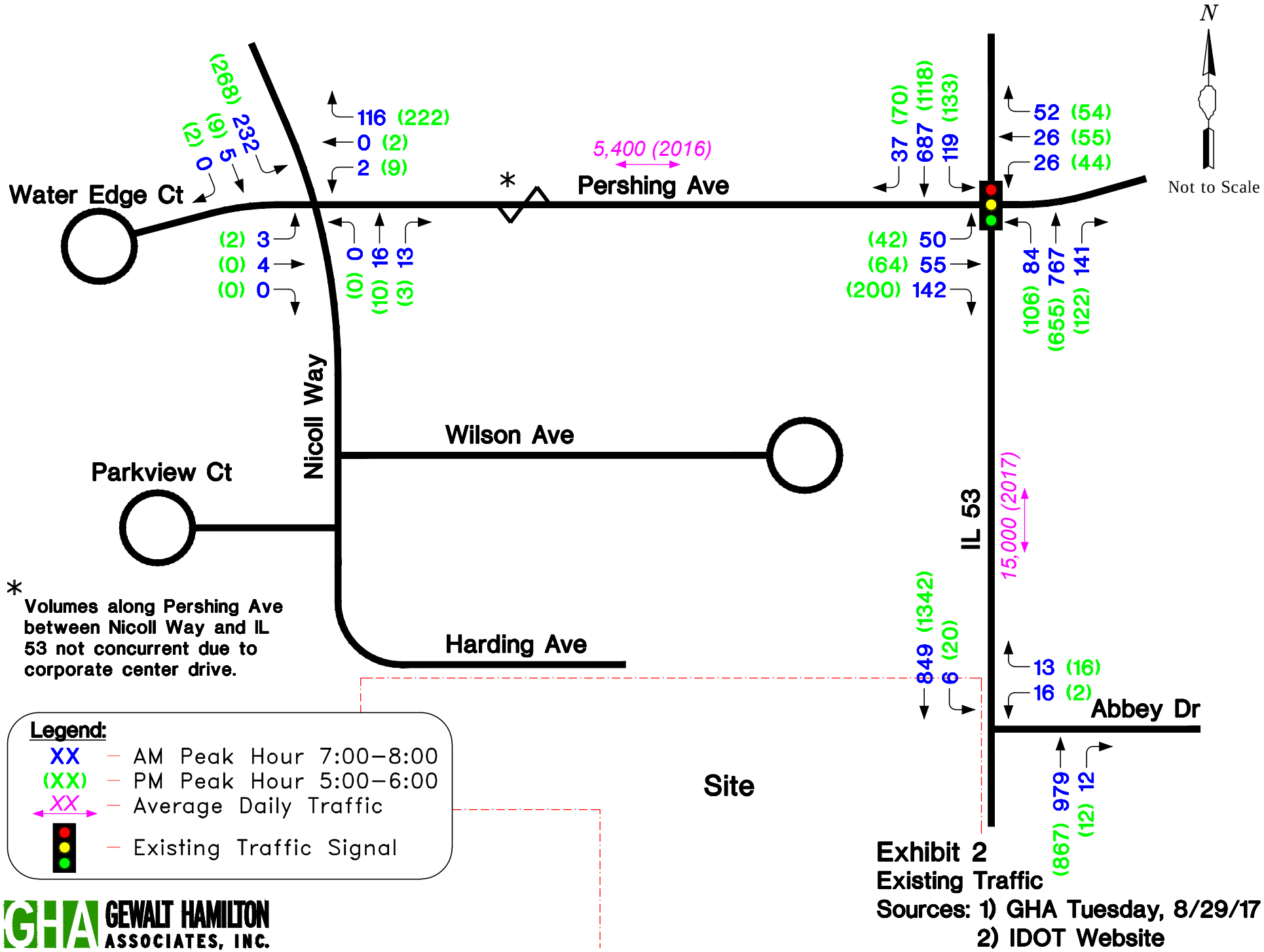
EXHIBITS

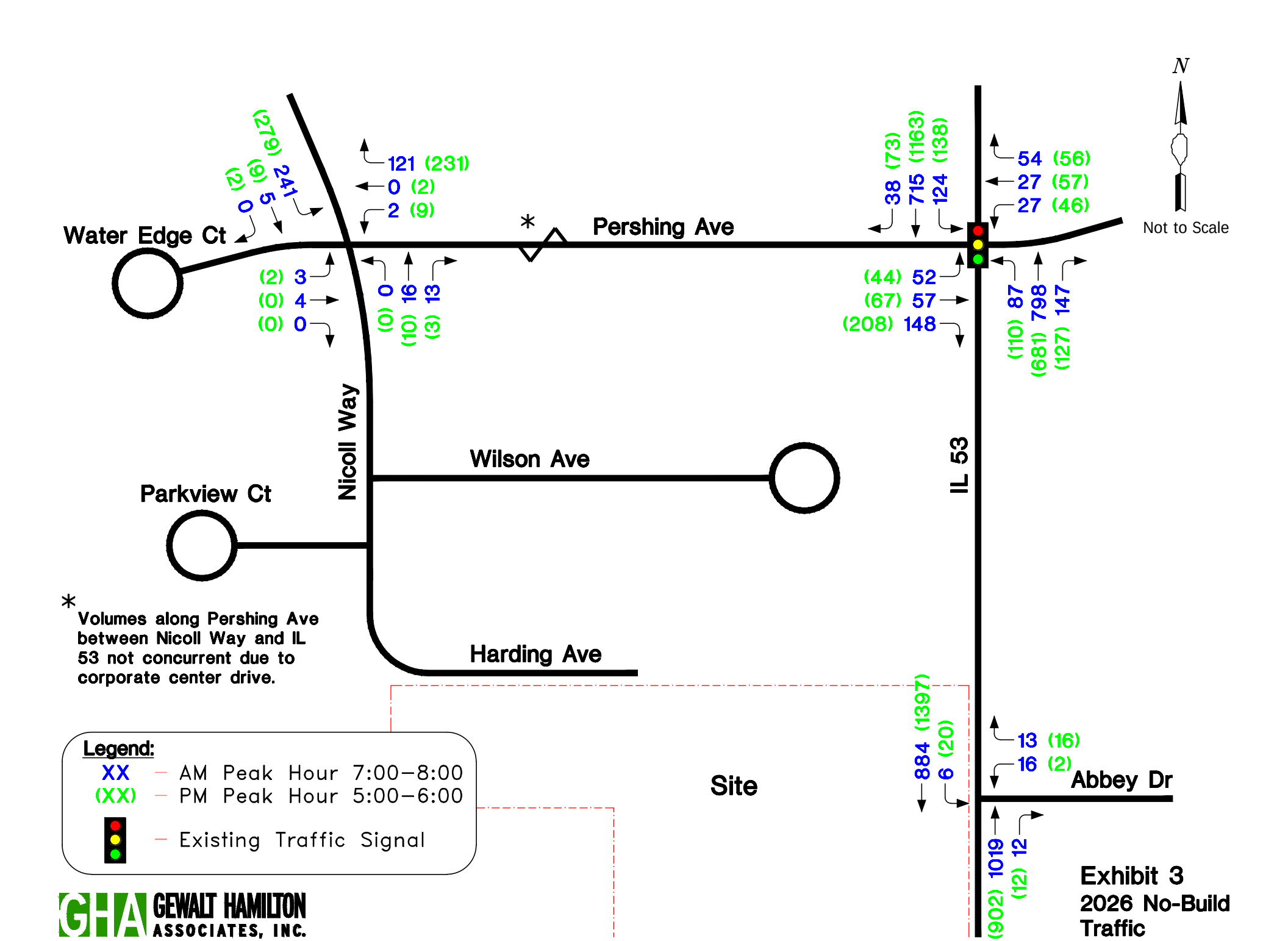


Proposed Residential Development – Glen Ellyn, Illinois

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 1
Location Map


N
Not to Scale
Water Edge Ct
Pershing Ave
5,400 (2016)
Nicoll Way
Wilson Ave
Parkview Ct
Harding Ave
IL 53
15,000 (2017)
Abbey Dr
Site
(268) (9) 232
(2) 0 5
116 (222)
0 (2)
2 (9)
(2) 3
(0) 4
(0) 0
(0) 0
(10) 16
(3) 13
37 (70)
687 (1118)
119 (133)
52 (54)
26 (55)
26 (44)
(42) 50
(64) 55
(200) 142
(106) 84
(655) 767
(122) 141
849 (1342)
6 (20)
13 (16)
16 (2)
(867) 979
(12) 12
* Volumes along Pershing Ave between Nicoll Way and IL 53 not concurrent due to corporate center drive.
Legend:
XX – AM Peak Hour 7:00–8:00
(XX) – PM Peak Hour 5:00–6:00
XX – Average Daily Traffic
– Existing Traffic Signal
GHA GEWALT HAMILTON ASSOCIATES, INC.
Exhibit 2
Existing Traffic
Sources: 1) GHA Tuesday, 8/29/17
2) IDOT Website


N
Not to Scale
Water Edge Ct
Pershing Ave
Nicoll Way
Wilson Ave
Parkview Ct
Harding Ave
IL 53
Abbey Dr
Site
* Volumes along Pershing Ave between Nicoll Way and IL 53 not concurrent due to corporate center drive.
Legend:
XX – AM Peak Hour 7:00–8:00
(XX) – PM Peak Hour 5:00–6:00
– Existing Traffic Signal
GEWALT HAMILTON ASSOCIATES, INC.
Exhibit 3
2026 No-Build
Traffic

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY (100' R/W)

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT
12" WATERMAIN

EXISTING POWER POLE

UTILITY POLE
12" WATERMAIN

EXISTING UTILITY POLE

(Rad.=34327.48')
(L=552.72')

EXISTING UTILITY POLE

W-2

PROPOSED 5' CONCRETE WALK

(L=31.03')
(Rad.=20.00')

VALVE VAULT
RIM=762.65

ST-21 ST-22 ST-23 ST-24 ST-25

ST-13

SAN-5

EXISTING UTILITY POLE

UNIT 23 | UNIT 22 | UNIT 21 | UNIT 20 | UNIT 19 | UNIT 18
BUILDING E

UNIT 17 | UNIT 16 | UNIT 15 | UNIT 14 | UNIT 13
BUILDING D

UNIT 12 | UNIT 11 | UNIT 10 | UNIT 9
BUILDING C

PROPOSED DRIVEWAY

PROPOSED 5' CONCRETE WALK

W-1

EXISTING POWER POLE

ST-20

(N 90°00'00" E)
(217.73')

PROPOSED 5' CONCRETE WALK

PROPOSED APRON

FH-2

SAN-2

ST-19 ST-15

2+50 2+75 3+00 3+25 3+50 3+75 4+00 4+25 4+50 4+75 5+00 5+25 5+50

HARDING AVE.

COURT

ST-18 ST-14 ST-26

STREET LIGHT

SAN-3

ST-12

(289.00')
(N 89°57'19" E)

1+00 1+25 1+50 1+75 2+00

ST-5 SIGN

ST-6

UNIT 8 | UNIT 7 | UNIT 6 | UNIT 5
BUILDING B

EXISTING FIRE HYDRANT

EXISTING WATER VALVE
RIM=760.28

EXISTING POWER POLE

EXISTING SANITARY MANHOLE
RIM=758.98
INV.=749.48 (8" W)

ST-17 ST-16 SAN-1

ST-4

UNIT 1 | UNIT 2 | UNIT 3 | UNIT 4
BUILDING A

ST-27

ST-8

(33.00')
(N 00°31'55" W)

1-00
(CL-PL)

46.75'
(N 90°00'00" E)

ST-3

ST-7

(L=166.78')
(Rad.=34066.78')

(20.84')
(N 89°59'07" E)

166.75'
(N 00°00'00" E)

22.02'

74.27'

ST-9

SAN-4

EXISTING UTILITY POLE

(28.27')
(S 89°58'12" W)

ST-10

ST-11

30.00'

136.77'
(166.77')
(S 01°16'42" W)

ST-28

BITUMINOUS ROADWAY

HARDING AVE.

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN (FIELD VERIFY LOCATION)

Date Of Field Work:	07/ /20	Drawn By:	x
Scale:	1" = 20'	Checked By:	x
Fld Bk Pg:	x	Approved:	x

Date:	Revision:

LANDSCAPE PLAN

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: X

Sheet 1 of 1

Project # 895

DRAWING FILE NAME: 895-MF-LANDSCAPE BASE

Exhibit 5
Project Traffic Characteristics
Proposed Residential Development - Glen Ellyn, Illinois

Part A. Traffic Generation Calculations

			Weekday Peak Hours						Daily
		ITE	Morning			Evening			
	Size	Code	In	Out	Sum	In	Out	Sum	Sum
Townhomes	23 Dwellings	#220	3	9	12	10	6	16	134
Single Family Homes	4 Dwellings	#210	2	6	8	3	2	5	54
		Totals =	5	15	20	13	8	21	188

Notes:

1) Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).

Part B. Trip Distribution

		Percent Use	
Route & Direction		Approaching Site	Departing Site
IL 53			
- North of Pershing Avenue		40%	30%
- South of Pershing Avenue		35%	35%
Nicole Way			
- North of Pershing Avenue		25%	25%
Pershing Avenue			
- East of IL 53		<5%	10%
	Totals =	100%	100%

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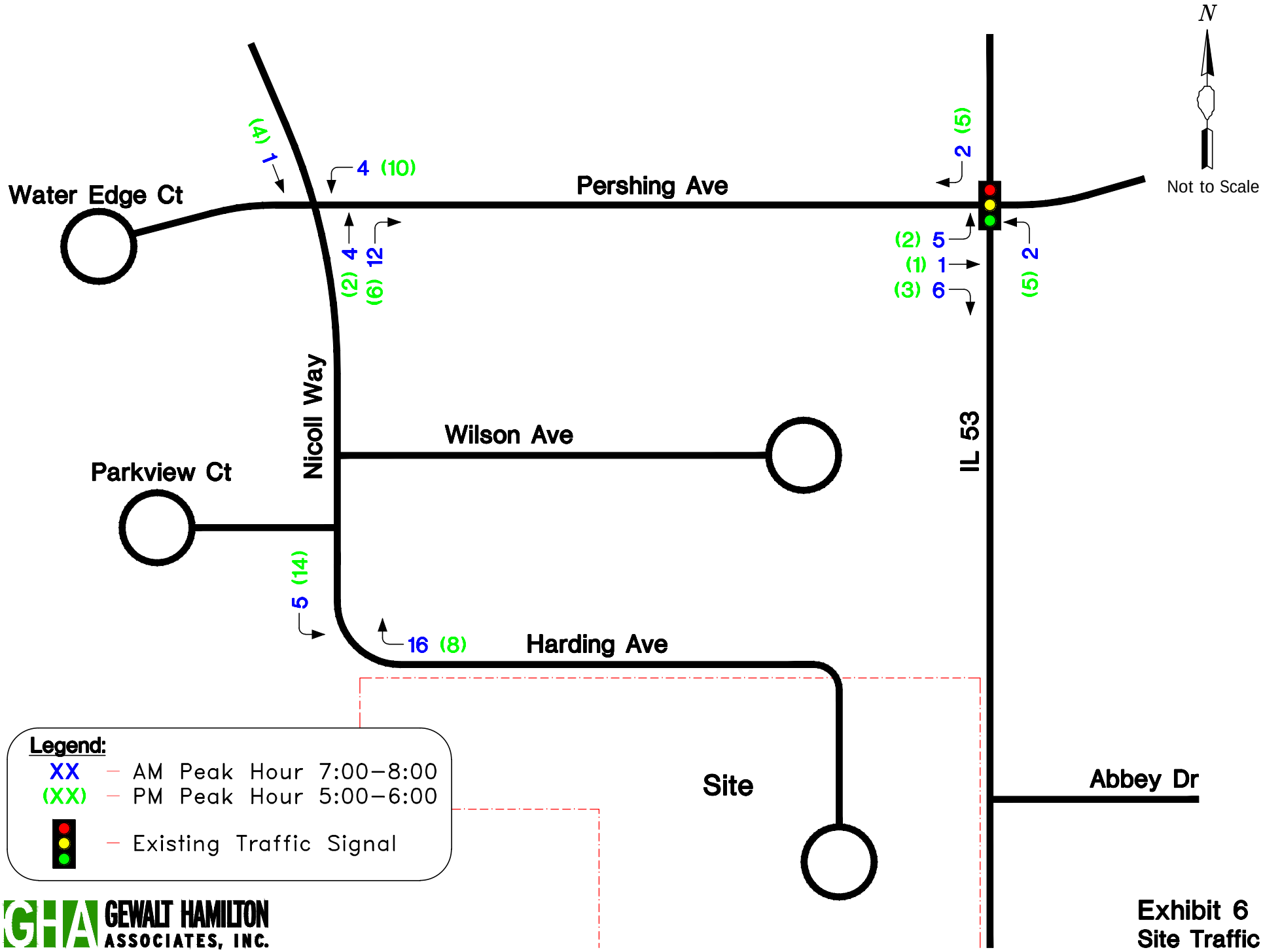
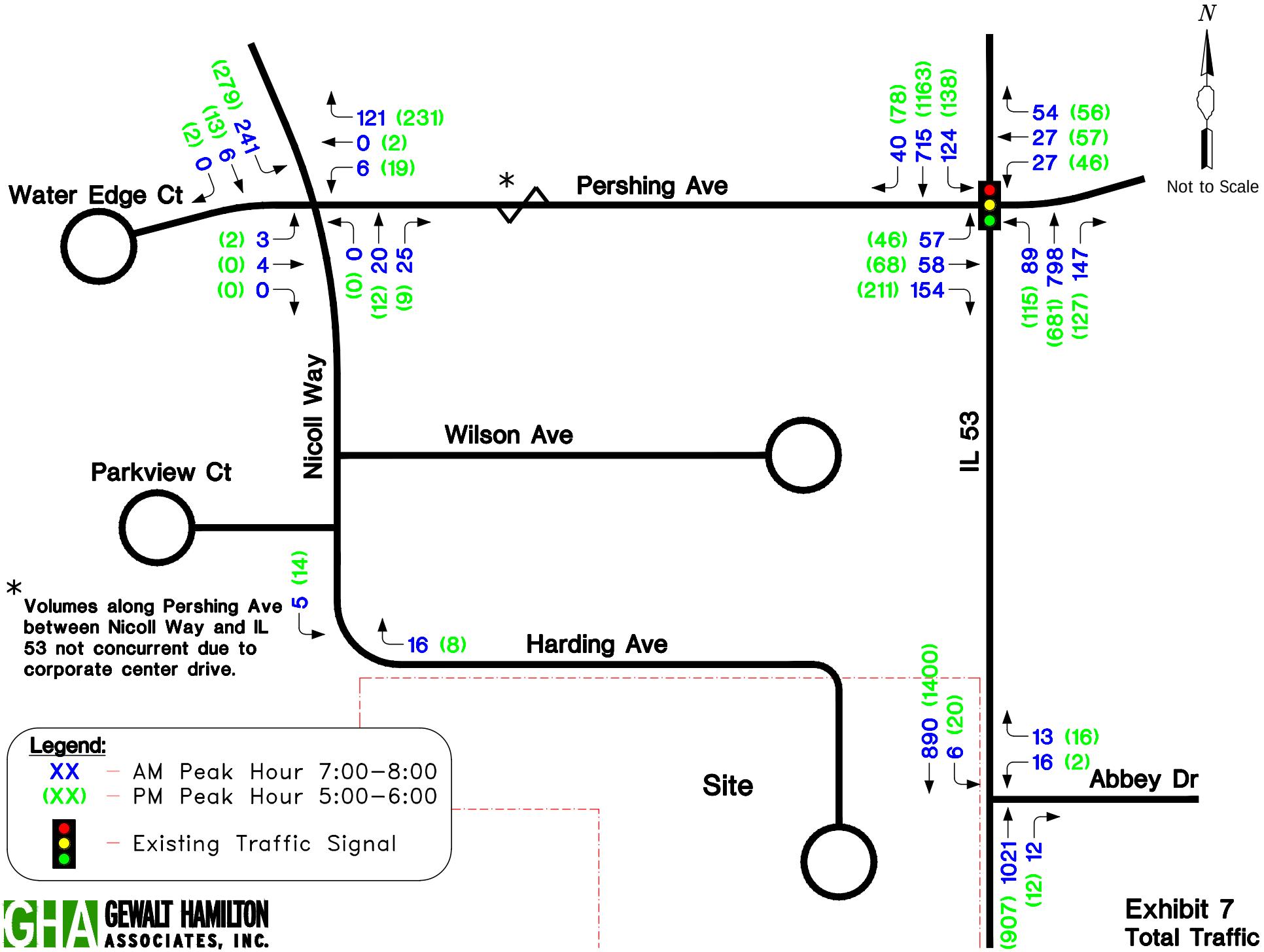


GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 6
Site Traffic



GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 7
Total Traffic

Exhibit 8
Intersection Capacity and Queue Analyses

Proposed Residential Development - Glen Ellyn, Illinois

Part A. Parameters - Type of Traffic Control *(Source: Highway Capacity Manual 6th Edition)*

I. Traffic Signals

LOS	Delay (sec / veh)	Description
A	<10	All signal phases clear waiting vehicles without delay
B	>10 and < 20	Minimal delay experienced on select signal phases
C	>20 and < 35	Some delay experienced on several phases; often used as design criteria
D	>35 and < 55	Usually considered as the acceptable delay standard
E	>55 and < 80	Very long delays experienced during the peak hours
F	>80	Unacceptable delays experienced throughout the peak hours

II. Stop Sign

LOS	Delay (sec / veh)
A	< 10
B	>10 and < 15
C	>15 and < 25
D	>25 and < 35
E	>35 and < 50
F	>50

Part B. Results

	Roadway Conditions	LOS Per Movement By Approach (> = Shared Lane; - = Non Critical or not Allowed Movement)												Intersection / Approach	
		Eastbound			Westbound			Northbound			Southbound			Delay	
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	(sec / veh)	LOS
1. IL 53 & Pershing Ave	**Signalized**													**Intersection Delay**	
A. Weekday Morning Peak Hour															
Existing Traffic (See *Exhibit 2*)	• Current	C	D	<	C	D	<	A	A	B	A	A	A	15.1	B
	• 95th Queue Length (ft)	49	253	-	25	84	-	35	177	199	49	127	130	-	-
No-Build Traffic (See *Exhibit 3*)	• Current	C	D	<	C	D	<	A	B	B	B	A	A	15.8	B
	• 95th Queue Length (ft)	51	263	-	26	87	-	37	194	214	52	139	141	-	-
Total Traffic (See *Exhibit 7*)	• Current	C	D	<	C	D	<	A	B	B	B	A	A	16.2	B
	• 95th Queue Length (ft)	55	273	-	26	87	-	38	198	217	53	143	146	-	-
B. Weekday Evening Peak Hour															
Existing Traffic (See Exhibit 2)	• Current	D	E	<	D	D	<	B	A	A	A	A	A	18.0	B
	• 95th Queue Length (ft)	51	391	-	54	146	-	53	133	165	65	202	219	-	-
No-Build Traffic (See Exhibit 3)	• Current	D	E	<	D	D	<	B	A	B	B	A	B	18.7	B
	• 95th Queue Length (ft)	53	408	-	56	151	-	57	147	180	70	220	237	-	-
Total Traffic (See Exhibit 7)	• Current	D	E	<	D	D	<	B	A	B	B	A	B	19.0	B
	• 95th Queue Length (ft)	55	414	-	56	151	-	60	149	182	70	226	244	-	-
2. IL 53 & Abbey Dr	**TWSC - WB Stops**													**WB Approach Delay**	
A. Weekday Morning Peak Hour															
Existing Traffic (See *Exhibit 2*)	• Current	-	-	-	>	F	<	-	-	-	B	-	-	58.8	F
	• 95th Queue Length (ft)	-	-	-	-	30	-	-	-	-	0	-	-	-	-
No-Build Traffic (See *Exhibit 3*)	• Current	-	-	-	>	F	<	-	-	-	B	-	-	68.0	F
	• 95th Queue Length (ft)	-	-	-	-	35	-	-	-	-	0	-	-	-	-
Total Traffic (See *Exhibit 7*)	• Current	-	-	-	>	F	<	-	-	-	B	-	-	69.0	F
	• 95th Queue Length (ft)	-	-	-	-	35	-	-	-	-	0	-	-	-	-
B. Weekday Evening Peak Hour															
Existing Traffic (See Exhibit 2)	• Current	-	-	-	>	D	<	-	-	-	B	-	-	30.4	D
	• 95th Queue Length (ft)	-	-	-	-	10	-	-	-	-	3	-	-	-	-
No-Build Traffic (See Exhibit 3)	• Current	-	-	-	>	D	<	-	-	-	B	-	-	33.6	D
	• 95th Queue Length (ft)	-	-	-	-	13	-	-	-	-	3	-	-	-	-
Total Traffic (See Exhibit 7)	• Current	-	-	-	>	D	<	-	-	-	B	-	-	34.0	D
	• 95th Queue Length (ft)	-	-	-	-	13	-	-	-	-	3	-	-	-	-

GHA GEWALT HAMILTON ASSOCIATES, INC.

APPENDIX A
Photo Inventory

Looking south along Nicoll Way at Harding Ave

Looking north through Nicoll Way & Harding Ave

Looking west along Harding Ave at Nicoll Way

Looking east along Harding Ave

Looking north along Nicoll Way at Pershing Ave

Looking west along Pershing Ave at Nicoll Way

Looking east along Pershing Ave at IL 53

Looking south along IL 53 at Pershing Ave

Looking west along Pershing Ave at IL 53

Looking north along IL 53 at Pershing Ave

Looking north along IL 53 at Abbey Dr

Looking west along Abbey Dr at IL 53

APPENDIX B

Existing Traffic Count Summary Sheets

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Pershing Ave
Site Code:
Start Date: 08/29/2017

Turning Movement Data

Start Time	IL-53 Southbound						Pershing Ave Westbound						IL-53 Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	2	46	13	0	0	61	13	5	6	0	0	24	15	89	6	0	0	110	7	7	2	0	0	16	211
6:15 AM	3	61	24	0	0	88	11	6	3	0	0	20	21	115	12	0	0	148	16	7	1	0	0	24	280
6:30 AM	4	94	18	0	1	116	14	9	5	0	0	28	20	156	13	0	0	189	19	8	4	0	1	31	364
6:45 AM	7	110	19	0	0	136	11	10	5	0	0	26	33	184	19	0	0	236	23	11	6	0	0	40	438
Hourly Total	16	311	74	0	1	401	49	30	19	0	0	98	89	544	50	0	0	683	65	33	13	0	1	111	1293
7:00 AM	4	127	28	0	1	159	18	6	10	0	0	34	32	199	17	0	1	248	36	13	8	0	0	57	498
7:15 AM	9	172	21	0	0	202	8	7	2	0	1	17	34	191	15	0	3	240	38	14	13	0	0	65	524
7:30 AM	10	227	27	0	0	264	13	6	11	0	1	30	40	201	26	0	0	267	42	14	8	0	0	64	625
7:45 AM	14	161	43	0	0	218	13	7	3	0	0	23	35	176	26	0	1	237	26	14	21	0	0	61	539
Hourly Total	37	687	119	0	1	843	52	26	26	0	2	104	141	767	84	0	5	992	142	55	50	0	0	247	2186
8:00 AM	4	165	30	0	0	199	3	5	6	0	0	14	26	139	32	0	0	197	41	12	8	0	0	61	471
8:15 AM	12	195	39	0	4	246	9	8	3	0	0	20	37	147	23	0	0	207	41	20	4	0	5	65	538
8:30 AM	11	166	41	0	0	218	12	12	6	0	0	30	28	133	22	1	0	184	22	27	10	1	0	60	492
8:45 AM	12	126	46	0	0	184	9	14	5	0	0	28	39	118	29	0	0	186	28	33	3	0	0	64	462
Hourly Total	39	652	156	0	4	847	33	39	20	0	0	92	130	537	106	1	0	774	132	92	25	1	5	250	1963
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	10	211	20	0	0	241	17	12	6	0	1	35	22	131	19	0	1	172	49	9	11	0	0	69	517
4:15 PM	11	257	20	0	0	288	10	11	10	0	0	31	24	167	19	0	1	210	49	12	13	0	0	74	603
4:30 PM	7	237	19	0	0	263	11	21	7	0	0	39	26	195	36	0	0	257	53	23	12	0	0	88	647
4:45 PM	10	244	18	0	0	272	9	7	9	0	0	25	29	156	28	1	0	214	47	21	11	0	0	79	590
Hourly Total	38	949	77	0	0	1064	47	51	32	0	1	130	101	649	102	1	2	853	198	65	47	0	0	310	2357
5:00 PM	9	261	44	0	0	314	15	12	12	0	0	39	31	161	28	0	0	220	60	15	17	0	0	92	665
5:15 PM	22	253	34	0	0	309	15	11	9	0	0	35	42	174	33	0	0	249	57	20	5	0	0	82	675
5:30 PM	16	302	24	0	0	342	10	17	14	0	0	41	26	169	22	0	1	217	40	12	16	0	0	68	668
5:45 PM	23	302	31	0	0	356	14	15	9	0	0	38	23	151	23	0	1	197	43	17	4	0	0	64	655
Hourly Total	70	1118	133	0	0	1321	54	55	44	0	0	153	122	655	106	0	2	883	200	64	42	0	0	306	2663
6:00 PM	13	227	33	1	0	274	14	7	6	0	0	27	30	168	49	0	0	247	47	17	13	0	0	77	625
6:15 PM	13	184	31	0	1	228	15	11	12	0	0	38	30	157	26	0	0	213	57	17	6	0	0	80	559
6:30 PM	8	125	29	0	0	162	24	14	14	0	0	52	23	125	22	0	0	170	40	8	6	0	0	54	438
6:45 PM	5	124	19	0	0	148	9	11	12	0	0	32	21	82	17	0	0	120	40	7	5	0	0	52	352
Hourly Total	39	660	112	1	1	812	62	43	44	0	0	149	104	532	114	0	0	750	184	49	30	0	0	263	1974
Grand Total	239	4377	671	1	7	5288	297	244	185	0	3	726	687	3684	562	2	9	4935	921	358	207	1	6	1487	12436
Approach %	4.5	82.8	12.7	0.0	-	-	40.9	33.6	25.5	0.0	-	-	13.9	74.7	11.4	0.0	-	-	61.9	24.1	13.9	0.1	-	-	-
Total %	1.9	35.2	5.4	0.0	-	42.5	2.4	2.0	1.5	0.0	-	5.8	5.5	29.6	4.5	0.0	-	39.7	7.4	2.9	1.7	0.0	-	12.0	-
Lights	233	4267	666	1	-	5167	295	240	179	0	-	714	673	3610	548	2	-	4833	904	352	194	1	-	1451	12165
% Lights	97.5	97.5	99.3	100.0	-	97.7	99.3	98.4	96.8	-	-	98.3	98.0	98.0	97.5	100.0	-	97.9	98.2	98.3	93.7	100.0	-	97.6	97.8
Mediums	3	65	5	0	-	73	2	4	6	0	-	12	14	47	10	0	-	71	13	6	8	0	-	27	183
% Mediums	1.3	1.5	0.7	0.0	-	1.4	0.7	1.6	3.2	-	-	1.7	2.0	1.3	1.8	0.0	-	1.4	1.4	1.7	3.9	0.0	-	1.8	1.5
Articulated Trucks	3	45	0	0	-	48	0	0	0	0	-	0	0	27	4	0	-	31	4	0	5	0	-	9	88

% Articulated Trucks	1.3	1.0	0.0	0.0	-	0.9	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.7	0.0	-	0.6	0.4	0.0	2.4	0.0	-	0.6	0.7
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	33.3	-	-	-	-	-	33.3	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	66.7	-	-	-	-	-	66.7	-	-	-	-	-	100.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Pershing Ave
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (7:00 AM)

Start Time	IL-53 Southbound						Pershing Ave Westbound						IL-53 Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	4	127	28	0	1	159	18	6	10	0	0	34	32	199	17	0	1	248	36	13	8	0	0	57	498
7:15 AM	9	172	21	0	0	202	8	7	2	0	1	17	34	191	15	0	3	240	38	14	13	0	0	65	524
7:30 AM	10	227	27	0	0	264	13	6	11	0	1	30	40	201	26	0	0	267	42	14	8	0	0	64	625
7:45 AM	14	161	43	0	0	218	13	7	3	0	0	23	35	176	26	0	1	237	26	14	21	0	0	61	539
Total	37	687	119	0	1	843	52	26	26	0	2	104	141	767	84	0	5	992	142	55	50	0	0	247	2186
Approach %	4.4	81.5	14.1	0.0	-	-	50.0	25.0	25.0	0.0	-	-	14.2	77.3	8.5	0.0	-	-	57.5	22.3	20.2	0.0	-	-	-
Total %	1.7	31.4	5.4	0.0	-	38.6	2.4	1.2	1.2	0.0	-	4.8	6.5	35.1	3.8	0.0	-	45.4	6.5	2.5	2.3	0.0	-	11.3	-
PHF	0.661	0.757	0.692	0.000	-	0.798	0.722	0.929	0.591	0.000	-	0.765	0.881	0.954	0.808	0.000	-	0.929	0.845	0.982	0.595	0.000	-	0.950	0.874
Lights	36	654	119	0	-	809	52	26	22	0	-	100	138	752	80	0	-	970	134	52	45	0	-	231	2110
% Lights	97.3	95.2	100.0	-	-	96.0	100.0	100.0	84.6	-	-	96.2	97.9	98.0	95.2	-	-	97.8	94.4	94.5	90.0	-	-	93.5	96.5
Mediums	0	24	0	0	-	24	0	0	4	0	-	4	3	10	2	0	-	15	5	3	2	0	-	10	53
% Mediums	0.0	3.5	0.0	-	-	2.8	0.0	0.0	15.4	-	-	3.8	2.1	1.3	2.4	-	-	1.5	3.5	5.5	4.0	-	-	4.0	2.4
Articulated Trucks	1	9	0	0	-	10	0	0	0	0	-	0	0	5	2	0	-	7	3	0	3	0	-	6	23
% Articulated Trucks	2.7	1.3	0.0	-	-	1.2	0.0	0.0	0.0	-	-	0.0	0.0	0.7	2.4	-	-	0.7	2.1	0.0	6.0	-	-	2.4	1.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Pershing Ave
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	IL-53 Southbound						Pershing Ave Westbound						IL-53 Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:00 PM	9	261	44	0	0	314	15	12	12	0	0	39	31	161	28	0	0	220	60	15	17	0	0	92	665
5:15 PM	22	253	34	0	0	309	15	11	9	0	0	35	42	174	33	0	0	249	57	20	5	0	0	82	675
5:30 PM	16	302	24	0	0	342	10	17	14	0	0	41	26	169	22	0	1	217	40	12	16	0	0	68	668
5:45 PM	23	302	31	0	0	356	14	15	9	0	0	38	23	151	23	0	1	197	43	17	4	0	0	64	655
Total	70	1118	133	0	0	1321	54	55	44	0	0	153	122	655	106	0	2	883	200	64	42	0	0	306	2663
Approach %	5.3	84.6	10.1	0.0	-	-	35.3	35.9	28.8	0.0	-	-	13.8	74.2	12.0	0.0	-	-	65.4	20.9	13.7	0.0	-	-	-
Total %	2.6	42.0	5.0	0.0	-	49.6	2.0	2.1	1.7	0.0	-	5.7	4.6	24.6	4.0	0.0	-	33.2	7.5	2.4	1.6	0.0	-	11.5	-
PHF	0.761	0.925	0.756	0.000	-	0.928	0.900	0.809	0.786	0.000	-	0.933	0.726	0.941	0.803	0.000	-	0.887	0.833	0.800	0.618	0.000	-	0.832	0.986
Lights	70	1110	132	0	-	1312	54	54	44	0	-	152	120	647	106	0	-	873	200	64	41	0	-	305	2642
% Lights	100.0	99.3	99.2	-	-	99.3	100.0	98.2	100.0	-	-	99.3	98.4	98.8	100.0	-	-	98.9	100.0	100.0	97.6	-	-	99.7	99.2
Mediums	0	4	1	0	-	5	0	1	0	0	-	1	2	4	0	0	-	6	0	0	1	0	-	1	13
% Mediums	0.0	0.4	0.8	-	-	0.4	0.0	1.8	0.0	-	-	0.7	1.6	0.6	0.0	-	-	0.7	0.0	0.0	2.4	-	-	0.3	0.5
Articulated Trucks	0	4	0	0	-	4	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	8
% Articulated Trucks	0.0	0.4	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.6	0.0	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.3
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Abbey Dr
Site Code:
Start Date: 08/29/2017
Page No: 1

Turning Movement Data

Start Time	IL-53 Southbound					Abbey Dr Westbound					IL-53 Northbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
6:00 AM	61	0	0	0	61	1	0	0	0	1	0	108	0	0	108	170
6:15 AM	77	1	0	0	78	1	0	0	0	1	0	157	0	0	157	236
6:30 AM	125	0	0	0	125	0	0	0	0	0	0	184	0	0	184	309
6:45 AM	132	3	0	0	135	4	0	0	0	4	4	232	0	0	236	375
Hourly Total	395	4	0	0	399	6	0	0	0	6	4	681	0	0	685	1090
7:00 AM	176	1	0	0	177	1	7	0	0	8	3	247	0	0	250	435
7:15 AM	216	4	0	0	220	5	3	0	0	8	3	224	0	0	227	455
7:30 AM	268	1	0	0	269	3	4	0	0	7	6	274	0	0	280	556
7:45 AM	225	0	0	0	225	4	2	0	0	6	0	232	0	0	232	463
Hourly Total	885	6	0	0	891	13	16	0	0	29	12	977	0	0	989	1909
8:00 AM	205	2	0	0	207	8	2	0	0	10	0	185	0	0	185	402
8:15 AM	228	4	0	0	232	5	6	0	0	11	3	198	0	0	201	444
8:30 AM	203	1	0	0	204	7	5	0	0	12	1	179	0	0	180	396
8:45 AM	163	1	0	0	164	2	4	0	0	6	0	190	0	0	190	360
Hourly Total	799	8	0	0	807	22	17	0	0	39	4	752	0	0	756	1602
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	262	2	0	0	264	0	1	0	0	1	0	172	0	0	172	437
4:15 PM	308	3	0	0	311	2	3	0	0	5	2	206	0	0	208	524
4:30 PM	295	4	1	0	300	1	0	0	0	1	6	262	0	0	268	569
4:45 PM	307	2	0	0	309	3	3	0	0	6	3	211	0	0	214	529
Hourly Total	1172	11	1	0	1184	6	7	0	0	13	11	851	0	0	862	2059
5:00 PM	349	7	0	0	356	4	0	0	0	4	1	223	0	0	224	584
5:15 PM	325	5	1	0	331	4	0	0	0	4	3	246	0	0	249	584
5:30 PM	352	1	0	0	353	2	1	0	0	3	5	211	0	0	216	572
5:45 PM	330	7	0	0	337	6	1	0	0	7	3	202	0	0	205	549
Hourly Total	1356	20	1	0	1377	16	2	0	0	18	12	882	0	0	894	2289
6:00 PM	309	2	0	0	311	2	0	0	0	2	5	237	0	0	242	555
6:15 PM	247	6	0	0	253	2	3	0	0	5	6	199	0	0	205	463
6:30 PM	176	5	1	0	182	1	2	0	0	3	2	175	0	0	177	362
6:45 PM	168	5	0	0	173	2	2	0	0	4	3	117	0	0	120	297
Hourly Total	900	18	1	0	919	7	7	0	0	14	16	728	0	0	744	1677
Grand Total	5507	67	3	0	5577	70	49	0	0	119	59	4871	0	0	4930	10626
Approach %	98.7	1.2	0.1	-	-	58.8	41.2	0.0	-	-	1.2	98.8	0.0	-	-	-
Total %	51.8	0.6	0.0	-	52.5	0.7	0.5	0.0	-	1.1	0.6	45.8	0.0	-	46.4	-
Lights	5371	65	3	-	5439	70	47	0	-	117	54	4766	0	-	4820	10376
% Lights	97.5	97.0	100.0	-	97.5	100.0	95.9	-	-	98.3	91.5	97.8	-	-	97.8	97.6
Mediums	87	2	0	-	89	0	2	0	-	2	5	71	0	-	76	167
% Mediums	1.6	3.0	0.0	-	1.6	0.0	4.1	-	-	1.7	8.5	1.5	-	-	1.5	1.6
Articulated Trucks	49	0	0	-	49	0	0	0	-	0	0	34	0	-	34	83
% Articulated Trucks	0.9	0.0	0.0	-	0.9	0.0	0.0	-	-	0.0	0.0	0.7	-	-	0.7	0.8
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-

% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Abbey Dr
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (7:00 AM)

Start Time	IL-53 Southbound					Abbey Dr Westbound					IL-53 Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
7:00 AM	176	1	0	0	177	1	7	0	0	8	3	247	0	0	250	435
7:15 AM	216	4	0	0	220	5	3	0	0	8	3	224	0	0	227	455
7:30 AM	268	1	0	0	269	3	4	0	0	7	6	274	0	0	280	556
7:45 AM	225	0	0	0	225	4	2	0	0	6	0	232	0	0	232	463
Total	885	6	0	0	891	13	16	0	0	29	12	977	0	0	989	1909
Approach %	99.3	0.7	0.0	-	-	44.8	55.2	0.0	-	-	1.2	98.8	0.0	-	-	-
Total %	46.4	0.3	0.0	-	46.7	0.7	0.8	0.0	-	1.5	0.6	51.2	0.0	-	51.8	-
PHF	0.826	0.375	0.000	-	0.828	0.650	0.571	0.000	-	0.906	0.500	0.891	0.000	-	0.883	0.858
Lights	840	5	0	-	845	13	15	0	-	28	9	958	0	-	967	1840
% Lights	94.9	83.3	-	-	94.8	100.0	93.8	-	-	96.6	75.0	98.1	-	-	97.8	96.4
Mediums	32	1	0	-	33	0	1	0	-	1	3	12	0	-	15	49
% Mediums	3.6	16.7	-	-	3.7	0.0	6.3	-	-	3.4	25.0	1.2	-	-	1.5	2.6
Articulated Trucks	13	0	0	-	13	0	0	0	-	0	0	7	0	-	7	20
% Articulated Trucks	1.5	0.0	-	-	1.5	0.0	0.0	-	-	0.0	0.0	0.7	-	-	0.7	1.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: IL-53 & Abbey Dr
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	IL-53 Southbound					Abbey Dr Westbound					IL-53 Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
5:00 PM	349	7	0	0	356	4	0	0	0	4	1	223	0	0	224	584
5:15 PM	325	5	1	0	331	4	0	0	0	4	3	246	0	0	249	584
5:30 PM	352	1	0	0	353	2	1	0	0	3	5	211	0	0	216	572
5:45 PM	330	7	0	0	337	6	1	0	0	7	3	202	0	0	205	549
Total	1356	20	1	0	1377	16	2	0	0	18	12	882	0	0	894	2289
Approach %	98.5	1.5	0.1	-	-	88.9	11.1	0.0	-	-	1.3	98.7	0.0	-	-	-
Total %	59.2	0.9	0.0	-	60.2	0.7	0.1	0.0	-	0.8	0.5	38.5	0.0	-	39.1	-
PHF	0.963	0.714	0.250	-	0.967	0.667	0.500	0.000	-	0.643	0.600	0.896	0.000	-	0.898	0.980
Lights	1344	20	1	-	1365	16	2	0	-	18	11	869	0	-	880	2263
% Lights	99.1	100.0	100.0	-	99.1	100.0	100.0	-	-	100.0	91.7	98.5	-	-	98.4	98.9
Mediums	8	0	0	-	8	0	0	0	-	0	1	8	0	-	9	17
% Mediums	0.6	0.0	0.0	-	0.6	0.0	0.0	-	-	0.0	8.3	0.9	-	-	1.0	0.7
Articulated Trucks	4	0	0	-	4	0	0	0	-	0	0	5	0	-	5	9
% Articulated Trucks	0.3	0.0	0.0	-	0.3	0.0	0.0	-	-	0.0	0.0	0.6	-	-	0.6	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: Pershing Ave & Nicole Way
Site Code:
Start Date: 08/29/2017

Turning Movement Data

Start Time	Nicoll Way Southbound						Waters Edge Ct Westbound						Nicoll Way Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
6:00 AM	0	0	16	0	0	16	10	0	0	0	0	10	0	2	0	0	0	2	0	0	0	0	0	0	28
6:15 AM	0	0	20	0	0	20	21	0	0	0	0	21	1	1	0	0	0	2	0	0	0	0	1	0	43
6:30 AM	0	0	30	0	0	30	25	0	2	0	0	27	0	2	0	0	1	2	0	0	0	0	2	0	59
6:45 AM	0	0	38	0	0	38	35	0	0	0	0	35	2	3	0	0	0	5	0	0	0	0	0	0	78
Hourly Total	0	0	104	0	0	104	91	0	2	0	0	93	3	8	0	0	1	11	0	0	0	0	3	0	208
7:00 AM	0	1	51	0	0	52	22	0	0	0	0	22	3	3	0	0	1	6	0	2	1	0	1	3	83
7:15 AM	0	0	58	0	0	58	22	0	0	0	0	22	4	6	0	0	2	10	0	2	0	0	3	2	92
7:30 AM	0	3	60	0	0	63	38	0	0	0	0	38	4	2	0	0	0	6	0	0	2	0	0	2	109
7:45 AM	0	1	63	0	0	64	34	0	2	0	0	36	2	5	0	0	1	7	0	0	0	0	0	0	107
Hourly Total	0	5	232	0	0	237	116	0	2	0	0	118	13	16	0	0	4	29	0	4	3	0	4	7	391
8:00 AM	0	3	55	1	0	59	31	0	1	0	0	32	3	3	0	0	0	6	0	0	1	0	0	1	98
8:15 AM	1	0	65	0	0	66	33	0	2	0	0	35	3	5	0	0	0	8	0	1	1	0	0	2	111
8:30 AM	0	4	54	0	0	58	37	0	1	0	0	38	3	3	0	0	2	6	0	0	1	0	2	1	103
8:45 AM	1	3	57	0	0	61	47	0	0	0	0	47	5	0	0	0	0	5	0	0	1	0	2	1	114
Hourly Total	2	10	231	1	0	244	148	0	4	0	0	152	14	11	0	0	2	25	0	1	4	0	4	5	426
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	7	69	0	0	76	43	0	1	0	0	44	1	0	0	0	2	1	0	0	0	0	2	0	121
4:15 PM	2	1	67	0	0	70	43	0	3	0	0	46	1	3	0	0	1	4	0	1	1	0	1	2	122
4:30 PM	2	5	71	0	0	78	65	0	0	0	0	65	1	2	0	0	4	3	0	0	0	0	4	0	146
4:45 PM	0	3	71	0	0	74	48	0	1	0	0	49	0	1	0	0	0	1	0	0	0	0	2	0	124
Hourly Total	4	16	278	0	0	298	199	0	5	0	0	204	3	6	0	0	7	9	0	1	1	0	9	2	513
5:00 PM	0	0	70	0	0	70	47	0	1	0	0	48	1	4	0	0	4	5	0	0	0	0	5	0	123
5:15 PM	1	2	74	0	0	77	64	2	2	0	0	68	1	3	0	0	2	4	0	0	0	0	4	0	149
5:30 PM	0	4	61	0	0	65	53	0	4	0	0	57	1	2	0	0	1	3	0	0	1	0	0	1	126
5:45 PM	1	3	63	0	0	67	58	0	2	0	0	60	0	1	0	0	0	1	0	0	1	0	0	1	129
Hourly Total	2	9	268	0	0	279	222	2	9	0	0	233	3	10	0	0	7	13	0	0	2	0	9	2	527
6:00 PM	1	3	76	0	0	80	61	1	8	0	0	70	1	2	0	0	0	3	0	1	0	0	5	1	154
6:15 PM	2	2	68	0	0	72	54	0	0	0	0	54	1	1	0	0	2	2	1	0	0	0	3	1	129
6:30 PM	2	2	53	0	0	57	40	0	1	0	0	41	1	5	0	0	0	6	1	0	1	0	2	2	106
6:45 PM	0	4	44	0	0	48	32	1	0	0	0	33	2	4	0	0	1	6	0	0	1	0	2	1	88
Hourly Total	5	11	241	0	0	257	187	2	9	0	0	198	5	12	0	0	3	17	2	1	2	0	12	5	477
Grand Total	13	51	1354	1	0	1419	963	4	31	0	0	998	41	63	0	0	24	104	2	7	12	0	41	21	2542
Approach %	0.9	3.6	95.4	0.1	-	-	96.5	0.4	3.1	0.0	-	-	39.4	60.6	0.0	0.0	-	-	9.5	33.3	57.1	0.0	-	-	-
Total %	0.5	2.0	53.3	0.0	-	55.8	37.9	0.2	1.2	0.0	-	39.3	1.6	2.5	0.0	0.0	-	4.1	0.1	0.3	0.5	0.0	-	0.8	-
Lights	13	51	1319	1	-	1384	938	4	30	0	-	972	38	63	0	0	-	101	2	7	12	0	-	21	2478
% Lights	100.0	100.0	97.4	100.0	-	97.5	97.4	100.0	96.8	-	-	97.4	92.7	100.0	-	-	-	97.1	100.0	100.0	100.0	-	-	100.0	97.5
Mediums	0	0	30	0	-	30	17	0	1	0	-	18	3	0	0	0	-	3	0	0	0	0	-	0	51
% Mediums	0.0	0.0	2.2	0.0	-	2.1	1.8	0.0	3.2	-	-	1.8	7.3	0.0	-	-	-	2.9	0.0	0.0	0.0	-	-	0.0	2.0
Articulated Trucks	0	0	5	0	-	5	8	0	0	0	-	8	0	0	0	0	-	0	0	0	0	0	-	0	13

% Articulated Trucks	0.0	0.0	0.4	0.0	-	0.4	0.8	0.0	0.0	-	-	0.8	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.5
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	4.9	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	24	-	-	-	-	-	39	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	95.1	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: Pershing Ave & Nicole Way
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Nicoll Way Southbound						Waters Edge Ct Westbound						Nicoll Way Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	0	1	51	0	0	52	22	0	0	0	0	22	3	3	0	0	1	6	0	2	1	0	1	3	83
7:15 AM	0	0	58	0	0	58	22	0	0	0	0	22	4	6	0	0	2	10	0	2	0	0	3	2	92
7:30 AM	0	3	60	0	0	63	38	0	0	0	0	38	4	2	0	0	0	6	0	0	2	0	0	2	109
7:45 AM	0	1	63	0	0	64	34	0	2	0	0	36	2	5	0	0	1	7	0	0	0	0	0	0	107
Total	0	5	232	0	0	237	116	0	2	0	0	118	13	16	0	0	4	29	0	4	3	0	4	7	391
Approach %	0.0	2.1	97.9	0.0	-	-	98.3	0.0	1.7	0.0	-	-	44.8	55.2	0.0	0.0	-	-	0.0	57.1	42.9	0.0	-	-	-
Total %	0.0	1.3	59.3	0.0	-	60.6	29.7	0.0	0.5	0.0	-	30.2	3.3	4.1	0.0	0.0	-	7.4	0.0	1.0	0.8	0.0	-	1.8	-
PHF	0.000	0.417	0.921	0.000	-	0.926	0.763	0.000	0.250	0.000	-	0.776	0.813	0.667	0.000	0.000	-	0.725	0.000	0.500	0.375	0.000	-	0.583	0.897
Lights	0	5	216	0	-	221	110	0	2	0	-	112	12	16	0	0	-	28	0	4	3	0	-	7	368
% Lights	-	100.0	93.1	-	-	93.2	94.8	-	100.0	-	-	94.9	92.3	100.0	-	-	-	96.6	-	100.0	100.0	-	-	100.0	94.1
Mediums	0	0	13	0	-	13	1	0	0	0	-	1	1	0	0	0	-	1	0	0	0	0	-	0	15
% Mediums	-	0.0	5.6	-	-	5.5	0.9	-	0.0	-	-	0.8	7.7	0.0	-	-	-	3.4	-	0.0	0.0	-	-	0.0	3.8
Articulated Trucks	0	0	3	0	-	3	5	0	0	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	8
% Articulated Trucks	-	0.0	1.3	-	-	1.3	4.3	-	0.0	-	-	4.2	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	2.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	25.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	75.0	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 jopitz@gha-engineers.com

Count Name: Pershing Ave & Nicole Way
Site Code:
Start Date: 08/29/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Nicoll Way Southbound						Waters Edge Ct Westbound						Nicoll Way Northbound						Pershing Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:00 PM	0	0	70	0	0	70	47	0	1	0	0	48	1	4	0	0	4	5	0	0	0	0	5	0	123
5:15 PM	1	2	74	0	0	77	64	2	2	0	0	68	1	3	0	0	2	4	0	0	0	0	4	0	149
5:30 PM	0	4	61	0	0	65	53	0	4	0	0	57	1	2	0	0	1	3	0	0	1	0	0	1	126
5:45 PM	1	3	63	0	0	67	58	0	2	0	0	60	0	1	0	0	0	1	0	0	1	0	0	1	129
Total	2	9	268	0	0	279	222	2	9	0	0	233	3	10	0	0	7	13	0	0	2	0	9	2	527
Approach %	0.7	3.2	96.1	0.0	-	-	95.3	0.9	3.9	0.0	-	-	23.1	76.9	0.0	0.0	-	-	0.0	0.0	100.0	0.0	-	-	-
Total %	0.4	1.7	50.9	0.0	-	52.9	42.1	0.4	1.7	0.0	-	44.2	0.6	1.9	0.0	0.0	-	2.5	0.0	0.0	0.4	0.0	-	0.4	-
PHF	0.500	0.563	0.905	0.000	-	0.906	0.867	0.250	0.563	0.000	-	0.857	0.750	0.625	0.000	0.000	-	0.650	0.000	0.000	0.500	0.000	-	0.500	0.884
Lights	2	9	268	0	-	279	221	2	9	0	-	232	3	10	0	0	-	13	0	0	2	0	-	2	526
% Lights	100.0	100.0	100.0	-	-	100.0	99.5	100.0	100.0	-	-	99.6	100.0	100.0	-	-	-	100.0	-	-	100.0	-	-	100.0	99.8
Mediums	0	0	0	0	-	0	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Mediums	0.0	0.0	0.0	-	-	0.0	0.5	0.0	0.0	-	-	0.4	0.0	0.0	-	-	-	0.0	-	-	0.0	-	-	0.0	0.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	-	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

APPENDIX C
CMAP Correspondence

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

October 5, 2018

William C. Grieve, P.E., PTOE
Senior Transportation Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061

Subject: IL 53 @ Pershing Avenue/Nicoll Way
IDOT

Dear Mr. Grieve:

In response to a request made on your behalf and dated October 5, 2018, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
IL 53 south of Roosevelt Rd (IL 38)	17,600	19,200
Pershing Ave west of IL 53	5,400	5,900

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2018 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2018cy_TrafficForecasts\GlenEllyn\du-49-18\du-49-18.docx

APPENDIX D

ITE Trip Generation Pages

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors). Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), and off-campus student apartment (Land Use 225) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the low-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:45 and 5:45 p.m., respectively. For the one site with Saturday data, the overall highest vehicle volume was counted between 9:45 and 10:45 a.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 11:45 a.m. and 12:45 p.m.

For the one dense multi-use urban site with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 6:15 and 7:15 p.m., respectively.

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

The average numbers of person trips per vehicle trip at the five general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.13 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.21 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, District of Columbia, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Minnesota, New Jersey, New York, Ontario, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, and Washington.

It is expected that the number of bedrooms and number of residents are likely correlated to the number of trips generated by a residential site. Many of the studies included in this land use did not indicate the total number of bedrooms. To assist in the future analysis of this land use, it is important that this information be collected and included in trip generation data submissions.

Source Numbers

168, 187, 188, 204, 211, 300, 305, 306, 319, 320, 321, 357, 390, 412, 418, 525, 530, 571, 579, 583, 864, 868, 869, 870, 896, 903, 918, 946, 947, 948, 951

Multifamily Housing (Low-Rise)
(220)

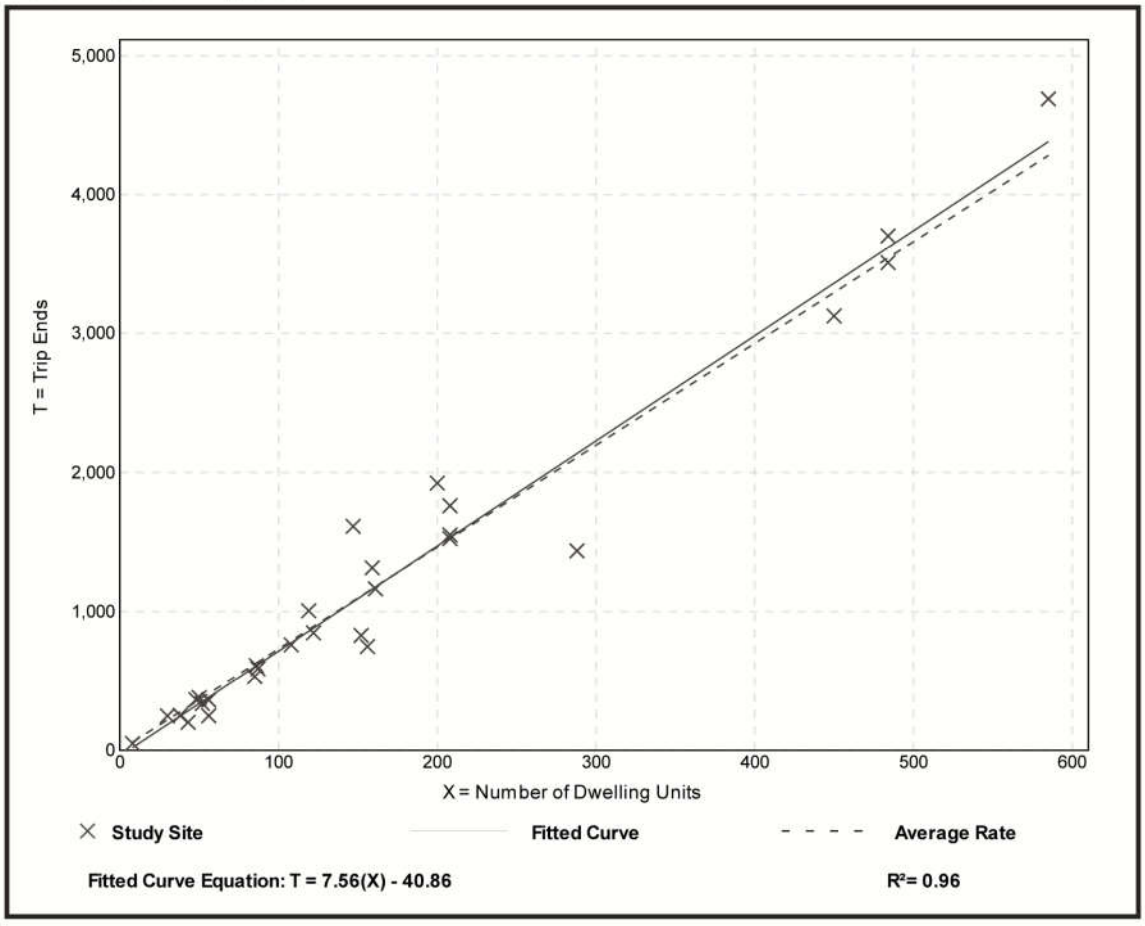
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 29
Avg. Num. of Dwelling Units: 168
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

Data Plot and Equation



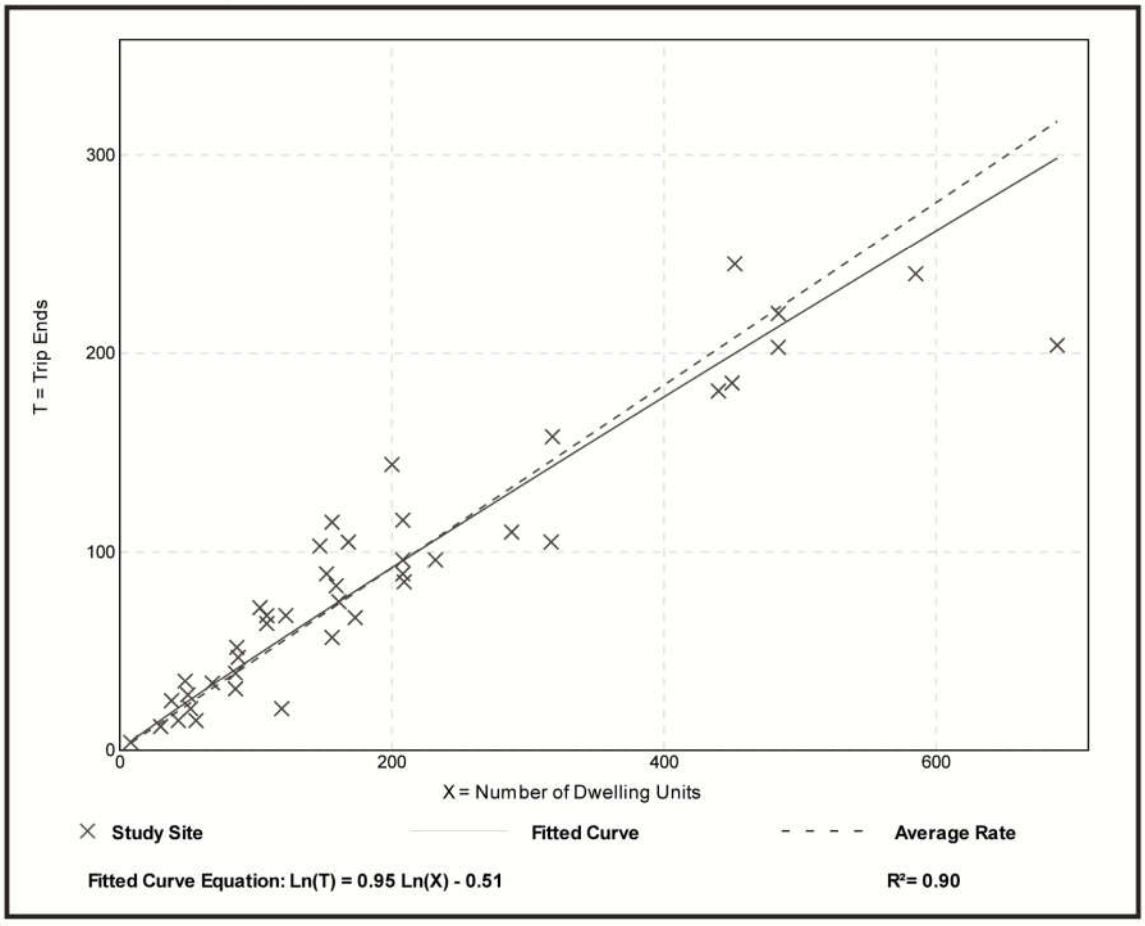
Multifamily Housing (Low-Rise)
(220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 42
Avg. Num. of Dwelling Units: 199
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12

Data Plot and Equation



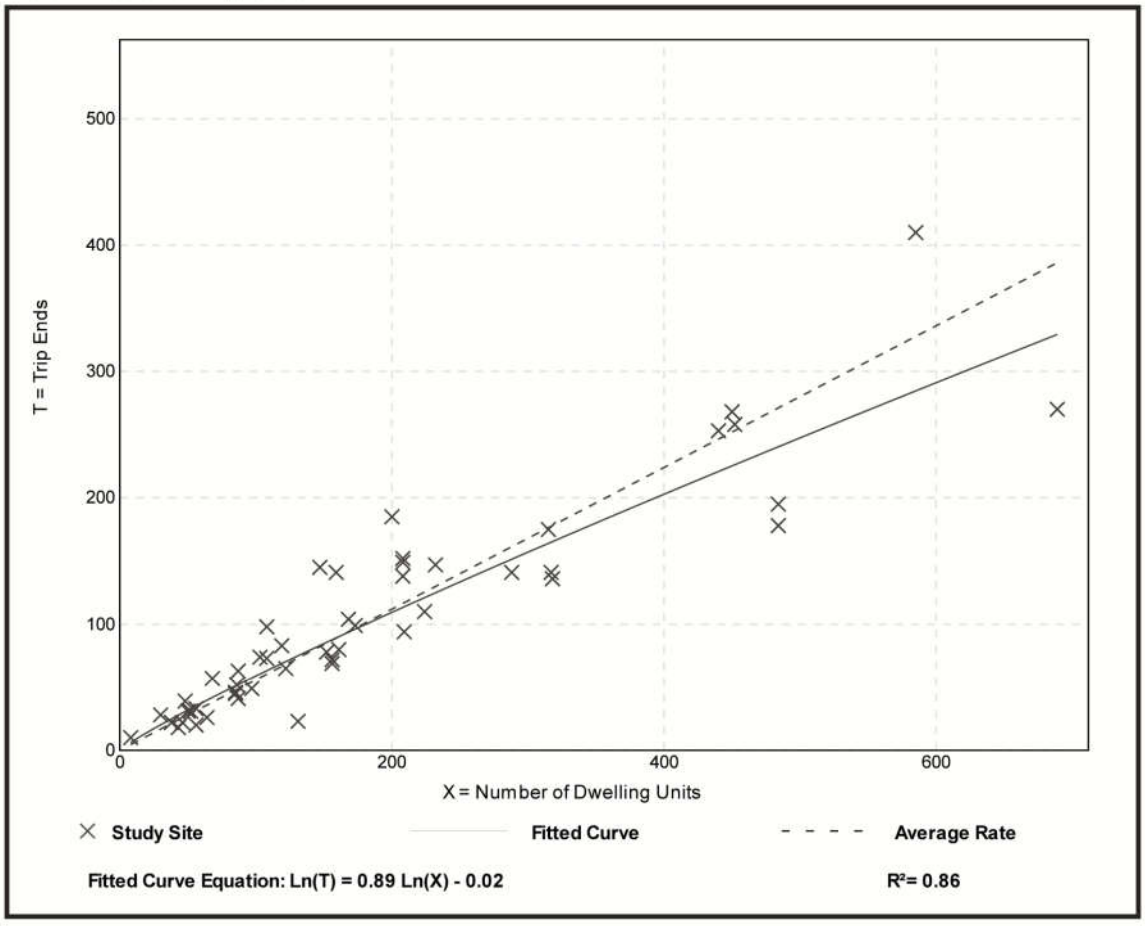
Multifamily Housing (Low-Rise)
(220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	50
Avg. Num. of Dwelling Units:	187
Directional Distribution:	63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

Data Plot and Equation



Land Use: 210
Single-Family Detached Housing

Description

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

Additional Data

The number of vehicles and residents had a high correlation with average weekday vehicle trip ends. The use of these variables was limited, however, because the number of vehicles and residents was often difficult to obtain or predict. The number of dwelling units was generally used as the independent variable of choice because it was usually readily available, easy to project, and had a high correlation with average weekday vehicle trip ends.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units had the highest trip generation rate per dwelling unit of all residential uses because they were the largest units in size and had more residents and more vehicles per unit than other residential land uses; they were generally located farther away from shopping centers, employment areas, and other trip attractors than other residential land uses; and they generally had fewer alternative modes of transportation available because they were typically not as concentrated as other residential land uses.

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:00 and 5:00 p.m., respectively. For the two sites with Saturday data, the overall highest vehicle volume was counted between 3:00 and 4:00 p.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 10:15 and 11:15 a.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Delaware, Illinois, Indiana, Maryland, Minnesota, Montana, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, and Virginia.

Source Numbers

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 903, 925, 936

Single-Family Detached Housing
(210)

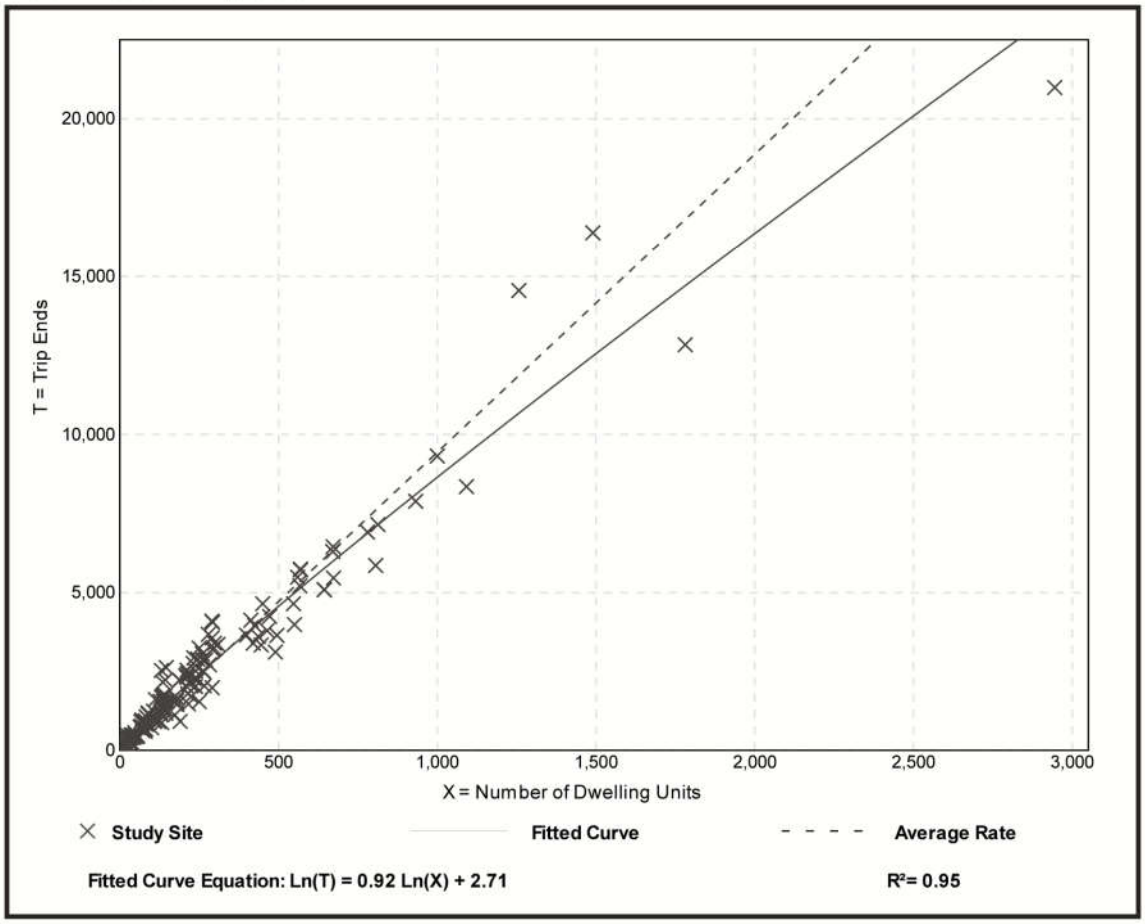
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 159
Avg. Num. of Dwelling Units: 264
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.44	4.81 - 19.39	2.10

Data Plot and Equation



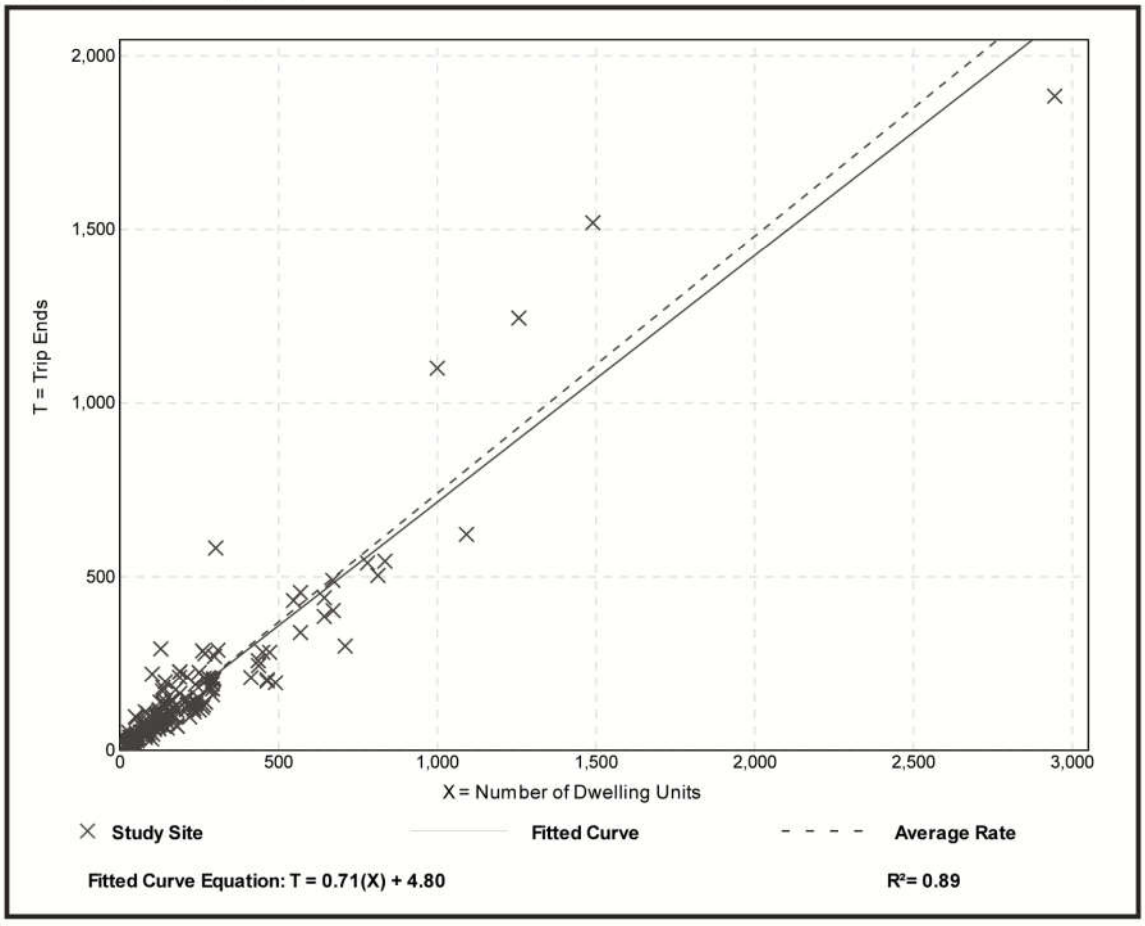
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 173
Avg. Num. of Dwelling Units: 219
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.74	0.33 - 2.27	0.27

Data Plot and Equation



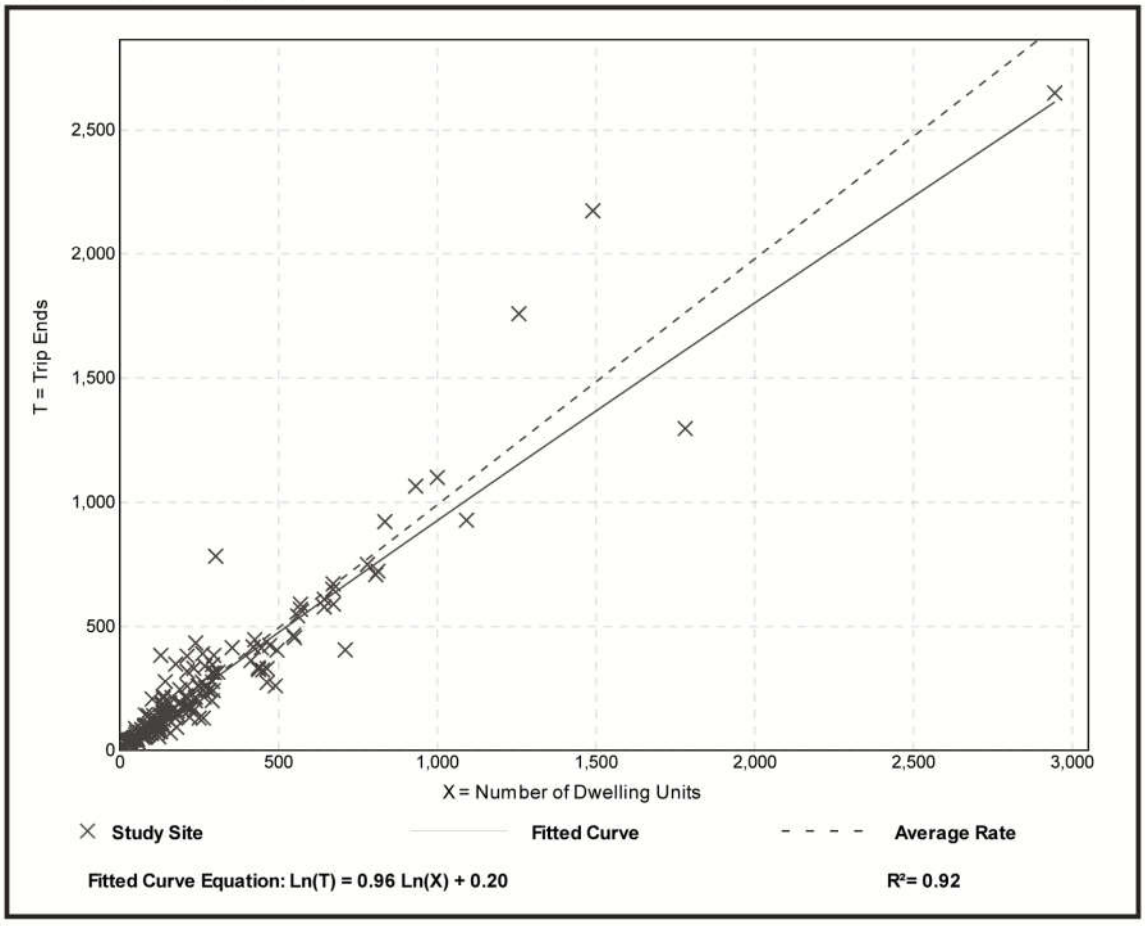
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. Num. of Dwelling Units: 242
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.44 - 2.98	0.31

Data Plot and Equation

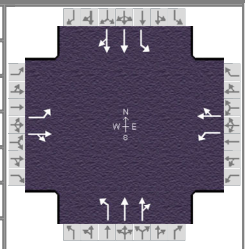


APPENDIX E

Capacity Analyses Worksheets

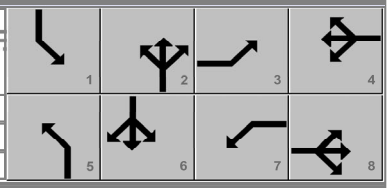
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX AM.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	55	142	26	26	52	84	767	141	119	687	37

Signal Information					EB			WB			NB		
Cycle, s	90.0	Reference Phase	2										
Offset, s	0	Reference Point	Begin	Green	4.4	0.9		47.6	3.2	1.3	13.6		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	0.0		4.5	3.5	0.0	4.5		
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		1.5	0.0	0.0	1.5		



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	55	142	26	26	52	84	767	141	119	687	37
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	6	2		0	0		2	1		0	4	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.5	18.0	13.5	18.0	18.0	45.0	13.5	40.5
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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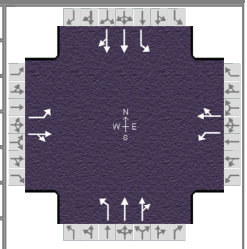
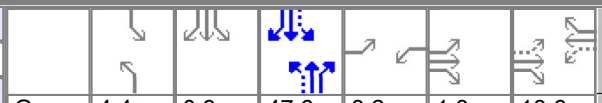
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX AM.xus		
Project Description	Existing				

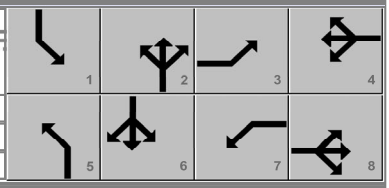


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	55	142	26	26	52	84	767	141	119	687	37

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.9	47.6	3.2	1.3	13.6
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.0	20.9	6.7	19.6	7.9	53.6	8.8	54.5
Change Period, (*Y+R c*), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.3	4.1	6.3	4.0	0.0	4.0	0.0
Queue Clearance Time (*g s*), s	4.5	13.9	3.2	6.3	4.2		5.0	
Green Extension Time (*g e*), s	0.0	1.0	0.0	1.8	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	0.99	1.00	1.00		1.00	
Max Out Probability	0.19	1.00	0.02	0.25	0.00		0.01	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	57	226		30	90		97	536	507	137	420	412
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1656		1810	1696		1781	1984	1876	1810	1938	1902
Queue Service Time (*g s*), s	2.5	11.9		1.2	4.3		2.2	11.2	12.8	3.0	7.7	8.1
Cycle Queue Clearance Time (*g c*), s	2.5	11.9		1.2	4.3		2.2	11.2	12.8	3.0	7.7	8.1
Green Ratio (*g/C*)	0.20	0.17		0.19	0.15		0.58	0.53	0.53	0.59	0.54	0.54
Capacity (*c*), veh/h	298	274		157	256		448	1050	993	399	1045	1026
Volume-to-Capacity Ratio (*X*)	0.193	0.827		0.190	0.350		0.216	0.511	0.511	0.343	0.402	0.402
Back of Queue (*Q*), ft/ln (95 th percentile)	49	253.1		24.9	83.7		34.8	177.3	199.3	48.7	127.2	129.7
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	10.0		1.0	3.3		1.4	7.0	8.0	1.9	4.9	5.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.28	0.00		0.09	0.00	0.00	0.29	0.00	0.00
Uniform Delay (*d 1*), s/veh	29.8	36.3		31.2	34.3		9.0	7.9	9.7	9.5	6.9	7.4
Incremental Delay (*d 2*), s/veh	0.3	16.3		0.6	1.7		0.2	1.8	1.9	0.5	1.2	1.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	30.1	52.6		31.8	36.0		9.3	9.7	11.5	10.0	8.1	8.6
Level of Service (LOS)	C	D		C	D		A	A	B	A	A	A
Approach Delay, s/veh / LOS	48.1	D		34.9	C		10.5	B		8.6	A	
Intersection Delay, s/veh / LOS	15.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.96	A	0.68	A	1.43	A	1.29	A

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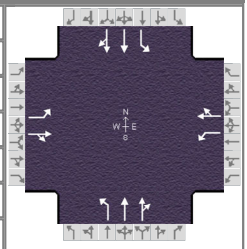
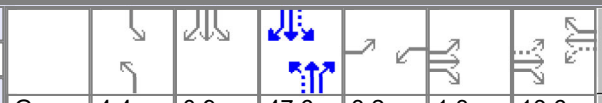
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX AM.xus		
Project Description	Existing				

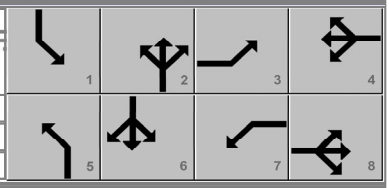


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	55	142	26	26	52	84	767	141	119	687	37

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.4	0.9	47.6	3.2	1.3	13.6
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.953	0.984	1.000	1.000	1.000	1.000	0.984	0.992	1.000	1.000	0.969	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.885	0.885		0.893	0.893		0.946	0.946		0.982	0.982
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1725	462	1193	1810	565	1131	1781	3261	599	1810	3644	196
Proportion of Vehicles Arriving on Green (P)	0.05	0.17	0.17	0.04	0.15	0.15	0.05	0.71	0.53	0.06	0.72	0.54
Incremental Delay Factor (k)	0.11	0.31		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.20	0.17	0.19	0.15	0.58	0.53	0.59	0.54
Permitted Saturation Flow Rate (s_p), veh/h/ln	1266	0	1173	0	660	0	549	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	13.6	0.0	13.6	0.0	47.6	0.0	47.6	0.0
Permitted Service Time (g_u), s	9.3	0.0	1.0	0.0	38.4	0.0	34.9	0.0
Permitted Queue Service Time (g_{ps}), s	0.2		0.3		1.6		4.2	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.138	0.000	0.140	0.000	0.092	0.000	0.090
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	330.85	31.34	301.68	32.45	1058.63	9.97	1078.51	9.55
Bicycle F_w / F_v	-3.64	0.47	-3.64	0.20	-3.64	0.94	-3.64	0.80

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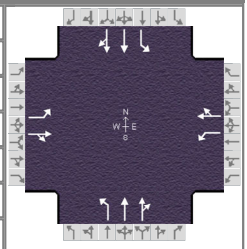
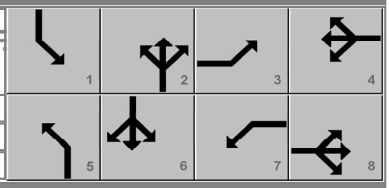
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX AM.xus		
Project Description	Existing				

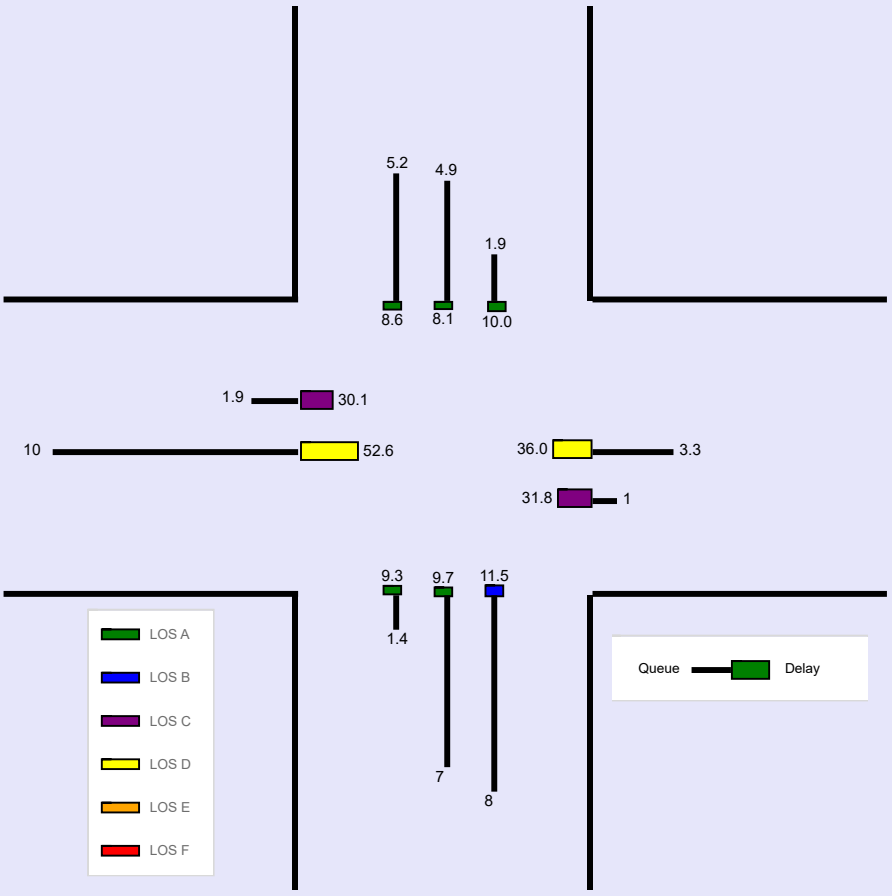


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	55	142	26	26	52	84	767	141	119	687	37

Signal Information												
Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	Begin									
Uncoordinated	No	Simult. Gap E/W	On	Green	4.4	0.9	47.6	3.2	1.3	13.6		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	3.5	0.0	4.5		
				Red	0.0	0.0	1.5	0.0	0.0	1.5		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	49	253.1		24.9	83.7		34.8	177.3	199.3	48.7	127.2	129.7
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	10.0		1.0	3.3		1.4	7.0	8.0	1.9	4.9	5.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.28	0.00		0.09	0.00	0.00	0.29	0.00	0.00
Control Delay (*d*), s/veh	30.1	52.6		31.8	36.0		9.3	9.7	11.5	10.0	8.1	8.6
Level of Service (LOS)	C	D		C	D		A	A	B	A	A	A
Approach Delay, s/veh / LOS	48.1	D		34.9	C		10.5	B		8.6	A	
Intersection Delay, s/veh / LOS	15.1						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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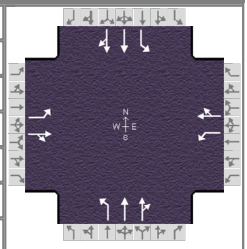
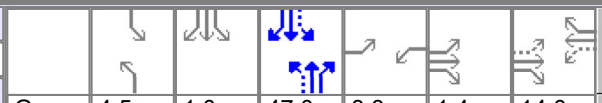
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB AM.xus		
Project Description	No Build				

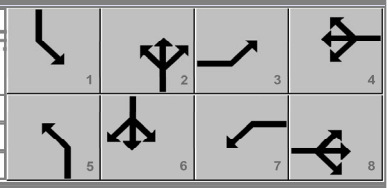


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	52	57	148	27	27	54	87	798	147	124	715	38

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	1.0		47.0	3.3	1.4	14.0					
Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	52	57	148	27	27	54	87	798	147	124	715	38
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	6	2		0	0		2	1		0	4	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.5	18.0	13.5	18.0	18.0	45.0	13.5	40.5
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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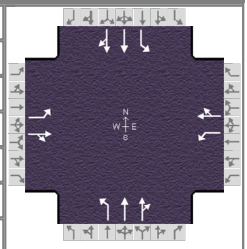
HCS7 Signalized Intersection Results Summary

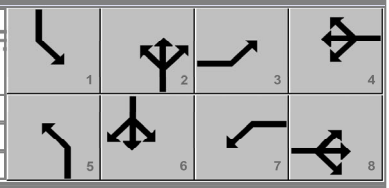
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB AM.xus		
Project Description	No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	52	57	148	27	27	54	87	798	147	124	715	38

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.5	1.0	47.0	3.3	1.4	14.0						
Yellow	3.5	0.0	4.5	3.5	0.0	4.5						
Red	0.0	0.0	1.5	0.0	0.0	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.1	21.3	6.8	20.0	8.0	53.0	8.9	53.9
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.3	4.1	6.3	4.0	0.0	4.0	0.0
Queue Clearance Time (g_s), s	4.6	14.4	3.3	6.4	4.3		5.2	
Green Extension Time (g_e), s	0.0	0.9	0.0	1.9	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	0.99	1.00	1.00		1.00	
Max Out Probability	0.21	1.00	0.02	0.28	0.00		0.03	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	60	236		31	93		100	558	528	143	437	429
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1655		1810	1696		1781	1984	1876	1810	1938	1903
Queue Service Time (g_s), s	2.6	12.4		1.3	4.4		2.3	12.3	13.9	3.2	8.4	8.8
Cycle Queue Clearance Time (g_c), s	2.6	12.4		1.3	4.4		2.3	12.3	13.9	3.2	8.4	8.8
Green Ratio (*g/C*)	0.21	0.17		0.19	0.16		0.57	0.52	0.52	0.58	0.53	0.53
Capacity (*c*), veh/h	302	282		158	264		432	1036	979	383	1032	1013
Volume-to-Capacity Ratio (*X*)	0.198	0.836		0.197	0.353		0.231	0.539	0.539	0.372	0.423	0.423
Back of Queue (*Q*), ft/ln (95 th percentile)	50.6	263.2		25.7	86.5		37	194	213.9	52	138.6	140.8
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	10.4		1.0	3.5		1.5	7.7	8.6	2.1	5.4	5.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.29	0.00		0.10	0.00	0.00	0.31	0.00	0.00
Uniform Delay (d_1), s/veh	29.5	36.1		30.9	34.0		9.4	8.4	10.2	10.0	7.3	7.8
Incremental Delay (d_2), s/veh	0.3	17.3		0.6	1.7		0.3	2.0	2.1	0.6	1.3	1.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	29.8	53.4		31.5	35.7		9.7	10.4	12.4	10.6	8.6	9.1
Level of Service (LOS)	C	D		C	D		A	B	B	B	A	A
Approach Delay, s/veh / LOS	48.7	D		34.6	C		11.2	B		9.1	A	
Intersection Delay, s/veh / LOS	15.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.30	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.98	A	0.69	A	1.47	A	1.32	A

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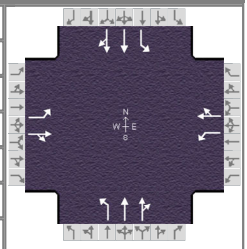
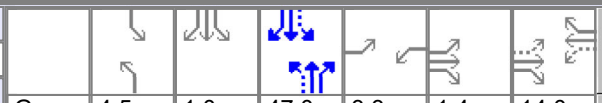
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB AM.xus		
Project Description	No Build				

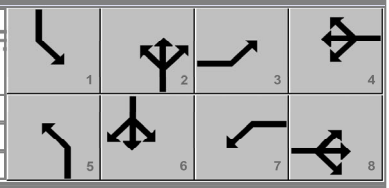


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	52	57	148	27	27	54	87	798	147	124	715	38

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.5	1.0	47.0	3.3	1.4	14.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.953	0.984	1.000	1.000	1.000	1.000	0.984	0.992	1.000	1.000	0.969	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.885	0.885		0.893	0.893		0.946	0.946		0.982	0.982
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1725	460	1195	1810	565	1131	1781	3260	600	1810	3647	194
Proportion of Vehicles Arriving on Green (P)	0.05	0.17	0.17	0.04	0.16	0.16	0.05	0.70	0.52	0.06	0.71	0.53
Incremental Delay Factor (k)	0.11	0.33		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.21	0.17	0.19	0.16	0.57	0.52	0.58	0.53
Permitted Saturation Flow Rate (s_p), veh/h/ln	1262	0	1163	0	639	0	528	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	14.0	0.0	14.0	0.0	47.0	0.0	47.0	0.0
Permitted Service Time (g_u), s	9.6	0.0	0.9	0.0	37.1	0.0	33.0	0.0
Permitted Queue Service Time (g_{ps}), s	0.2		0.4		1.8		5.2	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.138	0.000	0.139	0.000	0.093	0.000	0.092
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	340.75	30.97	310.68	32.11	1043.65	10.29	1064.90	9.84
Bicycle F_w / F_v	-3.64	0.49	-3.64	0.20	-3.64	0.98	-3.64	0.83

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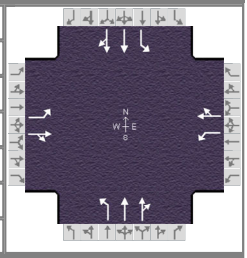
HCS7 Signalized Intersection Results Graphical Summary

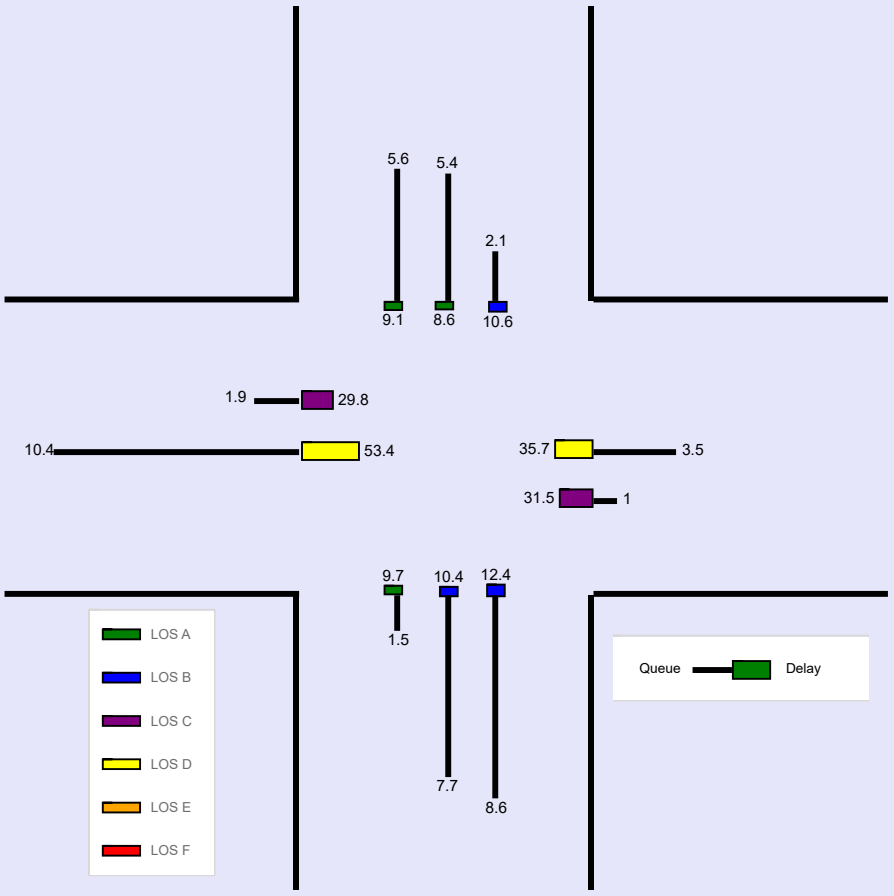
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB AM.xus		
Project Description	No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	52	57	148	27	27	54	87	798	147	124	715	38

Signal Information					EB			WB			NB			SB		
Cycle, s	90.0	Reference Phase	2													
Offset, s	0	Reference Point	Begin	Green	4.5	1.0		47.0	3.3	1.4	14.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		1.5	0.0	0.0	1.5					

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	50.6	263.2		25.7	86.5		37	194	213.9	52	138.6	140.8
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	10.4		1.0	3.5		1.5	7.7	8.6	2.1	5.4	5.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.29	0.00		0.10	0.00	0.00	0.31	0.00	0.00
Control Delay (*d*), s/veh	29.8	53.4		31.5	35.7		9.7	10.4	12.4	10.6	8.6	9.1
Level of Service (LOS)	C	D		C	D		A	B	B	B	A	A
Approach Delay, s/veh / LOS	48.7	D		34.6	C		11.2	B		9.1	A	
Intersection Delay, s/veh / LOS	15.8						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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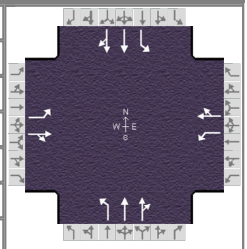
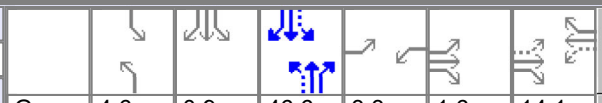
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL AM.xus		
Project Description	Total				

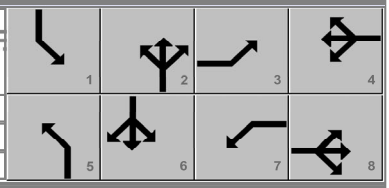


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	57	58	154	27	27	54	89	798	147	124	715	40

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.6	0.9		46.6	3.3	1.6	14.1					
Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	57	58	154	27	27	54	89	798	147	124	715	40
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	6	2		0	0		2	1		0	4	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.5	18.0	13.5	18.0	18.0	45.0	13.5	40.5
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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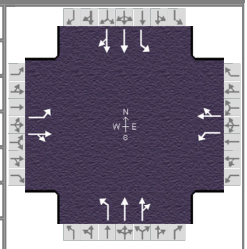
HCS7 Signalized Intersection Results Summary

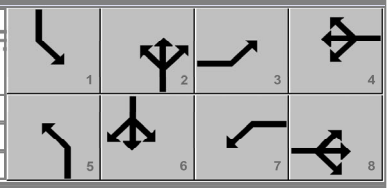
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL AM.xus		
Project Description	Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	57	58	154	27	27	54	89	798	147	124	715	40

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.6	0.9		46.6	3.3	1.6		14.1				
Yellow	3.5	0.0		4.5	3.5	0.0		4.5				
Red	0.0	0.0		1.5	0.0	0.0		1.5				



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.4	21.7	6.8	20.1	8.1	52.6	9.0	53.5
Change Period, (*Y+R c*), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.3	4.1	6.3	4.0	0.0	4.0	0.0
Queue Clearance Time (*g s*), s	4.8	14.8	3.3	6.4	4.4		5.2	
Green Extension Time (*g e*), s	0.1	0.9	0.0	1.9	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	0.99	1.00	1.00		1.00	
Max Out Probability	0.29	1.00	0.02	0.31	0.00		0.04	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	66	244		31	93		102	558	528	143	438	430
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1654		1810	1696		1781	1984	1876	1810	1938	1901
Queue Service Time (*g s*), s	2.8	12.8		1.3	4.4		2.4	12.6	14.1	3.2	8.6	9.1
Cycle Queue Clearance Time (*g c*), s	2.8	12.8		1.3	4.4		2.4	12.6	14.1	3.2	8.6	9.1
Green Ratio (*g/C*)	0.21	0.17		0.19	0.16		0.57	0.52	0.52	0.58	0.53	0.53
Capacity (*c*), veh/h	309	289		157	266		428	1026	971	380	1022	1002
Volume-to-Capacity Ratio (*X*)	0.212	0.843		0.198	0.350		0.239	0.544	0.544	0.375	0.429	0.429
Back of Queue (*Q*), ft/ln (95 th percentile)	55.2	272.5		25.7	86.2		38.4	197.8	217.4	53	143.3	145.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	10.7		1.0	3.4		1.5	7.8	8.7	2.1	5.6	5.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.28	0.00		0.29	0.00		0.10	0.00	0.00	0.31	0.00	0.00
Uniform Delay (*d 1*), s/veh	29.2	35.9		30.8	33.8		9.6	8.7	10.5	10.2	7.6	8.2
Incremental Delay (*d 2*), s/veh	0.3	18.3		0.6	1.7		0.3	2.1	2.2	0.6	1.3	1.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	29.5	54.2		31.4	35.5		9.9	10.8	12.7	10.8	8.9	9.5
Level of Service (LOS)	C	D		C	D		A	B	B	B	A	A
Approach Delay, s/veh / LOS	49.0	D		34.5	C		11.6	B		9.4	A	
Intersection Delay, s/veh / LOS	16.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.30	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	1.00	A	0.69	A	1.47	A	1.32	A

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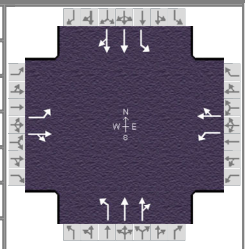
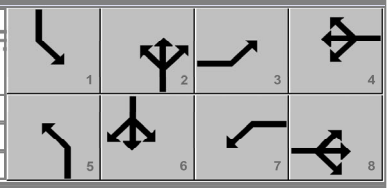
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL AM.xus		
Project Description	Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	57	58	154	27	27	54	89	798	147	124	715	40

Signal Information													
Cycle, s	90.0	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	No	Simult. Gap E/W	On	Green	4.6	0.9	46.6	3.3	1.6	14.1			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	3.5	0.0	4.5			
				Red	0.0	0.0	1.5	0.0	0.0	1.5			



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.953	0.984	1.000	1.000	1.000	1.000	0.984	0.992	1.000	1.000	0.969	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.884	0.884		0.893	0.893		0.946	0.946		0.981	0.981
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1725	453	1202	1810	565	1131	1781	3260	600	1810	3635	203
Proportion of Vehicles Arriving on Green (P)	0.05	0.17	0.17	0.04	0.16	0.16	0.05	0.69	0.52	0.06	0.70	0.53
Incremental Delay Factor (k)	0.11	0.34		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.21	0.17	0.19	0.16	0.57	0.52	0.58	0.53
Permitted Saturation Flow Rate (s_p), veh/h/ln	1262	0	1154	0	638	0	528	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	14.2	0.0	14.1	0.0	46.6	0.0	46.6	0.0
Permitted Service Time (g_u), s	9.7	0.0	0.9	0.0	36.4	0.0	32.4	0.0
Permitted Queue Service Time (g_{ps}), s	0.2		0.4		1.9		5.2	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.137	0.000	0.139	0.000	0.094	0.000	0.093
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	349.32	30.65	313.89	31.98	1034.49	10.49	1054.55	10.06
Bicycle F_w / F_v	-3.64	0.51	-3.64	0.20	-3.64	0.98	-3.64	0.83

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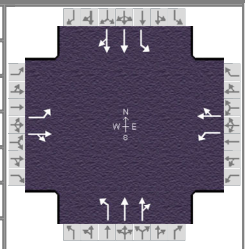
HCS7 Signalized Intersection Results Graphical Summary

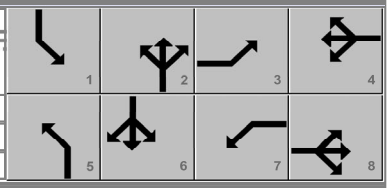
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL AM	PHF	0.87
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL AM.xus		
Project Description	Total				



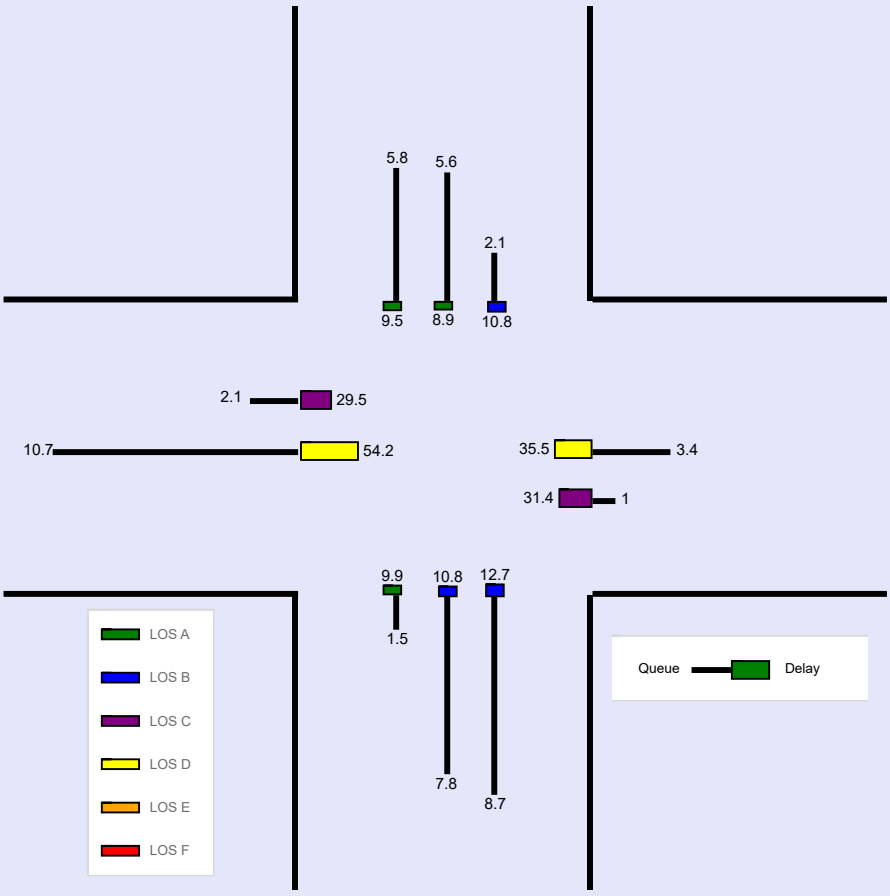
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	57	58	154	27	27	54	89	798	147	124	715	40

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.6	0.9		46.6	3.3	1.6		14.1				
Yellow	3.5	0.0		4.5	3.5	0.0		4.5				
Red	0.0	0.0		1.5	0.0	0.0		1.5				



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	55.2	272.5		25.7	86.2		38.4	197.8	217.4	53	143.3	145.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	10.7		1.0	3.4		1.5	7.8	8.7	2.1	5.6	5.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.28	0.00		0.29	0.00		0.10	0.00	0.00	0.31	0.00	0.00
Control Delay (*d*), s/veh	29.5	54.2		31.4	35.5		9.9	10.8	12.7	10.8	8.9	9.5
Level of Service (LOS)	C	D		C	D		A	B	B	B	A	A
Approach Delay, s/veh / LOS	49.0	D		34.5	C		11.6	B		9.4	A	
Intersection Delay, s/veh / LOS	16.2						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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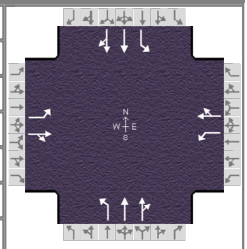
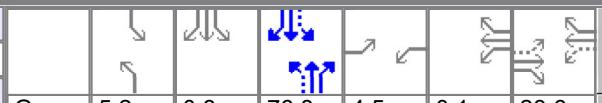
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX PM.xus		
Project Description	Existing				

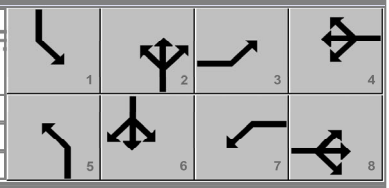


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	64	200	44	55	54	106	655	122	133	1118	70

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.2	0.8		76.8	4.5	0.1	23.6					
Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	64	200	44	55	54	106	655	122	133	1118	70
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	1		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	20.0	22.0	28.0	17.0	74.0	14.0	71.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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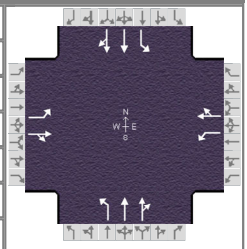
HCS7 Signalized Intersection Results Summary

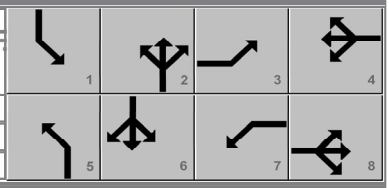
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX PM.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	64	200	44	55	54	106	655	122	133	1118	70

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.2	0.8	76.8	4.5	0.1	23.6	
Yellow	3.5	0.0	4.5	3.5	0.0	4.5	
Red	0.0	0.0	1.5	0.0	0.0	1.5	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.0	29.6	8.1	29.7	8.7	82.8	9.5	83.6
Change Period, (*Y+R c*), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.2	4.1	6.2	4.0	0.0	4.0	0.0
Queue Clearance Time (*g s*), s	4.4	22.2	4.6	9.2	5.0		5.8	
Green Extension Time (*g e*), s	0.0	1.4	0.1	2.9	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.08	1.00	0.00	0.05	0.00		0.01	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	42	267		44	110		107	403	382	134	606	594
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1672		1810	1744		1810	1984	1875	1810	2000	1958
Queue Service Time (*g s*), s	2.4	20.2		2.6	7.2		3.0	7.7	9.7	3.8	13.5	14.8
Cycle Queue Clearance Time (*g c*), s	2.4	20.2		2.6	7.2		3.0	7.7	9.7	3.8	13.5	14.8
Green Ratio (*g/C*)	0.22	0.18		0.22	0.18		0.63	0.59	0.59	0.64	0.60	0.60
Capacity (*c*), veh/h	263	303		149	318		350	1172	1108	500	1194	1169
Volume-to-Capacity Ratio (*X*)	0.161	0.880		0.299	0.346		0.306	0.344	0.345	0.268	0.508	0.508
Back of Queue (*Q*), ft/ln (95 th percentile)	50.6	390.5		54	146.3		53.1	133.1	165.2	65.4	202.2	218.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.0	15.6		2.2	5.9		2.1	5.3	6.6	2.6	8.1	8.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.60	0.00		0.14	0.00	0.00	0.38	0.00	0.00
Uniform Delay (*d 1*), s/veh	41.3	51.8		42.5	46.4		10.7	6.5	8.7	9.7	6.7	7.7
Incremental Delay (*d 2*), s/veh	0.3	22.3		1.1	1.4		0.5	0.8	0.9	0.3	1.5	1.6
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	41.5	74.1		43.6	47.8		11.2	7.3	9.5	10.0	8.3	9.2
Level of Service (LOS)	D	E		D	D		B	A	A	A	A	A
Approach Delay, s/veh / LOS	69.7	E		46.6	D		8.7	A		8.9	A	
Intersection Delay, s/veh / LOS	18.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	1.00	A	0.74	A	1.22	A	1.59	B

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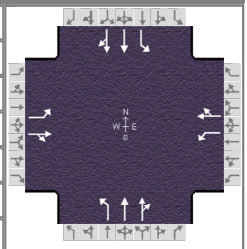
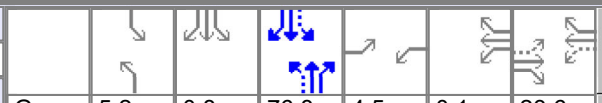
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX PM.xus		
Project Description	Existing				

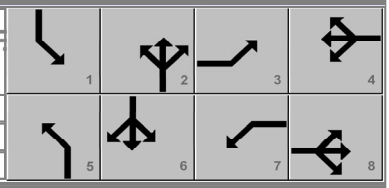


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	64	200	44	55	54	106	655	122	133	1118	70

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.2	0.8	76.8	4.5	0.1	23.6
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.880	0.880		0.918	0.918		0.945	0.945		0.979	0.979
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1810	405	1267	1810	880	864	1810	3254	605	1810	3725	233
Proportion of Vehicles Arriving on Green (P)	0.03	0.18	0.18	0.04	0.18	0.18	0.04	0.79	0.59	0.05	0.80	0.60
Incremental Delay Factor (k)	0.11	0.36		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.22	0.18	0.22	0.18	0.63	0.59	0.64	0.60
Permitted Saturation Flow Rate (s_p), veh/h/ln	1303	0	1130	0	474	0	700	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	23.6	0.0	23.6	0.0	76.8	0.0	76.8	0.0
Permitted Service Time (g_u), s	14.5	0.0	3.3	0.0	60.8	0.0	67.1	0.0
Permitted Queue Service Time (g_{ps}), s	0.3		0.8		4.7		2.3	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.151	0.000	0.151	0.000	0.096	0.000	0.095
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	362.56	43.57	364.82	43.45	1181.50	10.89	1193.60	10.57
Bicycle F_w / F_v	-3.64	0.51	-3.64	0.26	-3.64	0.74	-3.64	1.10

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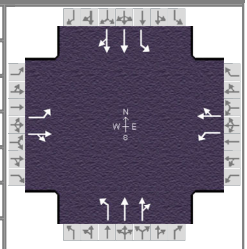
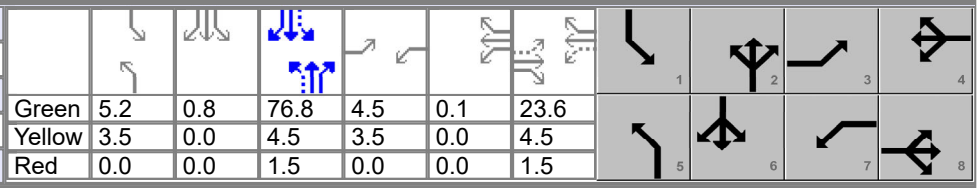
HCS7 Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	EX PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2017	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing EX PM.xus		
Project Description	Existing				



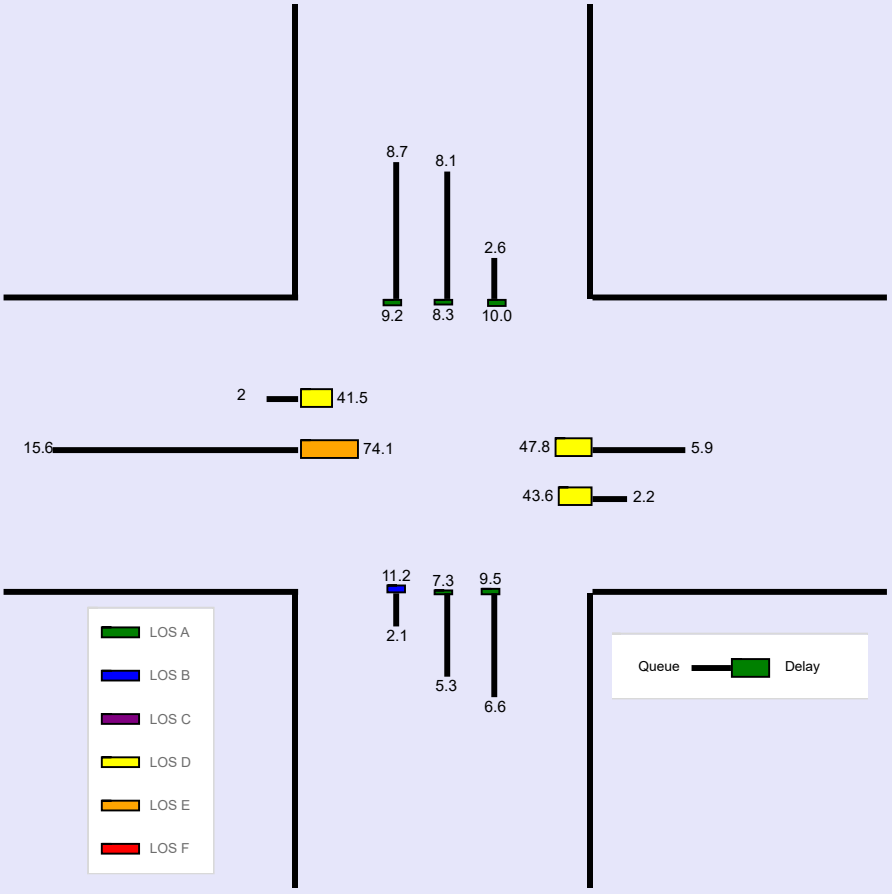
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	64	200	44	55	54	106	655	122	133	1118	70

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.2	0.8		76.8	4.5	0.1		23.6				
Yellow	3.5	0.0		4.5	3.5	0.0		4.5				
Red	0.0	0.0		1.5	0.0	0.0		1.5				

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	50.6	390.5		54	146.3		53.1	133.1	165.2	65.4	202.2	218.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.0	15.6		2.2	5.9		2.1	5.3	6.6	2.6	8.1	8.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00		0.60	0.00		0.14	0.00	0.00	0.38	0.00	0.00
Control Delay (*d*), s/veh	41.5	74.1		43.6	47.8		11.2	7.3	9.5	10.0	8.3	9.2
Level of Service (LOS)	D	E		D	D		B	A	A	A	A	A
Approach Delay, s/veh / LOS	69.7	E		46.6	D		8.7	A		8.9	A	
Intersection Delay, s/veh / LOS	18.0						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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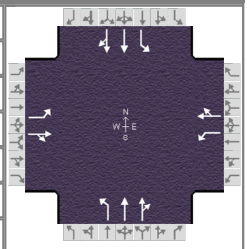
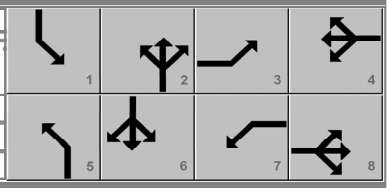
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB PM.xus		
Project Description	No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	67	208	46	57	56	110	681	127	138	1163	73

Signal Information													
Cycle, s	130.0	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	No	Simult. Gap E/W	On	Green	5.4	0.8	75.8	4.6	0.1	24.3			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	3.5	0.0	4.5			
				Red	0.0	0.0	1.5	0.0	0.0	1.5			



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	67	208	46	57	56	110	681	127	138	1163	73
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	1		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	20.0	22.0	28.0	17.0	74.0	14.0	71.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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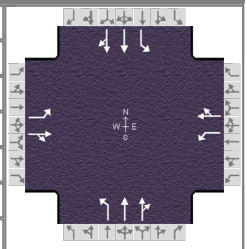
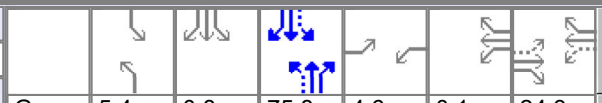
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB PM.xus		
Project Description	No Build				

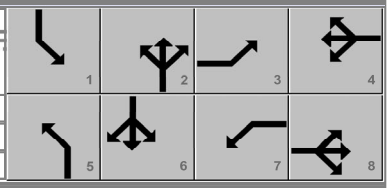


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	67	208	46	57	56	110	681	127	138	1163	73

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.4	0.8		75.8	4.6	0.1	24.3					
Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Red	0.0	0.0		1.5	0.0	0.0	1.5					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.1	30.3	8.2	30.4	8.9	81.8	9.7	82.6
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.2	4.1	6.2	4.0	0.0	4.0	0.0
Queue Clearance Time (g_s), s	4.5	23.1	4.7	9.4	5.2		6.0	
Green Extension Time (g_e), s	0.0	1.2	0.1	3.0	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.09	1.00	0.00	0.06	0.00		0.03	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	44	278		46	114		111	419	397	139	630	618
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1672		1810	1744		1810	1984	1875	1810	2000	1958
Queue Service Time (g_s), s	2.5	21.1		2.7	7.4		3.2	8.5	10.6	4.0	15.2	16.5
Cycle Queue Clearance Time (g_c), s	2.5	21.1		2.7	7.4		3.2	8.5	10.6	4.0	15.2	16.5
Green Ratio (*g/C*)	0.22	0.19		0.22	0.19		0.62	0.58	0.58	0.63	0.59	0.59
Capacity (*c*), veh/h	269	312		149	328		333	1156	1093	483	1178	1153
Volume-to-Capacity Ratio (*X*)	0.165	0.889		0.312	0.348		0.334	0.363	0.363	0.289	0.535	0.536
Back of Queue (*Q*), ft/ln (95 th percentile)	52.6	407.6		56.1	150.8		56.7	147	180.3	69.6	220	237.2
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	16.3		2.2	6.0		2.3	5.8	7.2	2.8	8.8	9.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.26	0.00		0.62	0.00		0.15	0.00	0.00	0.41	0.00	0.00
Uniform Delay (d_1), s/veh	40.7	51.5		42.0	45.9		11.4	7.0	9.3	10.1	7.4	8.3
Incremental Delay (d_2), s/veh	0.3	23.8		1.2	1.3		0.6	0.9	0.9	0.3	1.7	1.8
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	41.0	75.3		43.2	47.2		11.9	7.9	10.2	10.5	9.1	10.1
Level of Service (LOS)	D	E		D	D		B	A	B	B	A	B
Approach Delay, s/veh / LOS	70.6	E		46.1	D		9.4	A		9.7	A	
Intersection Delay, s/veh / LOS	18.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	1.02	A	0.75	A	1.25	A	1.63	B

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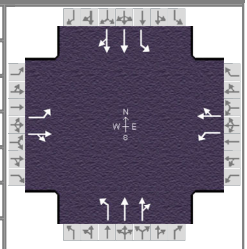
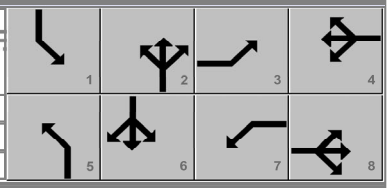
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB PM.xus		
Project Description	No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	67	208	46	57	56	110	681	127	138	1163	73

Signal Information													
Cycle, s	130.0	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	No	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Green	5.4	0.8	75.8	4.6	0.1	24.3			
				Yellow	3.5	0.0	4.5	3.5	0.0	4.5			
				Red	0.0	0.0	1.5	0.0	0.0	1.5			



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.880	0.880		0.918	0.918		0.945	0.945		0.979	0.979
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1810	407	1265	1810	880	864	1810	3253	606	1810	3724	234
Proportion of Vehicles Arriving on Green (P)	0.04	0.19	0.19	0.04	0.19	0.19	0.04	0.78	0.58	0.05	0.79	0.59
Incremental Delay Factor (k)	0.11	0.38		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.22	0.19	0.22	0.19	0.62	0.58	0.63	0.59
Permitted Saturation Flow Rate (s_p), veh/h/ln	1299	0	1119	0	452	0	680	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	24.3	0.0	24.3	0.0	75.8	0.0	75.8	0.0
Permitted Service Time (g_u), s	15.0	0.0	3.2	0.0	58.1	0.0	65.2	0.0
Permitted Queue Service Time (g_{ps}), s	0.3		0.9		5.7		2.7	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.151	0.000	0.151	0.000	0.097	0.000	0.096
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	373.72	42.98	376.01	42.86	1165.45	11.32	1178.13	10.98
Bicycle F_w / F_v	-3.64	0.53	-3.64	0.27	-3.64	0.77	-3.64	1.15

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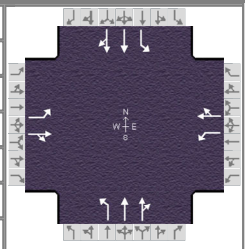
HCS7 Signalized Intersection Results Graphical Summary

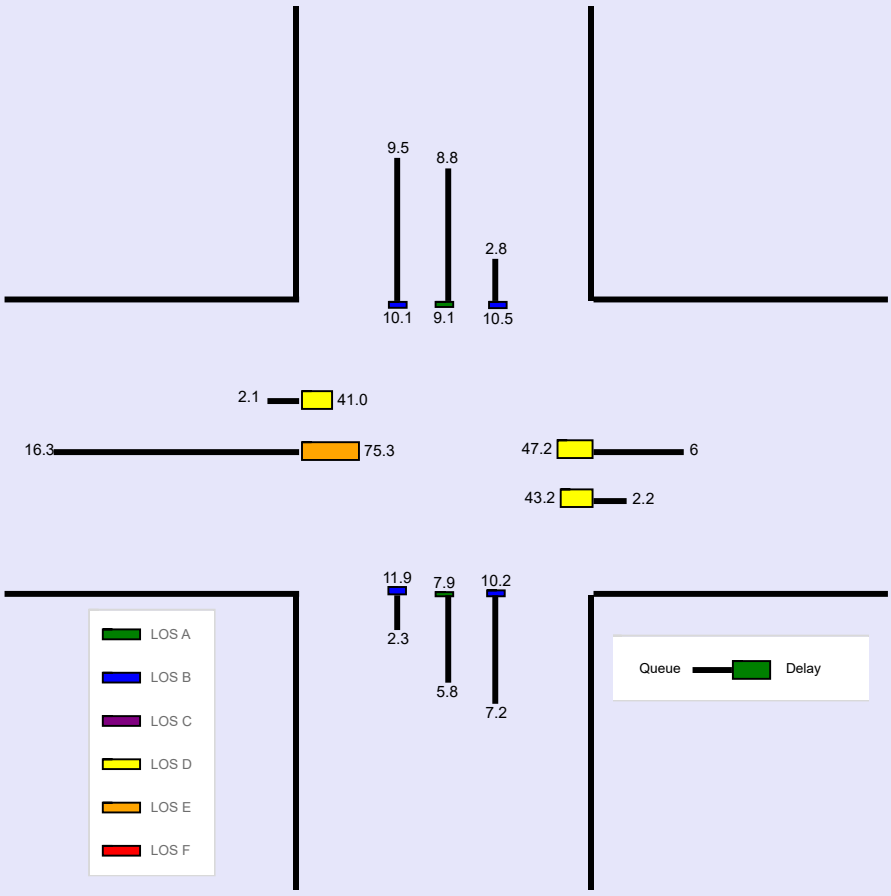
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 NB PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 NB PM.xus		
Project Description	No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	67	208	46	57	56	110	681	127	138	1163	73

Signal Information					EB			WB			NB			SB		
Cycle, s	130.0	Reference Phase	2													
Offset, s	0	Reference Point	Begin	Green	5.4	0.8		75.8	4.6	0.1	24.3					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	0.0		4.5	3.5	0.0	4.5					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		1.5	0.0	0.0	1.5					

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	52.6	407.6		56.1	150.8		56.7	147	180.3	69.6	220	237.2
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	16.3		2.2	6.0		2.3	5.8	7.2	2.8	8.8	9.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.26	0.00		0.62	0.00		0.15	0.00	0.00	0.41	0.00	0.00
Control Delay (*d*), s/veh	41.0	75.3		43.2	47.2		11.9	7.9	10.2	10.5	9.1	10.1
Level of Service (LOS)	D	E		D	D		B	A	B	B	A	B
Approach Delay, s/veh / LOS	70.6	E		46.1	D		9.4	A		9.7	A	
Intersection Delay, s/veh / LOS	18.7						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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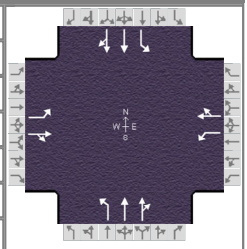
HCS7 Signalized Intersection Input Data

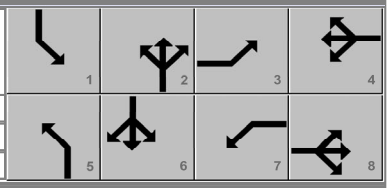
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL PM.xus		
Project Description	Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	68	211	46	57	56	115	681	127	138	1163	78

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.6	0.7		75.5	4.7	24.6	0.0					
Yellow	3.5	0.0		4.5	3.5	4.5	0.0					
Red	0.0	0.0		1.5	0.0	1.5	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	68	211	46	57	56	115	681	127	138	1163	78
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	1		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		90	0		380	0		170	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	20.0	22.0	28.0	17.0	74.0	14.0	71.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	8	3	8	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	3.0	5.0	3.0	5.0	3.0	7.0	3.0	7.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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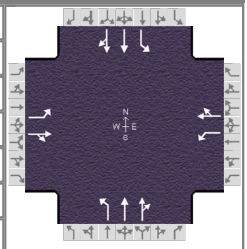
HCS7 Signalized Intersection Results Summary

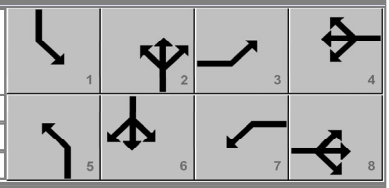
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL PM.xus		
Project Description	Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	68	211	46	57	56	115	681	127	138	1163	78

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.6	0.7	75.5	4.7	24.6	0.0	
Yellow	3.5	0.0	4.5	3.5	4.5	0.0	
Red	0.0	0.0	1.5	0.0	1.5	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.2	30.6	8.2	30.6	9.1	81.5	9.7	82.2
Change Period, (*Y+R c*), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	4.1	6.2	4.1	6.2	4.0	0.0	4.0	0.0
Queue Clearance Time (*g s*), s	4.7	23.4	4.7	9.4	5.4		6.0	
Green Extension Time (*g e*), s	0.0	1.2	0.1	3.0	0.2	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.11	1.00	0.00	0.06	0.00		0.04	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	46	282		46	114		116	419	397	139	633	620
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1672		1810	1744		1810	1984	1875	1810	2000	1955
Queue Service Time (*g s*), s	2.7	21.4		2.7	7.4		3.4	8.6	10.7	4.0	15.6	17.0
Cycle Queue Clearance Time (*g c*), s	2.7	21.4		2.7	7.4		3.4	8.6	10.7	4.0	15.6	17.0
Green Ratio (*g/C*)	0.22	0.19		0.23	0.19		0.62	0.58	0.58	0.63	0.59	0.59
Capacity (*c*), veh/h	272	316		148	330		331	1152	1089	481	1172	1145
Volume-to-Capacity Ratio (*X*)	0.171	0.892		0.314	0.346		0.351	0.364	0.364	0.290	0.541	0.542
Back of Queue (*Q*), ft/ln (95 th percentile)	54.8	413.5		55.9	150.6		59.8	149.2	182.4	70.3	225.2	243.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	16.5		2.2	6.0		2.4	5.9	7.3	2.8	9.0	9.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.27	0.00		0.62	0.00		0.16	0.00	0.00	0.41	0.00	0.00
Uniform Delay (*d 1*), s/veh	40.4	51.4		41.9	45.7		11.6	7.1	9.4	10.3	7.6	8.6
Incremental Delay (*d 2*), s/veh	0.3	24.3		1.2	1.3		0.6	0.9	0.9	0.3	1.8	1.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.7	75.7		43.1	47.1		12.2	8.0	10.3	10.6	9.4	10.5
Level of Service (LOS)	D	E		D	D		B	A	B	B	A	B
Approach Delay, s/veh / LOS	70.8	E		45.9	D		9.5	A		10.0	A	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.90	B	1.89	B
Bicycle LOS Score / LOS	1.03	A	0.75	A	1.26	A	1.64	B

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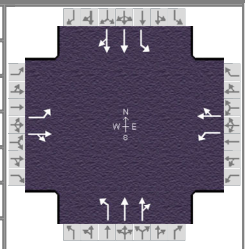
HCS7 Signalized Intersection Intermediate Values

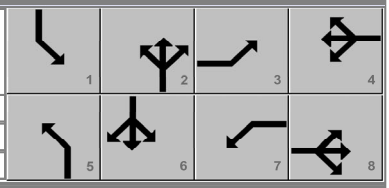
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL PM.xus		
Project Description	Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	68	211	46	57	56	115	681	127	138	1163	78

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.6	0.7		75.5	4.7	24.6	0.0					
Yellow	3.5	0.0		4.5	3.5	4.5	0.0					
Red	0.0	0.0		1.5	0.0	1.5	0.0					



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.880	0.880		0.918	0.918		0.945	0.945		0.978	0.978
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1810	408	1265	1810	880	864	1810	3253	606	1810	3707	248
Proportion of Vehicles Arriving on Green (P)	0.04	0.19	0.19	0.04	0.19	0.19	0.04	0.77	0.58	0.05	0.78	0.59
Incremental Delay Factor (k)	0.11	0.39		0.11	0.23		0.11	0.50	0.50	0.11	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.22	0.19	0.23	0.19	0.62	0.58	0.63	0.59
Permitted Saturation Flow Rate (s_p), veh/h/ln	1299	0	1115	0	450	0	680	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	24.6	0.0	24.6	0.0	75.5	0.0	75.5	0.0
Permitted Service Time (g_u), s	15.2	0.0	3.1	0.0	57.2	0.0	64.8	0.0
Permitted Queue Service Time (g_{ps}), s	0.3		0.9		6.4		2.7	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.000	1.557	0.000	1.198	0.000	1.198	0.000
Pedestrian F_s / F_{delay}	0.000	0.151	0.000	0.151	0.000	0.098	0.000	0.097
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	377.75	42.77	378.23	42.74	1161.27	11.43	1171.58	11.15
Bicycle F_w / F_v	-3.64	0.54	-3.64	0.27	-3.64	0.77	-3.64	1.15

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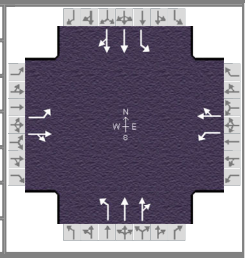
HCS7 Signalized Intersection Results Graphical Summary

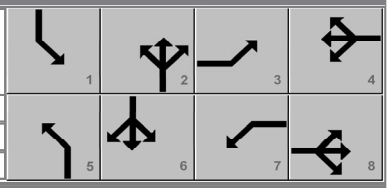
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	GHA	Analysis Date	May 26, 2020	Area Type	Other
Jurisdiction	IDOT	Time Period	2026 TOTAL PM	PHF	0.99
Urban Street	IL 53	Analysis Year	2026	Analysis Period	1> 5:00
Intersection	IL 53 & Pershing Ave	File Name	IL 53 & Pershing 2026 TOTAL PM.xus		
Project Description	Total				



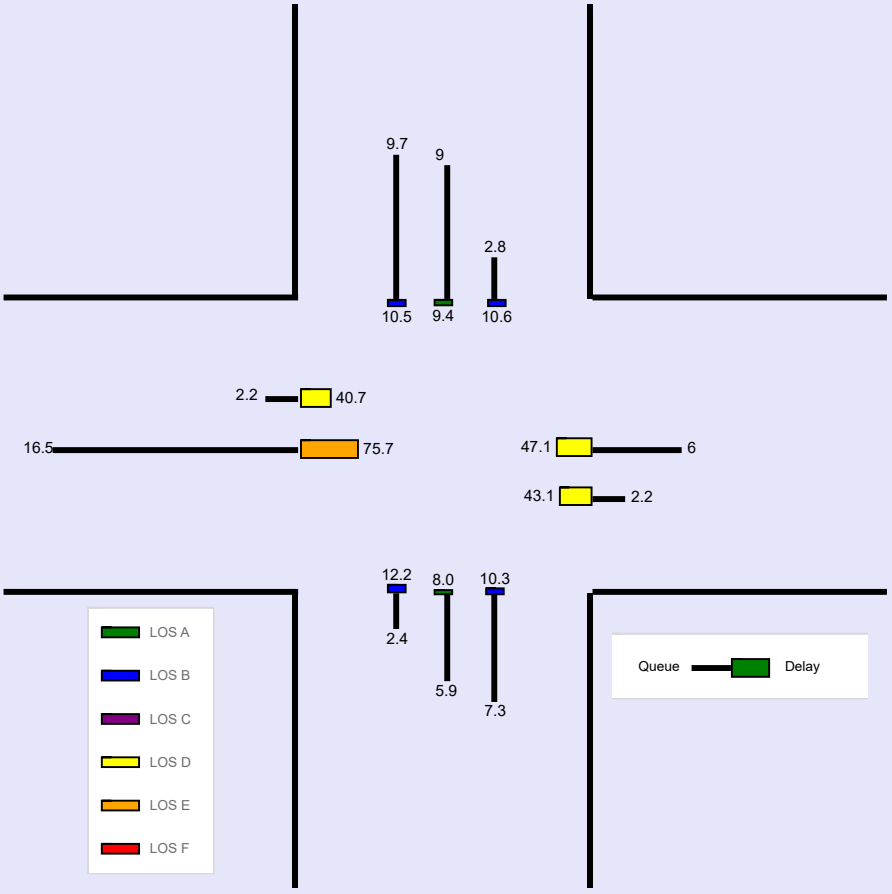
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	68	211	46	57	56	115	681	127	138	1163	78

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.6	0.7	75.5	4.7	24.6	0.0	
Yellow	3.5	0.0	4.5	3.5	4.5	0.0	
Red	0.0	0.0	1.5	0.0	1.5	0.0	



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	54.8	413.5		55.9	150.6		59.8	149.2	182.4	70.3	225.2	243.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	16.5		2.2	6.0		2.4	5.9	7.3	2.8	9.0	9.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.27	0.00		0.62	0.00		0.16	0.00	0.00	0.41	0.00	0.00
Control Delay (*d*), s/veh	40.7	75.7		43.1	47.1		12.2	8.0	10.3	10.6	9.4	10.5
Level of Service (LOS)	D	E		D	D		B	A	B	B	A	B
Approach Delay, s/veh / LOS	70.8	E		45.9	D		9.5	A		10.0	A	
Intersection Delay, s/veh / LOS	19.0						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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HCS7 Two-Way Stop-Control Report

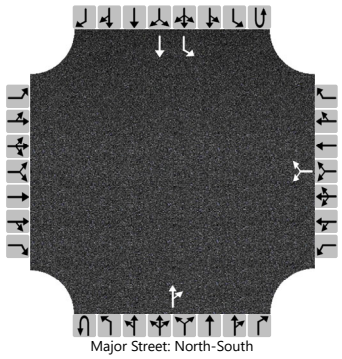
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2017
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						16		13			979	12		6	849	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							32							7		
Capacity, c (veh/h)							97							644		
v/c Ratio							0.32							0.01		
95% Queue Length, Q_{95} (veh)							1.2							0.0		
Control Delay (s/veh)							58.8							10.7		
Level of Service (LOS)							F							B		
Approach Delay (s/veh)						58.8								0.1		
Approach LOS						F										

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HCS7 Two-Way Stop-Control Report

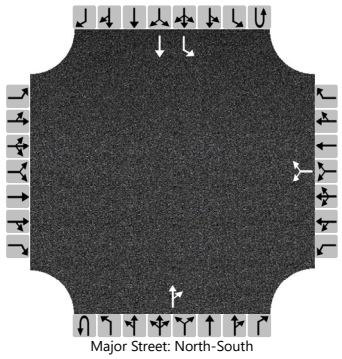
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	No Build

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						16		13			1019	12		6	884	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							32							7		
Capacity, c (veh/h)							87							620		
v/c Ratio							0.36							0.01		
95% Queue Length, Q_{95} (veh)							1.4							0.0		
Control Delay (s/veh)							68.0							10.9		
Level of Service (LOS)							F							B		
Approach Delay (s/veh)						68.0								0.1		
Approach LOS						F										

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HCS7 Two-Way Stop-Control Report

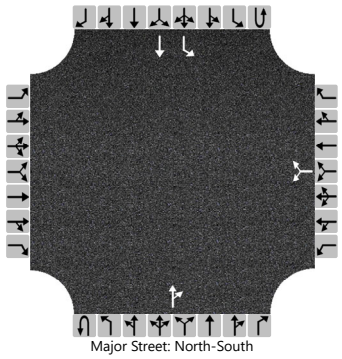
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Total

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						16		13			1021	12		6	890	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							32							7		
Capacity, c (veh/h)							86							618		
v/c Ratio							0.37							0.01		
95% Queue Length, Q_{95} (veh)							1.4							0.0		
Control Delay (s/veh)							69.0							10.9		
Level of Service (LOS)							F							B		
Approach Delay (s/veh)						69.0								0.1		
Approach LOS						F										

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HCS7 Two-Way Stop-Control Report

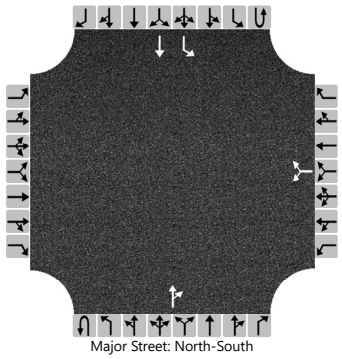
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2017
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						2		16			867	12		20	1342	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							20							22		
Capacity, c (veh/h)							161							715		
v/c Ratio							0.12							0.03		
95% Queue Length, Q_{95} (veh)							0.4							0.1		
Control Delay (s/veh)							30.4							10.2		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)					30.4								0.1			
Approach LOS					D											

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HCS7 Two-Way Stop-Control Report

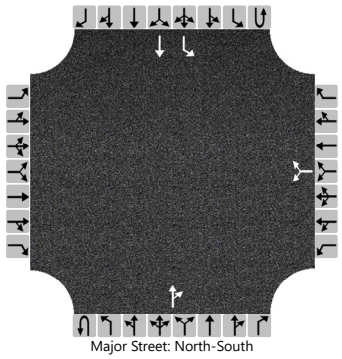
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	No Build

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						2		16			902	12		20	1397	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							20							22		
Capacity, c (veh/h)							145							692		
v/c Ratio							0.13							0.03		
95% Queue Length, Q_{95} (veh)							0.5							0.1		
Control Delay (s/veh)							33.6							10.4		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)					33.6								0.1			
Approach LOS					D											

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HCS7 Two-Way Stop-Control Report

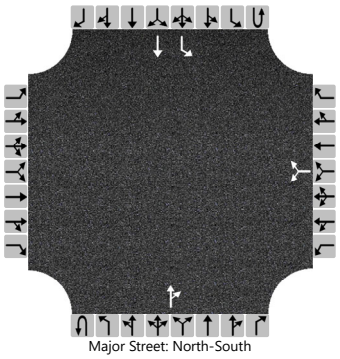
General Information

Analyst	GHA
Agency/Co.	GHA
Date Performed	5/26/2020
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Total

Site Information

Intersection	Abbey Dr @ IL 53
Jurisdiction	IDOT
East/West Street	Abbey Dr
North/South Street	IL 53
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						2		16			907	12		20	1400	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							20							22		
Capacity, c (veh/h)							144							689		
v/c Ratio							0.14							0.03		
95% Queue Length, Q_{95} (veh)							0.5							0.1		
Control Delay (s/veh)							34.0							10.4		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)					34.0								0.1			
Approach LOS					D											

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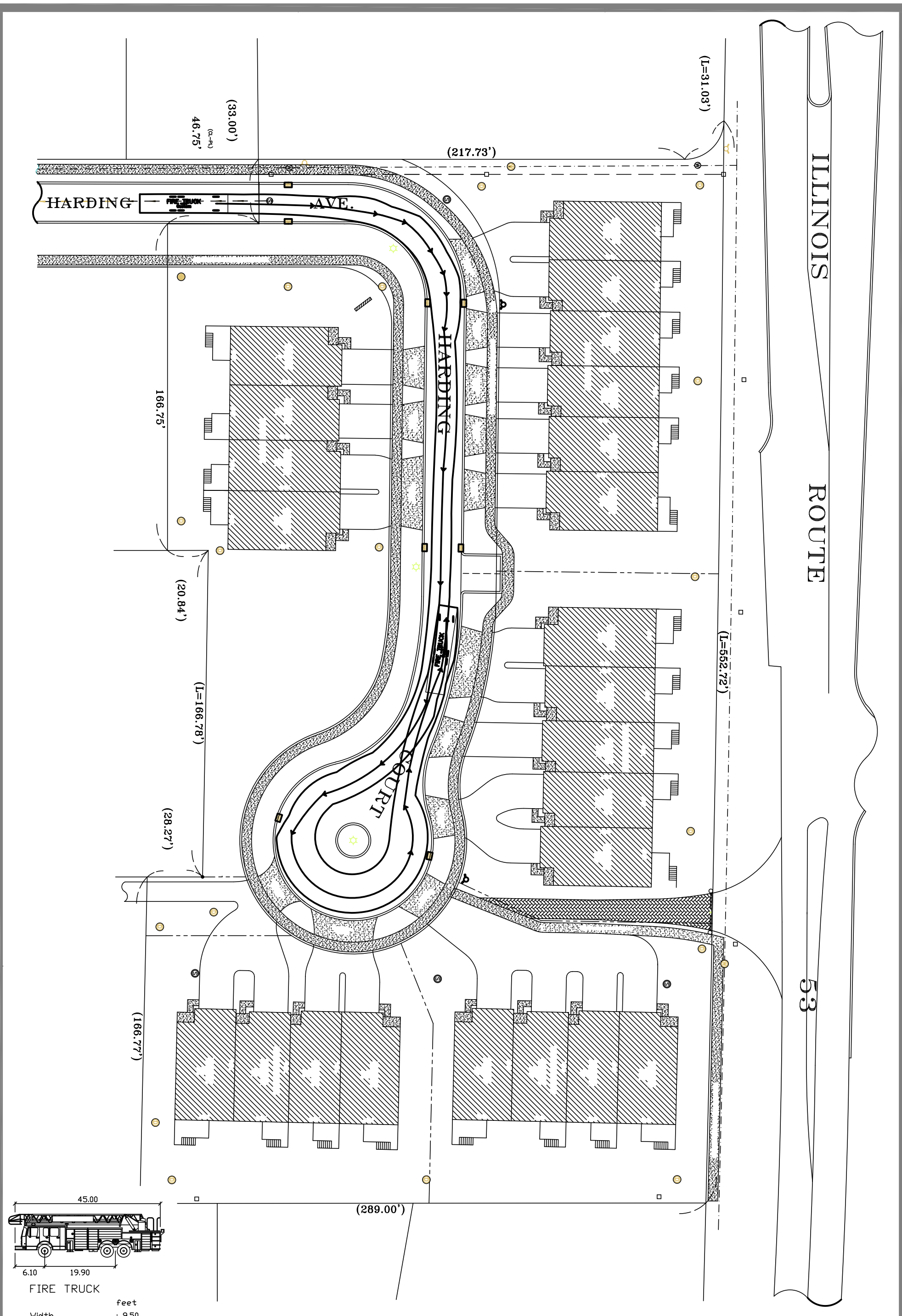
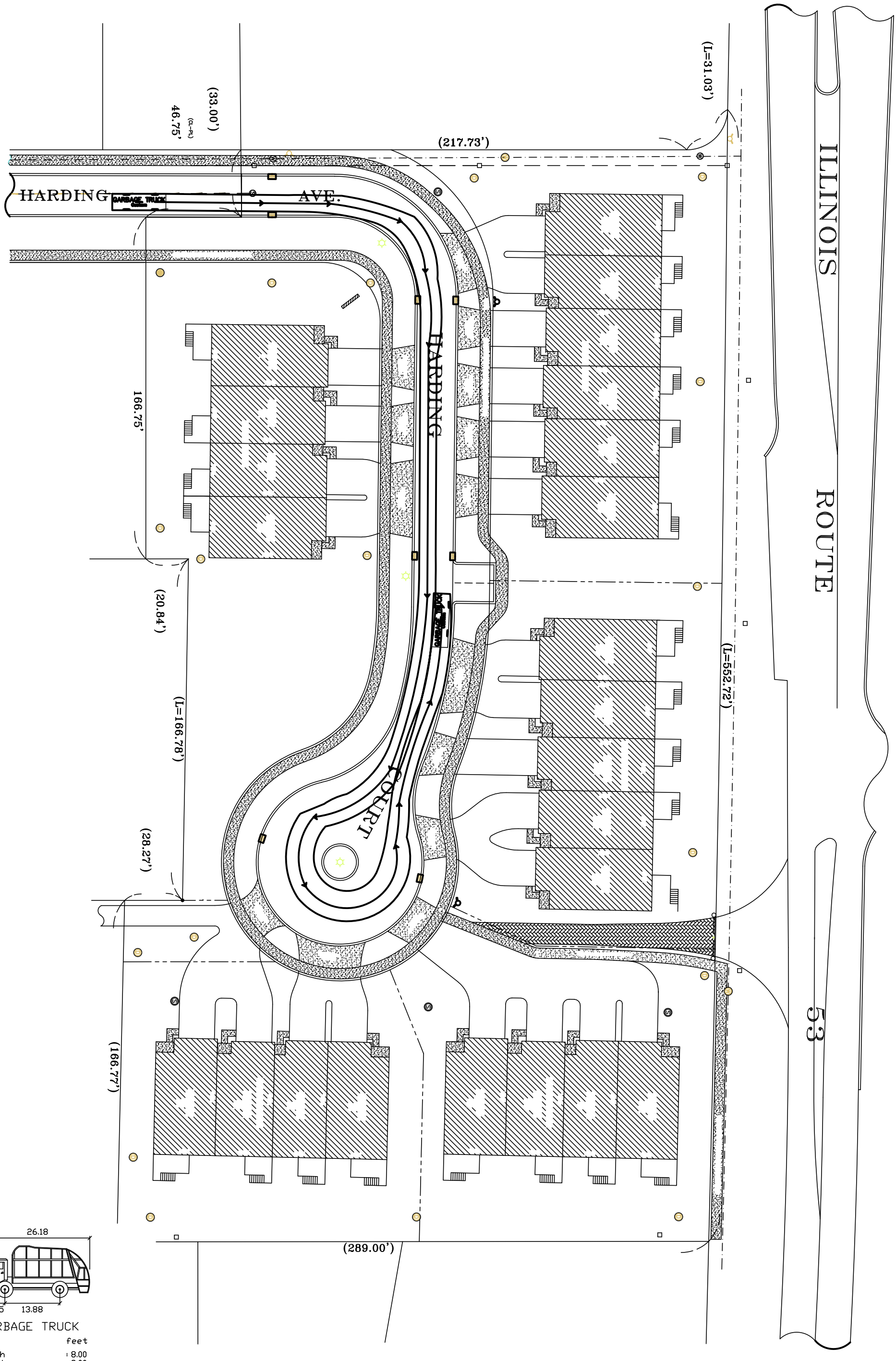
APPENDIX F
AutoTurn Analysis



GHA GEWALT HAMILTON ASSOCIATES, INC.

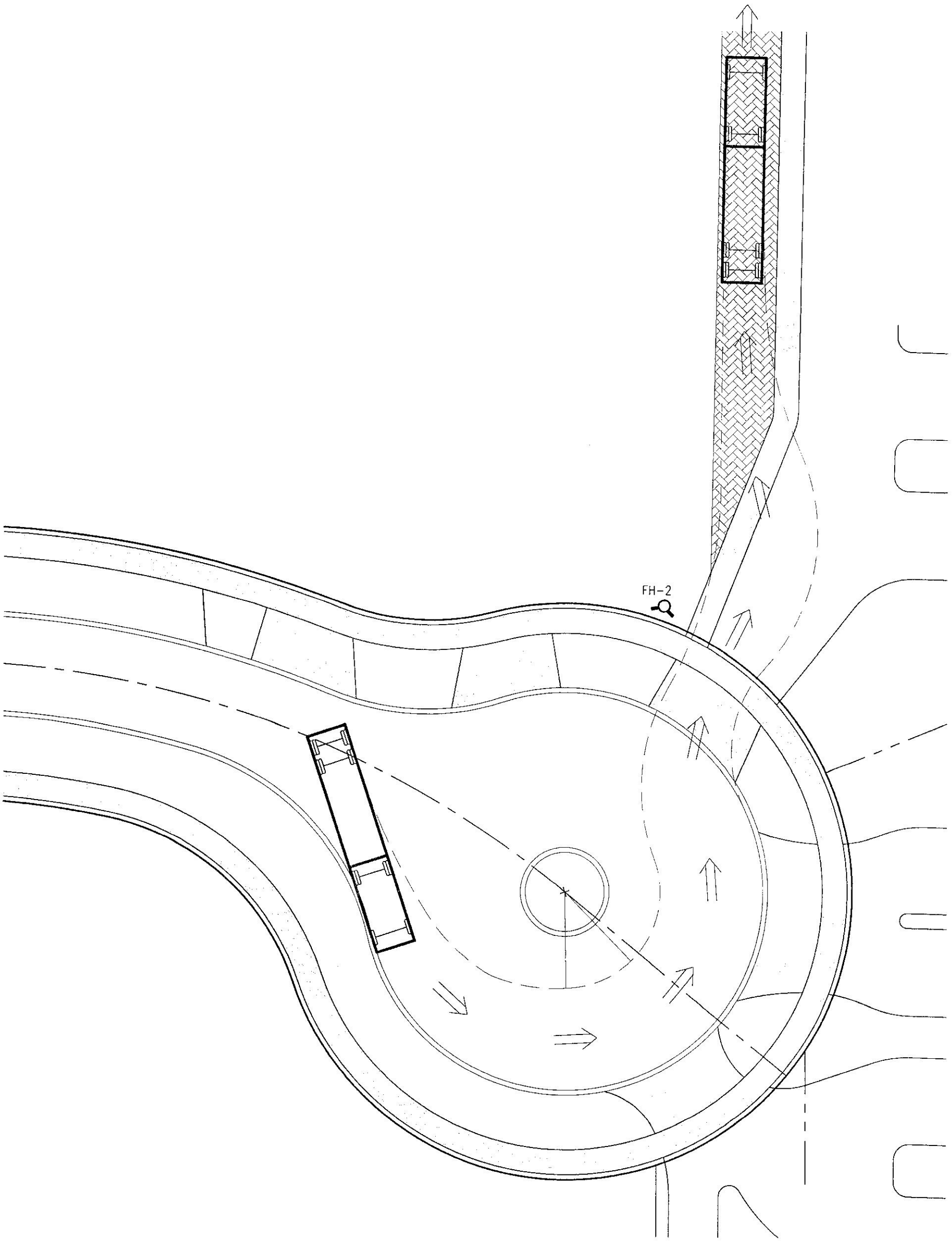
Appendix F
AutoTurn Anaysis
Fire Truck



GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendix F
AutoTurn Anaysis
Garbage Truck

TRUCK TURN EXHIBIT



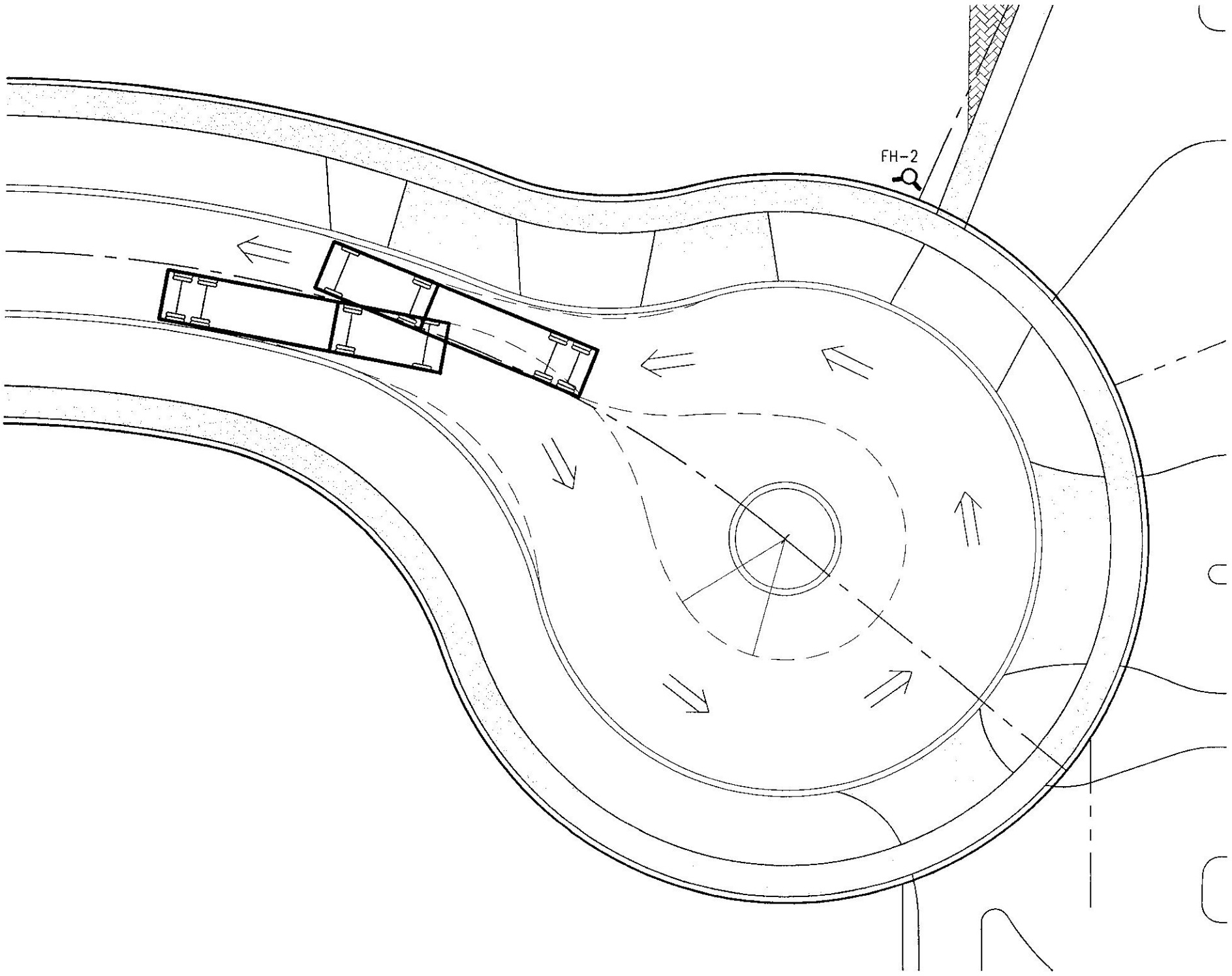
CARRADUS

CARRADUS LAND SURVEY, INC.
Residential & Commercial Land Surveying Services
191 S. GARY AVE. SUITE 180, CAROL STREAM, ILLINOIS, 60188
(630) 588-0416 (Fax) 653-7682 carradus_survey@yahoo.com

PREPARED FOR:				
HARDING CUSTOM HOMES, LLC.				
DRAWN BY:	DATE OF FIELD WORK:	SCALE:	FLD.BK - PAGE	PROJECT NO.
CMG	02/26/20	1" = 20'	48-00	895

DRAWING NAME: 895-XREF-10701

TRUCK TURN EXHIBIT



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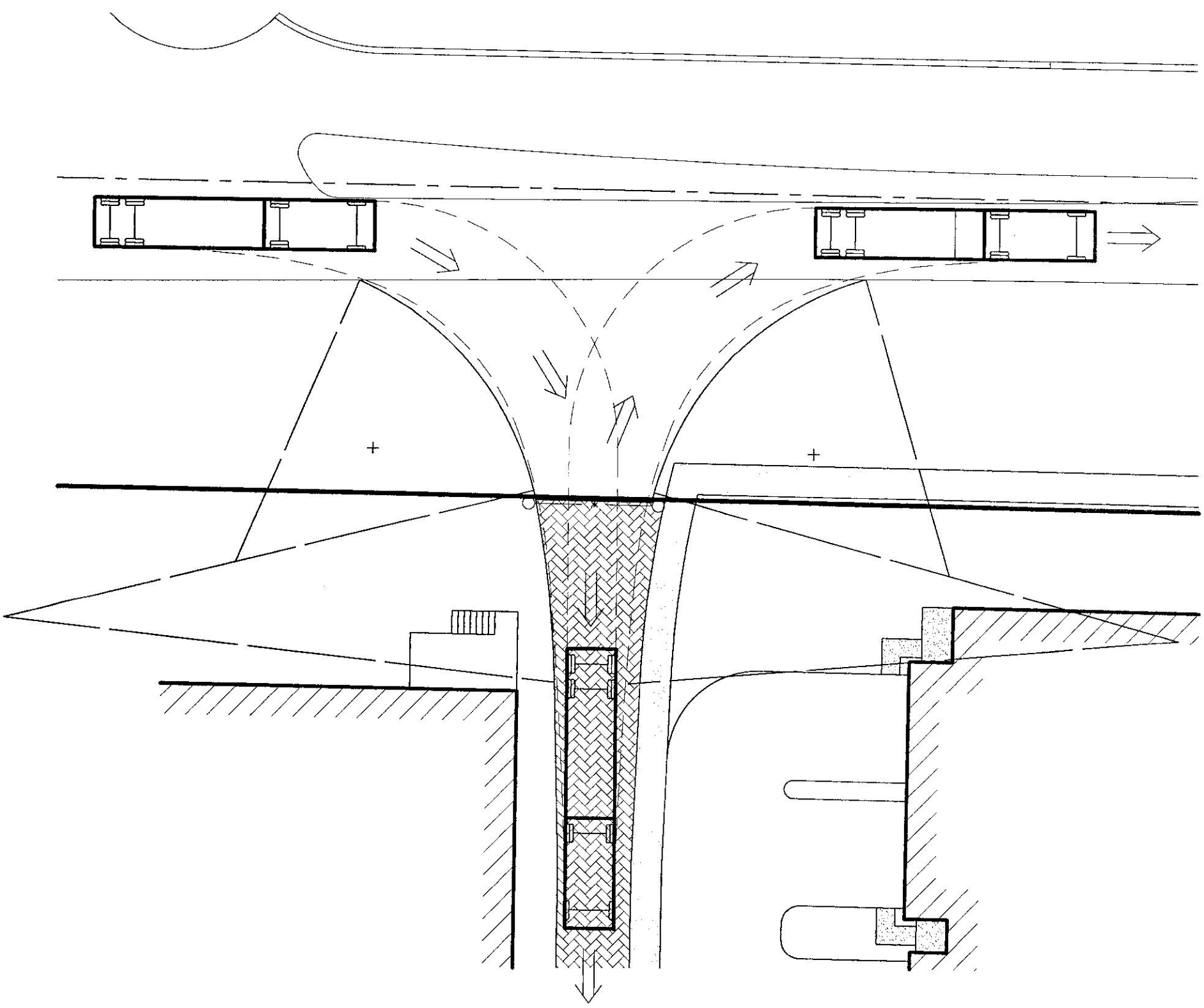
191 S. GARY AVE. SUITE 180, CAROL STREAM, ILLINOIS, 60188
(630) 588-0416 (Fax) 653-7682 carradus_survey@yahoo.com

PREPARED FOR:				
HARDING CUSTOM HOMES, LLC.				
DRAWN BY:	DATE OF FIELD WORK:	SCALE:	FLD.BK. - PAGE	PROJECT NO.
CMG	02/26/20	1" = 20'	48-00	895

DRAWING NAME: 895 WB 4P2

TRUCK TURN EXHIBIT



CARRADUS

CARRADUS LAND SURVEY, INC.

Residential & Commercial Land Surveying Services

191 S. GARY AVE. SUITE 180, CAROL STREAM, ILLINOIS, 60188

(630) 588-0416 (Fax) 653-7682 carradus_survey@yahoo.com

PREPARED FOR:				
HARDING CUSTOM HOMES, LLC.				
DRAWN BY:	DATE OF FIELD WORK:	SCALE:	FLD.BK. - PAGE	PROJECT NO.
CMG	02/26/20	1" = 20'	48-00	895

DRAWING NAME: 895-WB-40-C

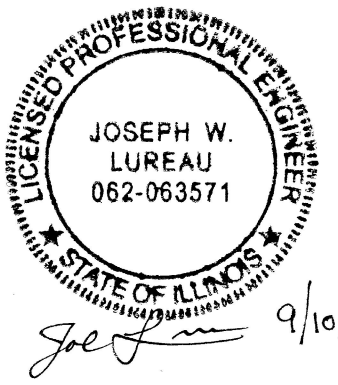
STORMWATER MANAGEMENT PLAN
FOR
HARDING CUSTOM HOMES SUBDIVSION, UNIT 2
GLEN ELLYN, ILLINOIS

PREPARED FOR:

HARDING CUSTOM HOMES, LLC
540 DUANE STREET, 2ND FLOOR
GLEN ELLYN, ILLINOIS 60137

PREPARED BY:

CARRADUS LAND SURVEY, INC.
191 S. GARY AVENUE
SUITE 180
CAROL STREAM, ILLINOIS 60188
PROFESSIONAL DESGIN FIRM # 184-007086



PROJECT # 895
DATED: 06/25/2021

STORMWATER MANAGEMENT PLAN
FOR
HARDING CUSTOM HOMES SUBDIVSION, UNIT 2
GLEN ELLYN, ILLINOIS

PREPARED FOR:

HARDING CUSTOM HOMES, LLC
540 DUANE STREET, 2ND FLOOR
GLEN ELLYN, ILLINOIS 60137

PREPARED BY:

CARRADUS LAND SURVEY, INC.
191 S. GARY AVENUE
SUITE 180
CAROL STREAM, ILLINOIS 60188
PROFESSIONAL DESGIN FIRM # 184-007086

PROJECT # 895
DATED: 06/25/2021

TAB 1

NARRATIVE

INTRODUCTION:

This report is intended to identify the stormwater runoff generated from this site and address how the proposed development will impact the community and the village's stormwater management system at Panfish Park.

EXISTING SITE CONDITIONS:

The development site consists of 5 parcels totaling 3.3692 acres of which 0.1817 acre is a portion of an existing 33' wide Harding Road Subdivision. Part of this existing 33' right-of-way will be expanded to 55', while part is proposed for vacation. The site lies South of the North right-of-way line of Harding Avenue, West of Illinois Route 53, North of the Rolling Hedge Subdivision, and East of Lot 2 of Rudbeck's Assessment Plat, Brentwood Place, and Harding Custom Homes Unit 1. The 5 parcels are somewhat rectangular in shape with 500.23' of Frontage along Illinois Route 53 on the East, and 281.27' along the existing Harding Avenue right-of-way To Harding Custom Homes Subdivision Unit 1 on the West.

The site has nearly 11' of relief across the property. A knoll exists near the center of the Southern third of the property which directs runoff in all directions, yet the predominant drainage flow is to the Northwest. Runoff is unrestricted in the sites present condition, and all adjoining properties receive runoff from this site. There is a small area of the Route 53 right-of-way, West of the center line of pavement that flows onto the Northeast corner of this site. This minor offsite flow combines with a relative minor offsite flow from the condominiums to the North of Harding. This small volume of runoff constitutes the only significant offsite flow onto the project. Although most of this site drains unrestricted onto adjoining properties, the Northwestern portion of the site drains to Harding Avenue, which has an existing storm sewer system along Harding Avenue and Nicoll Way that accepts the runoff and transports it toward the Panfish Park pond system.

Utilizing the National Resources Conservation Service TR-55 Urban Hydrology for Small Watersheds Program with rainfall amounts from Illinois State Water Survey Bulletin 75, we calculate the runoff from this site in its present condition, to be

12.04 cfs for the 10 year storm event, and 24.03 cfs for the 100 year storm event. An overall slope of 3.0% coupled with a RCN of 80 and an 8.57' rainfall for the 100 year storm event was utilized for the calculation. There is an existing 8" sanitary sewer main that services this site that is located within the center of the Harding Avenue pavement and stops near the Northwest corner of the site. There is a 6" water main that services this site that is located near, or under the walk (or walk extended), on the North edge of the existing Harding Avenue right-of-way. This 6" water main connects to an existing 12" water main along the West right-of-way line of Illinois Route 53. The existing right-of-way width of Harding Avenue North of the site is 33', but has been widened to 55' with the Harding Custom Homes Subdivision Unit 1 to the West.

PROPOSED SITE DEVELOPMENT:

The proposed use for this site would be a 5 lot subdivision containing 5 buildings housing 23 townhomes. An outlot would also be incorporated into the plan to provide Harding Court frontage for a potentially landlocked parcel West of the development. Access to all 5 lots and the outlot would be via an extension of the 55' Harding Avenue to the East, then South near the center of the site to the bulb of a cul-de-sac. This extension of the roadway South to the cul-de-sac would be named Harding Court. Within the 55' right-of-way of Harding Court would be an 8" sanitary sewer main. A 6" water main would be located in an easement just outside of the right-a-way. Storm sewer mains that would provide services to the 23 townhomes would be located throughout the site. To effectively provide utility services to all the townhomes, there would be a sanitary sewer extension to the East and West at the "bulb" of the cul-de-sac. The water main would be looped to service all units and tied into the existing 12" water main along the West side of Route 53. There is a single family home to the West of the site that would be provided driveway access to the Harding Court roadway via the outlot.

Sanitary services and water services for these townhomes would be connected to the proposed sewer and water mains within the Harding Court right-of-way, and their extension outside of the right-of-way. Storm runoff from this site, and any adjacent offsite areas, tributary to the site, would be collected by an internal

system of sewers, inlets and catch basins, which would connect into the 24" interceptor within Harding Avenue installed with Unit 1 that increases in size before it discharges to the Panfish Park detention system. This discharge location is West of Nicoll Way and North of a multi-purpose pathway and was installed with the Unit 1 improvements to accommodate the 100 year developed flow from the townhome project proposed herewith. Each of the townhome units would have a storm service that would discharge into the proposed BMP facilities and rear yard storm sewer. To meet the DuPage County Best Management Program requirements, each of the 5 townhome buildings will provide the necessary storage. The design has been included on the construction plan set, and its size verified by final permit drawings for each building. All BMP areas are oversized to accommodate the 1 ¼" rainfall from the public right-of-way as well.

Proposed grading of the site will result in runoff flowing in the same general direction as it currently does where it is intercepted by the storm sewer system before draining onto adjoining properties as it now does. Grading of the building sites for the townhomes allow for day light basements in the rear with the exception of units 22 and 23. In keeping with the existing terrain of the site as closely as possible, driveway slopes will vary from 3% to 9%.

Final development of the overall site will result in an increase of the RCN from 80 to 87. The grading of the sight however results in an increase to the time of concentration because total runoff is now collected and routed around the site rather than a direct discharge in all directions as currently exists. This results in an overall concentrated discharge of 24.47 cfs for the 100 year storm event. This number is used for comparison purposes only as the sum of the runoff calculated for each individual drainage structure totals 25.84 cfs, and this 5% larger volume is what has been used for storm sewer sizing. For comparative purposes we divided the site into 3 subcatchment areas based primarily on the storm sewer routing and find the sum of these 3 individual catchment areas is 25.95 cfs. Almost identical to the results from the rational method used to calculate storm sewer loading and sizing.

As this report will substantiate, the design as proposed creates a stormwater management plan that will enhance the neighborhood. It will capture unrestricted flows, both onsite and offsite, and redirect this uncontrolled runoff away from directly flowing onto adjoining residential property and homes. This runoff will be collected and delivered to the Panfish Park system of ponds that were developed to receive the runoff from these areas. With the increased impervious area of the proposed developed site, comes increased grassy swales that help with the T/C to balance proposed runoff vs. existing uncontrolled runoff. A proposed storm sewer system will provide a direct route to Panfish Park for the safety of the community.

The design of the improvements for this site has taken into consideration the many variables encountered with the development of such a property. Between dealing with the terrain of the site and the terrain of the developed properties surrounding it, we feel we have created a plan that provides a comprehensive solution to these challenges. This is not a minimalist plan by any means. Extra capacity safe guards within the storm system design should provide adequate allowance for any minor irregularities, disagreements, or discrepancies that may surface upon review of the calculations and plans. Though all efforts have been expended to eliminate any of the above, minor instances may arise that do not ultimately have a negative impact on the overall design.

In conclusion, this plan, as proposed, will not adversely affect the adjoining properties and should provide a cost effective solution to the runoff generated by the site, and enhance the overall drainage plan of the village by providing a controlled release of the stormwater into the Villages Panfish Park system, for a site that currently has unrestricted flow of the stormwater runoff.

FOR LEGAL DESCRIPTIONS OF PARCELS SEE SHEET 1

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT

12" WATERMAIN

IRON PIPE

EXISTING UTILITY POLE

IRON ROD 151.27' SOUTH & 0.56' WEST
IRON ROD 151.52' SOUTH & 0.48' WEST

WEST LINE OF ROUTE 53
(AS MONUMENTED & OCCUPIED)

EAST LINE OF LOT 2

UNDERBRUSH AND OVERGROWN VEGETATION ARE PROMINENT ALONG THE EAST PROPERTY LINE

(Rad.=34327.48')

(L=552.92')

(166.70')

(L=31.24')

(Rad.=20.00')

VALVE VAULT
RIM=762.65

52.62'

EAST LINE OF LOT 1

(150.70')

(166.70')

(33' R/W)

SOUTH LINE OF HARDING AVENUE
(AS MONUMENTED & OCCUPIED)

NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SEC 23-39-10
(NORTH LINE OF LOT A)

SOUTH LINE OF THE NORTH 16' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT

NORTH LINE OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SEC 23-39-10

SOUTH LINE OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SEC 23-39-10
(AS MONUMENTED & OCCUPIED)

PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
PARCEL 5

PARCEL 5
EXISTING 33' RIGHT OF WAY

EXISTING POWER POLE

EXISTING IBT PEDESTAL

EXISTING APARTMENT BUILDING

WILL-BRYANT CONDOMINIUM Per Doc. R1977-120078

(217.73')

(S 00°00'00" E)

236.05'

LOT 2
WHITE'S HARDING AVENUE RESUBDIVISION

PARCEL 1
P.I.N.: 05-23-223-020

PARCEL 2
P.I.N.: 05-23-223-005

PARCEL 4
THE NORTH 16' OF THE EAST 289' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT
P.I.N.: 05-23-223-025

PARCEL 3
P.I.N.: 05-23-223-008

(260.73')

(281.24')

(289.00')
(N 89°57'19" E)

(289.00')

THE NORTH LINE OF THE NORTH 16' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT

THE SOUTH LINE OF THE NORTH 16' OF LOT 2 IN RUDBECKS ASSESSMENT PLAT
AND THE SOUTH LINE OF LOT 1 IN RUDBECKS ASSESSMENT PLAT

SOUTH LINE OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SEC 23-39-10
(AS MONUMENTED & OCCUPIED)

EXISTING RESIDENCE
T.F.=770.41

EXISTING DRIVEWAY

LOT 1
RUDBECKS ASSESSMENT PLAT

LOT 2

LOT 3

LOT 4

LOT 5

LOT 14

LOT 15

#1 29" · #2 10" · #3 30" · #4 18" · #5 12"/18" · #6 9"/13" · #7 8"/12"/10" · #8 17" · #9 15" · #10 11" · #11 24" · #12 10" · #13 24" · #14 18" · #15 10" · #16 36" · #17 31" · #18 15" · #19 10" · #20 15" · #21 17" · #22 11" · #23 15" · #24 9" · #25 21" · #26 17"/13" · #27 9" · #28 26" · #29 11" · #30 21" · #31 22" · #32 12" · #33 14" · #34 14" · #35 16" · #36 16" · #37 14" · #38 14"/13" · #39 33" · #40 11" · #41 15" · #42 27" · #43 42" · #44 42" · #45 29" · #46 30" · #47 16" · #48 19" · #49 18" · #50 12" · #51 14" · #52 16" · #53 17" · #54 20" · #55 13" · #56 11" · #57 15" · #58 11" · #59 65" · #60 11"/6" · #61 13" · #62 10" · #63 6"/6"/5" · #64 39" · #65 32" · #66 24" · #67 22" · #68 21" · #69 15"/10"/7" · #70 32" · #71 15" · #72 32" · #73 41" · #74 22"

EXISTING ELECTRIC CONTROL BOX
EXISTING STREET LIGHT

(33.00')
(N 00°31'55" W)

N 90°00'00" E
46.75'

22.00

(166.75')
(N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

IRON PIPE IS 0.45' NORTH & 0.71' WEST

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

FRAME SHED

WOOD DECK

FENCE

EXISTING RESIDENCE

EXISTING BITUMINOUS DRIVEWAY

TOWNHOMES OF WATERS EDGE Per Doc. R1977-120078

PROPOSED HARDING CUSTOM HOMES SUBDIVISION UNIT 1 Per Doc. R2018-036528

PROPOSED RESIDENCE

PROPOSED DRIVEWAY

RUDBECKS BREWTWOOD PLACE Per Doc. R1991-022206

RUDBECKS ASSESSMENT PLAT Per Doc. R1963-008332

ROLLING WEDGE SUBDIVISION Per Doc. R1978-033719

APPROXIMATE LOCATION OF EXISTING SANITARY SEWER (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING SEPTIC FIELD (FIELD VERIFY LOCATION)

FIRE HYDRANT
WATER VALVE
RIM=760.28
SANITARY MANHOLE
RIM=758.93
INV=749.43 (8" W)
EXISTING UTILITY POLE

TREE LEGEND
DECIDUOUS TREE
#1 TREE NUMBER
29" TREE D.B.H.
CONIFEROUS TREE
#1 TREE NUMBER
29" TREE D.B.H.

TREES:
TREE NUMBERS AND SIZES CORRESPOND WITH THE IDENTIFICATION REPORT PROVIDED BY DAVE COULTER.

THERE IS NO SIGNIFICANT LANDSCAPING THAT WOULD AFFECT THIS PLAN ALONG THE NORTH, WEST AND SOUTH PROPERTY LINES ON THIS SITE OR ADJOINING PROPERTIES.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
05/25/21	VILLAGE REVIEW

EXISTING TOPOGRAPHIC SURVEY
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue, Suite 180, Carol Stream, Illinois, 60188
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Sheet 2 of 22

Project # 895

DRAWING FILE NAME: 895-MP.DWG

FURTHER REVIEW BY THE VILLAGE STAFF OF THE STORM SEWER SYSTEM WITHIN THE ROADWAY MAY NECESSITATE THE NEED FOR ADDITIONAL INLETS. IF IT IS DETERMINED ADDITIONAL CURB INLETS ARE NEEDED TO HANDLE FLOWS IN EXCESS OF THOSE SHOWN TO REDUCE THE POTENTIAL OF WATER ON THE PAVEMENT FOR STORMS IN EXCESS OF THE 10 YEAR STORM EVENT, THE DEVELOPER WILL WORK WITH THE VILLAGE TO FIND SUITABLE LOCATIONS THAT WORK WITH THE DRIVEWAY APPROACHES

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

EXISTING STRUCTURES WITH FRAMES SHALL BE ADJUSTED TO MATCH THE PROPOSED GRADE PER VILLAGE OF GLEN ELLYN PUBLIC WORKS STANDARDS AND SPECIFICATIONS. AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR ANY UNDERGROUND PIPE WITHIN 2 FEET OF ANY PAVEMENT, CURB, DRIVEWAY OR SIDEWALK.

EXISTING 12" WATERMAIN

FIRE HYDRANT

EXISTING UTILITY POLE TO REMAIN

IL. RT. 53 RIGHT OF WAY

(L=31.24')

(L=552.92')

PROPOSED 5' CONCRETE WALK

VALVE VAULT RIM=762.65

ST-21
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.25
INV.=759.87

110 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.72% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE

100 L.F. 15" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

ST-22
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.90
INV.=760.47

ST-23
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=764.00
INV.=761.27

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

ST-24
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.31

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

60 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.80%

ST-25
24" STORM INLET WITH TYPE "8" FRAME & OPEN GRATE.
RIM=766.80
INV.=762.79

W-2

ST-21 ST-22 ST-23 ST-24 ST-25

UNIT 23 | UNIT 22 | UNIT 21 | UNIT 20 | UNIT 19 | UNIT 18
BUILDING TYPE C

UNIT 17 | UNIT 16 | UNIT 15 | UNIT 14 | UNIT 13
BUILDING TYPE B

UNIT 12 | UNIT 11 | UNIT 10 | UNIT 9
BUILDING TYPE A

UNIT 8 | UNIT 7 | UNIT 6 | UNIT 5
BUILDING TYPE A

18 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

ST-19
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.85

ST-18
48" STORM CATCH BASIN WITH CURB FRAME & GRATE.
RIM=764.75 T/C
=764.25 F/L
INV.=760.67

ST-15
24" STORM INLET WITH DEPRESSED CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.82

FH-1
FIRE HYDRANT & HYDRANT VALVE

FH-2
FIRE HYDRANT & HYDRANT VALVE

395 L.F. 8" P.V.C. SANITARY SEWER @ 3.00%

20 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

6" D.I.P. WATERMAIN

6" D.I.P. WATERMAIN

72 L.F. 15" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.40%

ST-20
48" STORM CATCH BASIN WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=761.50
INV.=759.08

STREET LIGHT POWER DROP FROM EXISTING UTILITY POLE. TYPE 5 DISTRIBUTION.

SAN-2
SANITARY MANHOLE
RIM=763.00
INV.=751.60 (8" W)
INV.=751.70 (8" S)

90 L.F. 8" P.V.C. SANITARY SEWER @ 2.00% 8" P.V.C. SDR-26, ASTM D-2241 PIPE

50 L.F. 18" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 1.80%

32 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.50%

ST-16
48" STORM CATCH BASIN WITH DEPRESSED CURB FRAME & GRATE.
RIM=759.69 T/C
=759.49 F/L
INV.=757.33

ST-29
24" STORM INLET WITH FLAT TOP AND TYPE "8" FRAME & OPEN GRATE.
RIM=759.30
INV.=757.71

EXISTING FIRE HYDRANT

18 L.F. 12" R.C.P. C-76-IV STORM SEWER C-361 OR 443 "O" RING GASKETS @ 0.90%

EXISTING WATER VALVE RIM=760.28

EXISTING UTILITY POLE TO REMAIN

22 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00% ASTM-D-2241 WATERMAIN SPECIFICATION PIPE. TOP OF THE WATER MAIN AT THE CROSSING IS AT ELEVATION 755.48. BOTTOM OF THE STORM SEWER AT THE CROSSING IS AT ELEVATION 756.98. CREATING A VERTICAL SEPARATION OF 18". FIELD VERIFY THIS INFORMATION PRIOR TO THE START OF CONSTRUCTION. MAINTAIN A MINIMUM HORIZONTAL SEPERATION OF 10.0' FROM THE EXISTING FIRE HYDRANT AND VALVE.

EXISTING STREET LIGHT & STREET LIGHT CONTROLLER

EXISTING STREET LIGHT & STREET LIGHT CONTROLLER

ST-17
48" STORM INLET WITH FLAT TOP & CURB FRAME & GRATE.
RIM=759.99 T/C
=759.49 F/L
INV.=757.49

REMOVE AND REPLACE THE NECESSARY "SQUARES" (APPROXIMATELY 10') TO PERMIT REALIGNMENT OF SIDEWALK AROUND EXISTING POWER POLE.

SAN-1
EXISTING SANITARY MANHOLE
RIM=758.98 (EXISTING)
RIM=759.51 (PROPOSED)
INV.=749.48 (8" W) EXISTING
PROPOSED INV. @ CONNECTION=749.80

EXISTING BITUMINOUS ROADWAY

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN (FIELD VERIFY LOCATION)

HARDING AVE.

HARDING COURT

(217.73')

(166.75')

(20.84')

(L=166.78')

(28.23')

(166.77')

(289.00')

FOR WATERMAIN STORM SEWER CROSSING SEE SHEET 12

125 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.00%

STREET LIGHT

133 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 4.00%

SIGN

PROPSOED 10' X 10' GAZEBO

PROPOSED 2" P.V.C. CONDUIT FOR STREET LIGHT POWER SUPPLY

STREET LIGHT

ST-5
60" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=764.50
INV.=758.07 (W-18")
=758.07 (N-15")
=758.07 (S-12")
=760.42 (E-12")

ST-6
48" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=769.65
INV.=763.39 (N-12")
=763.39 (S-12")
=764.39 (E-12")

ST-14
24" STORM INLET WITH CURB FRAME & GRATE.
RIM=769.00 T/C
=768.50 F/L
INV.=764.62

23 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

148 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.80%

80 L.F. 12" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 1.60%

ST-4
60" MANHOLE WITH FLAT TOP AND TYPE "1" FRAME & CLOSED LID.
RIM=762.50
INV.=757.17 (W, E, N)

55 L.F. 18" R.C.P. C-76-IV STORM SEWER WITH C-361 OR 443 "O" RING GASKETS @ 2.40%

125 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.60%

185 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

ST-8
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=763.30
INV.=758.25

ST-27
48" STORM CATCH BASIN WITH CURB FRAME & GRATE.
RIM=770.25 T/C
=769.75 F/L
INV.=766.05

25 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.60%

ST-3
60" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=759.70
INV.=755.85 (W-24")
INV.=755.85 (E-18")
INV.=755.85 (S-12")

ST-7
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=762.50
INV.=757.85

247 L.F. 24" R.C.P. C-76-IV WITH ASTM C-361 OR 443 GASKETS (FOR PROTECTION OF WATER SERVICES) STORM SEWER PIPE @ 1.60%

125 L.F. 4" PERFORATED P.V.C. PIPE IN FILTER SOCK DRAIN TILE TO DISCHARGE TO DAYLIGHT @ INV.=764.50.

ST-9
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=770.00
INV.=760.47

28 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.20%

ST-10
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.30
INV.=760.81

SAN-4
SANITARY MANHOLE
RIM=771.30
INV.=764.90 (8" E)

100 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

ST-28
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=767.20
INV.=761.81

30 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 1.00%

SAN-5
SANITARY MANHOLE
RIM=771.30
INV.=764.80 (8" E)

ST-13
24" STORM INLET WITH TYPE "8" FRAME & OPEN GRATE.
RIM=766.00
INV.=763.67

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

115 L.F. 8" P.V.C. SANITARY SEWER @ 1.00% 8" P.V.C., SDR-26 ASTM D-2241 PIPE

ST-12
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.89

SAN-3
SANITARY MANHOLE
RIM=772.50
INV.=763.55 (8" N)
INV.=763.65 (8" E)
INV.=763.65 (8" W)

125 L.F. 8" P.V.C. SANITARY SEWER @ 1.00% 8" P.V.C., SDR-26 ASTM D-2241 PIPE

130 L.F. 12" P.V.C. (SDR-26) STORM SEWER PIPE @ 0.60%

ST-11
48" STORM INLET WITH FLAT TOP AND TYPE "1" FRAME & OPEN GRATE.
RIM=766.00
INV.=762.11

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

UTILITY PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Sheet 5 of 22

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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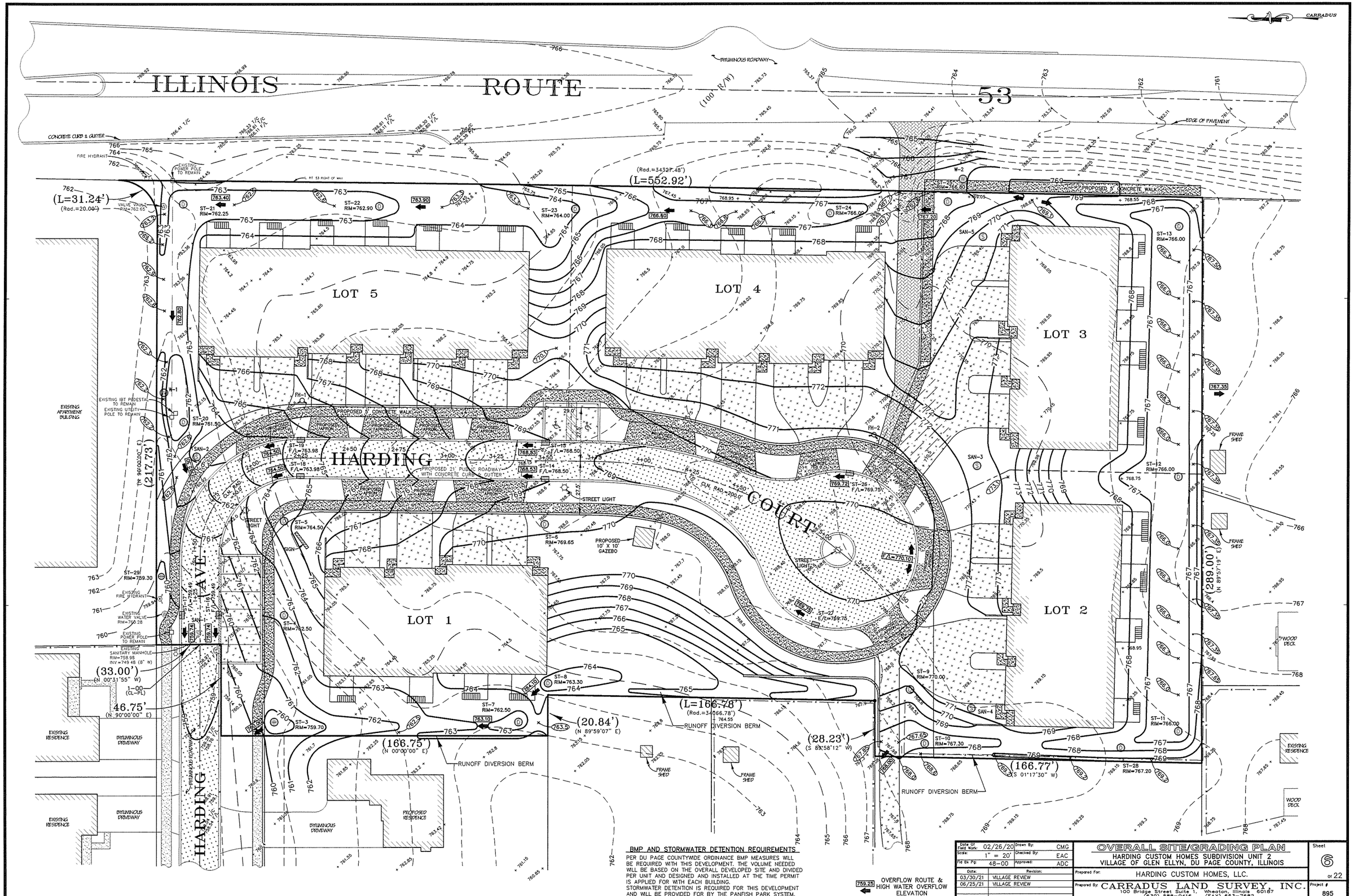
Project # 895

DRAWING FILE NAME: 895-MP-SHS



BMP AND STORMWATER DETENTION REQUIREMENTS

PER DU PAGE COUNTYWIDE ORDINANCE BMP MEASURES WILL BE REQUIRED WITH THIS DEVELOPMENT. THE VOLUME NEEDED WILL BE BASED ON THE OVERALL DEVELOPED SITE AND DIVIDED PER UNIT AND DESIGNED AND INSTALLED AT THE TIME PERMIT IS APPLIED FOR WITH EACH BUILDING.
STORMWATER DETENTION IS REQUIRED FOR THIS DEVELOPMENT AND WILL BE PROVIDED FOR BY THE PANFISH PARK SYSTEM.

759.25 OVERFLOW ROUTE & HIGH WATER OVERFLOW ELEVATION

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

OVERALL SITE/GRADING PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 6 of 22

Project # 895

DRAWING FILE NAME: 895_MF.DWG

FOR LEGAL DESCRIPTIONS OF PARCELS SEE SHEET 1

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY (100' R/W)

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

EXISTING APARTMENT BUILDING

(N 90°00'00" E)
(217.73')

SITE

(33.00')
(N 00°31'55" W)

HARDING AVE.

BITUMINOUS ROADWAY

46.75'
(N 90°00'00" E)

(166.75')
(N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

GLENBARD RD.
(100' R/W)
BITUMINOUS ROADWAY

EXISTING RESIDENCE
WOOD DECK
CONC. PATIO
BITUMINOUS DRIVEWAY
BRICK PATIO
FRAME SHED
EXISTING GARAGE
WOOD PORCH
PROPOSED RESIDENCE
PROPOSED DRIVEWAY
EXISTING DRIVEWAY
UNDER CONSTRUCTION RESIDENCE
STONE PATIO
CONCRETE WALKWAY
BRENTWOOD COURT

Date Of Field Work:	11/03/20	Drawn By:	JW
Scale:	1" = 30'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SURROUNDING CONDITIONS EXHIBIT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 20 of 22

Project # 895

DRAWING FILE NAME: 895-MD.DWG

TAB 2

SITE RUNOFF STORAGE
2A/2B

STORM CALCULATION METHODOLOGY

The Stormwater runoff volume has been calculated for each structure to establish the volume each structures grate must accommodate, and also to use as a volume necessary for bypass of overland flows should an inlet become obstructed. To establish the area tributary to each structure, the anticipated subcatchment areas have been shown on the drawing titled "Storm Sewer Tributary Exhibit". Also shown on this drawing are the primary overland flow routes with length and slope to be used to determine the time of concentration as calculated by the Soil Conservation Service TR-55 Method, the output herein referred to by the designation (55) behind a value. Secondary overland flow routes for comparison purposed have also been included in some instances. The land use for each individual subcatchment area based on the proposed design has also been incorporated into the TR-55 input data. Rainfall data has been obtained from the Illinois State Water Service, Bulletin 75.

Potions of the output from the TR-55 program have then been utilized to determine the runoff volumes for use in the storm sewer design, inlet grate capacity, and overflow bypass requirements through calculations by the Rational Method, the output herein after referred to by the designations (R) behind a value.

The output from the Rational Method was also put into the HEC-22 Program to determine gutter spread, and inlet interception capacity.

The runoff volumes generated by the Rational Method are significantly less then runoff volumes generated by the TR-55 method. This is generally due to the fact that the TR-55 calculations are based on a formula that is geared more for much larger tributary areas, while the Rational Method formula is geared more for the smaller tributary areas of a project like this. For the purposes of this design, output from the Rational Method has been utilized for storm sewer design. We have included the TR-55 runoff volumes for comparison purposes only.

STORM SEWER PIPING

When evaluating the storm sewer system for this site, the subcatchment area tributary to each storm structure was identified with its terrain characteristics. The "Storm Sewer Exhibit" drawing has been included as part of this report. Then incorporating the Rational Method, utilizing rainfall data from ISWS Bulletin 75 for the 100 year storm, the stormwater runoff for each structure was calculated. To calculate the volume of stormwater runoff each segment of the storm sewer system must transport, the methods prescribed in Chapter 8 of the IDOT drainage manual were employed. The TR-55 program was used to determine the time of concentration for the start of each storm sewer run. Information was tabulated on the "Storm Sewer Computation Sheet", Table 8-304 from the design manual, and is included herewith. All material specifications and details used in this design have been provided by the Village of Glen Ellyn Public Works Department.

In determining the "C" value used for the Rational Method Calculations, the actual impervious area and pervious area of the site we incorporated, with the total impervious area of the site, including right-of-way and the 5 lot being 80,889 sq.ft. or 55.15% of the site, and pervious area being 65,779 sq. ft. or 44.85% of the site we used 0.95 for impervious surface and 0.12 for pervious surface. The result was 0.57, which we then rounded down to 0.55 for the calculations to compensate for offsite areas that would be pervious area only. The pervious area "C" value selected, took into account an interpretation of the soil type and slopes of the site.

From Table 8-304 we find the sum of all subcatchment areas, calculated to be 19.91 cfs for the total outfall from The Storm Sewer System of the site. We have sized the storm sewer pipes so that most have a built in safety factor of approximately 40%, ensuring the piping will handle flows that could exceed the projected 100 year flows. Though several runs of the storm sewers are at 90% capacity or more, these are in rear yard areas with built in storage from the swales and BMP stone beds that provide added management of stormwater runoff. It is further expected that runoff volumes will be reduced or slowed down

by the stormwater runoff that is temporarily stored within the BMP areas for treatment and then percolating into the ground, or later introduced into the storm sewer system. The 24" RCP interceptor along the South side of Harding and the 36" RCP that discharges into Panfish Park have both been designed to accept flows in excess of the total runoff from this site.

The proposed water main separation from sewers is a minimum of 10' horizontal and 18" vertical with the sewers designed to run under water mains and services at crossings when possible. Where a sewer crosses over or under a water main, water main quality pipe is specified for sewers.

Storm sewer inceptors, and those within the right-of-way are all designed to have in excess of 35% unused capacity while transporting the total projected 100 year flows that may be expected. Swales have been designed with periodic diversion berms (speed bumps) approximately 2"-3" in height to redirect runoff to the BMP areas and storm inlets. The rim elevations of inlets and the overflow elevation of these periodic ponding areas is well below the grade of adjacent buildings as demonstrated later in this tab. Should a downstream inlet grate become blocked the drainage system as designed provides adequate capacity in the swales above the storm sewers to convey all upstream runoff to the next available storm inlet. Example being Lots 4 and 5, all rear yard swales above the storm sewers and BMP beds have a capacity of at least 16 cfs behind the building on Lot 5. With an anticipated high water level of only 0.05' above the top of the ditch check at elevation 763.50. This high water level of 763.55 in a 100 year rainfall "system fail" scenario is 2.45' below the adjacent top of foundation elevation of 766.0 of units 18 and 19. This pattern is characteristic throughout the rear yard storm sewer and berm system of lots 1, 4 and 5. The design of the storm sewer and berm system along the rear of Lots 2 and 3 present a different challenge. The rear yards of Lots 2 and 3 originally flowed unrestricted onto the property to the South. A knoll prevents the overland flow to the North of runoff flow, both existing and as proposed. Because of this natural feature, any rainfall in excess of the 100 year event that the storm system is designed to accommodate or should the storm sewer system fail for any reason that would prevent stormwater from

traveling North to the 24" interceptor, a rear yard depression has been created on Lots 2 and 3 that would provide a stormwater detention system capable of storage of rainfall in excess of the 100 year storm event. This emergency detention facility and its capabilities are further described in Section D-D of the bypass portion of this report.

The onsite Storm Sewer System is broken into two entities with a common trunk line to discharge the stormwater from the site. The publicly maintained curb inlet system and main trunk line along Harding Avenue and Harding Court is independent of the rear yard drainage system and BMP systems that are the Homeowners Association's responsibility for maintenance. The rear yard system does tie into the main trunk along Harding, but does not directly connect to any curb inlets, nor do any of the curb inlets directly tie into the rear yard system.

The "Storm Sewer Computation Sheet" attached as part of this report displays the design basis for the storm sewer system. All storm sewers are capable of transporting the upstream flows, and all grates are capable of capturing all of the upstream runoff and getting this runoff into the storm sewer, in the event upstream inlets are blocked and not functioning. It should also be apparent by calculations, that any minor fluctuation or discrepancy of the input data would not adversely affect the design of this system.

CARRADUS

ILLINOIS ROUTE 53

HARDING COURT

HARDING AVE.

150'@2.3%
100'@3.5%
45'@3.3%
70'@0.7%
(90'@6.6%)
(40'@7.5%)
(55'@2.7%)
45'@6.0%
(80'@6.9%)
(40'@1.8%)
(4.14 C.F.S. PROVIDED 0.34 C.F.S. REQUIRED)
(6.50 C.F.S. PROVIDED 5.71 C.F.S. REQUIRED)
(35'@2.9%)
(4.14 C.F.S. PROVIDED 4.01 C.F.S. REQUIRED)
(4.14 C.F.S. PROVIDED 2.51 C.F.S. REQUIRED)
(45'@6.7%)
(65'@3.1%)
(80'@2.5%)
(75'@7.3%)
(60'@4.2%)
(70'@10.1%)
(6.58 C.F.S. PROVIDED 6.58 C.F.S. REQUIRED)
60'@2.2%①
65'@0.9%①
(7.13 C.F.S. PROVIDED 6.58 C.F.S. REQUIRED)
100'@4.5%
155'@4.5%
(85'@6.0%)
(55'@7.2%)
175'@2.3%
155'@3.9%
185'@4.1%
65'@3.8%①
60'@2.2%①
(3.59 C.F.S. PROVIDED 0.80 C.F.S. REQUIRED)
75'@3.5%①
70'@1.9%①
(3.86 C.F.S. PROVIDED 1.40 C.F.S. REQUIRED)
(3.86 C.F.S. PROVIDED 1.80 C.F.S. REQUIRED)
145'@4.3%
140'@4.5%
(3.86 C.F.S. PROVIDED 2.59 C.F.S. REQUIRED)
(4.63 C.F.S. PROVIDED)
(2.99 C.F.S. REQUIRED)
(9.26 C.F.S. PROVIDED 4.81 C.F.S. REQUIRED)
(6.21 C.F.S. PROVIDED 1.87 C.F.S. REQUIRED)
(4.88 C.F.S. PROVIDED)
(4.45 C.F.S. REQUIRED)
85'@2.1%
(85'@8.3%)
85'@3.1%
75'@3.3%①
70'@1.9%①
(2.28 C.F.S. PROVIDED 2.28 C.F.S. REQUIRED)
110'@5.9%
(60'@7.5%)
(21.92 C.F.S. PROVIDED)
(14.24 C.F.S. REQUIRED)
(60'@7.5%)
(26.45 C.F.S. PROVIDED)
(16.17 C.F.S. REQUIRED)
(110'@7.0%)
95'@ 4.3%
65'@3.8%①
(3.59 C.F.S. PROVIDED 2.28 C.F.S. REQUIRED)
60'@2.3%①
170'@4.9%
(5.07 C.F.S. PROVIDED 3.79 C.F.S. REQUIRED)
120'@4.9%
(5.86 C.F.S. PROVIDED 5.10 C.F.S. REQUIRED)
55'@0.7%①
(5.86 C.F.S. PROVIDED 5.01 C.F.S. REQUIRED)
(5.07 C.F.S. PROVIDED 3.79 C.F.S. REQUIRED)
(50'@4.2%)
80'@4.4%①
(4.63 C.F.S. PROVIDED 3.00 C.F.S. REQUIRED)
(4.63 C.F.S. PROVIDED)
(3.00 C.F.S. REQUIRED)
(8.28 C.F.S. PROVIDED)
(7.21 C.F.S. REQUIRED)
75'@6.5%
(4.63 C.F.S. PROVIDED)
(0.51 C.F.S. REQUIRED)
(3.66 C.F.S. PROVIDED)
(1.36 C.F.S. REQUIRED)
(3.28 C.F.S. PROVIDED)
(2.00 C.F.S. REQUIRED)
(31.00 C.F.S. PROVIDED, 19.91 C.F.S. REQUIRED)

0.130 Ac.
0.198 Ac.
0.242 Ac.
0.345 Ac.
0.126 Ac.
0.039 Ac.
0.112 Ac.
0.212 Ac.
0.272 Ac.
0.181 Ac.
0.229 Ac.
0.251 Ac.
0.081 Ac.
0.123 Ac.
0.105 Ac.
0.182 Ac.
0.072 Ac.
0.221 Ac.
0.168 Ac.
0.017 Ac.
0.133 Ac.
0.143 Ac.

W-1 W-2
ST-20 ST-21 ST-22 ST-23 ST-24 ST-25 ST-13
ST-19 ST-15 ST-18 ST-14 ST-26 ST-12
ST-5 ST-6 ST-29 ST-17 ST-16 ST-4 ST-27 ST-9 ST-10 ST-11 ST-28
ST-3 ST-7 ST-8
FH-1 FH-2
SAN-1 SAN-2 SAN-3 SAN-4 SAN-5

STORM SEWER AND RUNOFF VALUES BASED ON THE RATIONAL METHOD UTALIZING BULLETIN 75 RAINFALL DATA FOR THE 100 YEAR STORM EVENT.

DRAINAGE FLOW LEGEND

- 50' @ 1.0% — PRIMARY OVERLAND DRAINAGE FLOW ROUTE
- (50' @ 1.0%) — SECONDARY OVERLAND DRAINAGE FLOW ROUTE
- 50' @ 1.0%① — USED TO DETERMINE AVERAGE OVERLAND FLOW TIME
- (C.F.S.) — UNDERGROUND STORM SEWER
- GRADING RIDGE LINE
- AREA=X.XX — TRIBUTARY AREA IN ACRES

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
08/25/21	VILLAGE REVIEW

STORM SEWER TRIBUTARY EXHIBIT

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

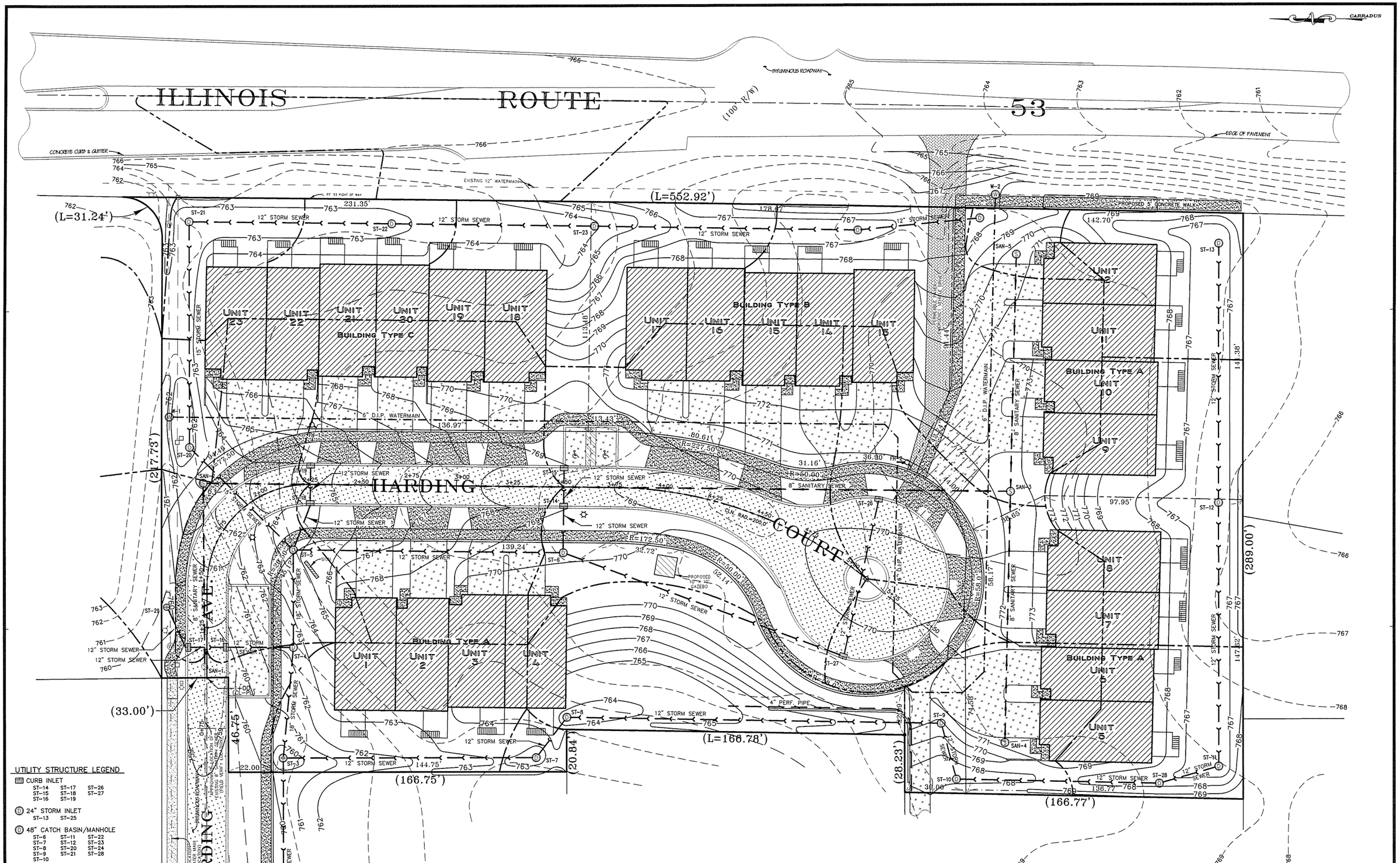
Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 2

Project # 895

DRAWING FILE NAME: 895-TRIB_SHT



UTILITY STRUCTURE LEGEND

CURB INLET
ST-14 ST-17 ST-26
ST-15 ST-18 ST-27
ST-16 ST-19

24" STORM INLET
ST-13 ST-25

48" CATCH BASIN/MANHOLE
ST-6 ST-11 ST-22
ST-7 ST-12 ST-23
ST-8 ST-20 ST-24
ST-9 ST-21 ST-28
ST-10

60" MANHOLE
ST-3 ST-4 ST-5

SANITARY MANHOLE
SAN-1 SAN-2 SAN-3
SAN-4 SAN-5

VALVE VAULT
W-1 W-2

Date Of Field Work: 02/26/20	Drawn By: CMG	STORM SEWER TRIBUTARY EXHIBIT	Sheet 2 of 2
Scale: 1" = 20'	Checked By: EAC	HARDING CUSTOM HOMES SUBDIVISION UNIT 2 VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS	
Fla Bk Pg: 48-00	Approved: ADC	Prepared For: HARDING CUSTOM HOMES, LLC.	
Date: 03/30/21	Revision: PRELIMINARY PLAT	Prepared By: CARRADUS LAND SURVEY, INC. 191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188 (630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM	Project # 895
06/25/21	VILLAGE REVIEW		

STORM SEWER COMPUTATION SHEET

COMPUTED ADC DATE 06/24/21

CHECKED JW DATE 06/24/21

ROUTE HARDING TOWNHOMES

SECTION

COUNTY

BULLETIN 75, 100 YEAR STORM

STATION FROM	STATION TO	LENGTH FEET	DRAINAGE AREA "A" (ACRES) INCREMENT	DRAINAGE AREA "A" (ACRES) TOTAL	RUNOFF COEFFICIENT "C"	"A" x "C" INCREMENT	"A" x "C" TOTAL	FLOW TIME MIN. TO UPPER END	FLOW TIME MIN. IN SECTION	RAINFALL INTENSITY "I" In/hour	TOTAL RUNOFF C.I.A. = Q (c.f.s.)	DIAMETER PIPE Inches	CAPACITY FULL c.f.s.	VELOCITY f.p.s. FLOWING FULL	VELOCITY f.p.s. DESIGN FLOW	INVERT ELEV UPPER END	INVERT ELEV LOWER END	MANHOLE INVERT DROP	SLOPE OF SEWER ft/ft
ST-13	ST-12	130	0.13	0.13	0.55		0.072	9.18	0.474	11.05	0.80	12	3.59	4.57	3.29	763.67	762.39		0.0060
ST-12	ST-11	130	0.25	0.38	0.55		0.209	9.65	0.659	10.9	2.28	12	3.59	4.57	4.48	762.39	762.11		0.0060
ST-11	ST-28	30	0.13	0.51	0.55		0.281	10.31	0.112	10.7	3.00	12	4.63	5.90	6.31	762.11	761.81		0.0100
ST-28	ST-10	100	0.00	0.51	0.55		0.281	10.42	0.264	10.65	3.00	12	4.63	5.90	6.31	761.81	760.81		0.0100
ST-10	ST-9	28	0.14	0.65	0.55		0.358	10.68	0.074	10.6	3.79	12	5.07	6.46	7.11	760.81	760.47		0.0120
ST-9	ST-8	185	0.00	0.65	0.55		0.358	10.75	0.434	10.55	3.79	12	5.07	6.46	7.11	760.47	758.25		0.0120
ST-8	ST-7	25	0.22	0.87	0.55		0.479	11.18	0.059	10.45	5.01	12	5.86	7.46	8.43	758.25	757.85		0.0160
ST-7	ST-3	125	0.02	0.89	0.55		0.490	11.24	0.247	10.4	5.10	12	5.86	7.46	8.50	757.85	755.85		0.0160
ST-25	ST-24	60	0.05	0.05	0.55		0.028	6.00	0.190	12.05	0.34	12	4.14	5.27	2.95	762.79	762.31		0.0080
ST-24	ST-23	130	0.33	0.38	0.55		0.209	6.19	0.734	12.0	2.51	12	4.14	5.27	5.53	762.31	761.27		0.0080
ST-23	ST-22	100	0.24	0.62	0.55		0.341	6.92	0.301	11.75	4.01	12	4.14	5.27	6.11	761.27	760.47		0.0080
ST-22	ST-21	100	0.27	0.89	0.55		0.490	7.22	0.273	11.65	5.71	15	6.50	5.30	6.04	760.47	759.87		0.0060
ST-21	ST-20	110	0.14	1.03	0.55		0.567	7.49	0.304	11.6	6.58	15	7.13	5.80	6.67	759.87	759.08		0.0072
ST-20	ST-5	72	0.11	1.14	0.55		0.627	7.79	0.180	11.5	7.21	15	8.28	6.75	7.70	759.08	756.91		0.0140
ST-19	ST-18	18	0.21	0.21	0.55		0.116	6.00	0.061	12.05	1.40	12	3.86	4.91	4.47	760.85	760.67		0.0100
ST-18	ST-5	25	0.18	0.39	0.55		0.215	6.06	0.093	12.05	2.59	12	3.86	4.91	5.30	760.67	760.42		0.0100
ST-26	ST-27	80	0.23	0.23	0.55		0.127	7.92	0.214	11.45	1.45	12	4.88	6.22	5.35	767.33	766.05		0.0160
ST-27	ST-6	148	0.07	0.30	0.55		0.165	8.13	0.461	11.35	1.87	12	6.21	7.91	6.80	766.05	763.39		0.0180
ST-15	ST-14	20	0.27	0.27	0.55		0.149	6.00	0.068	12.05	1.80	12	3.86	4.91	4.76	764.82	764.62		0.0100
ST-14	ST-6	23	0.18	0.45	0.55		0.248	6.07	0.081	12.05	2.99	12	4.63	5.90	6.31	764.62	764.39		0.0100

"n"
RCP - 0.012
PVC - 0.010

Storm Sewer Computation Sheet
Table 8-304

STORM SEWER COMPUTATION SHEET

COMPUTED AOC DATE 06/24/21

CHECKED JW DATE 06/24/21

ROUTE HARDING TOWNHOMES

SECTION

COUNTY

BULLETIN 75, 100 YEAR STORM

STATION FROM	STATION TO	LENGTH FEET	DRAINAGE AREA "A" (ACRES) INCREMENT	DRAINAGE AREA "A" (ACRES) TOTAL	RUNOFF COEFFICIENT "C"	"A" x "C" INCREMENT	"A" x "C" TOTAL	FLOW TIME MIN. TO UPPER END	FLOW TIME MIN. IN SECTION	RAINFALL INTENSITY "I" in/hour	TOTAL RUNOFF C.I.A. = Q (c.f.s.)	DIAMETER PIPE inches	CAPACITY FULL c.f.s.	VELOCITY f.p.s. FLOWING FULL	VELOCITY f.p.s. DESIGN FLOW	INVERT ELEV UPPER END	INVERT ELEV LOWER END	MANHOLE INVERT DROP	SLOPE OF SEWER ft/ft
ST-29	ST-17	17	0.08	0.08	0.55		0.044	7.020	0.048	11.7	0.51	12	4.63	5.90	2.83	757.71	757.49		0.0100
ST-17	ST-16	18	0.13	0.21	0.55		0.116	7.068	0.106	11.7	1.36	12	3.66	4.66	3.96	757.49	757.33		0.0090
ST-16	ST-4	32	0.10	0.31	0.55		0.171	7.174	0.122	11.7	2.00	12	3.28	4.17	4.38	757.33	757.17		0.0050
ST-27	ST-6	148		0.30	0.55		0.165	8.13*	0.461	11.35	1.87	12	6.21	7.91	6.80	766.05	763.39		0.0180
ST-14	ST-6	23		0.45	0.55		0.248	6.07	0.081	12.05	2.99	12	4.43	5.90	6.31	764.62	764.39		0.0100
ST-6	ST-5	0		0.75	0.55		0.423	8.13	—	11.35	4.81	12	9.26	11.79	11.91	763.39	758.07		0.0400
ST-6	ST-5	0		0.75	0.55		0.423	8.13*	—	11.35	4.81	12	9.26	11.79	11.91	763.39	758.07		0.0400
ST-18	ST-5	25		0.39	0.55		0.215	6.06	0.093	12.05	2.59	12	3.86	4.91	5.30	760.67	760.42		0.0100
ST-20	ST-5	72		1.14	0.55		0.627	7.74	0.172	11.5	7.21	15	8.28	6.75	7.70	759.08	758.07		0.0140
ST-5	ST-4	0		2.28	0.55		1.254	8.13	—	11.35	14.24	18	21.92	6.98	7.47	758.07	757.17		0.0180
ST-16	ST-4	32		0.31	0.55		0.171	7.174	0.122	11.7	2.00	12	3.28	4.17	4.38	757.33	757.17		0.0400
ST-5	ST-4	0		2.28	0.55		1.254	8.13*	—	11.35	14.24	18	21.92	6.98	7.47	758.07	757.17		0.0080
ST-4	ST-3	0		2.59	0.55		1.425	8.13	—	11.35	14.17	18	26.85	8.55	8.98	757.17	755.85		0.0240
ST-7	ST-3	125		0.89	0.55		0.490	11.24*	0.247	10.4	5.10	12	5.86	7.46	8.50	758.25	755.85		0.0160
ST-4	ST-3	55		2.59	0.55		1.425	8.13	—	11.35	14.17	24	26.85	8.55	8.98	757.17	755.85		0.0120
ST-3	ST-2	247		3.48	0.55		1.914	11.24	—	10.4	19.91	24	31.00	9.87	10.46	755.85	751.75		0.0160

"n"
RCP - 0.012
PVC - 0.010

Storm Sewer Computation Sheet
Table 8-304

Illinois State Water Survey
Bulletin 75 Rainfall Data

Table 7. Rainfall (inches) for Given Recurrence Interval for Section 2 (Northeast)

Storm Duration	2-month	3-month	4-month	6-month	9-month	1-year	2-year	5-year	10-year	25-year	50-year	100-year	500-year
5 minutes	0.19	0.22	0.24	0.27	0.31	0.33	0.40	0.52	0.62	0.77	0.90	1.03	1.35
10 minutes	0.33	0.38	0.41	0.47	0.53	0.58	0.70	0.90	1.08	1.35	1.58	1.80	2.36
15 minutes	0.42	0.49	0.53	0.61	0.69	0.75	0.90	1.16	1.39	1.74	2.03	2.32	3.04
30 minutes	0.58	0.66	0.73	0.83	0.94	1.03	1.24	1.59	1.91	2.39	2.78	3.17	4.16
1 hour	0.74	0.84	0.93	1.05	1.20	1.30	1.57	2.02	2.42	3.03	3.53	4.03	5.28
2 hours	0.91	1.04	1.14	1.30	1.48	1.61	1.94	2.49	2.99	3.74	4.35	4.97	6.52
3 hours	1.00	1.15	1.26	1.44	1.63	1.77	2.14	2.75	3.30	4.13	4.80	5.49	7.20
6 hours	1.18	1.35	1.48	1.68	1.91	2.08	2.51	3.23	3.86	4.84	5.63	6.43	8.43
12 hours	1.37	1.56	1.71	1.95	2.21	2.41	2.91	3.74	4.48	5.61	6.53	7.46	9.78
18 hours	1.48	1.69	1.85	2.11	2.39	2.61	3.14	4.04	4.84	6.06	7.05	8.06	10.57
24 hours	1.57	1.80	1.97	2.24	2.55	2.77	3.34	4.30	5.15	6.45	7.50	8.57	11.24
48 hours	1.72	1.97	2.16	2.46	2.79	3.04	3.66	4.71	5.62	6.99	8.13	9.28	12.10
72 hours	1.87	2.14	2.34	2.67	3.03	3.30	3.97	5.08	6.05	7.49	8.64	9.85	12.81
120 hours	2.08	2.38	2.61	2.97	3.37	3.67	4.42	5.63	6.68	8.16	9.39	10.66	13.81
240 hours	2.63	3.01	3.30	3.76	4.27	4.65	5.60	7.09	8.25	9.90	11.26	12.65	16.00

Carradus Land Survey, Inc.
191 S. Gary Ave., Ste. 180
Carol Stream, IL 60188

HARDING TOWNHOMES
TR-55 INPUT

Project No. 845
Date: 03/01/2021

I.D.	TOTAL AREA	IMPERVIOUS	PERVIOUS	OVERALL SLOPE	OVERALL LENGTH	SHEET SHALLOW		T/C HR.	T/C MIN
ST-3	7,317 ft² 0.168 Ac.	3,481 ft² 0.079 Ac.	3,886 ft² 0.089 Ac.	4.9%	120'	100' 20'	U U	0.163	9.8
ST-4	0								
ST-5	0								
ST-6	0								
ST-7	723 0.017	40 0.001	683 0.016	15.5%	20'	20'	U	0.1	6.0
ST-8	9,615 0.221	1,071 0.025	8,544 0.196	4.9%	170'	100' 70'	U U	0.167	10.0
ST-9	0								
ST-10	4,224 0.143	3,810 0.087	2,414 0.056	4.3%	95'	50' 45'	P U	0.1	6.0
ST-11	5,805 0.133	2,193 0.050	3,612 0.083	3.6%	70'	70'	U	0.138	8.3
ST-12	10,940 0.251	4,175 0.096	6,765 0.155	2.6%	75'	75'	U	0.167	10.0
ST-13	5,493 0.126	2,050 0.047	3,443 0.079	2.8%	70'	70'	U	0.153	9.2
ST-14	7,904 0.181	4,067 0.093	3,837 0.088	1.1%	170'	100' 70'	P P	0.1	6.0
ST-15	11,828 0.272	8,892 0.204	2,936 0.068	2.3%	175'	100' 75'	P P	0.1	6.0
ST-16	4,496 0.103	2,469 0.056	2,027 0.047	5.9%	110'	80' 30'	U P	0.128	7.7
ST-17	5,345 0.123	4,635 0.106	710 0.017	4.5%	155'	100' 55'	P P	0.1	6.0
		34,883							

P - PAVED
U - UNPAVED

Carradus Land Survey, Inc.
191 S. Gary Ave., Ste. 180
Carol Stream, IL 60188

HARDING TOWNHOMES
TR-55 INPUT

Project No. 075
Date: 03/01/2021

I.D.	TOTAL AREA	IMPERVIOUS	PERVIOUS	OVERALL SLOPE	OVERALL LENGTH	SHEET SHALLOW		T/C HR	T/C MIN
ST-18	7,947 ft² 0.182 Ac.	4,609 ft² 0.151 Ac	1,338 ft² 0.031	4.5%	140'	100' 40'	P P	0.10	6.0
ST-19	9,245 0.212	7,707 0.177	1,538 0.035	4.3%	145'	100' 45'	P P	0.10	6.0
ST-20	4,862 0.112	233 0.006	4,629 0.106	1.8%	85'	85'	U	0.213	12.8
ST-21	5,677 0.130	1,149 0.026	4,528 0.104	3.0%	80'	80'	U	0.166	10.0
ST-22	8,604 0.198	4,260 0.144	2,344 0.054	2.3%	150'	100' 50'	U U	0.224	13.4
ST-23	10,545 0.242	4,208 0.097	6,337 0.145	0.7%	70'	70'	U	0.266	16.0
ST-24	15,011 0.345	9,498 0.223	5,313 0.122	4.1%	185'	100' 85'	U U	0.180	10.8
ST-25	1,497 0.039	502 0.012	1,195 0.027	6.0%	45'	45'	U	0.10	6.0
ST-26	9,985 0.229	7,508 0.172	2,477 0.057	3.1%	85'	60' 25'	U P	0.132	7.9
ST-27	3,121 0.072	2,339 0.054	782 0.018	2.1%	85'	40' 45'	U P	0.114	6.8
ST-28	0								
ST-29	3,535 0.081	164 0.004	3371 0.077	6.3%	75'	75'	U	0.117	7.0
		46,377 36,883 83,260 ft²							

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-3 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-(Unit 2).w55

Date: 3/4/2021
Units: English .
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.17	85	.163

Total area: .17 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-3 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.45	0.65	0.83	1.11	1.33	1.55	0.34
REACHES							
OUTLET	0.45	0.65	0.83	1.11	1.33	1.55	0.34

ADC

Harding Subdivision Unit 2
Structire ST-3 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.089	74
	Paved parking lots, roofs, driveways	C	.079	98
	Total Area / Weighted Curve Number		.17	85

ADC

Harding Subdivision Unit 2
Structire ST-3 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0490	0.240				0.161
SHALLOW	20	0.0490	0.050				0.002
					Time of Concentration		.163

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-7 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-7 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.02	75	0.1

Total area: .02 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-7 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	.00	0.06	0.08	0.11	0.14	0.16	.00
REACHES							
OUTLET	.00	0.06	0.08	0.11	0.14	0.16	.00

ADC

Harding Subdivision Unit 2
Structire ST-7 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.016	74
	Paved parking lots, roofs, driveways	C	.001	98
	Total Area / Weighted Curve Number		.02	75

ADC

Harding Subdivision Unit 2
Structire ST-7 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	20	0.1550	0.240				0.028
						Time of Concentration	0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-8 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-8 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.22	77	.167

Total area: .22 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-8 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.39	0.62	0.83	1.16	1.44	1.72	0.27
REACHES							
OUTLET	0.39	0.62	0.83	1.16	1.44	1.72	0.27

ADC

Harding Subdivision Unit 2
Structire ST-8 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.196	74
	Paved parking lots, roofs, driveways	C	.025	98
	Total Area / Weighted Curve Number		.22	77

ADC

Harding Subdivision Unit 2
Structire ST-8 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0490	0.240				0.161
SHALLOW	71	0.0490	0.050				0.006
						Time of Concentration	.167

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-10 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-10 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.14	89	0.1

Total area: .14 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-10 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.47	0.66	0.82	1.07	1.26	1.46	0.37
REACHES							
OUTLET	0.47	0.66	0.82	1.07	1.26	1.46	0.37

ADC

Harding Subdivision Unit 2
Structire ST-10 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.056	74
	Paved parking lots, roofs, driveways	C	.087	98
	Total Area / Weighted Curve Number		.14	89

ADC

Harding Subdivision Unit 2
Structire ST-10 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	50	0.0430	0.011				0.008
SHALLOW	45	0.0430	0.050				0.004
						Time of Concentration	0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-11 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-11 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.13	83	.138

Total area: .13 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-11 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.32	0.47	0.61	0.82	0.99	1.16	0.23
REACHES							
OUTLET	0.32	0.47	0.61	0.82	0.99	1.16	0.23

ADC

Harding Subdivision Unit 2
Structire ST-11 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.083	74
	Paved parking lots, roofs, driveways	C	.05	98
	Total Area / Weighted Curve Number		.13	83

ADC

Harding Subdivision Unit 2
Structire ST-11 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	70	0.0360	0.240				0.138
					Time of Concentration		.138

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-12 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-12 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.25	83	.167

Total area: .25 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-12 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.60	0.88	1.13	1.53	1.85	2.17	0.44
REACHES							
OUTLET	0.60	0.88	1.13	1.53	1.85	2.17	0.44

ADC

Harding Subdivision Unit 2
Structire ST-12 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.155	74
	Paved parking lots, roofs, driveways	C	.096	98
	Total Area / Weighted Curve Number		.25	83

ADC

Harding Subdivision Unit 2
Structire ST-12 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	75	0.0260	0.240				0.167
						Time of Concentration	.167

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-13 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-13 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.13	83	.153

Total area: .13 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-13 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.31	0.46	0.59	0.80	0.97	1.14	0.23
REACHES							
OUTLET	0.31	0.46	0.59	0.80	0.97	1.14	0.23

ADC

Harding Subdivision Unit 2
Structire ST-13 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.079	74
	Paved parking lots, roofs, driveways	C	.047	98
	Total Area / Weighted Curve Number		.13	83

ADC

Harding Subdivision Unit 2
Structire ST-13 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	70	0.0280	0.240				0.153
						Time of Concentration	.153

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-14 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-14 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.18	86	0.1

Total area: .18 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-14 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.54	0.77	0.98	1.29	1.55	1.80	0.41
REACHES							
OUTLET	0.54	0.77	0.98	1.29	1.55	1.80	0.41

ADC

Harding Subdivision Unit 2
Structire ST-14 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.088	74
	Paved parking lots, roofs, driveways	C	.093	98
	Total Area / Weighted Curve Number		.18	86

ADC

Harding Subdivision Unit 2
Structire ST-14 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0110	0.011				0.025
SHALLOW	71	0.0110	0.025				0.009
					Time of Concentration		0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-15 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-15 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.27	92	0.1

Total area: .27 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-15 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	1.00	1.35	1.65	2.12	2.49	2.87	0.79
REACHES							
OUTLET	1.00	1.35	1.65	2.12	2.49	2.87	0.79

ADC

Harding Subdivision Unit 2
Structire ST-15 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.068	74
	Paved parking lots, roofs, driveways	C	.204	98
	Total Area / Weighted Curve Number		.27	92

ADC

Harding Subdivision Unit 2
Structire ST-15 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0230	0.011				0.019
SHALLOW	76	0.0230	0.025				0.007
						Time of Concentration	0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-16 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-16 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.1	87	.128

Total area: .10 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-16 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.31	0.43	0.54	0.72	0.85	1.00	0.23
REACHES							
OUTLET	0.31	0.43	0.54	0.72	0.85	1.00	0.23

ADC

Harding Subdivision Unit 2
Structire ST-16 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.047	74
	Paved parking lots, roofs, driveways	C	.056	98
	Total Area / Weighted Curve Number		.1	87
			==	==

ADC

Harding Subdivision Unit 2
Structire ST-16 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	80	0.0590	0.240				0.126
SHALLOW	30	0.0590	0.025				0.002
					Time of Concentration		.128
							========

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-17 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-17 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.12	95	0.1

Total area: .12 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-17 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.49	0.64	0.78	0.99	1.15	1.32	0.40
REACHES							
OUTLET	0.49	0.64	0.78	0.99	1.15	1.32	0.40

ADC

Harding Subdivision Unit 2
Structire ST-17 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.017	74
	Paved parking lots, roofs, driveways	C	.106	98
	Total Area / Weighted Curve Number		.12	95

ADC

Harding Subdivision Unit 2
Structire ST-17 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0450	0.011				0.014
SHALLOW	56	0.0450	0.025				0.004
					Time of Concentration		0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-18 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-18 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.18	94	0.1

Total area: .18 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-18 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.70	0.93	1.13	1.44	1.69	1.94	0.57
REACHES							
OUTLET	0.70	0.93	1.13	1.44	1.69	1.94	0.57

ADC

Harding Subdivision Unit 2
Structire ST-18 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.031	74
	Paved parking lots, roofs, driveways	C	.151	98
	Total Area / Weighted Curve Number		.18	94

ADC

Harding Subdivision Unit 2
Structire ST-18 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0450	0.011				0.014
SHALLOW	41	0.0450	0.025				0.003
						Time of Concentration	0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-19 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-19 (Unit'2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.21	94	0.1

Total area: .21 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-19 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.83	1.10	1.34	1.70	1.99	2.28	0.67
REACHES							
OUTLET	0.83	1.10	1.34	1.70	1.99	2.28	0.67

ADC

Harding Subdivision Unit 2
Structire ST-19 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75%	(good)	C	.035	74
	Paved parking lots, roofs, driveways		C	.177	98
	Total Area / Weighted Curve Number			.21	94

ADC

Harding Subdivision Unit 2
Structire ST-19 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0430	0.011				0.014
SHALLOW	46	0.0430	0.025				0.003
					Time of Concentration		0.1

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-20 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-20 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.11	75	.213

Total area: .11 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-20 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.17	0.27	0.37	0.52	0.65	0.78	0.11
REACHES							
OUTLET	0.17	0.27	0.37	0.52	0.65	0.78	0.11

ADC

Harding Subdivision Unit 2
Structire ST-20 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.106	74
	Paved parking lots, roofs, driveways	C	.006	98
	Total Area / Weighted Curve Number		.11	75

ADC

Harding Subdivision Unit 2
Structire ST-20 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	85	0.0180	0.240				0.213
					Time of Concentration		.213

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-21 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-21 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.13	79	.166

Total area: .13 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-21 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.26	0.39	0.52	0.72	0.88	1.05	0.18
REACHES							
OUTLET	0.26	0.39	0.52	0.72	0.88	1.05	0.18

ADC

Harding Subdivision Unit 2
Structire ST-21 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.104	74
	Paved parking lots, roofs, driveways	C	.026	98
	Total Area / Weighted Curve Number		.13	79

ADC

Harding Subdivision Unit 2
Structire ST-21 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	80	0.0300	0.240				0.166
						Time of Concentration	.166

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-22 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-22 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.2	91	.224

Total area: .20 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-22 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.60	0.81	1.00	1.29	1.52	1.75	0.47
REACHES							
OUTLET	0.60	0.81	1.00	1.29	1.52	1.75	0.47

ADC

Harding Subdivision Unit 2
Structire ST-22 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.054	74
	Paved parking lots, roofs, driveways	C	.144	98
	Total Area / Weighted Curve Number		.2	91

ADC

Harding Subdivision Unit 2
Structire ST-22 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0230	0.240				0.218
SHALLOW	51	0.0230	0.050				0.006
						Time of Concentration	.224

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-23 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-23 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.24	84	.266

Total area: .24 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-23 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.53	0.77	0.99	1.33	1.61	1.88	0.39
REACHES							
OUTLET	0.53	0.77	0.99	1.33	1.61	1.88	0.39

ADC

Harding Subdivision Unit 2
Structire ST-23 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.145	74
	Paved parking lots, roofs, driveways	C	.097	98
	Total Area / Weighted Curve Number		.24	84

ADC

Harding Subdivision Unit 2
Structire ST-23 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	70	0.0070	0.240				0.266
						Time of Concentration	.266

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-24 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-24 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.35	90	.18

Total area: .35 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-24 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	1.08	1.49	1.84	2.38	2.82	3.26	0.84
REACHES							
OUTLET	1.08	1.49	1.84	2.38	2.82	3.26	0.84

ADC

Harding Subdivision Unit 2
Structire ST-24 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.122	74
	Paved parking lots, roofs, driveways	C	.223	98
	Total Area / Weighted Curve Number		.35	90

ADC

Harding Subdivision Unit 2
Structire ST-24 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0410	0.240				0.173
SHALLOW	86	0.0410	0.050				0.007
						Time of Concentration	.18

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-25 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-25 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.04	81	0.1

Total area: .04 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-25 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.09	0.14	0.18	0.25	0.31	0.36	0.07
REACHES							
OUTLET	0.09	0.14	0.18	0.25	0.31	0.36	0.07

ADC

Harding Subdivision Unit 2
Structire ST-25 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.027	74
	Paved parking lots, roofs, driveways	C	.012	98
	Total Area / Weighted Curve Number		.04	81
			===	==

ADC

Harding Subdivision Unit 2
Structire ST-25 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE SHEET	45	0.0600	0.240				0.079
					Time of Concentration		0.1
							========

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-26 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-26 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.23	92	.132

Total area: .23 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-26 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.81	1.09	1.34	1.72	2.02	2.33	0.64
REACHES							
OUTLET	0.81	1.09	1.34	1.72	2.02	2.33	0.64

ADC

Harding Subdivision Unit 2
Structire ST-26 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.057	74
	Paved parking lots, roofs, driveways	C	.172	98
	Total Area / Weighted Curve Number		.23	92

ADC

Harding Subdivision Unit 2
Structire ST-26 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	60	0.0310	0.240				0.130
SHALLOW	25	0.0310	0.025				0.002
					Time of Concentration		.132

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-27 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-27 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.07	92	.114

Total area: .07 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-27 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.26	0.34	0.42	0.54	0.64	0.73	0.20
REACHES							
OUTLET	0.26	0.34	0.42	0.54	0.64	0.73	0.20

ADC

Harding Subdivision Unit 2
Structire ST-27 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.018	74
	Paved parking lots, roofs, driveways	C	.054	98
	Total Area / Weighted Curve Number		.07	92

ADC

Harding Subdivision Unit 2
Structire ST-27 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	40	0.0210	0.240				0.110
SHALLOW	45	0.0210	0.025				0.004
					Time of Concentration		.114

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Structire ST-29 (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\March 2021\895-ST-29 (Unit 2).w55

Date: 3/5/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.08	75	.117

Total area: .08 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

ADC

Harding Subdivision Unit 2
Structire ST-29 (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.14	0.23	0.32	0.46	0.57	0.69	0.10
REACHES							
OUTLET	0.14	0.23	0.32	0.46	0.57	0.69	0.10

ADC

Harding Subdivision Unit 2
Structire ST-29 (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover > 75% (good)	C	.077	74
	Paved parking lots, roofs, driveways	C	.004	98
	Total Area / Weighted Curve Number		.08	75

ADC

Harding Subdivision Unit 2
Structire ST-29 (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	75	0.0630	0.240				0.117
					Time of Concentration		.117

INLET GRATES

The inlet frames and grates included on this design are from Neenah Foundry, and East Jordan Iron Works, as specified by the Village of Glen Ellyn Public Works Department. It was the intention of this design to size inlet grates that would be capable of intercepting all flows directly tributary to a structure, together with all overflow bypass flows should any or all upstream inlets or sewers fail for any reason. For the purpose of the design calculations, statistics provided by East Jordan Iron Works (EJIW) have been used. It should be noted that the corresponding Neenah grates specified by the Village have nearly identical hydraulic characteristics to those of WJIR, and no realistic increase or decrease in effectiveness would be realized by the choice of either companies product.

To generate the runoff values tributary to each inlet we utilized the same design criteria as developed for the storm sewer piping. The subcatchment areas, both onsite and offsite, with corresponding rainfall values developed by the TR-55 program, and ISWS Bulletin 75 Rainfall Data, provided the input data for the Rational Method used to develop the 100 year runoff volumes for each structure. Per the Chapter 8 of the IDOT Drainage Manual, the following formulas were utilized to identify inlet capacities.

The capacity of grate inlets operating as a weir is:

$$Q_i = CPd^{1.5} \qquad \text{(Eq. 8-12)}$$

Where:

C = 3.0 weir coefficient
P = perimeter of the grate in ft disregarding bars and the side against the curb
d = average depth of water above grate, ft

and as an orifice is:

$$Q_i = CA(2gd)^{0.5} \qquad \text{(Eq. 8-13)}$$

Where:

C = 0.67 orifice coefficient
A = clear opening area of the grate, sqft
g = 32.2 ft/sec^2

The four basic inlet grates used within this design and calculations are:

Type 8 (beehive type)

EJIW 6527N

Opening area = 160 cu. in.

Type 3 (curb grate)

EJIW 7000 with Type 1 back

Opening area = 135 cu.in.

Type 1 (standard frame with open lid)

EJIW 1020 M3

Opening area = 120 cu.in.

Rolled Curb

EJIW 7430M1

Opening Area = 315 cu.in.

Values and dimensions have been obtained from the EJIW Catalog.

Average depth of water over a grate is determined by the design rim elevation, and the ponding of the high water level generated by the swale restrictions, as outlined in the "Emergency Overflow Bypass" calculations outlined later in this report. The runoff coefficient of 0.68 used within the Rational Method Formula

throughout this report, is generated from the evaluation of actual proposed conditions.

Utilizing "Table 8-304", the total 100 year runoff for individual inlets is generated by the Rational Method. This information is then incorporated into the Storm Structure Loading Diagram for comparison with the calculated inlet grate capacity. This diagram displays the tributary runoff to each individual structure, as well as the addition of the immediate upstream structures runoff, and then also, the addition of the runoff from all upstream structures verifying an inlets grate has sufficient capacity to provide total protection in a "system blocked" scenario. The percent of the generated runoff that each inlet grate will capture is shown on this diagram. In an effort to compare the TR-55 program as well, this data has also been added to the Exhibit for evaluation.

The EJIW website provides an interactive "Drainage Grate Flow Calculator" utilizing the following formulas:

DRAINAGE GRATE FLOW CALCULATOR

Orifice Flow Calculator
When water depth is 4" or more.

$$Q=0.0108A\sqrt{d}$$

Q = Flow (CFS, cubic feet per second)
A = Open area in grate (inches^2)
d = Depth of water over grate (inches)

Coefficient = 0.0108

Weir Flow Calculator
When water depth is less than 4".

$$Q=3.33L(H)^{3/2}$$

Q = Flow (CFS, cubic feet per second)
L = Perimeter of grate where flow is present (in feet)
H = Depth of water (in feet)

Coefficient = 3.33

From comparison purposes, the output from this program for the 3 major inlet grates used within the overall design has been included. Though not as precise, it does verify the values included herein.

Based on the information provided herein, all inlet grates, both yard and curb, are capable of intercepting all immediate and upstream overflow runoff, and introducing it into the storm sewer piping.

CURB FLOW AND CURB INLETS

The roadway system has been designed to direct all runoff tributary to the roadway North along Harding Court to Harding Avenue, then West along the proposed extension of Harding Avenue to the existing Harding Avenue pavement and thusly on to the Panfish Park Stormwater Management area. This system has no "lag" locations, and thus is all downstream to Panfish Park. The grade of the roadway has been limited to a maximum of 5%, and a minimum grade of 0.5%, which is only designed for the South end of the cul-de-sac. Curb inlets are placed along the proposed roadway to capture the runoff directly tributary thereto. These inlets are also capable of capturing most of the upstream flow that may bypass upstream inlets should they become obstructed.

Within the "inlet grate" section of this report, is the description of how each curb inlet grate is capable of intercepting all curb flows tributary to it, including flows that may have not been captured by upstream curb inlets. The curb flow for the 100 year runoff for each structure has been established by the Rational Method. This is information displayed on the Exhibit included herewith. Capacity of each curb inlet grate is calculated as defined by the IDOT Drainage Manual, Chapter 8, those calculations displayed earlier in this report. The actual depth of flow over the inlets, to determine grate capacity, has been determined by the "HEC-22 Gutter Spread" programs, and the "HEC-22 Inlet Interception Capacity" programs. Included in these calculations are the results for each curb inlet utilizing the runoff volume immediately tributary to the structure. These printouts indicate the spread across the pavement prior to collection, depth of flow in the curb at the inlet, the volume of flow that is intercepted by the inlet, and the inlet efficiency in capturing the flows tributary thereto. Input data for the roadway and cul-de-sac is based on the actual design of the pavement cross sections and curbs specified. Capacities and sizes of curb inlets were obtained from the EJIN online catalog.

The Curb Inlet Interception Calculations are based on the results of the Rational Method utilizing the 100 year storm event from Bulletin 75. I would like to point out that most conventional storm inlet spacing design is based on a 10 year storm, and attempting to keep gutter spread to less than 3 or 4 feet. Utilizing the

rainfall data from Bulletin 75, a 10 year storm volume is 60% of that of the 100 year storm. When plugging this information into the HEC-22 Program we find most of the inlets intercept around 90% of the flow and have a gutter spread acceptable to the 3 to 4' range. On the flat slopes of the cul-de-sac bulb this spread is greater. If at the time of the final permit plans the Village staff feels additional inlets are needed to capture a greater amount of the flow as it runs down the curb toward Panfish Park, the developer will work with the Village to incorporate additional curb inlets within the limited space between driveway approaches.

STORM SEWER COMPUTATION SHEET

CURB INLET RUNOFF

COMPUTED _____ DATE _____

CHECKED _____ DATE _____

ROUTE _____

SECTION _____

COUNTY _____

STATION FROM	STATION TO	LENGTH FEET	DRAINAGE AREA "A" (ACRES) INCREMENT	DRAINAGE AREA "A" (ACRES) TOTAL	RUNOFF COEFFICIENT "C"	"A" x "C" INCREMENT	"A" x "C" TOTAL	FLOW TIME MIN. TO UPPER END	FLOW TIME MIN. IN SECTION	RAINFALL INTENSITY "I" in/hour	TOTAL RUNOFF C.I.A. = Q (c.f.s.)	DIAMETER PIPE inches	CAPACITY FULL c.f.s.	VELOCITY f.p.s. FLOWING FULL	VELOCITY f.p.s. DESIGN FLOW	INVERT ELEV UPPER END	INVERT ELEV LOWER END	MANHOLE INVERT DROP	SLOPE OF SEWER ft/ft
	ST-26	80	0.23	0.23	0.68		0.156		7.9	1.53	0.24								
	ST-27	148	0.07	0.07	0.68		0.048		6.8	1.34	0.06								
	ST-14	23	0.18	0.18	0.68		0.122		5.0	1.03	0.13								
	ST-15	20	0.27	0.27	0.68		0.184		5.0	1.03	0.19								
	ST-16	32	0.10	0.10	0.68		0.068		7.7	1.50	0.10								
	ST-17	18	0.13	0.13	0.68		0.088		5.0	1.03	0.09								
	ST-18	25	0.18	0.18	0.68		0.122		5.0	1.03	0.13								
	ST-19	18	0.21	0.21	0.68		0.143		5.0	1.03	0.15								
ST-26	ST-15	80	0.23	0.23	0.68		0.156	7.9	7.9	1.53	0.24								
ST-15	ST-19	20	0.27	0.50	0.68		0.340	12.9	5.0	2.14	0.73								
ST-19	ST-17	18	0.21	0.71	0.68		0.438	17.9	5.0	2.48	1.20								
ST-17	O/F	18	0.13	0.84	0.68		0.571	22.9	5.0	2.77	1.58								
ST-27	ST-14	148	0.07	0.07	0.68		0.048	6.8	6.8	1.34	0.06								
ST-14	ST-18	23	0.18	0.25	0.68		0.170	11.8	5.0	2.04	0.35								
ST-18	ST-16	25	0.18	0.43	0.68		0.292	16.8	5.0	2.42	0.71								
ST-16	O/F	32	0.10	0.53	0.68		0.360	24.5	7.7	2.87	1.03								

O/F = Overflow to Downstream Roadway

STORM SEWER COMPUTATION SHEET

COMPUTED _____ DATE _____

CHECKED _____ DATE _____

HARDING TOWNHOMES

100 YEAR RUNOFF FOR INDIVIDUAL INLETS
REQUIRED INLET CAPACITY – RATIONAL METHOD

ROUTE _____
SECTION _____
COUNTY _____

STATION FROM	STATION TO	LENGTH FEET	DRAINAGE AREA "A" (ACRES) INCREMENT	DRAINAGE AREA "A" (ACRES) TOTAL	RUNOFF COEFFICIENT "C"	"A" x "C" INCREMENT	"A" x "C" TOTAL	FLOW TIME MIN. TO UPPER END	FLOW TIME MIN. IN SECTION	RAINFALL INTENSITY "I" in/hour	TOTAL RUNOFF C.I.A. = Q (c.f.s.)	DIAMETER PIPE inches	CAPACITY FULL c.f.s.	VELOCITY f.p.s. FLOWING FULL	VELOCITY f.p.s. DESIGN FLOW	INVERT ELEV UPPER END	INVERT ELEV LOWER END	MANHOLE INVERT DROP	SLOPE OF SEWER ft/ft
ST-13		130	0.13		0.68	0.088			9.2	1.75	0.15								
ST-12		130	0.25		0.68	0.170			10.0	1.89	0.32								
ST-11		30	0.13		0.68	0.088			8.3	1.60	0.14								
ST-10		28	0.14		0.68	0.095			6.0	1.20	0.11								
ST-8		25	0.22		0.68	0.150			10.0	1.89	0.28								
ST-7		125	0.02		0.68	0.014			6.0	1.20	0.02								
ST-25		60	0.05		0.68	0.034			5.0	1.03	0.04								
ST-24		130	0.33		0.68	0.224			10.8	1.96	0.44								
ST-23		100	0.24		0.68	0.163			16.0	2.38	0.39								
ST-22		100	0.27		0.68	0.184			13.4	2.18	0.40								
ST-21		110	0.14		0.68	0.095			10.0	1.89	0.18								
ST-20		72	0.11		0.68	0.075			12.8	2.13	0.16								
ST-19		18	0.21		0.68	0.143			5.0	1.03	0.15								
ST-18		25	0.18		0.68	0.122			5.0	1.03	0.13								
ST-26		80	0.23		0.68	0.156			7.9	1.53	0.24								
ST-27		148	0.07		0.68	0.048			6.8	1.34	0.06								
ST-15		20	0.27		0.68	0.184			5.0	1.03	0.19								
ST-14		23	0.18		0.68	0.122			5.0	1.03	0.13								
ST-29		17	0.08		0.68	0.054			7.0	1.37	0.07								
ST-17		18	0.13		0.68	0.088			5.0	1.03	0.09								
ST-16		32	0.10		0.68	0.068			7.7	1.50	0.10								

STRUCTURE				OVERFLOW RESTRICTION			100 YEAR RUNOFF BY RATIONAL METHOD						TR-55 RUNOFF	
Structure I.D.	Grate Type	Opening Area (sq.ft.)	Rim Elevation (F/L)	Berm Overtopping Elevation	Maximum Ponding Depth	Total Inlet Capacity	Immediate Tributary Runoff	% Captured By Inlet	Include Immediate Upstream	% Captured By Inlet	All Runoff Upstream Of Inlet	% Captured By Inlet	Immediate Tributary Runoff	% Captured By Inlet
ST-13	6527N	1.111	766.00	767.35	1.35'	6.96 ①	0.15 ①	100 %	— ①		— ①		1.14 ①	100%
ST-12	6527N	1.111	766.00	767.35	1.35'	6.96	0.32	100 %	0.47	100 %	—		2.17	100 %
ST-11	6527N	1.111	767.00	767.35	1.35'	6.96	0.14	100 %	0.46	100 %	0.61	100 %	1.16	100 %
ST-28	6527N	1.111	767.20	767.35	0.15'	2.32	0.00 ②	100 %	0.46	100 %	0.61	100 %		
ST-10	6527N	1.111	767.30	768.00	0.70'	5.01	0.11	100 %	—				1.46	100 %
ST-9	1020M3	0.833												
ST-8	6527N	1.111	763.30	763.80	0.50'	4.23	0.28	100 %	—				1.72	100%
ST-7	6527N	1.111	762.50	762.80	0.30'	3.28	0.02	100 %	0.30	100%			0.16	100%
ST-3	1020M3	0.833	759.70	760.05	0.35'	2.66	0.22	100 %	0.24	100%	0.52	100%	1.55	100%
ST-25	6527N	1.111	766.80	767.12	0.32'	3.39	0.04	100 %	—		—		0.36	100%
ST-24	6527N	1.111	766.00	766.20	0.20'	2.68	0.44	100 %	0.48	100%	—		3.26	82% ③
ST-23	6527N	1.111	763.00	763.50	0.50'	4.23	0.39	100 %	0.83	100%	0.87	100%	1.88	100%
ST-22	6527N	1.111	762.50	762.80	0.30'	3.28	0.40	100 %	0.79	100%	1.27	100%	1.75	100%
ST-21	1020M3	0.833	761.50	762.10	0.60'	3.48	0.18	100%	0.58	100%	1.45	100%	1.05	100%
ST-20	1020M3	0.833	761.50	762.30	0.80'	4.02	0.16	100%	0.34	100%	1.61	100%	0.78	100%
ST-29	6527N	1.111	759.30	759.60	0.30'	3.06	0.07	100%	—				0.69	100%

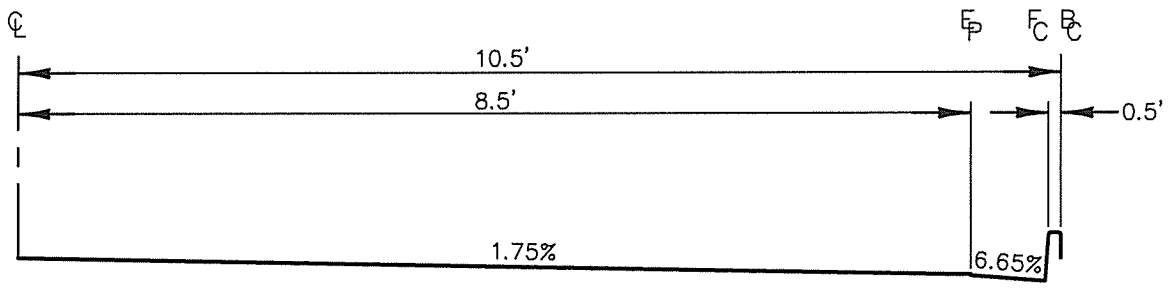
① Values are shown in Cubic Feet per Second (c.f.s.)

② ST-28 has no direct runoff, and only acts as a safety inlet to protect against overtopping the berm along the south property line should all upstream inlets become blocked.

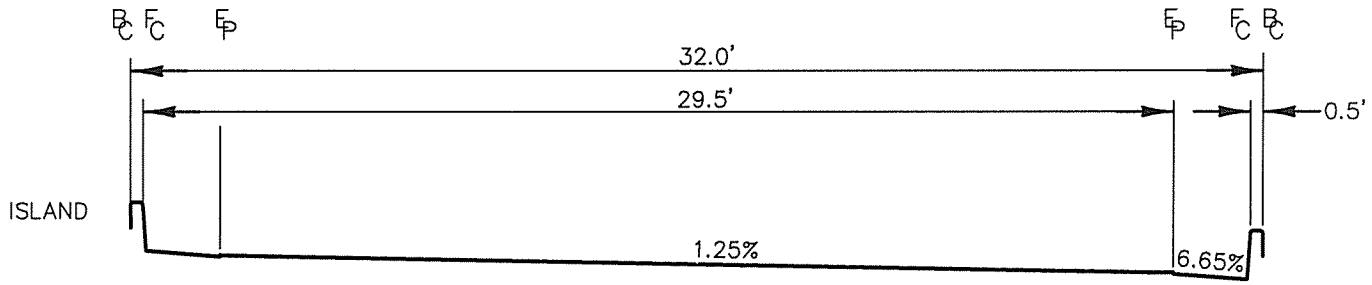
③ Any flows that would exceet the capacity of the grate of this inlet could be captured by the next downstream inlet which has excess capacity fo effectively handle the flow.

Project: HARDING TOWNHOMES
Description: YARD INLET GRATE CAPACITY
Project No. 895
Date: /
By:

TYPICAL ROADWAY



CUL-DE-SAC ROADWAY



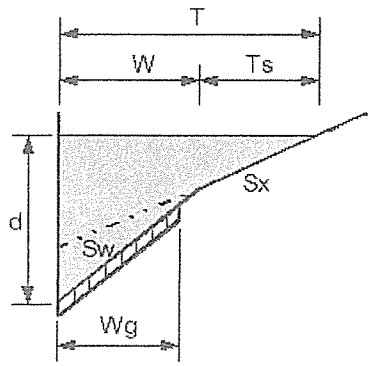
HEC-22 Inlet Interception Capacity

Structure ST-14

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	1.19
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	1.00
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	6.894
Depth at curb d (in):	2.448
Average velocity V (ft/s):	2.488
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	0.712
Intercepted flow Q_i (cfs):	0.752
Inlet efficiency E:	0.632

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

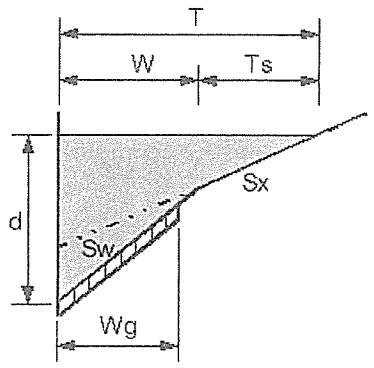
4,254 total views, 7 views today

HEC-22 Inlet Interception Capacity

Structure ST-15
Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	1.80
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	1.00
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	8.332
Depth at curb d (in):	2.750
Average velocity V (ft/s):	2.687
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	0.915
Intercepted flow Q_i (cfs):	0.980
Inlet efficiency E:	0.544

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

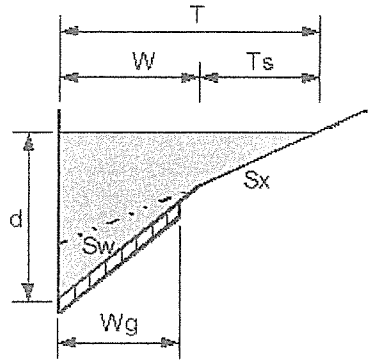
HEC-22 Inlet Interception Capacity

Structure ST-16

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	0.64
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	1.85
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	4.181
Depth at curb d (in):	1.878
Average velocity V (ft/s):	2.971
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	0.530
Intercepted flow Q_i (cfs):	0.537
Inlet efficiency E:	0.839

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

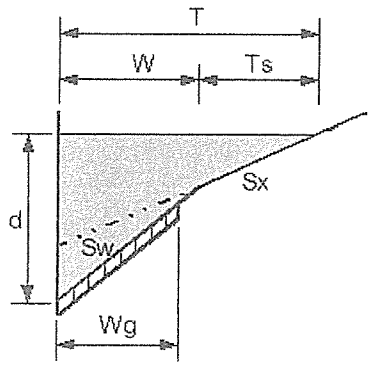
HEC-22 Inlet Interception Capacity

Structure ST-17

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	0.84
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	1.85
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	4.920
Depth at curb d (in):	2.033
Average velocity V (ft/s):	3.063
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	0.638
Intercepted flow Q_i (cfs):	0.650
Inlet efficiency E:	0.774

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

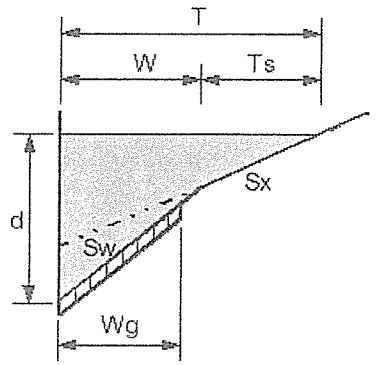
HEC-22 Inlet Interception Capacity

Structure ST-18

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	1.19
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	5.00
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	4.511
Depth at curb d (in):	1.947
Average velocity V (ft/s):	4.947
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	0.949
Intercepted flow Q_i (cfs):	0.956
Inlet efficiency E:	0.803

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

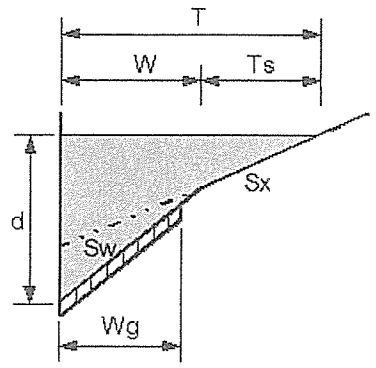
4,254 total views, 7 views today

HEC-22 Inlet Interception Capacity

Structure ST-19
Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	1.40
Cross slope S_x (%):	1.75
Longitudinal slope S_L (%):	5.00
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	4.957
Depth at curb d (in):	2.041
Average velocity V (ft/s):	5.045
Depressed slope S_w (%):	7.306
Frontal flow Q_f (cfs):	1.059
Intercepted flow Q_i (cfs):	1.068
Inlet efficiency E:	0.763

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

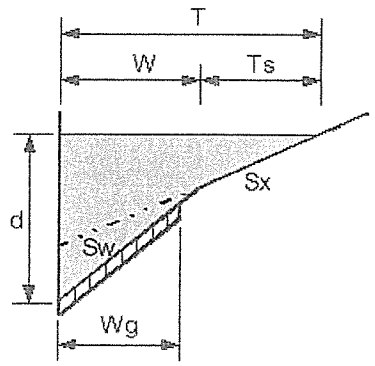
HEC-22 Inlet Interception Capacity

Structure ST-26

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	1.45
Cross slope S_x (%):	1.25
Longitudinal slope S_L (%):	0.54
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	10.760
Depth at curb d (in):	2.614
Average velocity V (ft/s):	1.844
Depressed slope S_w (%):	6.806
Frontal flow Q_f (cfs):	0.623
Intercepted flow Q_i (cfs):	0.706
Inlet efficiency E:	0.487

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

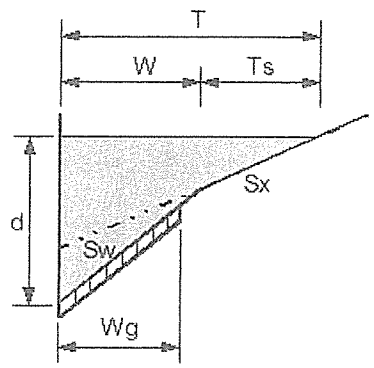
HEC-22 Inlet Interception Capacity

Structure ST-27

Local Upstream Tributary Runoff
Rational Method
(100 Year Storm Event)

March 30, 2018 second 0

HEC-22 Inlet Interception Capacity



Units: English

Flow Q (cfs):	0.43
Cross slope S_x (%):	1.25
Longitudinal slope S_L (%):	0.50
Mannings n:	0.013
Composite section only (W > 0).	
Depressed width W (ft):	1.50
Depression depth a (in):	1.00
Mannings n_w:	0.013
Inlet interception only (L > 0).	
Inlet length L (ft):	1.83
Grate width W_g (ft):	1.42
Local depressed width W_L (ft):	5.00
Local depression depth a_L (in):	1.00

Spread T (ft):	6.093
Depth at curb d (in):	1.914
Average velocity V (ft/s):	1.460
Depressed slope S_w (%):	6.806
Frontal flow Q_f (cfs):	0.302
Intercepted flow Q_i (cfs):	0.321
Inlet efficiency E:	0.745

Gutter type: Composite.
Inlet type: Grate or combination inlet.
Revised: 30 Mar 2018.

4,254 total views, 7 views today

The provided flow capacity calculators are theoretical calculations and are provided for your guidance. The calculators do not take into account the many variables that occur in the field. For any questions, please contact us (https://www.ejco.com/am/en/contact/).

Orifice Flow Calculator

What do you need to calculate?

FLOW | GRATE OPEN AREA

Enter open area of grate (in^2) 160 in^2

RESET **CALCULATE RESULTS**

WATER DEPTH (IN):	FLOW CAPACITY (CFS):
4	3.4
5	3.8
6	4.2
7	4.5
8	4.8
9	5.1
10	5.4
11	5.7
12	5.9
13	6.2
14	6.4
15	6.6
16	6.9
17	7.1
18	7.3
19	7.5
20	7.7
21	7.9
22	8.1
23	8.2
24	8.4

The provided flow capacity calculators are theoretical calculations and are provided for your guidance. The calculators do not take into account the many variables that occur in the field. For any questions, please contact us (https://www.ejco.com/am/en/contact/).

CLOSE

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Orifice Flow Calculator

What do you need to calculate?

FLOW | GRATE OPEN AREA

Enter open area of grate (in^2) 135 in^2

RESET **CALCULATE RESULTS**

WATER DEPTH (IN):	FLOW CAPACITY (CFS):
4	2.9
5	3.2
6	3.5
7	3.8
8	4.1
9	4.3
10	4.6
11	4.8
12	5.0
13	5.2
14	5.4
15	5.6
16	5.8
17	6.0
18	6.1
19	6.3
20	6.5
21	6.6
22	6.8
23	6.9
24	7.1

The provided flow capacity calculators are theoretical calculations and are provided for your guidance. The calculators do not take into account the many variables that occur in the field. For any questions, please contact us (https://www.ejco.com/am/en/contact/).

CLOSE

The provided flow capacity calculators are theoretical calculations and are provided for your guidance. The calculators do not take into account the many variables that occur in the field. For any questions, please contact us (https://www.ejco.com/am/en/contact/).

Orifice Flow Calculator

What do you need to calculate?

FLOW | GRATE OPEN AREA

Enter open area of grate (in^2) 120 in^2

RESET **CALCULATE RESULTS**

WATER DEPTH (IN):	FLOW CAPACITY (CFS):
4	2.5
5	2.9
6	3.1
7	3.4
8	3.6
9	3.8
10	4.0
11	4.3
12	4.4
13	4.6
14	4.8
15	5.0
16	5.1
17	5.3
18	5.4
19	5.6
20	5.7
21	5.9
22	6.0
23	6.2
24	6.3

The provided flow capacity calculators are theoretical calculations and are provided for your guidance. The calculators do not take into account the many variables that occur in the field. For any questions, please contact us (https://www.ejco.com/am/en/contact/).

CLOSE

CARRADUS

ILLINOIS ROUTE 53

HARDING COURT

HARDING AVE.

ST-21
TYPE 1, OPEN GRATE
RIM=762.25

BYPASS @ 762.10
HWL @ 762.60
10.50 cfs @ DEPTH = 0.50'
(0.87 cfs IMMEDIATE BYPASS)
(6.58 cfs UPSTREAM BYPASS)

ST-22
TYPE 1, OPEN GRATE
RIM=762.90

BYPASS @ 762.80
HWL @ 763.25
15.91 cfs @ DEPTH = 0.45'
(1.70 cfs IMMEDIATE BYPASS)
(5.71 cfs UPSTREAM BYPASS)

ST-23
TYPE 1, OPEN GRATE
RIM=764.00

BYPASS @ 763.50
HWL @ 764.00
16.17 cfs @ DEPTH = 0.50'
(1.50 cfs IMMEDIATE BYPASS)
(4.01 cfs UPSTREAM BYPASS)

ST-24
TYPE 1, OPEN GRATE
RIM=765.00

BYPASS @ 766.30
HWL @ 767.00
26.72 cfs @ DEPTH = 0.70'
(2.17 cfs IMMEDIATE BYPASS)
(2.51 cfs UPSTREAM BYPASS)

ST-25
TYPE 1, OPEN GRATE
RIM=766.80

BYPASS @ 767.38
HWL @ 767.70
10.69 cfs @ DEPTH = 0.32'
(0.34 cfs UPSTREAM BYPASS)

ST-13
TYPE "B"
RIM=766.00

ST-20
TYPE 1, OPEN GRATE
RIM=761.50

BYPASS @ 762.20
HWL @ 762.60
77.15 cfs @ DEPTH = 0.40'
(0.63 cfs IMMEDIATE BYPASS)
(7.21 cfs UPSTREAM BYPASS)

ST-19
CURB INLET
T/C=764.75
F/L=764.25

MAX. DEPTH AT CURB=2.0"
TRIBUTARY RUNOFF= 1.40 cfs
INTERCEPTED FLOW=76.0%

ST-15
CURB INLET
T/C=769.00
F/L=768.50

MAX. DEPTH AT CURB=2.75"
TRIBUTARY RUNOFF= 1.80 cfs
INTERCEPTED FLOW=54.0%

ST-26
CURB INLET
T/C=770.25
F/L=769.75

MAX. DEPTH AT CURB=2.6"
TRIBUTARY RUNOFF= 1.45 cfs
INTERCEPTED FLOW=49.0%

ST-12
TYPE 1, OPEN GRATE
RIM=766.00

MAX. DEPTH AT CURB=1.95"
TRIBUTARY RUNOFF= 1.19 cfs
INTERCEPTED FLOW=80.0%

MAX. DEPTH AT CURB=2.4"
TRIBUTARY RUNOFF= 1.19 cfs
INTERCEPTED FLOW=63.0%

ST-18
CURB INLET
T/C=764.75
F/L=764.25

ST-14
CURB INLET
T/C=769.00
F/L=768.50

ST-5
TYPE 1, CLOSED LID
RIM=764.50

ST-6
TYPE 1, CLOSED LID
RIM=769.65

BYPASS @ 767.35
HWL @ 767.50
31.64 cfs @ DEPTH = 0.15'
(3.00 cfs IMMEDIATE BYPASS)
(3.00 cfs UPSTREAM BYPASS)

ST-29
TYPE "B"
RIM=759.30

BYPASS @ 759.78
HWL @ 760.00
5.23 cfs @ DEPTH = 0.22'
(0.51 cfs IMMEDIATE BYPASS)
(7.72 cfs UPSTREAM BYPASS)

ST-4
TYPE 1, CLOSED LID
RIM=762.50

ST-16
DEPRESSED CURB INLET
T/C=759.69
F/L=759.49

ST-17
CURB INLET
T/C=769.99
F/L=769.49

MAX. DEPTH AT CURB=2.0"
TRIBUTARY RUNOFF= 0.84 cfs
INTERCEPTED FLOW=77.0%

MAX. DEPTH AT CURB=1.9"
TRIBUTARY RUNOFF= 0.64 cfs
INTERCEPTED FLOW=84.0%

BYPASS @ 763.80
HWL @ 764.10
4.91 cfs @ DEPTH = 0.30'
(1.22 cfs IMMEDIATE BYPASS)
(1.22 cfs UPSTREAM BYPASS)*

ST-8
TYPE 1, OPEN GRATE
RIM=763.30

ST-7
TYPE 1, OPEN GRATE
RIM=762.50

ST-3
TYPE 1, OPEN GRATE
RIM=759.70

BYPASS @ 762.80
HWL @ 763.20
6.23 cfs @ DEPTH = 0.40'
(0.02 cfs IMMEDIATE BYPASS)
(1.31 cfs UPSTREAM BYPASS)*

BYPASS @ 760.05
HWL @ 760.35
12.06 cfs @ DEPTH = 0.30'
(0.22 cfs IMMEDIATE BYPASS)
(1.31 cfs UPSTREAM BYPASS)

MAX. DEPTH AT CURB=1.9"
TRIBUTARY RUNOFF= 0.43 cfs
INTERCEPTED FLOW=75.0%

ST-27
CURB INLET
T/C=770.25
F/L=769.75

ST-9
TYPE 1, OPEN GRATE
RIM=770.00
(INCIDENTAL FLOWS ONLY)

ST-10
TYPE 1, OPEN GRATE
RIM=767.30

ST-28
TYPE 1, OPEN GRATE
RIM=767.20
(OVERFLOW STRUCTURE ONLY)

ST-11
TYPE 1, OPEN GRATE
RIM=766.00

BYPASS @ 768.00
HWL @ 768.20
16.32 cfs @ DEPTH = 0.20'
(0.79 cfs UPSTREAM BYPASS)

CURB FLOW & BYPASS LEGEND

SWALE BYPASS-YARDS

BYPASS @ 759.78	= ELEVATION THAT RUNOFF OVERTOPS A DOWNSTREAM OVERFLOW OBSTRUCTION.
HWL @ 760.00	= ELEVATION OF A CALCULATED HIGH WATER LEVEL THAT PROVIDES A FLOW VOLUME IN EXCESS OF THAT REQUIRED FOR THE IMMEDIATE RUNOFF TRIBUTARY TO THE NEXT UPSTREAM STRUCTURE.
5.23 cfs @ DEPTH = 0.22'	= CALCULATED RUNOFF OF THE CHANNEL VOLUME, BASED ON MANNINGS FORMULA.
(0.07 cfs IMMEDIATE BYPASS)	= RUNOFF DIRECTLY TRIBUTARY TO THE SPECIFIC STRUCTURE IMMEDIATELY UPSTREAM BASED ON THE RATIONAL METHOD.
(1.68 cfs UPSTREAM BYPASS)	= RUNOFF OF ALL UPSTREAM TRIBUTARY AREA UPSTREAM OF THE IMMEDIATELY UPSTREAM STRUCTURE BASED ON THE RATIONAL METHOD.
*	= REDUCED DUE TO THE VOLUME UPSTREAM THAT WOULD NOT REACH THIS LOCATION AND OVERFLOW IN ANOTHER DIRECTION, NOT FOLLOWING THE PATH OF THE STORM SEWER

CURB FLOW-STREETS

MAX. DEPTH AT CURB=1.6"	= MAXIMUM DEPTH WATER WILL POND AT THE CURB BASED ON THE HEC-22 INLET INTERCEPTION CAPACITY CALCULATIONS
TRIBUTARY RUNOFF= 0.24 cfs	= 100 YEAR RUNOFF IMMEDIATELY TRIBUTARY TO THE CURB INLET BASED ON THE RATIONAL METHOD.
INTERCEPTED FLOW=100.0%	= PERCENT OF THE 100 YEAR RUNOFF THAT WILL BE INTERCEPTED BY THE CURB INLET UTILIZING THE HEC-22 INLET INTERCEPTION CAPACITY CALCULATIONS.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Pld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/01/21	VILLAGE REVIEW

CURB FLOW & BYPASS EXHIBIT

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 1

Project # 895

DRAWING FILE NAME: 895-CURB FLOW

EMERGENCY OVERFLOW BYPASS

The general purpose of these overflow bypass sections is to demonstrate how upstream runoff can traverse the site in a safe manner that has been designed to protect adjoining properties, and the buildings, and improvements proposed with the development of this site. Generally these bypass locations occur at the downstream "Berms" within the swales, that impeded swale flow and define an area of the swale that will be tributary to an inlet, thus preventing flow of runoff from travelling downstream without capture by the storm sewer system, and the BMP facilities. These bypass sections generally fall between inlets. There are several locations where bypass flows do not continue within the site because of the terrain, and discharge to an adjacent property. In this scenario, the majority of the onsite runoff would be contained within depressions of the swales and any offsite bypass flows would be insignificant in comparison to the unrestricted flow of runoff in the currently undeveloped site. It should be emphasized that bypass flows would only occur if a storm in excess of the 100 year event is realized, and all storm sewer inlets are blocked. All inlet grates and storm sewers are designed to handle flows well in excess of the 100 year storm for all areas upstream and tributary to any component of the storm sewer system.

SECTION A-A

Bypass Section A-A is downstream of ST-3. The overtopping elevation is 760.05. This emergency route would only be utilized should the ST-3 grate become blocked. The directly immediate tributary runoff to ST-3 is 0.22 cfs (R). Total upstream tributary runoff to Section A-A from the swale on the West side of Lot 1, through ST-3, ST-7 and ST-8, generates 1.31 cfs (R). At only 0.3' depth (HWL=760.35) the bypass section would flow 12.06 cfs. This volume is over half of the total 19.91 CFS (R) carried within the storm sewer trunk leaving the site through the 24" RCP storm sewer along Harding Avenue, with the T/F of the adjacent Unit 1 being at elevation 764.10, there exists over 3.75' of expected freeboard above the HWL. Approximate actual depth required to bypass the 1.53 cfs (R) would be 0.05', or about one half of an inch. In comparison, the TR-55 runoff volume for the entire upstream area would be 3.43 cfs (55). The approximate depth to bypass the 3.43 cfs (55) would be 0.09', or just over an inch.

SECTION B-B

Bypass Section B-B is downstream of ST-7. The overtopping elevation is 762.80 within the main swale. This emergency bypass would only be utilized should the ST-7 grate become blocked directly. Immediate tributary runoff to ST-7 is 0.02 cfs (R). Total upstream tributary runoff to Section B-B from the swale on the West side of Lot 1, through ST-7 and ST-8, generates 1.31 cfs (R), at a depth of only 0.40' over the threshold of Section B-B within the main swale (HWL=763.20).

The bypass through Section B-B would flow 6.23 cfs. This is sufficient capacity to handle any onsite flows, and provide an emergency route to prevent onsite flows from passing onto adjoining properties. Additional capacity of 4.55 cfs is available through the BMP area should that be necessary, or should the primary swale channel become obstructed with the T/F of the adjacent Unit 4 being at elevation 766.10, there exists 2.9' of expected freeboard above the HWL. Approximate actual depth required to bypass the 1.31 cfs (R) would be 0.08', or about a three quarters of an inch. In comparison, the TR-55 runoff volume for the entire

upstream area would be 1.88 cfs (55). The approximate depth to bypass the 1.88 cfs (55) would be 0.12', or about an inch and a half.

SECTION C-C

Bypass Section C-C is downstream of ST-8. The overtopping elevation is 763.80 within the main swale. This emergency bypass would only be utilized should the ST-8 grate become blocked. The directly immediate tributary runoff to ST-8 is 1.22 cfs (R). There is no further upstream tributary to Section C-C from the swale on the West side of Lot 1, except that tributary to ST-8. At a depth of only 0.30' over the threshold of Section C-C within the swale (HWL=764.10), the bypass section would flow 4.91 cfs. This is sufficient capacity to handle any onsite flows, and provide an emergency route to prevent onsite flows from passing onto adjoining properties. With the T/F of the adjacent Unit 4 being at elevation 766.10, there exists 2.0' of expected freeboard above the HWL. Approximate actual depth required to bypass the 1.22 cfs (R) would be 0.08', or about three quarters of an inch. In comparison, the TR-55 runoff volume for the entire upstream area would be 1.72 cfs (55). The approximate depth to bypass the 1.72 cfs (55) would be 0.11', or about a one and a quarter inch.

SECTION D-D

Bypass Section D-D is along the South boundary of the development, also being the South line of Lots 2 and 3. This emergency bypass section would only be utilized should the four structures, ST-11, ST-12, ST-13 and ST-28 along the South line, all become plugged and fail to allow runoff to enter the storm sewer system at any location. The overtopping elevation is 767.35. The directly immediate tributary runoff to all four structures ST-11, ST-12, ST-13 and ST-28 shall be considered as one aggregate volume since the tributary area forms a basin rather than a swale with serial inlets. Total runoff tributary to this basin is 3.00 cfs (R). Based on the length of this berm, at only a depth of 0.15' (HWL=767.50), the

bypass through Section D-D would flow 31.64 cfs. The volume is greatly above the 3.00 cfs (R) required.

This rear yard area of Lots 2 and 3 has no way to flow overland toward the North because of restrictions imposed by the existing and proposed terrain of this site as well as the adjacent properties. Therefore a backup storm water detention basin is formed by the rear yard grading. This rear yard depression would provide detention capable of storing rainfall in excess of the 100 year storm event that would be tributary to this area. Before overtopping the berm along the South side property line at elevation 767.35, the basin provides 0.146 acre feet of at grade storage. The subcatchment area accounts for approximately 11.6% of the total site, thus if you prorate this portion of the total storm water storage required for the entire site of 1.481 acre feet, the rear yards of Lots 2 and 3 would be expected to contain 0.172 acre feet for the 100 year storm event. With the 0.075 acre feet of available storage of the BMP systems of these two lots, you have a combined available storage capacity of 0.221 acre feet, or nearly 30% of excess capacity. Combine this storage with the higher rim elevation of ST-28 acting as an emergency overflow outlet before reaching the berm elevation of 767.35, it seems unrealistic that runoff would ever discharge onto the property to the South. In comparison, the total TR-55 calculated runoff for the rear yards of Lots 2 and 3 is 4.47 cfs (55).

With an overtopping elevation of 767.35, and a T/F of 769.0 of the adjoining buildings on Lots 2 and 3, there exists 1.65' of freeboard above the HWL.

SECTION E-E

Bypass Section E-E is downstream of St-25. The overtopping elevation is 767.38. This emergency bypass would only be utilized should ST-25 grate become blocked. The directly immediate tributary runoff to ST-25 is 0.34 cfs (R). There is no further upstream tributary to Section E-E beyond that of ST-25. At a depth of only 0.32' over the threshold within the swale (HWL-767.70), the bypass capacity of Section E-E would be 10.69 cfs. This is sufficient capacity to handle any onsite

flows, and provide an emergency route for both onsite and any minor offsite flows incidental to the swale. With the T/F of the front of the adjacent Unit 12 at 772.0, there exists 4.3' of freeboard above the HWL. Approximate depth within Section E-E to bypass the 0.04 cfs (55) generated by the TR-55 model for ST-25 would only result in a calculated depth of flow being about 0.02'.

SECTION F-F

Bypass Section F-F is downstream of ST-24. The overtopping elevation is 766.30. This emergency bypass would only be utilized should the ST-24 grate become blocked. The directly immediate tributary runoff to ST-24 is 2.17 cfs (R). Total upstream runoff to Section F-F from the swale along the East line of Lot 4, through ST-24 and ST-25, generates 2.51 CFS (R). At a depth of only 0.70' over the threshold of Section F-F within the main swale (HWL-767.00) the bypass capacity of Section F-F would flow 26.72 cfs. This is more than sufficient capacity to handle any offsite flows that may occur.

Approximate depth within Section F-F to bypass the 2.17 cfs (R) is 0.15'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-24 is 3.62 CFS (55) resulting in a depth of flow of approximately 0.24' over the threshold (HWL=766.54) with the T/F of the rear of Unit 16 at 769, there exists 2.46 of freeboard above the maximum HWL of 766.54.

SECTION G-G

Bypass Section G-G is downstream of ST-23 the overtopping elevation is 763.50. This emergency bypass would only be utilized should the ST-23 grate become blocked. The directly immediate tributary runoff to ST-23 is 1.50 cfs (R). Total upstream runoff to Section G-G from the swale along the East line of Lots 4 and 5 through ST-23, ST-24 and ST-25, generates 4.01 cfs (R). At a depth of only 0.50' over the threshold of Section G-G within the main swale (HWL=764.00), the bypass capacity of Section G-G would flow 16.17 cfs. This is more than sufficient

capacity to handle any onsite flows, and any incidental offsite flows that may occur.

Approximate depth within Section G-G to bypass the 4.01 cfs (R) is 0.22'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-23 is 5.50 cfs (55) resulting in a depth of flow of approximately 0.30' over the threshold (HWL= 763.80) with the T/F of the rear of unit 18 at 766.00, there exists 2.2' of freeboard above the maximum HWL of 763.80.

SECTION H-H

Bypass Section H-H is downstream of ST-22 the overtopping elevation is 762.80. This emergency bypass would only be utilized should the ST-22 grate become blocked. The directly immediate tributary runoff to ST-22 is 1.70 cfs (R). Total upstream runoff to Section H-H from the swale along the East line of Lots 4 and 5 through ST-22, ST-23, ST-24 and ST-25, generates 5.71 cfs (R). At a depth of only 0.45' over the threshold of Section H-H within the main swale (HWL=763.25), the bypass capacity of Section H-H would flow 15.91 cfs. This is more than sufficient capacity to handle any onsite flows, and any expected offsite flows that may occur.

Approximate depth within Section H-H to bypass the 5.71 cfs (R) is 0.23'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-22 is 7.25 cfs (55) resulting in a depth of flow of approximately 0.29' over the threshold (HWL= 763.09) with the T/F of the rear of unit 22 at 767.00, there exists 3.91' of freeboard above the maximum HWL of 763.90.

SECTION I-I

Bypass Section I-I is downstream of ST-21 the overtopping elevation is 762.10. This emergency bypass would only be utilized should the ST-21 grate become blocked. The directly immediate tributary runoff to ST-21 is 0.87 cfs (R). Total upstream runoff to Section I-I from the swale along the North lines of Lots 4 and 5

through ST-21, ST-22, ST-23, ST-24 and ST-25, generates 6.58 cfs (R). At a depth of only 0.50' over the threshold of Section I-I within the main swale (HWL=762.60), the bypass capacity of Section I-I would flow 10.50 cfs. This is more than sufficient capacity to handle any onsite flows, and any expected or incidental offsite flows that may occur.

Approximate depth within Section I-I to bypass the 6.58 cfs (R) is 0.36'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-21 is 8.30 cfs (55) resulting in a depth of flow of approximately 0.42' over the threshold (HWL= 762.52) with the T/F of the rear of Unit 23 at 767.00, there exists 4.48' of freeboard above the maximum HWL of 762.52.

In the event conditions dictate the threshold elevation of 762.20 for downstream Section J-J control the bypass of Section I-I, then the shown above would be raised by 0.10'. This results in satisfactory bypass elevations as well.

SECTION J-J

Bypass Section J-J is downstream of ST-20 the overtopping elevation is 762.20. This emergency bypass would only be utilized should the ST-20 grate become blocked. The directly immediate tributary runoff to ST-20 is 0.63 cfs (R). Total upstream runoff to Section J-j from the swales along the North line of Lots 5 and the East line of Lots 4 & 5, through ST-20, ST-21, ST-22, ST-23, ST-24 and ST-25, generates 7.621 cfs (R). At a depth of only 0.40' over the threshold of Section J-J adjacent to the North lines of Lot 5 (HWL=762.60), the bypass capacity of Section J-J would flow 77.15 cfs. This is more than sufficient capacity to handle any onsite flows, and any expected or incidental offsite flows that may occur. Section J-J is South of and adjacent to the North line of Lot 4 and is the lower portion of the berm that restricts onsite runoff from flowing onto the property to the North. North of and adjacent to the berm along the north property line is the existing property line swale that drains toward the West to ST-29 and ultimately on to Harding Avenue with the offsite runoff from the property immediately North of the site.

Approximate depth within Section J-J to bypass the 7.21 cfs (R) is 0.04'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-20 is 9.08 cfs (55) resulting in a depth of flow of approximately 0.05' over the threshold (HWL= 762.25) with the T/F of the rear of Unit 23 at 767.00, there exists 4.75' of freeboard above the maximum HWL of 762.25.

SECTION K-K

Bypass Section K-K is downstream of ST-29 the overtopping elevation is 759.78. This emergency bypass would only be utilized should the ST-29 grate become blocked. The directly immediate tributary runoff to ST-29 is 0.51 cfs (R). Total upstream runoff to Section K-K from the North property line Swale and the swales along the North line of Lots and East line of lots 4 & 5, through ST-29, ST-20, ST-21 ST-22, ST-23, ST-24 and ST-25, generates 7.72 cfs (R). At a depth of only 0.22' over the threshold of Section K-K crossing the Harding Avenue sidewalk and curb towards the pavement of Harding Avenue (HWL=760.00), the bypass capacity of Section K-K would flow 5.23 cfs. This is more than sufficient capacity to handle any onsite flows, and any expected offsite flows that may occur.

Approximate depth within Section K-K to bypass the 7.72 cfs (R) is 0.35'. In comparison, the total TR-55 calculated runoff for all tributary area upstream of ST-29 is 9.77 cfs (55) resulting in a depth of flow of approximately 0.42' over the threshold (HWL= 760.20). There are no adjacent buildings on this site or adjacent properties that would be adversely affected by this HWL of 760.20.

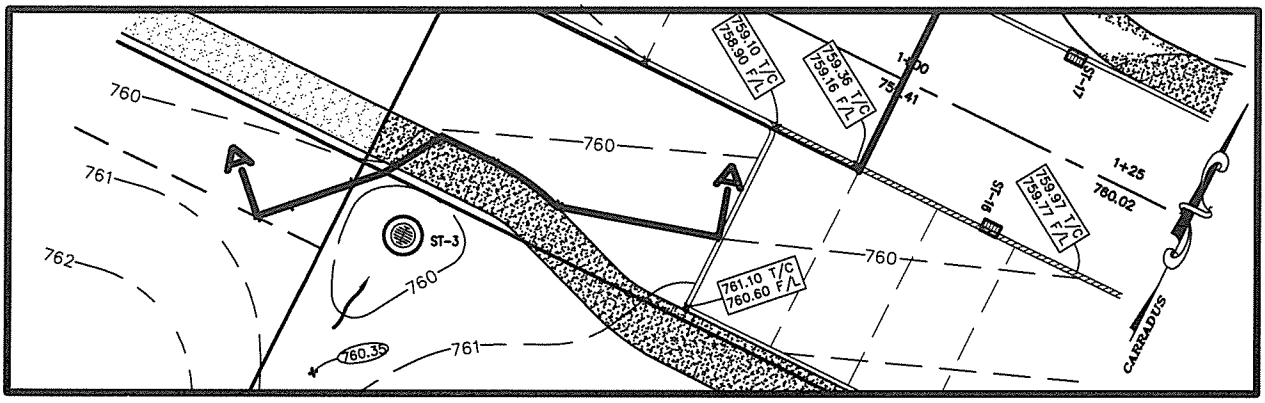
SECTION L-L

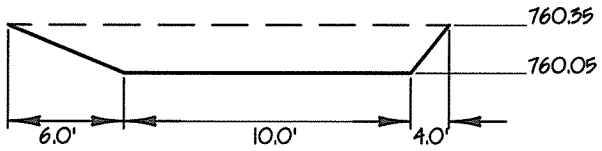
Bypass Section L-L is downstream of ST-10 the overtopping elevation is 768.00 for a small area but generally 768.08. This emergency bypass would only be utilized should the ST-10 grate become blocked. The directly immediate tributary runoff to ST-10 is 0.79 cfs (R). There is no additional upstream runoff to Section L-L at a general depth of only 0.12' over the threshold of Section L-L (HWL=768.20), the

bypass capacity of Section L-L would flow 14.78 cfs. This is more than sufficient capacity to handle any onsite flows, and any expected or incidental offsite flows that may occur.

Approximate depth within Section L-L to bypass the 0.79 cfs (R) is negligible. In comparison, the total TR-55 calculated runoff for the tributary area upstream of ST-10 is 1.46 cfs (55) resulting in a depth of flow of approximately 0.02' over the threshold (HWL= 768.10). This bypass section would overflow onto the property West of and adjacent to the site along their driveway, it should be noted that any bypass of runoff leaving this site is greatly reduced compared to the unrestricted runoff from the site in its current undeveloped state, no matter if the rational method or TR-55 is used to determine the runoff values.

BYPASS SECTION A-A





a	= 4.80 s.f.	**HWL** =	760.35
p	= 22.0'	**INV** =	760.05
R	= 0.2182	**d**	= 0.30'
$R^{2/3}$	= 0.3624		
n	= 0.025		
s	= 0.0136	**V**	= **2.51 fps**
$s^{1/2}$	= 0.1166	**Q**	= **12.06 cfs**

Notes:

12.06 cfs = Capacity to the Overflow Bypass Elevation of 760.35

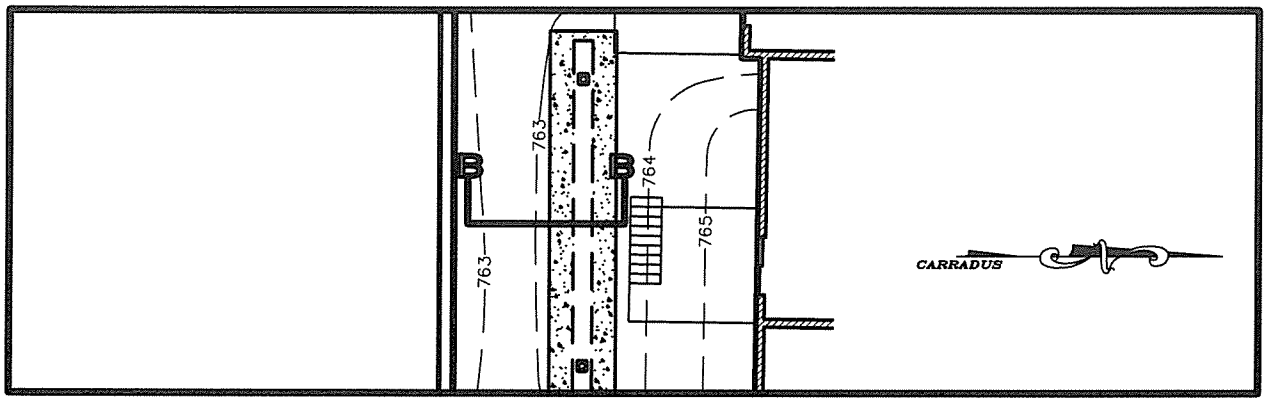
Rational Method

0.22 cfs = Capacity required to Bypass Immediate Upstream Runoff.
1.31 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 760.02 the swale is expected to bypass 3.35 cfs

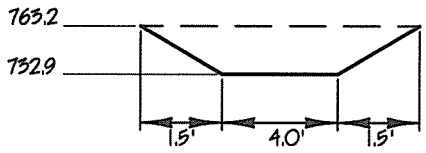
TR-55 Method

1.55 cfs = Capacity required to Bypass Immediate Upstream Runoff.
3.43 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

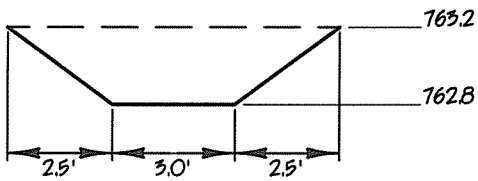
BYPASS SECTION B-B



MAIN CHANNEL



BMP AREA



MAIN CHANNEL

a	= 1.65 s.f.	**HWL** =	763.20
p	= 7.0'	**INV** =	762.90
R	= 0.2357	**d** =	0.30'
$R^{2/3}$	= 0.3816		
n	= 0.025		
s	= 0.0148	**V** =	**2.76 fps**
$s^{1/2}$	= 0.1217	**Q** =	**4.55 cfs**

Notes:

4.55 cfs = Capacity to the Overflow Bypass Elevation of 763.20 (main channel)

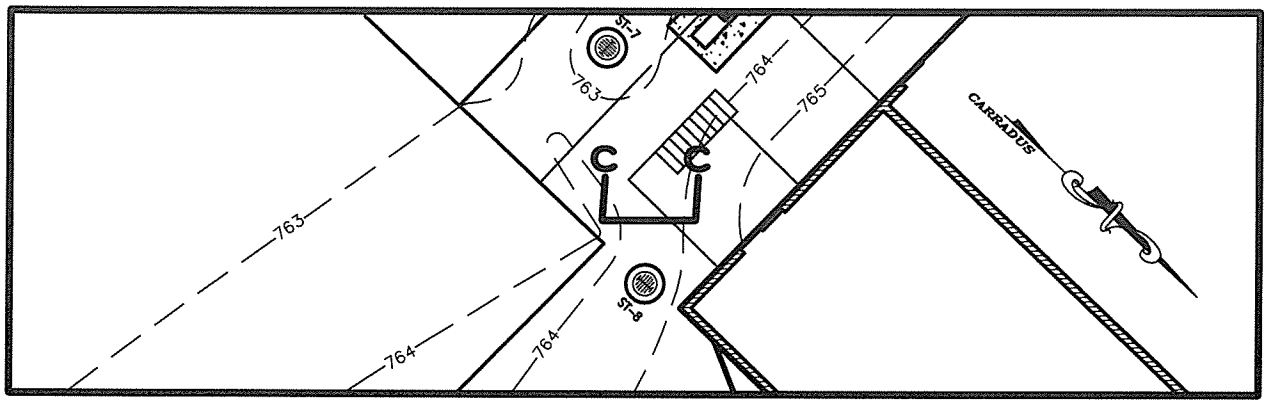
Rational Method

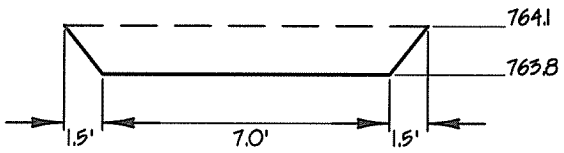
0.02 cfs = Capacity required to Bypass Immediate Upstream Runoff.
1.31 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 763.05 the swale is expected to bypass 1.90 cfs

TR-55 Method

0.16 cfs = Capacity required to Bypass Immediate Upstream Runoff.
1.88 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION C-C





a	= 2.55 s.f.	**HWL** =	764.1
p	= 10.0'	**INV** =	763.8
R	= 0.2550	**d**	= 0.30'
$R^{2/3}$	= 0.4021		
n	= 0.025		
s	= 0.0065	**V**	= **1.93 fps**
$s^{1/2}$	= 0.0806	**Q**	= **4.91 cfs**

Notes:

4.91 cfs = Capacity to the Overflow Bypass Elevation of 764.10

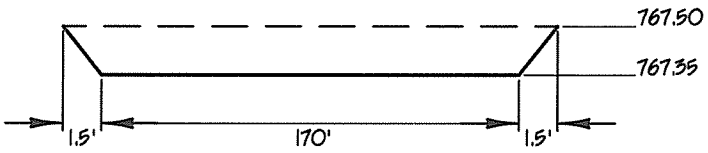
Rational Method

1.22 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 763.91 the swale is expected to bypass 1.75 cfs

TR-55 Method

1.72 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION D-D



a	= 27.75 s.f.	**HWL** =	767.50
p	= 200.0'	**INV** =	767.35
R	= 0.1388	**d** =	0.15'
$R^{2/3}$	= 0.2560		
n	= 0.025		
s	= 0.0056	**V** =	**1.14 fps**
$s^{1/2}$	= 0.0748	**Q** =	**31.64 cfs**

Notes:

31.64 cfs = Capacity to the Overflow Bypass Elevation of 767.50

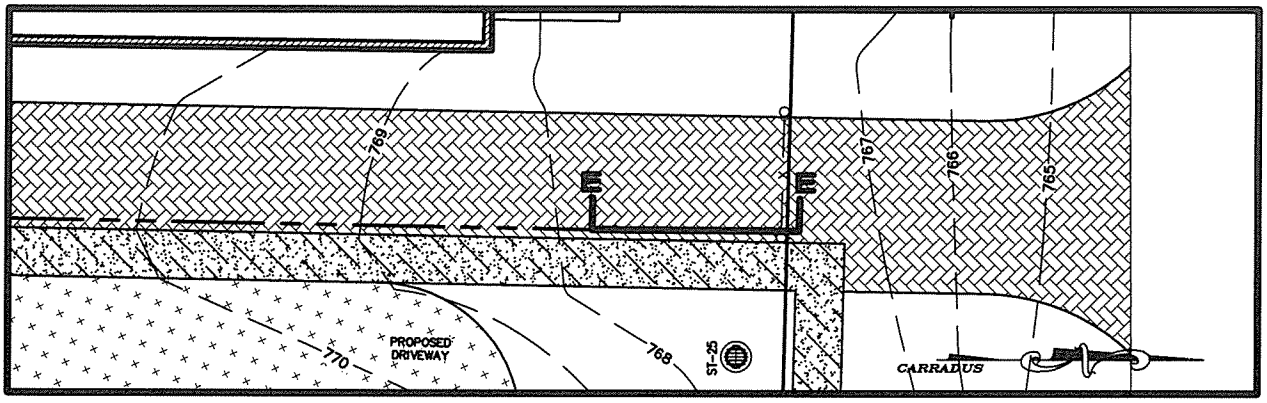
Rational Method

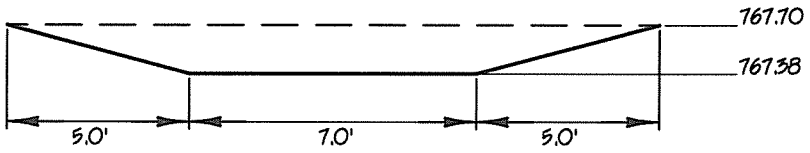
0.00 cfs = Capacity required to Bypass Immediate Upstream Runoff.
3.00 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 767.41 the swale is expected to bypass 4.55 cfs

TR-55 Method

0.00 cfs = Capacity required to Bypass Immediate Upstream Runoff.
4.47 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION E-E





a	= 4.48 s.f.	**HWL** =	767.70
p	= 21.02'	**INV** =	767.38
R	= 0.2131	**d**	= 0.32'
$R^{2/3}$	= 0.3568		
n	= 0.025		
s	= 0.0127	**V**	= **2.39 fps**
$s^{1/2}$	= 0.1125	**Q**	= **10.69 cfs**

Notes:

10.69 cfs = Capacity to the Overflow Bypass Elevation of 767.70

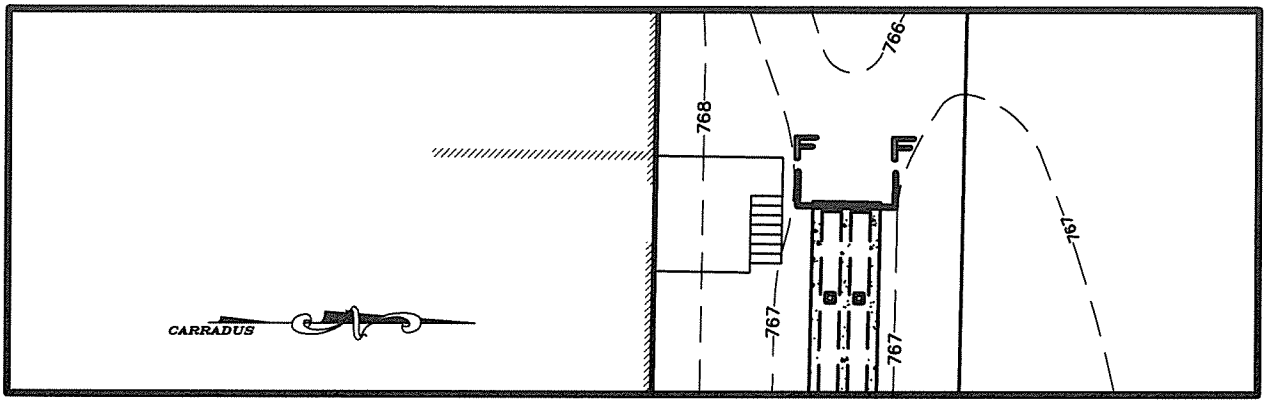
Rational Method

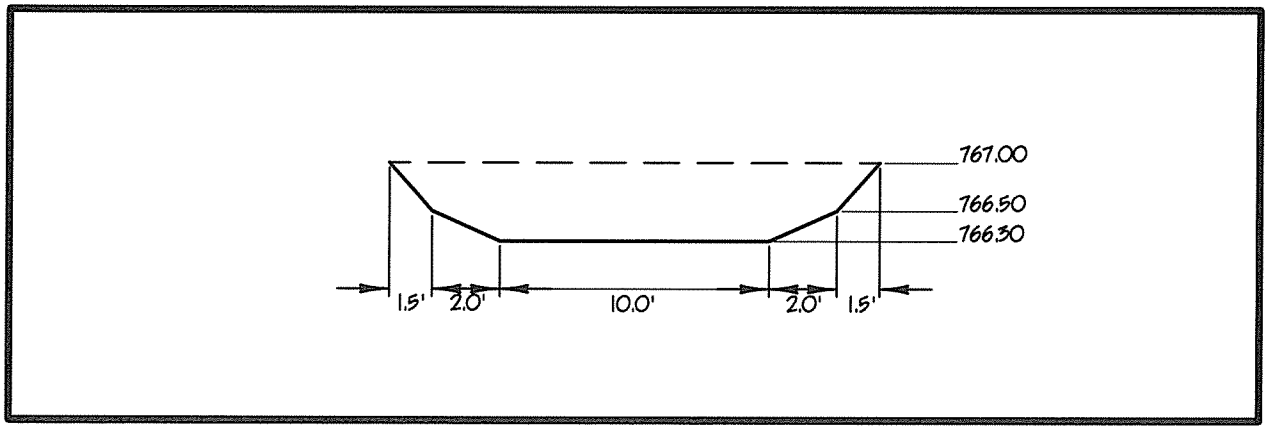
0.34 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 7647.40 the swale is expected to bypass 0.05 cfs

TR-55 Method

0.36 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION F-F





a	= 6.33 s.f.	**HWL** =	767.00
p	= 12.66'	**INV** =	766.30
R	= 0.5000	**d**	= 0.70'
$R^{2/3}$	= 0.6300		
n	= 0.025		
s	= 0.0057	**V**	= 4.22 fps
$s^{1/2}$	= 0.0755	**Q**	= 26.72 cfs

Notes:

26.72 cfs = Capacity to the Overflow Bypass Elevation of 767.00

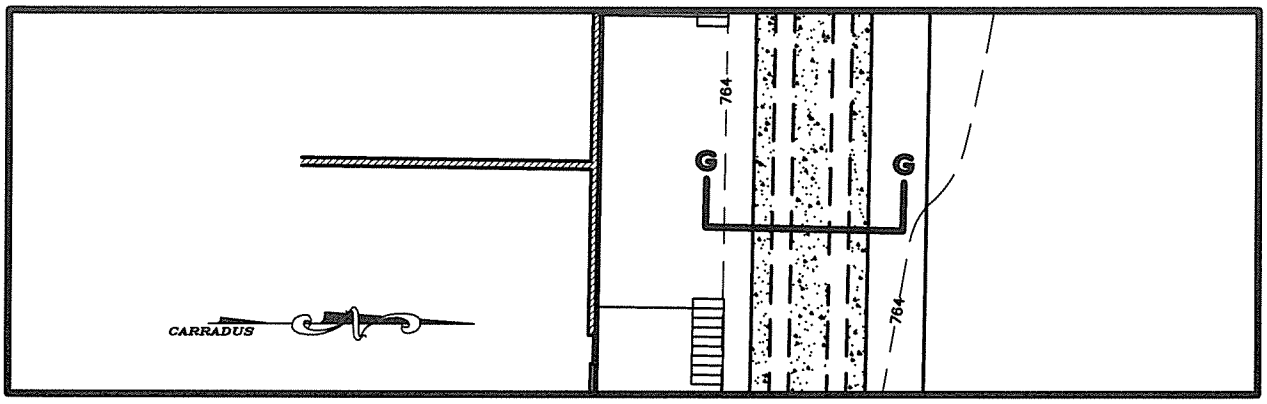
Rational Method

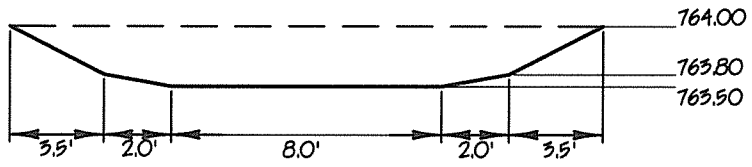
2.17 cfs = Capacity required to Bypass Immediate Upstream Runoff.
2.51 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 766.54 the swale is expected to bypass 3.62 cfs

TR-55 Method

3.26 cfs = Capacity required to Bypass Immediate Upstream Runoff.
3.62 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION G-G





a	= 6.1 s.f.	**HWL** =	764.00
p	= 19.05'	**INV** =	763.50
R	= 0.3202	**d** =	0.50'
$R^{2/3}$	= 0.4680		
n	= 0.025		
s	= 0.0091	**V** =	**2.65 fps**
$s^{1/2}$	= 0.0954	**Q** =	**16.17 cfs**

Notes:

16.17 cfs = Capacity to the Overflow Bypass Elevation of 764.00

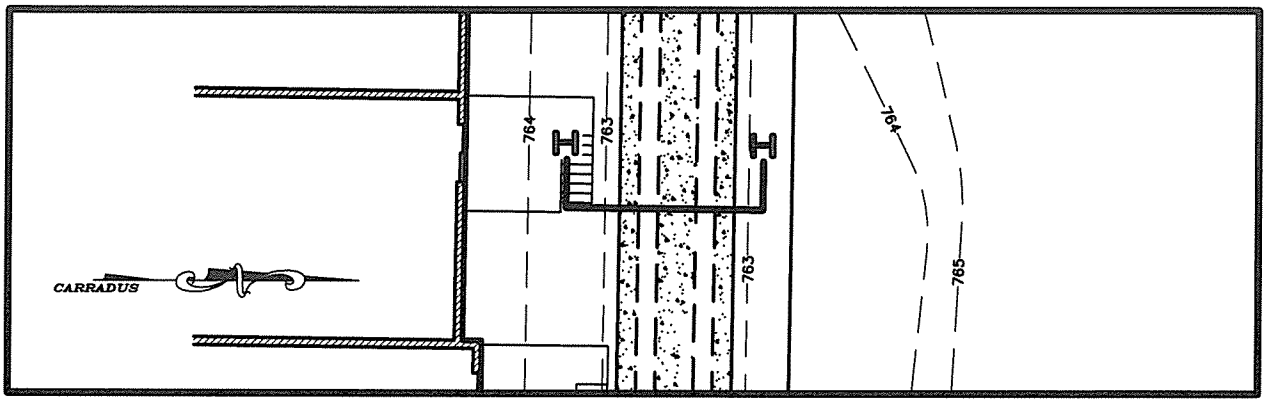
Rational Method

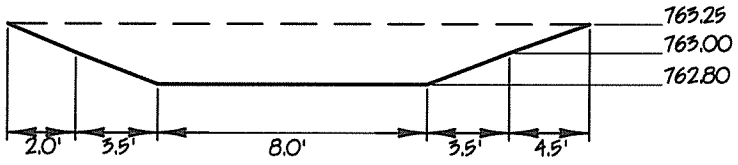
1.50 cfs = Capacity required to Bypass Immediate Upstream Runoff.
4.01 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 763.80 the swale is expected to bypass 5.35 cfs

TR-55 Method

1.88 cfs = Capacity required to Bypass Immediate Upstream Runoff.
5.50 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION H-H





a	= 6.86 s.f.	**HWL** =	763.25
p	= 21.55'	**INV** =	762.80
R	= 0.3183	**d**	= 0.45'
$R^{2/3}$	= 0.4662		
n	= 0.025		
s	= 0.0070	**V**	= **2.32 fps**
$s^{1/2}$	= 0.0837	**Q**	= **12.91 cfs**

Notes:

15.91 cfs = Capacity to the Overflow Bypass Elevation of 763.25

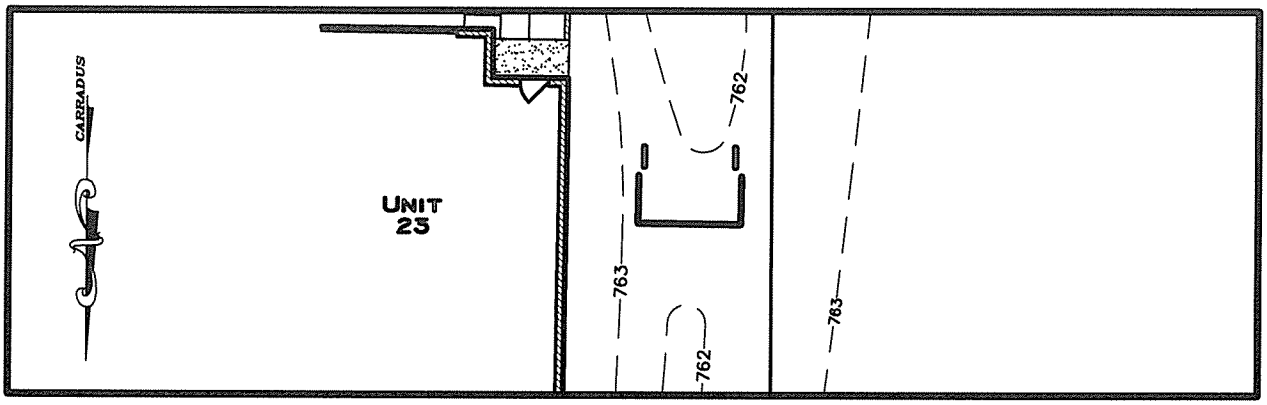
Rational Method

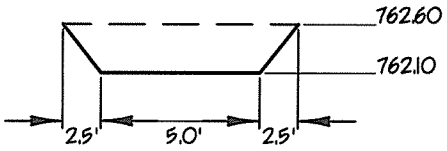
1.70 cfs = Capacity required to Bypass Immediate Upstream Runoff.
5.71 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 763.09 the swale is expected to bypass 7.25 cfs

TR-55 Method

1.75 cfs = Capacity required to Bypass Immediate Upstream Runoff.
7.25 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION 1-1





a	= 3.75 s.f.	**HWL** =	762.60
p	= 10.10'	**INV** =	762.10
R	= 0.3713	**d**	= 0.50'
$R^{2/3}$	= 0.5166		
n	= 0.025		
s	= 0.0083	**V**	= 2.80 fps
$s^{1/2}$	= 0.0911	**Q**	= 10.50 cfs

Notes:

10.50 cfs = Capacity to the Overflow Bypass Elevation of 762.60

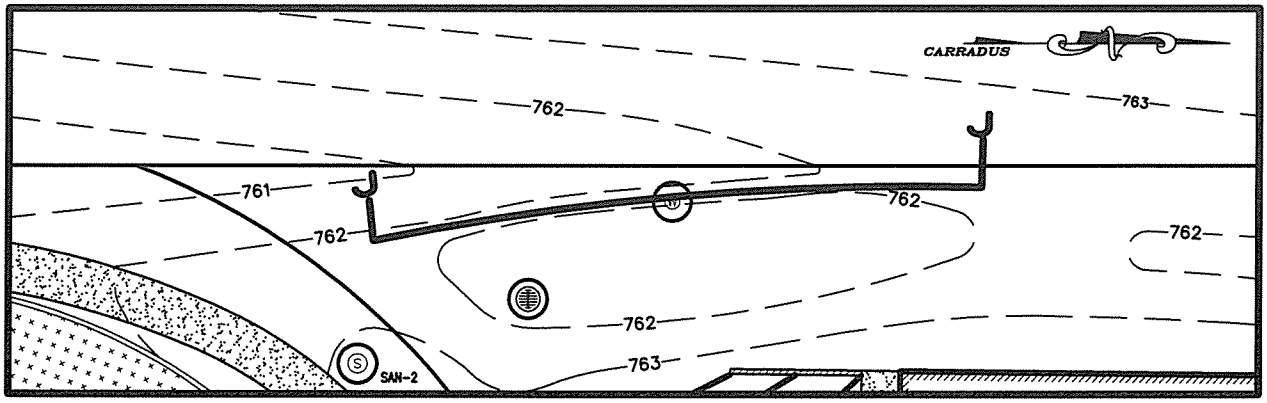
Rational Method

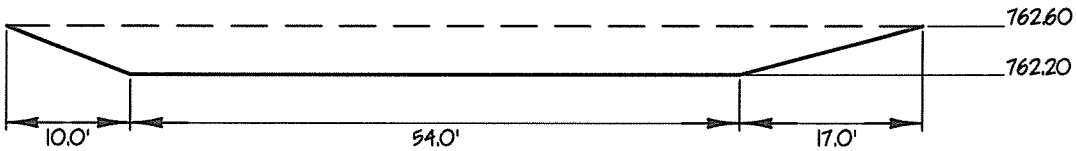
0.87 cfs = Capacity required to Bypass Immediate Upstream Runoff.
6.58 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 762.52 the swale is expected to bypass 8.30 cfs

TR-55 Method

1.05 cfs = Capacity required to Bypass Immediate Upstream Runoff.
8.30 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION J-J





a	= 27.0 s.f.	**HWL** =	762.60
p	= 81.01'	**INV** =	762.20
R	= 0.3333	**d**	= 0.40'
$R^{2/3}$	= 0.4807		
n	= 0.025		
s	= 0.0100	**V**	= **2.86 fps**
$s^{1/2}$	= 0.1000	**Q**	= **77.15 cfs**

Notes:

77.15 cfs = Capacity to the Overflow Bypass Elevation of 762.60

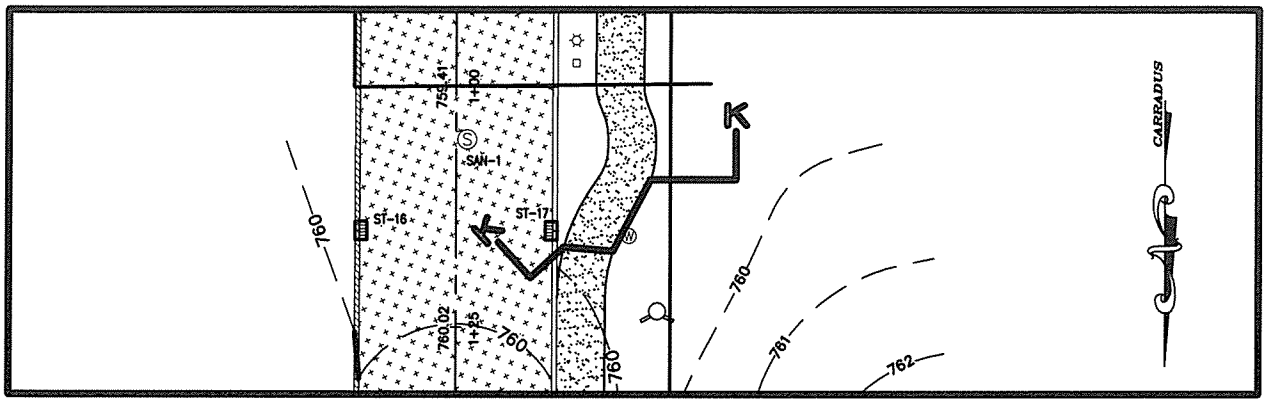
Rational Method

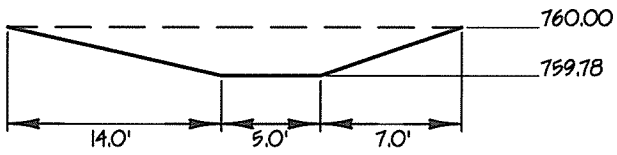
0.63 cfs = Capacity required to Bypass Immediate Upstream Runoff.
7.21 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 762.25 the swale is expected to bypass 9.10 cfs

TR-55 Method

0.78 cfs = Capacity required to Bypass Immediate Upstream Runoff.
9.08 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION K-K





a	= 3.41 s.f.	**HWL** =	760.00
p	= 26.01'	**INV** =	759.78
R	= 0.1311	**d**	= 0.22'
$R^{2/3}$	= 0.2581		
n	= 0.025		
s	= 0.0100	**V**	= **1.54 fps**
$s^{1/2}$	= 0.1000	**Q**	= **5.23 cfs**

Notes:

5.23 cfs = Capacity to the Overflow Bypass Elevation of 760.00

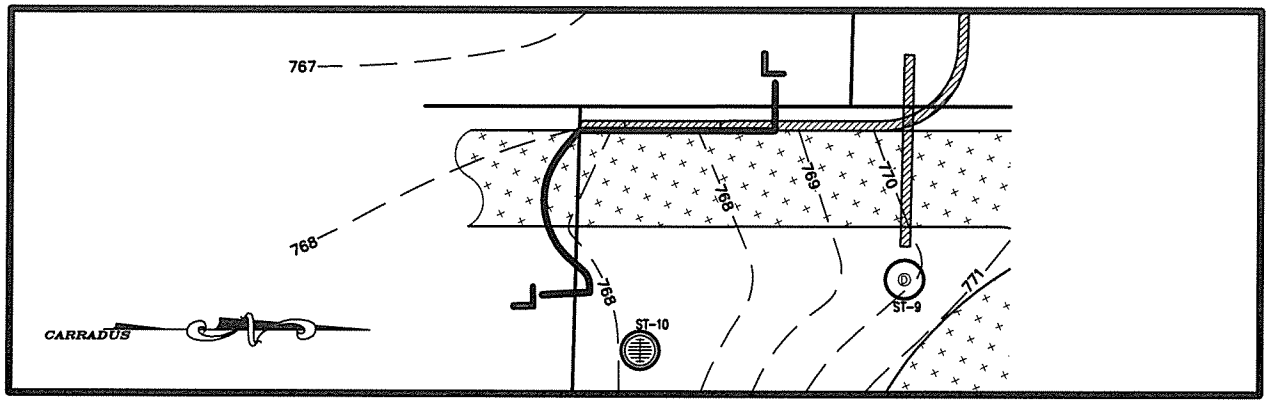
Rational Method

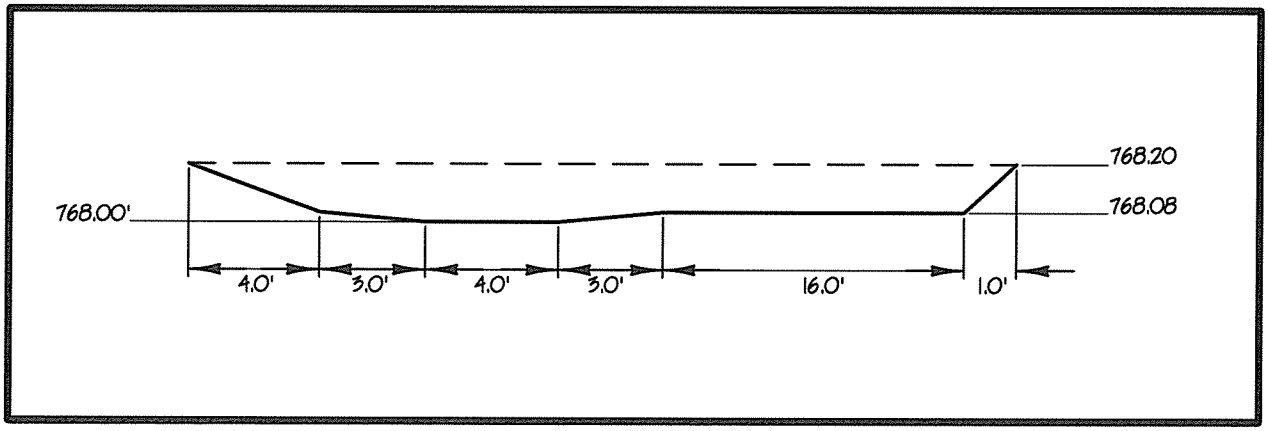
0.51 cfs = Capacity required to Bypass Immediate Upstream Runoff.
7.72 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 760.20 the swale is expected to bypass 9.80 cfs

TR-55 Method

0.69 cfs = Capacity required to Bypass Immediate Upstream Runoff.
9.77 cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

BYPASS SECTION L-L





a	= 3.98 s.f.	**HWL** =	768.20
p	= 31.0'	**INV** =	768.08
R	= 0.1103	**d**	= 0.18'
$R^{2/3}$	= 0.2300		
n	= 0.025		
s	= 0.1000	**V**	= **4.32 fps**
$s^{1/2}$	= 0.3162	**Q**	= **16.32 cfs**

Notes:

16.32 cfs = Capacity to the Overflow Bypass Elevation of 768.20

Rational Method

0.79 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.
At elevation 768.10 the swale is expected to bypass 1.50 cfs

TR-55 Method

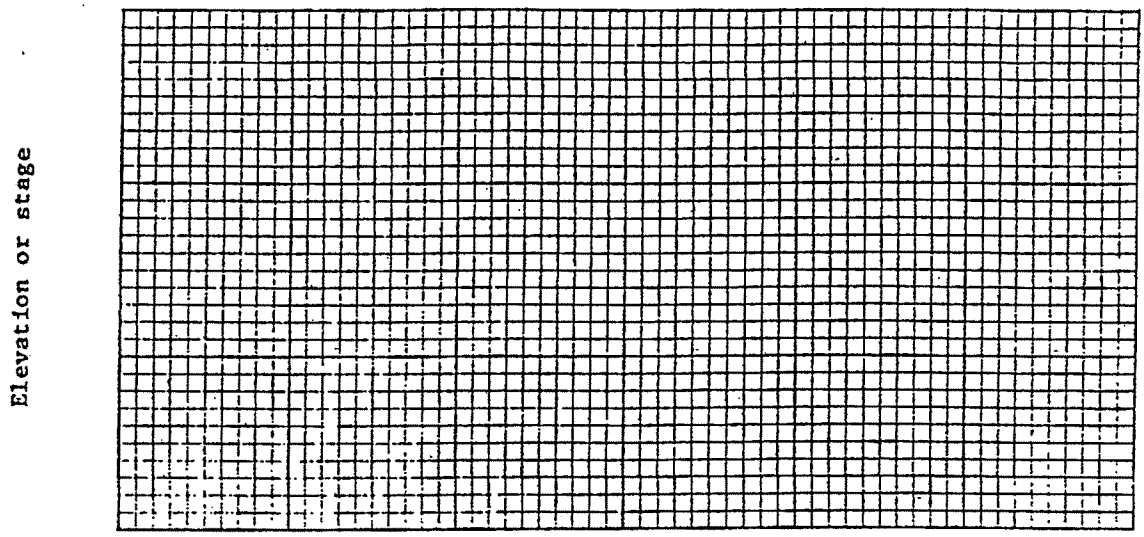
1.46 cfs = Capacity required to Bypass Immediate Upstream Runoff.
N/A cfs = Capacity required to Bypass All Cumulative Upstream Runoff.

Worksheet 6a: Detention basin storage, peak outflow discharge (q_o) known

Project Harding Custom Homes Unit 2 By ADC Date 12/22/2020

Location Harding Avenue, Glen Ellyn Checked JL Date 12/22/2020

Circle one: Present Developed



Detention basin storage

1. Data:
   Drainage area ..... A_m = 0.00527 mi^2
   Rainfall distribution type (I, IA, II, III) = II

	1st stage	2nd stage
2. Frequency ..... yr	10	100
3. Peak inflow discharge, q_i .... cfs (From worksheet 4 or 5b)	13.35	24.47
4. Peak outflow discharge, q_o .... cfs 1/	0.337	0.337
5. Compute $\frac{q_o}{q_i}$	0.0252	0.0138
6. $\frac{V_s}{V_r}$ ..... (Use $\frac{q_o}{q_i}$ with figure 6-1)	0.72	0.75
7. Runoff, Q ..... in (From worksheet 2)	3.72	7.0
8. Runoff volume, V_r ..... ac-ft ($V_r = QA_m 53.33$)	1.05	1.975
9. Storage volume, V_s ..... ac-ft ($V_s = V_r(\frac{V_s}{V_r})$)	0.756	1.481
10. Maximum stage, E_{max} (From plot)		

1/ 2nd stage q_o includes 1st stage q_o.

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Existing Overall Development (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\July 2020\895-Existing Overall(Unit 2).w5

Date: 12/22/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	3.37	80	.284

Total area: 3.37 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

ADC

Harding Subdivision Unit 2
Existing Overall Development (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	5.99	9.15	12.04	16.55	20.25	24.03	4.25
REACHES							
OUTLET	5.99	9.15	12.04	16.55	20.25	24.03	4.25

ADC

Harding Subdivision Unit 2
Existing Overall Development (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover 50% to 75% (fair)	C	3.17	79
	Paved parking lots, roofs, driveways	C	.2	98
	Total Area / Weighted Curve Number		3.37	80

ADC

Harding Subdivision Unit 2
Existing Overall Development (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0160	0.240				0.252
SHALLOW	330	0.0320	0.050				0.032
						Time of Concentration	.284

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Proposed Overall Development (Unit 2)
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\December 2020\895-Proposed Overall(Unit 2

Date: 12/22/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	3.37	87	.342

Total area: 3.37 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

ADC

Harding Subdivision Unit 2
Proposed Overall Development (Unit 2)
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	7.46	10.58	13.35	17.61	21.02	24.47	5.65
REACHES							
OUTLET	7.46	10.58	13.35	17.61	21.02	24.47	5.65

ADC

Harding Subdivision Unit 2
Proposed Overall Development (Unit 2)
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover < 50% (poor)	C	3.17	86
	Paved parking lots, roofs, driveways	C	.2	98
	Total Area / Weighted Curve Number		3.37	87

ADC

Harding Subdivision Unit 2
Proposed Overall Development (Unit 2)
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0160	0.240				0.252
SHALLOW	560	0.0136	0.050				0.083
SHALLOW	100	0.0400	0.025				0.007
						Time of Concentration	.342

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Proposed Development (Unit 2) South & West
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\December 2020\895-Proposed (Unit 2) South

Date: 12/22/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	1.18	86	.348

Total area: 1.18 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) South & West
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	2.48	3.56	4.52	5.99	7.18	8.37	1.86
REACHES							
OUTLET	2.48	3.56	4.52	5.99	7.18	8.37	1.86

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) South & West
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover < 50%	(poor)	C	1.18	86
	Total Area / Weighted Curve Number			1.18	86

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) South & West
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0280	0.240				0.202
SHALLOW	240	0.0015	0.050				0.107
SHALLOW	400	0.0315	0.050				0.039
						Time of Concentration	.348

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Proposed Development (Unit 2) East & North
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\December 2020\895-Proposed (Unit 2) East

Date: 12/26/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	0.48	79	.329

Total area: .48 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) East & North
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	0.76	1.18	1.56	2.16	2.66	3.16	0.53
REACHES							
OUTLET	0.76	1.18	1.56	2.16	2.66	3.16	0.53

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) East & North
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover 50% to 75% (fair)	C	.48	79
	Total Area / Weighted Curve Number		.48	79

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) East & North
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	99	0.0145	0.240				0.263
SHALLOW	460	0.0145	0.050				0.066
					Time of Concentration		.329

WinTR-55 Current Data Description

--- Identification Data ---

User: ADC
Project: Harding Subdivision Unit 2
SubTitle: Proposed Development (Unit 2) Roadway & Front Yard
State: Illinois
County: Dupage
Filename: C:\Users\ADC\AppData\Roaming\WinTR-55\895-Unit2\December 2020\895-Proposed (Unit 2) Roadw.

Date: 12/22/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
TOTAL SITE		Outlet	1.71	79	.162

Total area: 1.71 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.34	4.3	5.15	6.45	7.5	8.57	2.77

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) Roadway & Front Yard
Dupage County, Illinois

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)
SUBAREAS							
TOTAL SITE	3.43	5.27	6.97	9.65	11.85	14.08	2.41
REACHES							
OUTLET	3.43	5.27	6.97	9.65	11.85	14.08	2.41

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) Roadway & Front Yard
Dupage County, Illinois

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
TOTAL SITE	Open space; grass cover 50% to 75% (fair)	C	1.71	79
	Total Area / Weighted Curve Number		1.71	79

ADC

Harding Subdivision Unit 2
Proposed Development (Unit 2) Roadway & Front Yard
Dupage County, Illinois

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
TOTAL SITE							
SHEET	60	0.0350	0.240				0.124
SHALLOW	450	0.0260	0.025				0.038
					Time of Concentration		.162

TAB 3

FLOOD PLAIN
3A/3B

Does not apply to this project. Map attached.

Zone AE
(EL 751.1 Feet)
Village of Glen Ellyn
170207
17043C0156J
eff. 8/1/2019
SITE
AREA OF MINIMAL FLOOD HAZARD
Zone X
Esri, USDA Farm Servi

DuPage County
Information Technology Department / GIS Division
421 N County Farm Rd.
Wheaton, IL 60187

Regional Topography and Flood Zone

Copyright DuPage 201

TAB 4

WETLANDS/ WETLAND BUFFER

Does not apply to this project.

TAB 5

WATERWAY BUFFER

Does not apply to this project.

TAB 6

PCBMP'S

DUPAGE COUNTY BMP REQUIREMENT:

DuPage county's BMP regulations are intended to help filter contaminants from stormwater runoff before these flows reach the storm sewers that drain into our streams. These regulations provide for treatment being required when more than 2500 square feet of new impervious area is proposed for a site. The regulatory volume required to be treated is based on a 1¼"rainfall over all impervious area of the site.

To meet this requirement we are proposing that stone infiltration beds with 24" perforated pipes be placed in the rear of each lot. These beds are below grade and have approximately 12" of porous topsoil above them to finish grade. With this system the runoff flows overland and is filtered by the thick turf for the initial treatment. Secondary treatment is provided by the filtration characteristics of porous topsoil above the stone beds. The finish grade is generally bermed slightly at the downstream area of the stone bed to retard runoff and allow the rainwater to percolate through the topsoil and into the stone bed. The stone bed and perforated pipe then provides a settling basin to further filter out contaminates and provide a storage volume necessary to accommodate the 1¼" rainfall that falls onto the total impervious area of the lots. Should the runoff volume exceed the percolation rate of the porous topsoil above the stone bed, there are vertical 6" perforated pipes with yard inlet caps placed over the beds that connect to the BMP system below. This will permit the maximum volume of stormwater to reach the filtration of the stone beds rather than flowing downstream untreated. These 6" vertical PVC pipes also serve as an observation well for the system. To provide a positive outlet for stormwater that exceeds the volume of the stone bed, a perforated drain tile is placed just above the top of the stone, and is connected to a secondary storm service line to be connected to the rear yard storm sewer system. A 6" PVC equalizer pipe is connected between multiple 24" perforated pipes to balance the storage and treatment of the systems.

This system has been designed to be installed with the construction of each townhome building though installation during storm sewer construction is also possible. Each building will have its own distinctive driveways, patios, sidewalks,

etc., so the impervious area subject to the BMP calculations is different for each lot. The system that is proposed is a design that has been utilized numerous times to meet the BMP requirements of DuPage County. Though there is adequate open space with this site design, the terrain provides restrictions to obtaining large flat areas to accommodate the stone bed size that will be required. In some instances this has been obtained by placement of the BMP facilities within the swales over the privately maintained rear yard storm system. This method provides the best location for trapping runoff for introduction into the BMP system.

Intertwining of the privately maintained BMP system with the privately maintained rear yard storm sewer system would all be within the blanket easement allowing Village personnel to monitor the maintenance of the system that shall be performed by the H.O.A.

It should be noted that the soil boring log from the soil borings performed on the site indicated most all borings were dry while drilling, and 24 hours after as well. Only ground water incurred was at a depth of over 5.5' in a few instances. The BMP facilities have been designed to stay at least 1' above any potential ground water. Any fill placed under, over and around the BMP system is designated as porous topsoil to allow for percolation of the runoff into, and out of, the stone bed for filtration of contaminants. Additional soil evaluation studies may be required prior to the installation of each individual BMP System at time of approval and construction.

Safety construction fencing or silt fence is specified as encompassing the BMP areas to protect the integrity of the porous soils from compaction caused by construction activity. All fencing locations will be shown on permit drawings for each building as applicable and fencing shall be noted as maintain in place until all construction activity is complete and final landscape and turf is in place and established. A summary of the BMP required for each lot and the public right-of-ways, and how this required volume shall be achieved is shown on the following table.

PCBMP SITE TABULATION

LOTS 1 thru 5

Lot Number	Impervious Area	BMP Required	BMP Provided	Excess or Shortage
Lot 1	9,634 sq.ft.	1,004 cu.ft.	2,070 cu.ft.	+1,066 cu.ft.
Lot 2	9,635 sq.ft.	1,004 cu.ft.	1,625 cu.ft.	+621 cu.ft.
Lot 3	11,640 sq.ft.	1,213 cu.ft.	1,658 cu.ft.	+445 cu.ft.
Lot 4	12,074 sq.ft.	1,258 cu.ft.	916 cu.ft.	−342 cu.ft.
Lot 5	13,502 sq.ft.	1,406 cu.ft.	2,699 cu.ft.	+1,293 cu.ft.
Total		5,885 cu.ft.	8,968 cu.ft.	+3,083 cu.ft.
Total applied to right of way BMP requirements = 3,083 cu.ft.				

HARDING AVE. & HARDING CT.

Description of Area	Impervious Area	BMP Required	BMP Provided	Excess or Shortage
Back of Curb/ Back of Curb	12,965 sq.ft.			
Public Walks (Harding)	4,980 sq.ft.			
Parking Spaces	1,700 sq.ft.			
Driveway Aprons	3,640 sq.ft.			
Public Walks (Rt 53)	608 sq.ft.			
Right of Way Total	23,893 sq.ft.	2,489 cu.ft.	0 cu.ft.	−2,489 cu.ft.
Total applied to right of way BMP requirements from Lot 1−5 Excess = +3,083 cu.ft. Total Project Excess BMP Improvements Proposed = +594 cu.ft.				

TAB 7

SESC

Sheet 3 of 23 within Harding Custom Homes Subdivision Unit 2 Plan Set was created to meet State, County and Municipal guidelines for soil erosion and sediment control. Additional measures are identified within the SWPPP documents and drawings, the 6 pages of Appendix C and D are included herewith.

NOTE:
ALL TREE PROTECTION AND TREE REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH THE VILLAGES NOTES AND DETAILS FOR TREE PROTECTION INCLUDED ON SHEET 13 AND AS SHOWN ON THE "TREE PRESERVATION AND REMOVAL PLAN" PREPARED BY OTHERS AND INCLUDED AS AN ATTACHMENT TO THIS PLAN SET. NO VARIATION FROM SAID PLAN SHALL START WITHOUT PRIOR APPROVAL FROM THE VILLAGE STAFF.

CARRADUS

ILLINOIS ROUTE 53 (100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT

12" WATERMAIN

EXISTING UTILITY POLE

EXISTING UTILITY POLE TO REMAIN

IL RT. 53 RIGHT OF WAY

EXISTING UTILITY SERVICE POLES ALONG IL RT. 53 TO BE REMOVED (3) (TYPICAL)

HEAVY BRUSH ALONG RIGHT OF WAY SHALL BE REMOVED AS NEEDED FOR SIDEWALK CONSTRUCTION WITHIN ROUTE 53 RIGHT OF WAY

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

VALVE VAULT RIM=762.65

EXISTING UTILITY SERVICE POLES ON SITE SHALL BE ABANDONED AND REMOVED AS SOON AS SERVICE AROUND THE PERIMETER OF THE SITE IS PROVIDED BY COM ED. CO. (TYPICAL)

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL TO REMAIN

EXISTING UTILITY POLE TO REMAIN

(217.73')
(N 90°00'00" E)

INSTALL FILTER BASKET INSIDE FRAME AND 5" DIA. FILTER SOCK (OR APPROVED EQUAL) AROUND ALL STORM STRUCTURES AS THEY ARE INSTALLED FOR SEDIMENT PROTECTION. (PROPOSED STRUCTURES TYPICAL)

STABILIZED CONSTRUCTION ENTRANCE

CONCRETE WASHOUT AREA

PORTABLE TOILET

PROTECT EXISTING SANITARY MANHOLE WITH CONSTRUCTION SAFETY FENCE AND WIDEN CONSTRUCTION ACCESS ENTRANCE TO ALLOW CONSTRUCTION TRAFFIC ACCESS ON EACH SIDE OF THE MANHOLE SUFFICIENTLY TO PERMIT CONSTRUCTION VEHICLES WITHOUT DAMAGE. THE VILLAGE SHALL APPROVE THE METHOD OF PROTECTION IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

SILT FENCE SHALL BE INSTALLED PRIOR TO THE START OF ANY WORK ON THE SITE AND BE MAINTAINED UNTIL FINAL VEGETATION IS ESTABLISHED.

EXISTING DRIVEWAY TO BE REMOVED.

EXISTING RESIDENCE TO BE DEMOLISED.

EXISTING SEPTIC SHALL BE FIELD LOCATED AND ABANDONED PER DUPAGE COUNTY AND STATE OF ILLINOIS HEALTH DEPARTMENT SPECIFICATIONS AND PROCEDURES.

SANITARY MANHOLE RIM=758.98 INV=749.48 (8" W)
EXISTING ELECTRIC CONTROL BOX
EXISTING STREET LIGHT

(33.00')
(N 00°31'55" W)

46.75'
(N 90°00'00" E)

(20.84')
(N 89°59'07" E)

(166.75')
(N 00°00'00" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

EXISTING RESIDENCE

BITUMINOUS DRIVEWAY

PROPOSED RESIDENCE

FRAME SHED

WOOD DECK

FENCE

EXISTING UTILITY POLE

F/F=770.41

APPROXIMATE LOCATION OF EXISTING 8" WATER MAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

STORM STRUCTURE LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

NOTE:
FOR EROSION CONTROL AND TREE PRESERVATION NOTES & DETAILS SEE SHEET 13 OF THIS PLAN SET.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Plat Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

EROSION CONTROL & DEMOLITION PLAN
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180 Carol Stream Illinois 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

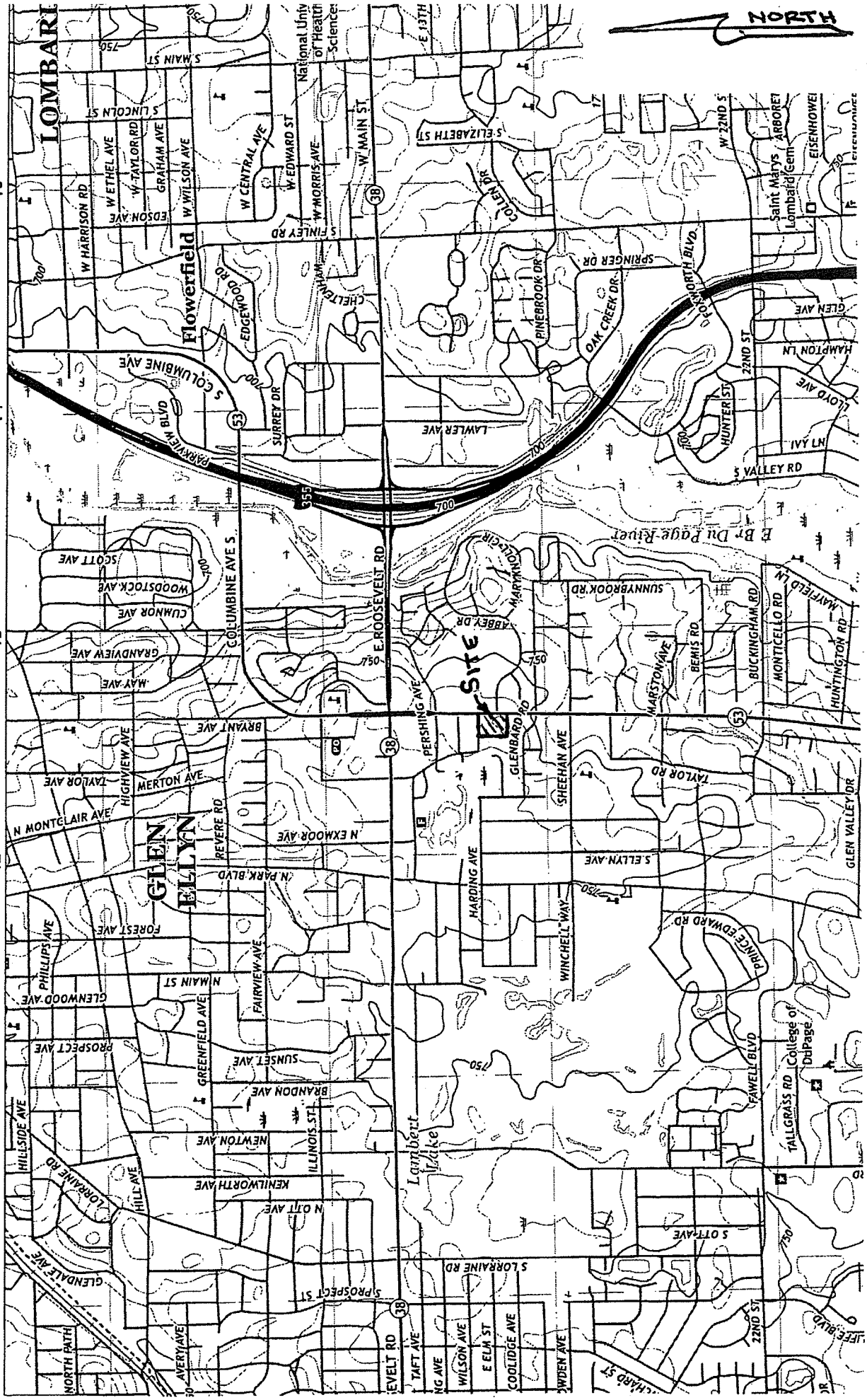
Sheet 3 of 22

Project # 895

DRAWING FILE NAME: 895-MF-SH3

TAB 8

MAPS



USGS TOPOGRAPHIC MAP APPENDIX B

TAB 9

MAINTENANCE AND MONITORING

Maintenance and monitoring the site is specified in the SWPPP. This documentation has been submitted to Springfield and a copy of the application and material will be kept onsite with the designated site representative. A copy of the 3 sheets of Exhibit D is included herewith.

SCALE: 1"=20'

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

THE TOWNHOMES OF WATERS EDGE

THE TOWNHOMES OF WATERS EDGE

NICOLL WAY

HARDING AVENUE

BRENTWOOD PLACE

BRENTWOOD COURT

BRENTWOOD PLACE

LOT 1

LIMITS OF WETLANDS AS DELINEATED BY GARY R. WEBER ASSOC.

SITE BENCHMARK
SANITARY MANHOLE
RIM=757.23
INV.=743.68 (8" E)
INV.=743.65 (8" W)
INV.=744.33 (8" N)

WATER VALVE RIM=757.08

WATER VALVE RIM=757.70

WATER VALVE RIM=760.28

CURB INLET RIM=757.03 INV=753.03 (W) INV=752.28 (N)

CURB INLET RIM=756.94 INV=751.59 (W) INV=751.84 (E)

EXISTING 12" STORM SEWER @ 0.65%(15 c.f.s.)

EXISTING 8" SANITARY SEWER

EXISTING 6" WATERMAIN

EXISTING OVERHEAD UTILITY WIRES

EXISTING STREET LIGHT

EXISTING CONCRETE SIDEWALK ENDS

EXISTING STREET LIGHT CONTROLLER

EXISTING POWER POLE & GUY WIRE WITH POWER DROP TO UNDERGROUND

FIRE HYDRANT

EXISTING UNDERGROUND STREET LIGHT, GAS, ELECTRIC AND COMMUNICATIONS BETWEEN WALK & CURB. (FIELD LOCATE PRIOR TO THE START OF CONSTRUCTION)

EXISTING BITUMINOUS DRIVEWAY

EXISTING WATER SERVICE (TYPICAL)

APPROXIMATE LOCATION OF SANITARY SERVICE (FIELD VERIFY)

EXISTING BITUMINOUS ROADWAY

EXISTING CONCRETE CURB & GUTTER ENDS

SANITARY MANHOLE RIM=758.98 INV=749.48 (8" W)

EXISTING UNDERGROUND ELECTRIC UTILITY (FIELD LOCATE PRIOR TO THE START OF CONSTRUCTION)

5' STONE WALKWAY

EXISTING 30' UTILITY EASEMENT

UTILITY PEDESTALS

ELECTRIC TRANSFORMER

CONCRETE WALK

CONCRETE CURB IS 0.65' NORTH

IRON PIPE IS 0.9' NORTH & 0.8' WEST

IRON FENCE IS 0.9' SOUTH & 1.6' WEST

IRON FENCE IS 0.75' WEST

IRON PIPE IS 0.19' SOUTH & 0.12' WEST

IRON PIPE IS 0.18' NORTH & 0.71' WEST

IRON PIPE

264.12'

283.70'

266.62'

281.21'

(166.75')

(166.70')
WEST LINE OF ROUTE 53 (AS MONUMENTED & OCCUPIED)

166.84' Calc
166.84' Meas.
WEST LINE OF THE EAST 24.70' OF LOT 1

BASE FLOOD ELEVATION (B.F.E.) = 751.0

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

NOTES

1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f. Distances shown along curved lines are Arc Measurements unless otherwise noted
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction
6. Dimensions to and along buildings are exterior foundation measurements
7. Do Not Assume distances from scaled measurements made hereon.

STORM STRUCTURE LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

TOPOGRAPIC SURVEY LEGEND

- EXISTING CONTOUR
- EXISTING GRADE
- DRAINAGE FLOW ROUTE
- SP — SUMP PUMP DISCHARGE
- DS — DOWNSPOUT DISCHARGE
- UNDERGROUND STORM DRAIN
- T/F — TOP OF FOUNDATION ELEVATION
- G/F — GARAGE FLOOR ELEVATION
- SILT FENCE WITH CONSTRUCTION SAFETY FENCE

NOTE:
THERE ARE NO EXISTING TREES ONSITE GREATER THEN 5" DIA. TO REMAIN AFTER CONSTRUCTION.

NOTE:
NO EXISTING IMPERVIOUS AREA ONSITE.

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP DEMOLITION PLAN APPENDIX C
HARDING CUSTOM HOMES SUBDIVISION UNIT 1
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 Carradus_survey@yahoo.com

Sheet 1 of 3

Project # 895

DRAWING FILE NAME: [illegible]

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

NOTE:
ALL TREE PROTECTION AND TREE REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH THE VILLAGES NOTES AND DETAILS FOR TREE PROTECTION INCLUDED ON SHEET 13 AND AS SHOWN ON THE "TREE PRESERVATION AND REMOVAL PLAN" PREPARED BY OTHERS AND INCLUDED AS AN ATTACHMENT TO THIS PLAN SET. NO VARIATION FROM SAID PLAN SHALL START WITHOUT PRIOR APPROVAL FROM THE VILLAGE STAFF.

CARRADUS
0 10 20 30 40
SCALE: 1"=20'

ILLINOIS ROUTE 53 (100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

EXISTING UTILITY SERVICE POLES ALONG IL RT. 53 TO BE REMOVED (3) (TYPICAL)

HEAVY BRUSH ALONG RIGHT OF WAY SHALL BE REMOVED AS NEEDED FOR SIDEWALK CONSTRUCTION WITHIN ROUTE 53 RIGHT OF WAY

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

FIRE HYDRANT
12" WATERMAIN
VALVE VAULT
EXISTING UTILITY POLE TO REMAIN
IL RT 53 RIGHT OF WAY
EXISTING UTILITY POLE

EXISTING UTILITY SERVICE POLES ON SITE SHALL BE ABANDONED AND REMOVED AS SOON AS SERVICE AROUND THE PERIMETER OF THE SITE IS PROVIDED BY COM ED. CO. (TYPICAL)

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL TO REMAIN
EXISTING UTILITY POLE TO REMAIN

(N 90°00'00" E)
(217.73')

INSTALL FILTER BASKET INSIDE FRAME AND 5" DIA. FILTER SOCK (OR APPROVED EQUAL) AROUND ALL STORM STRUCTURES AS THEY ARE INSTALLED FOR SEDIMENT PROTECTION. (PROPOSED STRUCTURES TYPICAL)

EXISTING RESIDENCE TO BE DEMOLISED.

EXISTING DRIVEWAY TO BE REMOVED.

STABILIZED CONSTRUCTION ENTRANCE

CONCRETE WASHOUT AREA

PORTABLE TOILET

FIRE HYDRANT
WATER VALVE
RIM=760.28
EXISTING UTILITY POLE

PROTECT EXISTING SANITARY MANHOLE WITH CONSTRUCTION SAFETY FENCE AND WIDEN CONSTRUCTION ACCESS ENTRANCE TO ALLOW CONSTRUCTION TRAFFIC ACCESS ON EACH SIDE OF THE MANHOLE SUFFICIENTLY TO PERMIT CONSTRUCTION VEHICLES WITHOUT DAMAGE. THE VILLAGE SHALL APPROVE THE METHOD OF PROTECTION IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

SANITARY MANHOLE
RIM=758.98
INV=749.48 (8" W)
EXISTING ELECTRIC CONTROL BOX
EXISTING STREET LIGHT

(33.00')
(N 00°31'55" W)

46.75'
(N 90°00'00" E)

SILT FENCE SHALL BE INSTALLED PRIOR TO THE START OF ANY WORK ON THE SITE AND BE MAINTAINED UNTIL FINAL VEGETATION IS ESTABLISHED.

(L=166.78')
(Rad.=34066.78')

(20.84')
(N 89°59'07" E)

(166.75')
762.25 + (N 00°00'00" E)

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

EXISTING SEPTIC SHALL BE FIELD LOCATED AND ABANDONED PER DUPAGE COUNTY AND STATE OF ILLINOIS HEALTH DEPARTMENT SPECIFICATIONS AND PROCEDURES.

EXISTING RESIDENCE
BITUMINOUS DRIVEWAY
APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)
PROPOSED RESIDENCE
FRAME SHED
WOOD DECK
FENCE

NOTES
1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f Distances shown along curved lines are Arc Measurements unless otherwise noted.
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction.
6. Dimensions to and along buildings are exterior foundation measurements.
7. Do Not Assume distances from scaled measurements made hereon.

STORM STRUCTURE LEGEND
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)
SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

TOPOGRAPIC SURVEY LEGEND
- EXISTING CONTOUR
- EXISTING GRADE
- DRAINAGE FLOW ROUTE
- SUMP PUMP DISCHARGE
- DOWNSPOUT DISCHARGE
- UNDERGROUND STORM DRAIN
- T/F TOP OF FOUNDATION ELEVATION
- G/F GARAGE FLOOR ELEVATION
- SILT FENCE WITH CONSTRUCTION SAFETY FENCE

SURVEY LEGEND
- Monumentation Found
- Monumentation Set (MAG SPIKE-SSW)
- (50') Record Dimension
- Fence Line

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP DEMOLITION PLAN APPENDIX G
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Sheet 2 of 3
Project # 895

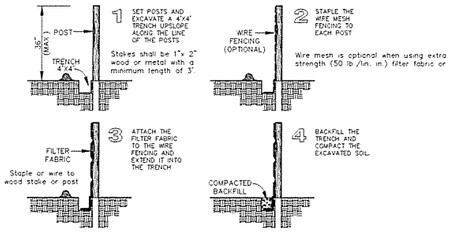
DRAWING FILE NAME: 895 HCH

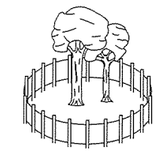
EROSION CONTROL NOTES

1. Sediment and erosion control devices shall be installed and functional before the site is otherwise disturbed.
2. If a stockpile is to remain in place for more than seven days, it shall be surrounded by silt fence. If a stockpile is to remain in place for more than fourteen days, it shall be protected with temporary seeding.
3. All flared end sections shall be protected by sediment settling basins and/or straw bales until ground cover has been established. Filter fabric shall be placed under all inlet grates until ground cover has been established.
4. Water pumped, or otherwise discharged, from the site as part of construction dewatering shall be filtered.
5. All soil, mud and debris washed, tracked or deposited onto the street pavement shall be removed at the end of each work day.
6. Vehicular access to the site shall be restricted to a gravel drive after the foundation has been backfilled. The gravel drive shall be installed within seven days of the foundation backfilling and prior to the start of any construction above the top of foundation.
7. Ground cover (seed and mulch or sod) shall be placed on all disturbed areas within fourteen days of the completion of top soil placement and final grading. If weather conditions preclude the placement of seed and mulch or sod, all disturbed areas shall be protected with erosion blanket.

EROSION CONTROL DETAILS

Plans and Specifications
For Silt Fence and Straw Bale Placement





NOTES: INSTALL PROTECTIVE FENCING TO A MINIMUM HEIGHT OF 4.0', FENCING SHALL BE POSITIONED SUCH THAT DRIP LINE OF TREE IS PROTECTED.

Maintenance

1. Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

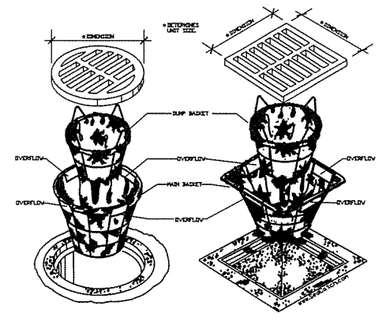
All Construction Shall be Governed by "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" October 1981 edition as Revised.

SEDCATCH® SEDIMENT BASKET®
SQUARE, RECTANGULAR, OR ROUND GRATES

LEGEND

SB	SEDIMENT BASKET®

SIZING INSTRUCTIONS:
MEASURE THE ACTUAL SIZE OF THE GRATE. CHECK FOR ANY OBSTRUCTIONS THAT COULD INTERFERE WITH THE SEDCATCH® SEDIMENT BASKET®



US PATENTS D 598,134, D 600,324, D 654,000, OTHER PATENTS PENDING

SedCatch® Environmental Products
www.SedCatch.com

1. INLET PROTECTION SHALL BE INSTALLED AT THE TIME THE STRUCTURE IS SET.
2. TO INSTALL: REMOVE GRATE, DROP MAIN SEDIMENT BASKET IN OPENING, PLACE DUMP BASKET IN MAIN BASKET, REPLACE GRATE.
3. INSPECT AFTER EACH RAIN OR AS DIRECTED BY ENGINEER OR INSPECTOR.
4. IF THERE IS AN ACCUMULATION OF SEDIMENT, SLIDE THE GRATE OFF THE INLET, LIFT THE DUMP BASKET OUT OF THE MAIN BASKET, EMPTY CONTENTS IN A SUITABLE LOCATION, REPLACE DUMP BASKET, REPLACE GRATE.
5. AFTER APPROXIMATELY 10-20 DUMPS, OR AS NEEDED, EMPTY THE MAIN BASKET OF ANY ACCUMULATED SEDIMENT.
6. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE TO BE BLOCKED ENTIRELY. DO NOT INSTALL IF IT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

PENALTY FOR UNLAWFUL DISCHARGE

IT SHALL BE UNLAWFUL TO DISCHARGE TO ANY NATURAL OUTLET, WATERCOURSE OR STORM SEWER WITHIN THE VILLAGE OF GLEN ELLYN, OR IN ANY AREA UNDER THE JURISDICTION OF SAID VILLAGE, ANY SEWAGE OR OTHER POLLUTED WATERS, EXCEPT WHERE SUITABLE TREATMENT HAS BEEN PROVIDED IN ACCORDANCE WITH SUBSEQUENT PROVISIONS OF THIS ORDINANCE AND/OR PROVISIONS AS OUTLINED IN THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. (VILLAGE CODE SECTION 23-04)

ANY USER WHO IS FOUND TO HAVE VIOLATED AN ORDER OF THE VILLAGE OR WHO HAS FAILED TO COMPLY WITH ANY PROVISION OF THIS CHAPTER AND THE ORDERS, RULES AND REGULATIONS AND PERMITS HEREUNDER, SHALL BE FINED IN AN AMOUNT NOT LESS THAN ONE THOUSAND DOLLARS ($1,000.00) MINIMUM FOR EACH VIOLATION (VILLAGE CODE SECTION 23-35)

GENERAL NOTES FOR EROSION CONTROL

1. SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENT CONTROL IN ILLINOIS", AND SHALL MEET ALL REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY, N.P.D.E.S. PERMIT FOR "CONSTRUCTION SITE ACTIVITIES".
2. SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE PROPERTY WHERE BERMS, STOCKPILES, OR OTHER EARTHWORK WILL TAKE PLACE AND AROUND ANY EXISTING STORM SEWER STRUCTURES, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT A VALID NOTICE OF INTENT (N.O.I.) IS ON RECORD WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (I.E.P.A.), AND THAT COPIES OF ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CERTIFICATES ARE SIGNED, AND ON FILE PRIOR TO DISTURBING ANY GROUND.
4. A COPY OF THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MAINTAINED ON SITE AT ALL TIMES.
5. A STABILIZED CONSTRUCTION ENTRANCE(S) FOR MUD AND DUST CONTROL SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF THE PROJECT. CONSTRUCTION ENTRANCE(S) SHALL BE LOCATED WHERE SHOWN ON THE PLANS, AND AT ANY OTHER POINTS WHERE CONSTRUCTION TRAFFIC FREQUENTLY LEAVES THE PUBLIC ROADWAY TO ENTER THE SITE. THE STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE A MINIMUM 30' WIDE, 50' LONG, AND SHALL BE CONSTRUCTED OF A 6" THICK MINIMUM LAYER OF 2" ANGULAR CRUSHED AGGREGATE COMPACTED IN PLACE, LAID OVER A GEOTEXTILE FABRIC.
6. STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND OTHER DEBRIS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY DIRT, MUD OR DEBRIS THAT MAY BECOME DEPOSITED UPON THE ADJACENT STREETS.
7. HAULING WILL NOT BE ALLOWED WHEN THE WORK SITE IS TOO WET TO MAINTAIN ACCEPTABLE CONDITIONS ON ADJACENT STREETS.
8. ADJACENT STREETS SHALL BE MECHANICALLY SWEPT PERIODICALLY AS DIRECTED BY THE VILLAGE INSPECTOR.
9. NO SEDIMENT SHALL BE ALLOWED TO ENTER THE STORM SEWER SYSTEM.
10. ALL STORM SEWER STRUCTURES EXISTING OR PROPOSED, LOCATED IN GRADED AREAS, SHALL BE PROTECTED SILT FENCE AND REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. ALL OPEN GRATE STORM SEWER STRUCTURES LOCATED IN PAVED AREAS, ON SITE OR WITHIN 300' OF THE PROJECT, SHALL BE PROTECTED BY A REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED AND/OR CONSTRUCTION IS COMPLETE. FILTRATION BASKETS SHALL BE FLEXSTORM OR EQUAL.
11. TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFF SITE AREAS, I.E. THE STOCKPILE SHALL BE LOCATED SO THAT AN ONSITE DRAINAGE SWALE IS LOCATED BETWEEN THE STOCKPILE AND THE DOWNSTREAM OFF SITE PROPERTY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN TWELVE MONTHS, IT IS REQUIRED THAT THE STOCKPILE BE SEEDED SO AS TO MINIMIZE SOIL EROSION BY BOTH WIND AND RAIN.
12. CONCRETE TRUCKS SHALL WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONLY IN DESIGNATED WASHOUT LOCATIONS. THE CONTRACTOR SHALL TAKE SUFFICIENT PRECAUTIONS TO PREVENT SURPLUS CONCRETE OR DRUM WASH WATER FROM ENTERING THE STORM SEWER SYSTEM.
13. ALL STORM SEWER STRUCTURES, PERMANENT SEDIMENT BASINS AND RETENTION BASINS PROVIDED WITHIN THIS PROJECT ARE TO BE CLEANED AT THE END OF CONSTRUCTION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE. CLEANING MAY ALSO BE REQUIRED DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT IF IT IS DETERMINED THAT THE SILT AND DEBRIS TRAPS ARE NOT PROPERLY FUNCTIONING AND THEIR PERFORMANCE IS IMPAIRED.
14. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS OF FINAL INSPECTION, OR AFTER THE CONTROL MEASURES ARE NO LONGER NEEDED.
15. IF FOUND BY INSPECTION THAT THE CONDITIONS ARE NOT SUBSTANTIALLY AS STATED OR SHOWN IN THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, THE VILLAGE ENGINEER MAY STOP FURTHER WORK UNTIL DEFICIENT CONDITIONS ARE CORRECTED.
16. SOIL STABILIZATION (TEMPORARY SEEDING OR EROSION CONTROL BLANKETS) SHALL BE INITIATED AS SOON PRACTICAL IN THOSE PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, IN NO CASE SHALL AN AREA THAT IS AT FINAL GRADE REMAIN EXPOSED TO THE ELEMENTS FOR MORE THAN FIFTEEN (15) DAYS. SOIL STABILIZATION SHALL ALSO BE INITIATED WITHIN FIFTEEN (15) DAYS FOR THOSE AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN UNDISTURBED FOR LONGER THAN SIXTY (60) DAYS.

SEQUENCE FOR SOIL EROSION CONTROL ITEMS

1. DIVERSION AND STRUCTURAL MEASURES – WILL BE INSPECTED AT WEEKLY INTERVALS OR AFTER EVERY RAINSTORM PRODUCING RUNOFF.
2. SEDIMENT BASINS – WILL BE CHECKED WEEKLY FOR SEDIMENT ACCUMULATION.
3. VEGETATIVE PLANTINGS – SPRING PLANTINGS WILL BE CHECKED DURING SUMMER OR EARLY FALL.
4. REPAIRS – ANY EROSION CONTROL MEASURES, STRUCTURAL MEASURES OR OTHER RELATED ITEMS IN NEED OF REPAIR, ARE EXPECTED TO BE BROUGHT INTO COMPLIANCE IMMEDIATELY.
5. MOWING – DRAINAGEWAYS, DITCHES AND OTHER AREAS THAT SUPPORT A DESIGNATED FLOW OF WATER WILL BE MOWED REGULARLY TO MAINTAIN THAT FLOW.
6. RESEEDING – SEEDED AREAS WHERE THE SEED HAS NOT PRODUCED A GOOD COVER WILL BE RESEEDED AND FERTILIZED.

SEQUENCE FOR SOIL EROSION CONTROL ITEMS

EACH RESPECTIVE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND ANY NECESSARY CORRECTIVE ACTION ASSOCIATED WITH THE EROSION CONTROL MEASURES SO DESIGNATED FOR THAT CONTRACTOR. THE FOLLOWING ITEMS ARE TO BE PROVIDED BY THE DESIGNATED CONTRACTOR AT THE TIME AND IN THE GENERAL SEQUENCE INDICATED BELOW.

1. MASS GRADING / EARTHWORK CONTRACTOR
   A. PROVIDE CONSTRUCTION ENTRANCE, AND SILT FENCE PRIOR TO THE START OF CONSTRUCTION.
   B. PROVIDE DIVERSION SWALES AROUND SITE PERIMETER (WHICH ARE PART OF OVERALL GRADING PLAN) AS NECESSARY TO PREVENT AND/OR INTERCEPT STORM WATER RUNOFF TO OFFSITE AREAS, AS PART OF THE INITIAL MASS GRADING IMPROVEMENTS.
   C. OVER-EXCAVATE PROPOSED TEMPORARY SILTATION BASIN(S) AS NECESSARY
   D. OVER-EXCAVATE AROUND PROPOSED YARD INLETS.
   E. PROVIDE A DIVERSION DITCH OR BERM IN ACCORDANCE WITH THE TEMPORARY STOCKPILE DETAIL FOR ALL STOCKPILES PRIOR TO ANY PLACEMENT OF MATERIAL IN SAID STOCKPILE.
8. UNDERGROUND CONTRACTOR
   A. PROVIDE SILT FENCE AROUND ALL STORM STRUCTURES IMMEDIATELY UPON INSTALLATION OF SAID STRUCTURE(S).
   B. PROVIDE REUSABLE FILTRATION BASKETS AT ALL OPEN GRATE STORM STRUCTURES DURING CONSTRUCTION. REUSABLE FILTRATION BASKETS SHALL BE PLACED BETWEEN THE GRATE AND CAST IRON FRAME TO ALLOW MAINTENANCE BY REMOVING GRATE WITH FRAME TO REMAIN IN PLACE. REUSABLE FILTRATION BASKETS SHALL BE MAINTAINED UNTIL ALL "UPSTREAM" AREAS TO A RESPECTIVE STORM STRUCTURE HAVE BEEN COMPLETED THROUGH ESTABLISHMENT OF VEGETATIVE COVER.
   C. PROVIDE CLEANING OF THE STORM SEWER SYSTEM AND SEWER STRUCTURES.

SITE SCHEDULE

TASK	MONTH OF CONSTRUCTION 1	2	3	4	5	6	7	8	9	10	11	12
SILT FENCE INSTALLATION												
SITE CLEANING & HAUL OFF												
EXCAVATION & SITE GRADING												
STORM SEWER & DETENTION												
RETAINING WALLS & CURBS												
STONE BASE & PAVING												
SANITARY & WATER SERVICE												
LANDSCAPE												
SILT FENCE MAINTENANCE												
CLEANING OF ROADWAY												

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fig Bk Pg:	48-00	Approved:	ADC

Date	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP DEMOLITION PLAN APPENDIX C
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois 60188
(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Sheet 3 of 3
Project # 895

DRAWING FILE NAME: [illegible]

SCALE: 1"=20'

HARDING AVENUE

ST-1
REMOVE EXISTING MANHOLE AND REPLACE WITH 72" MANHOLE WITH TYPE 1 FRAME & CURB INLET. MATCH EXISTING CURB GRADES. RIM=756.74

SITE BENCHMARK
SANITARY MANHOLE
RIM=757.23'
INV=743.68 (8" E)
INV=743.68 (8" W)
INV=744.33 (8" N)

LIMITS OF WETLANDS

BASE FLOOD ELEVATION = 751.0
NO RAISING OF THE FINISH GRADE BELOW ELEVATION 751.0

DIVERSION BERM ALONG LOT LINE TO DIRECT RUNOFF TOWARD INLETS AND AWAY FROM ADJOINING PROPERTIES

PROPOSED 5' WIDE CONCRETE WALK

Lot One
Lot Two
Lot Three
Lot Four

66.00'
144.80'
144.79'
144.77'
144.75'
R=166.84'
L=144.84'
68.22'
(287.46')
(310.87')

TOPSOIL STOCKPILE LOCATION

LOCATION OF FUTURE TOWNHOUSE WITH LOOKOUT BASEMENT (PHASE 2)

T/F=764.50
T/F=768.50

NOTE:
GRADING BEYOND THE BOUNDARY OF THE SINGLE FAMILY DEVELOPMENT IS TEMPORARY AND WILL BE FINALIZED WITH THE TOWNHOME GRADING PLANS (PHASE 2). ALL GRADED AREAS, SWALES AND THE STOCKPILE AREA SHALL BE SEEDED AND MULCHED FOR STABILIZATION AND EROSION CONTROL IMMEDIATELY UPON COMPLETION. THE STOCKPILE SHALL BE REMOVED UPON THE COMPLETION OF THE HOMES ON THE 4 LOTS.

TEMPORARY SWALE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AT A MINIMUM OF 6" BELOW THE EXISTING GRADE AT THE ADJACENT PROPERTY LINE.

IMPERVIOUS SHADING / HATCH LEGEND

- BUILDINGS
- CONCRETE WALKS
- BITUMINOUS DRIVEWAYS

DRAINAGE STRUCTURE LEGEND

- STORM CATCHBASIN WITH CURB INLET
- STORM CATCHBASIN
- STORM MANHOLE (D)
- SANITARY SEWER MANHOLE (S)
- DENOTES LOCATION OF PLANNED EMERGENCY OVERFLOW BY PASS ROUTE AT ELEV.=744.00

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk. Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP PLAN APPENDIX D

HARDING CUSTOM HOMES SUBDIVISION UNIT 1
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream Illinois, 60188
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Sheet 1 of 3

Project # 895

Drawing File Name: [illegible]

SWPPP PLAN

CARRADUS

ILLINOIS ROUTE 53

(100' R/W)

BITUMINOUS ROADWAY

EDGE OF PAVEMENT

CONCRETE CURB & GUTTER

PERVIOUS AREAS OF SITE ARE NOT HATCHED OR SHADED. (TYPICAL)

BOUNDARY LINE OF ENTIRE AREA OF SUBDIVISION. (TYPICAL)

(Rad.=34327.48')
(L=552.92')

(L=31.24')
(Rad.=20.00')

VALVE VAULT RIM=762.65

FIRE HYDRANT

EXISTING POWER POLE

EXISTING IBT PEDESTAL

EXISTING UTILITY POLE

EXISTING APARTMENT BUILDING

PROPOSED 5' CONCRETE WALK

PROPOSED 5' CONCRETE WALK

ST-21 RIM=762.25

ST-22 RIM=762.90

ST-23 RIM=764.00

ST-24 RIM=766.00

ST-25 RIM=766.80

ST-20 RIM=761.50

ST-19 F/L=764.25

ST-18 F/L=764.25

ST-15 F/L=768.50

ST-14 F/L=768.50

ST-26 F/L=769.75

ST-27 F/L=769.75

ST-5 RIM=764.50

ST-6 RIM=769.65

ST-1 RIM=762.50

ST-8 RIM=763.30

ST-7 RIM=762.50

ST-3 RIM=759.70

ST-29 RIM=759.30

ST-17 F/L=759.49

ST-16 F/L=759.49

ST-13 RIM=766.00

ST-12 RIM=766.00

ST-11 RIM=766.80

ST-9 RIM=770.00

ST-10 RIM=767.30

ST-28 RIM=767.20

HARDING AVE.

HARDING COURT

PROPOSED 21' PUBLIC ROADWAY WITH CONCRETE CURB & GUTTER

CUL. RAD.=200.0'

STREET LIGHT

PROPOSED 10' X 10' GAZEBO

F/L=770.78

(217.73')
(N 90°00'00" E)

(33.00')
(N 00°31'55" W)

(46.75')
(N 90°00'00" E)

(20.84')
(N 89°59'07" E)

(166.75')
(N 00°00'00" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 88°57'19" E)

RUNOFF DIVERSION BERM

RUNOFF DIVERSION BERM

RUNOFF DIVERSION BERM

LOT 1
UNIT 1
UNIT 2
UNIT 3
UNIT 4
BUILDING A

LOT 2
UNIT 5
UNIT 6
UNIT 7
BUILDING A

LOT 3
UNIT 8
UNIT 9
UNIT 10
UNIT 11
UNIT 12
BUILDING A

LOT 4
UNIT 13
UNIT 14
UNIT 15
UNIT 16
UNIT 17
BUILDING B

LOT 5
UNIT 18
UNIT 19
UNIT 20
UNIT 21
UNIT 22
UNIT 23
BUILDING C

PROPOSED DRIVEWAY

EXISTING RESIDENCE

PROPOSED RESIDENCE

BITUMINOUS DRIVEWAY

BITUMINOUS DRIVEWAY

BITUMINOUS DRIVEWAY

FRAME SHED

WOOD DECK

CONNECTION POINT OF ONSITE SANITARY OUTFALL WITH SANITARY SEWER.

CONCRETE WASHOUT AREA. WASHOUT DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR BUT ALL WASHOUT ACTIVITY SHALL TAKE PLACE ON PRIVATE PROPERTY AND NOT WITHIN THE PUBLIC RIGHT OF WAY.
SEE DETAIL ON SHEET 13 OF 16

STORMWATER DISCHARGE STRUCTURE

NOTE:
ALL CATCH BASINS SHALL BE PROTECTED WITH SEDIMENT BASINS WHERE POSSIBLE AND FILTER BASKETS FOR ALL OTHER INLETS AND CATCH BASINS. SEE SHEET 3 OF 19 FOR DETAILS

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

IMPERVIOUS SHADING / HATCH LEGEND

BUILDINGS

CONCRETE WALKS

BITUMINOUS DRIVEWAYS

DRAINAGE STRUCTURE LEGEND

STORM CATCHBASIN WITH CURB INLET

STORM CATCHBASIN

STORM MANHOLE

SANITARY SEWER MANHOLE

DENOTES LOCATION OF PLANNED EMERGENCY OVERFLOW BY PASS

OVERFLOW ROUTE & ELEVATION 759.25

NO OTHER CONTIGUOUSLY OWNED PROPERTY.

NO AREA OF THE SITE IS LEFT UNDEVELOPED ALL PERVIOUS AREAS CONTAIN LANDSCAPING.

TOTAL PROJECT AREA = 146,695 SQ.FT., 3.368 ACRE.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

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03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP PLAN APPENDIX D
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 2 of 3

Project # 895

DRAWING FILE: PLAN SHEETS

SWPPP PLAN

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.

(787 HARDING AVENUE)
PIN 05-23-223-020
47,101 SQ. FT.

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

(NO ADDRESS ASSIGNED)
PIN 05-23-223-005
43,468 SQ. FT.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

(138 IL STATE ROUTE 53)
PIN 05-23-223-008
43,562 SQ. FT.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

(PART OF 128 IL STATE ROUTE 53)
PART OF PIN 05-23-223-025
4,624 SQ. FT.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

EXISTING 33' HARDING RIGHT OF WAY
7,913 SQ. FT.

O&M PRACTICES

1.) O&M PLAN PROCEDURES AND PRACTICES MUST BE REVIEWED AND ASSESSED ANNUALLY

2.) ACCESS ROUTES INCLUDING ROADWAYS AND SIDEWALKS SHALL BE INSPECTED ANNUALLY AND MAINTAINED AS NEEDED.

3.) DRAINAGE STRUCTURES AND FLOW RESTRICTORS MUST BE INSPECTED AND CLEANED SEMI-ANNUALLY.

4.) VOLUME CONTROL BMPs SHALL BE INSPECTED SEMI-ANNUALLY AND AFTER SIGNIFICANT RAINFALL EVENTS EXCEEDING 1.5 INCHES.

5.) THE OWNER SHALL KEEP AN UPDATED LOG BOOK DOCUMENTING THE PERFORMANCE OF THE REQUIRED O&M ACTIVITIES FOR PERPETUITY. LOG BOOKS MUST BE PRODUCED UPON THE REQUEST OF THE VILLAGE INSPECTOR.

6.) VEGETATION SHALL BE MAINTAINED ON A REGULAR BASIS.

7.) PEST CONTROL MEASURES SHALL BE IMPLEMENTED TO ADDRESS INSECTS AND RODENTS.

8.) SIGNAGE AND FENCING SHALL BE INSTALLED AND MAINTAINED WHERE NECESSARY TO PROTECT PROPERTY AND THE PUBLIC.

9.) UNDERGROUND VAULTS MUST INCLUDE DESIGN MEASURES TO FACILITATE CLEANING AND MAINTENANCE. CONFINED SPACE SAFETY PROCEDURES MUST BE FOLLOWED.

NOTE:
THERE ARE NO RECORDED FLOODPLAIN/FLOODWAY, RIPARIAN OR WETLAND AREAS ON THE SITE OR ADJACENT THERETO.
BUILDINGS ONSITE ARE PROTECTED FROM FLOODING BY THE ONSITE OVERFLOW BYPASS ELEVATION BEING SET AT ELEVATION 760.0, WHICH IS 2.10' BELOW THE TOP OF FOUNDATION ELEVATION OF THE LOWEST FOUNDATION ON SITE (UNIT 1 OF BUILDING 1) AT 764.10, AND 4.50' BELOW THE LOWEST GARAGE FLOOR ELEVATION ONSITE (UNIT 23 BUILDING 5) AT 766.50.

DEWATERING NOTE:
DEWATERING OF TRENCHES, EXCAVATIONS AND THE DETENTION SYSTEM SHALL BE VIA OVERLAND FLOW TOWARD THE OUTFALL STRUCTURES ADJACENT TO THE SITE. ALL DEWATERING SHALL BE FILTERED WITH TEMPORARY SILTATION BARRIERS AND SEDIMENT BASINS TO PREVENT CONTAMINATED RUNOFF FROM LEAVING THE SITE. NO DIRECT PUMPING OR DISCHARGE FROM THE DEWATERING PROCESS SHALL BE DIRECTED TOWARD ADJOINING PROPERTIES OR THE RIGHT OF WAYS WITHOUT BEING PROPERLY FILTERED.

ONSITE IMPERVIOUS AREA TABLE				
	BEFORE CONSTRUCTION		AFTER CONSTRUCTION	
BUILDINGS-	2,593 SQ.FT.	1.8 %	35,456 SQ.FT.	24.2 %
DRIVEWAY-	4,770 SQ.FT.	3.3 %	19,327 SQ.FT.	13.2 %
WALK & STEPS-	346 SQ.FT.	0.2 %	7,142 SQ.FT.	4.9 %
ROADWAY-	0 SQ.FT.	0.0 %	14,713 SQ.FT.	10.0 %
TOTAL IMPERVIOUS-	7,709 SQ.FT.	5.3 %	76,638 SQ.FT.	52.2 %
TOTAL SITE AREA-	146,695 SQ.FT.	100.0 %	146,695 SQ.FT.	100.0 %
NET ONSITE IMPERVIOUS AREA INCREASE = 68,929 SQ.FT.				
ROUTE 53 RIGHT OF WAY IMPERVIOUS AREA TABLE				
ROADWAY/DRIVEWAY-	570 SQ.FT.		0 SQ.FT.	
PUBLIC SIDEWALK-	0 SQ.FT.		710 SQ.FT.	
TOTAL NET IMPERVIOUS AREA INCREASE = 69,069 SQ.FT.				

RUNOFF CHARACTERISTICS OF SITE

IMPERVIOUS AREA (RESTRICTED) = 76,638 SQ.FT.
PERVIOUS AREA (RESTRICTED) = 70,057 SQ.FT.
TOTAL AREA OF SITE = 146,695 SQ.FT.

STORAGE PROVIDED

ALL STORMWATER STORAGE FOR THIS SITE IS PROVIDED AT AN OFFSITE VILLAGE OF GLEN ELLYN DETENTION BASIN SYSTEM DESIGNED TO ACCOMMODATE THIS PROPERTY.

AREA DISTURBED BY CONSTRUCTION

ENTIRE ONSITE AREA = 76,638 SQ.FT IMPERVIOUS
= 70,057 SQ.FT PERVIOUS
RT. 53 PARKWAY BETWEEN WALK & PROPERTY LINE = 11,170 SQ.FT PERVIOUS
RT. 53 DRIVEWAY ACCESS REMOVE & REPLACE = 0 SQ.FT IMPERVIOUS

BUILDINGS FOR LOWEST UNIT

TOP OF FOUNDATION = 769.10
GARAGE FLOOR = 768.60

FOR EROSION CONTROL AND SEDIMENT PROTECTION DETAILS AND EROSION PROTECTION SCHEDULE SEE SHEET 2 OF 22.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

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03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW

SWPP PLAN APPENDIX D
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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Sheet 3 of 3
Project # 895

DRAWING FILE NAME: 895-MPE-SWPPP

TAB 10

SECURITY

Does not apply to this project.

TAB 11

VARIANCE

Any variances to Glen Ellyn's ordinance does not apply to this project.

CARRADUS

ILLINOIS ROUTE 53

HARDING COURT

HARDING AVE.

(4.14 C.F.S. PROVIDED 0.34 C.F.S. REQUIRED)

(6.50 C.F.S. PROVIDED 5.71 C.F.S. REQUIRED)

(4.14 C.F.S. PROVIDED 4.01 C.F.S. REQUIRED)

(4.14 C.F.S. PROVIDED 2.51 C.F.S. REQUIRED)

(6.58 C.F.S. PROVIDED 7.13 C.F.S. REQUIRED)

(3.86 C.F.S. PROVIDED, 1.40 C.F.S. REQUIRED)

(3.86 C.F.S. PROVIDED 1.80 C.F.S. REQUIRED)

(3.86 C.F.S. PROVIDED 2.59 C.F.S. REQUIRED)

(4.63 C.F.S. PROVIDED) (2.99 C.F.S. REQUIRED)

(9.26 C.F.S. PROVIDED 4.81 C.F.S. REQUIRED)

(6.21 C.F.S. PROVIDED 1.87 C.F.S. REQUIRED)

(21.92 C.F.S. PROVIDED) (14.24 C.F.S. REQUIRED)

(26.85 C.F.S. PROVIDED) (16.17 C.F.S. REQUIRED)

(31.00 C.F.S. PROVIDED, 19.91 C.F.S. REQUIRED)

(8.28 C.F.S. PROVIDED) (7.21 C.F.S. REQUIRED)

(4.63 C.F.S. PROVIDED) (0.51 C.F.S. REQUIRED)

(3.66 C.F.S. PROVIDED) (1.36 C.F.S. REQUIRED)

(3.28 C.F.S. PROVIDED) (2.00 C.F.S. REQUIRED)

(5.86 C.F.S. PROVIDED 5.10 C.F.S. REQUIRED)

(5.86 C.F.S. PROVIDED 5.01 C.F.S. REQUIRED)

(5.07 C.F.S. PROVIDED 3.79 C.F.S. REQUIRED)

(4.88 C.F.S. PROVIDED) (1.45 C.F.S. REQUIRED)

(4.63 C.F.S. PROVIDED 3.00 C.F.S. REQUIRED)

(3.59 C.F.S. PROVIDED 0.80 C.F.S. REQUIRED)

(3.59 C.F.S. PROVIDED 12.28 C.F.S. REQUIRED)

(4.63 C.F.S. PROVIDED) (3.00 C.F.S. REQUIRED)

0.130 Ac. 0.198 Ac. 0.242 Ac. 0.345 Ac. 0.039 Ac. 0.126 Ac.

0.112 Ac. 0.212 Ac. 0.272 Ac. 0.181 Ac. 0.229 Ac. 0.251 Ac.

0.081 Ac. 0.123 Ac. 0.103 Ac. 0.182 Ac. 0.072 Ac.

0.221 Ac. 0.168 Ac. 0.017 Ac. 0.133 Ac. 0.143 Ac.

ST-1 ST-2 ST-3 ST-4 ST-5 ST-6 ST-7 ST-8 ST-9 ST-10 ST-11 ST-12 ST-13 ST-14 ST-15 ST-16 ST-17 ST-18 ST-19 ST-20 ST-21 ST-22 ST-23 ST-24 ST-25 ST-26 ST-27 ST-28 ST-29

W-1 W-2 FH-1 FH-2 SAN-1 SAN-2 SAN-3 SAN-4 SAN-5

DRAINAGE FLOW LEGEND

- 50' @ 1.0% — PRIMARY OVERLAND DRAINAGE FLOW ROUTE
- (50' @ 1.0%) — SECONDARY OVERLAND DRAINAGE FLOW ROUTE
- 50' @ 1.0% ① — USED TO DETERMINE AVERAGE OVERLAND FLOW TIME
- (C.F.S.) — UNDERGROUND STORM SEWER
- GRADING RIDGE LINE
- AREA=X.XX — TRIBUTARY AREA IN ACRES

STORM SEWER AND RUNOFF VALUES BASED ON THE RATIONAL METHOD UTALIZING BULLETIN 75 RAINFALL DATA FOR THE 100 YEAR STORM EVENT.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

STORM SEWER TRIBUTARY EXHIBIT

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VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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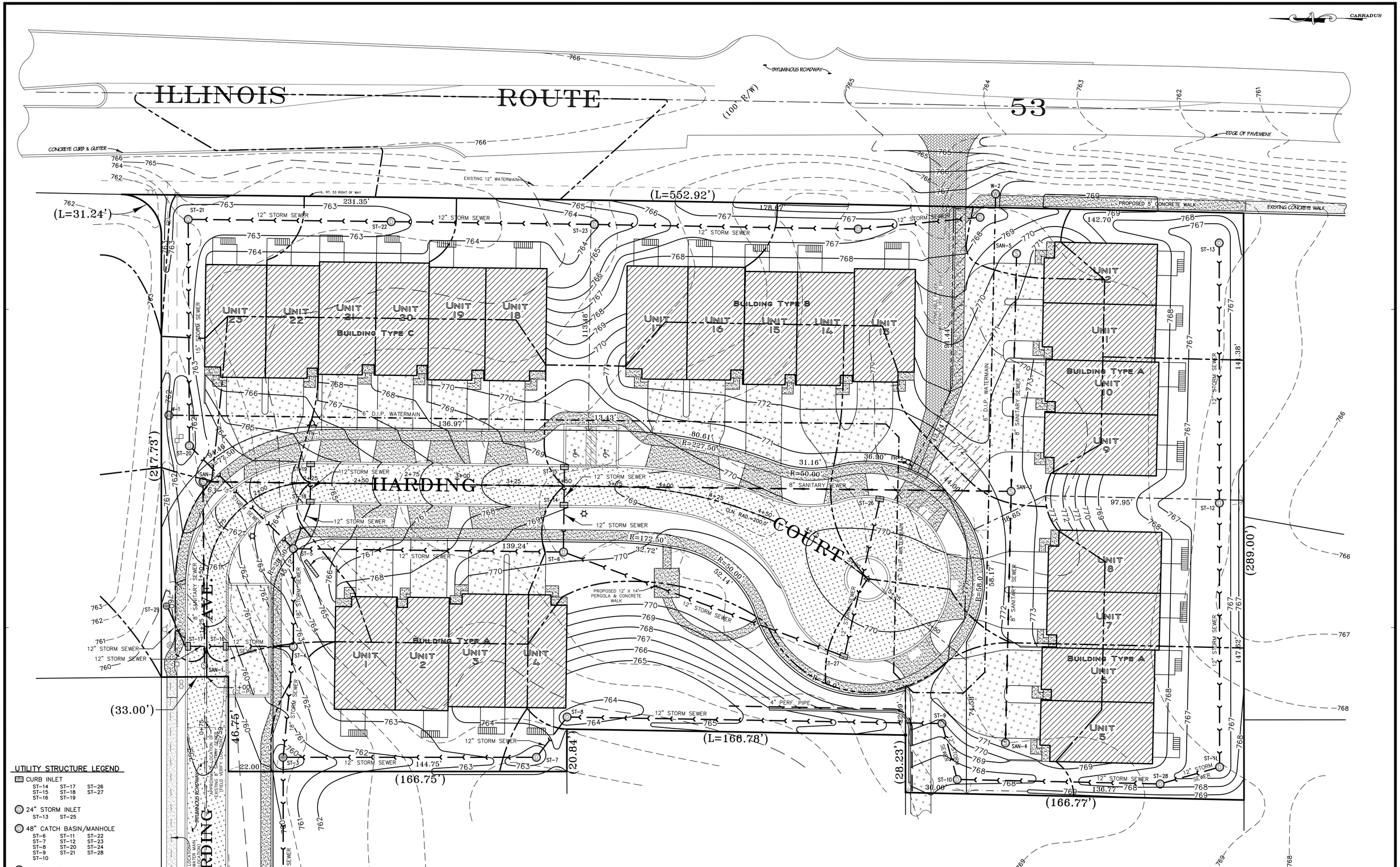
Sheet 1 of 2

Project # 895

DRAWING FILE NAME: 895-TRIB-SH1

Harding - Trib, 10/04/2021



UTILITY STRUCTURE LEGEND

CURB INLET
ST-14 ST-17 ST-26
ST-15 ST-18 ST-27
ST-16 ST-19

24" STORM INLET
ST-13 ST-25

48" CATCH BASIN/MANHOLE
ST-6 ST-11 ST-22
ST-7 ST-12 ST-23
ST-8 ST-20 ST-24
ST-9 ST-21 ST-28
ST-10

60" MANHOLE
ST-3 ST-4 ST-5

SANITARY MANHOLE
SAN-1 SAN-2 SAN-3
SAN-4 SAN-5

VALVE VAULT
W-1 W-2

Date Of Field Work:	02/26/20	Drawn By:	CMG
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Date:	Revision:
03/30/21	PRELIMINARY PLAT
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

STORM SEWER TRIBUTARY EXHIBIT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 2 of 2

Project # 895

DRAWING FILE NAME: 895-TRIB-SH2

CARRADUS

ILLINOIS ROUTE 53

HARDING COURT

HARDING AVE.

ST-21
TYPE 1, OPEN GRATE
RIM=762.25

BYPASS @ 762.10
HWL @ 762.60
10.50 cfs @ DEPTH = 0.50'
(0.87 cfs IMMEDIATE BYPASS)
(6.58 cfs UPSTREAM BYPASS)

ST-22
TYPE 1, OPEN GRATE
RIM=762.90

BYPASS @ 762.80
HWL @ 763.25
15.91 cfs @ DEPTH = 0.45'
(1.70 cfs IMMEDIATE BYPASS)
(5.71 cfs UPSTREAM BYPASS)

ST-23
TYPE 1, OPEN GRATE
RIM=764.00

BYPASS @ 763.50
HWL @ 764.00
16.17 cfs @ DEPTH = 0.50'
(1.50 cfs IMMEDIATE BYPASS)
(4.01 cfs UPSTREAM BYPASS)

ST-24
TYPE 1, OPEN GRATE
RIM=766.00

BYPASS @ 766.30
HWL @ 767.00
26.72 cfs @ DEPTH = 0.70'
(2.17 cfs IMMEDIATE BYPASS)
(2.51 cfs UPSTREAM BYPASS)

ST-25
TYPE 1, OPEN GRATE
RIM=766.80

BYPASS @ 767.38
HWL @ 767.70
10.69 cfs @ DEPTH = 0.32'
(0.34 cfs UPSTREAM BYPASS)

ST-13
TYPE "B"
RIM=766.00

ST-20
TYPE 1, OPEN GRATE
RIM=761.50

BYPASS @ 762.20
HWL @ 762.60
77.15 cfs @ DEPTH = 0.40'
(0.63 cfs IMMEDIATE BYPASS)
(7.21 cfs UPSTREAM BYPASS)

ST-19
CURB INLET
T/C=764.75
F/L=764.25

MAX. DEPTH AT CURB=2.0"
TRIBUTARY RUNOFF= 1.40 cfs
INTERCEPTED FLOW=76.0%

ST-15
CURB INLET
T/C=769.00
F/L=768.50

MAX. DEPTH AT CURB=2.75"
TRIBUTARY RUNOFF= 1.80 cfs
INTERCEPTED FLOW=54.0%

ST-26
CURB INLET
T/C=770.25
F/L=769.75

MAX. DEPTH AT CURB=2.6"
TRIBUTARY RUNOFF= 1.45 cfs
INTERCEPTED FLOW=49.0%

ST-12
TYPE 1, OPEN GRATE
RIM=766.00

MAX. DEPTH AT CURB=1.95"
TRIBUTARY RUNOFF= 1.19 cfs
INTERCEPTED FLOW=80.0%

MAX. DEPTH AT CURB=2.4"
TRIBUTARY RUNOFF= 1.19 cfs
INTERCEPTED FLOW=63.0%

ST-18
CURB INLET
T/C=764.75
F/L=764.25

ST-14
CURB INLET
T/C=769.00
F/L=768.50

ST-5
TYPE 1, CLOSED LID
RIM=764.50

ST-6
TYPE 1, CLOSED LID
RIM=769.65

BYPASS @ 767.35
HWL @ 767.50
31.64 cfs @ DEPTH = 0.15'
(3.00 cfs IMMEDIATE BYPASS)
(3.00 cfs UPSTREAM BYPASS)

ST-29
TYPE "B"
RIM=759.30

BYPASS @ 759.78
HWL @ 760.00
5.23 cfs @ DEPTH = 0.22'
(0.51 cfs IMMEDIATE BYPASS)
(7.72 cfs UPSTREAM BYPASS)

ST-4
TYPE 1, CLOSED LID
RIM=762.50

ST-16
DEPRESSED CURB INLET
T/C=759.69
F/L=759.49

ST-17
CURB INLET
T/C=769.99
F/L=769.49

MAX. DEPTH AT CURB=1.9"
TRIBUTARY RUNOFF= 0.64 cfs
INTERCEPTED FLOW=84.0%

MAX. DEPTH AT CURB=2.0"
TRIBUTARY RUNOFF= 0.84 cfs
INTERCEPTED FLOW=77.0%

BYPASS @ 763.80
HWL @ 764.10
4.91 cfs @ DEPTH = 0.30'
(1.22 cfs IMMEDIATE BYPASS)
(1.22 cfs UPSTREAM BYPASS)*

ST-8
TYPE 1, OPEN GRATE
RIM=763.30

ST-7
TYPE 1, OPEN GRATE
RIM=762.50

ST-3
TYPE 1, OPEN GRATE
RIM=759.70

BYPASS @ 762.80
HWL @ 763.20
6.23 cfs @ DEPTH = 0.40'
(0.02 cfs IMMEDIATE BYPASS)
(1.31 cfs UPSTREAM BYPASS)*

BYPASS @ 760.05
HWL @ 760.35
12.06 cfs @ DEPTH = 0.30'
(0.22 cfs IMMEDIATE BYPASS)
(1.31 cfs UPSTREAM BYPASS)

MAX. DEPTH AT CURB=1.9"
TRIBUTARY RUNOFF= 0.43 cfs
INTERCEPTED FLOW=75.0%

ST-27
CURB INLET
T/C=770.25
F/L=769.75

ST-9
TYPE 1, OPEN GRATE
RIM=770.00
(INCIDENTAL FLOWS ONLY)

ST-10
TYPE 1, OPEN GRATE
RIM=767.30

ST-11
TYPE 1, OPEN GRATE
RIM=766.00

ST-28
TYPE 1, OPEN GRATE
RIM=767.20
(OVERFLOW STRUCTURE ONLY)

BYPASS @ 768.00
HWL @ 768.20
16.32 cfs @ DEPTH = 0.20'
(0.79 cfs UPSTREAM BYPASS)

CURB FLOW & BYPASS LEGEND

SWALE BYPASS-YARDS

BYPASS @ 759.78 = ELEVATION THAT RUNOFF OVERTOPS A DOWNSTREAM OVERFLOW OBSTRUCTION.

HWL @ 760.00 = ELEVATION OF A CALCULATED HIGH WATER LEVEL THAT PROVIDES A FLOW VOLUME IN EXCESS OF THAT REQUIRED FOR THE IMMEDIATE RUNOFF TRIBUTARY TO THE NEXT UPSTREAM STRUCTURE.

5.23 cfs @ DEPTH = 0.22' = CALCULATED RUNOFF OF THE CHANNEL VOLUME. BASED ON MANNINGS FORMULA.

(0.07 cfs IMMEDIATE BYPASS) = RUNOFF DIRECTLY TRIBUTARY TO THE SPECIFIC STRUCTURE IMMEDIATELY UPSTREAM BASED ON THE RATIONAL METHOD.

(1.68 cfs UPSTREAM BYPASS) = RUNOFF OF ALL UPSTREAM TRIBUTARY AREA UPSTREAM OF THE IMMEDIATELY UPSTREAM STRUCTURE BASED ON THE RATIONAL METHOD.

* = REDUCED DUE TO THE VOLUME UPSTREAM THAT WOULD NOT REACH THIS LOCATION AND OVERFLOW IN ANOTHER DIRECTION, NOT FOLLOWING THE PATH OF THE STORM SEWER

CURB FLOW-STREETS

MAX. DEPTH AT CURB=1.6" = MAXIMUM DEPTH WATER WILL POND AT THE CURB BASED ON THE HEC-22 INLET INTERCEPTION CAPACITY CALCULATIONS.

TRIBUTARY RUNOFF= 0.24 cfs = 100 YEAR RUNOFF IMMEDIATELY TRIBUTARY TO THE CURB INLET BASED ON THE RATIONAL METHOD.

INTERCEPTED FLOW=100.0% = PERCENT OF THE 100 YEAR RUNOFF THAT WILL BE INTERCEPTED BY THE CURB INLET UTILIZING THE HEC-22 INLET INTERCEPTION CAPACITY CALCULATIONS.

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/01/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

CURB FLOW & BYPASS EXHIBIT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 1

Project # 895

DRAWING FILE NAME: 895-CURB FLOW

Harding Townhomes, 10/04/2021

SCALE: 1"=20'

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

THE TOWNHOMES OF WATERS EDGE

LIMITS OF WETLANDS AS DELINEATED BY GARY R. WEBER ASSOC.

NICOLL WAY

HARDING AVENUE

BRENTWOOD PLACE

BRENTWOOD COURT

LOT 1

CARRADUS

EXISTING 12" STORM SEWER @ 0.65% (1.5 c.f.s.)

CURB INLET RIM=756.74 INV.=751.59 (W) INV.=751.68 (E)

F.E.S. INV.=751.18

EXISTING 8" WATERMAIN

EXISTING 8" SANITARY SEWER

CONCRETE WALK

CURB INLET RIM=757.03 INV.=752.03 (W) INV.=752.28 (N)

EXISTING STREET LIGHT

FIRE HYDRANT

SITE BENCHMARK
SANITARY MANHOLE
RIM=757.23
INV.=743.68 (8" E)
INV.=743.68 (8" W)
INV.=744.33 (8" N)

WATER VALVE RIM=757.08

WATER VALVE RIM=757.70

EXISTING UNDERGROUND STREET LIGHT, GAS, ELECTRIC AND COMMUNICATIONS BETWEEN WALK & CURB. (FIELD LOCATE PRIOR TO THE START OF CONSTRUCTION)

EXISTING BITUMINOUS DRIVEWAY

EXISTING WATER SERVICE (TYPICAL)

APPROXIMATE LOCATION OF SANITARY SERVICE (FIELD VERIFY)

EXISTING STREET LIGHT
EXISTING CONCRETE SIDEWALK ENDS
EXISTING STREET LIGHT CONTROLLER
EXISTING POWER POLE & GUY WIRE WITH POWER DROP TO UNDERGROUND
FIRE HYDRANT
WATER VALVE RIM=760.28
EXISTING 6" WATERMAIN
EXISTING OVERHEAD UTILITY WIRES

EXISTING BITUMINOUS ROADWAY

EXISTING 8" SANITARY SEWER

EXISTING CONCRETE CURB & GUTTER ENDS

SANITARY MANHOLE RIM=758.98 INV.=749.48 (8" W)

UTILITY PEDESTAL

ELECTRIC TRANSFORMER

5' STONE WALKWAY

EXISTING 30" UTILITY EASEMENT

IRON PIPE IS 0.5' SOUTH & 1.6' WEST

CONCRETE CURB IS 0.65' NORTH

264.12'

283.70'

266.62'

281.21'

(166.75')

(166.70')

WEST LINE OF ROUTE 53 (AS MONUMENTED & OCCUPIED)

EXISTING UNDERGROUND ELECTRIC UTILITY (FIELD LOCATE PRIOR TO THE START OF CONSTRUCTION)

Meas.=166.84'

EAST 247.79' OF LOT 1

IRON FENCE IS 0.75' WEST

IRON PIPE IS 0.19' SOUTH & 0.12' WEST

IRON PIPE IS 0.18' NORTH & 0.71' WEST

IRON PIPE

IRON PIPE

BASE FLOOD ELEVATION (B.F.E.) = 751.0

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

NOTE:
THERE ARE NO EXISTING TREES ONSITE GREATER THEN 5" DIA. TO REMAIN AFTER CONSTRUCTION.

NOTE:
NO EXISTING IMPERVIOUS AREA ONSITE.

NOTES

1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f. Distances shown along curved lines are Arc Measurements unless otherwise noted.
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction.
6. Dimensions to and along buildings are exterior foundation measurements.
7. Do Not Assume distances from scaled measurements made hereon.

STORM STRUCTURE LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

TOPOGRAPIC SURVEY LEGEND

- EXISTING CONTOUR
- EXISTING GRADE
- DRAINAGE FLOW ROUTE
- SP — SUMP PUMP DISCHARGE
- DS — DOWNSPOUT DISCHARGE
- UNDERGROUND STORM DRAIN
- T/F — TOP OF FOUNDATION ELEVATION
- G/F — GARAGE FLOOR ELEVATION
- SILT FENCE WITH CONSTRUCTION SAFETY FENCE

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SWPP DEMOLITION PLAN APPENDIX C

HARDING CUSTOM HOMES SUBDIVISION UNIT 1
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 Carradus_survey@yahoo.com

Sheet 1 of 3

Project # 895

DRAWING FILE NAME: 895-AP-C-SH1

Harding - SWPP Demolition Plan, 10/04/2021

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

NOTE:
ALL TREE PROTECTION AND TREE REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH THE VILLAGES NOTES AND DETAILS FOR TREE PROTECTION INCLUDED ON SHEET 13 AND AS SHOWN ON THE "TREE PRESERVATION AND REMOVAL PLAN" PREPARED BY OTHERS AND INCLUDED AS AN ATTACHMENT TO THIS PLAN SET. NO VARIATION FROM SAID PLAN SHALL START WITHOUT PRIOR APPROVAL FROM THE VILLAGE STAFF.

CARRADUS
0 10 20 30 40
SCALE: 1"=20'

ILLINOIS ROUTE 53 (100' R/W)

BITUMINOUS ROADWAY

CONCRETE CURB & GUTTER

FIRE HYDRANT

12" WATERMAIN

EXISTING UTILITY POLE TO REMAIN

IL. RT. 53 RIGHT OF WAY

EXISTING UTILITY SERVICE POLES ALONG IL. RT. 53 TO BE REMOVED (3) (TYPICAL)

HEAVY BRUSH ALONG RIGHT OF WAY SHALL BE REMOVED AS NEEDED FOR SIDEWALK CONSTRUCTION WITHIN ROUTE 53 RIGHT OF WAY

(Rad.=34327.48')
(L=552.92')

EDGE OF PAVEMENT

EXISTING CONCRETE WALK

(L=31.24')
(Rad.=20.00')

VALVE VAULT
RIM=762.65

EXISTING UTILITY POLE

EXISTING UTILITY SERVICE POLES ON SITE SHALL BE ABANDONED AND REMOVED AS SOON AS SERVICE AROUND THE PERIMETER OF THE SITE IS PROVIDED BY COM ED. CO. (TYPICAL)

FENCE

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL TO REMAIN

EXISTING UTILITY POLE TO REMAIN

(217.73')
(N 90°00'00" E)

INSTALL FILTER BASKET INSIDE FRAME AND 5" DIA. FILTER SOCK (OR APPROVED EQUAL) AROUND ALL STORM STRUCTURES AS THEY ARE INSTALLED FOR SEDIMENT PROTECTION. (PROPOSED STRUCTURES TYPICAL)

STABILIZED CONSTRUCTION ENTRANCE

CONCRETE WASHOUT AREA

PORTABLE TOILET

FIRE HYDRANT

WATER VALVE
RIM=760.28

EXISTING UTILITY POLE

SANITARY MANHOLE
RIM=758.98
INV.=749.48 (8" W)

EXISTING ELECTRIC CONTROL BOX

EXISTING STREET LIGHT

PROTECT EXISTING SANITARY MANHOLE WITH CONSTRUCTION SAFETY FENCE AND WHEN CONSTRUCTION ACCESS ENTRANCE TO ALLOW CONSTRUCTION TRAFFIC ACCESS ON EACH SIDE OF THE MANHOLE SUFFICIENTLY TO PERMIT CONSTRUCTION VEHICLES WITHOUT DAMAGE. THE VILLAGE SHALL APPROVE THE METHOD OF PROTECTION IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

SILT FENCE SHALL BE INSTALLED PRIOR TO THE START OF ANY WORK ON THE SITE AND BE MAINTAINED UNTIL FINAL VEGETATION IS ESTABLISHED.

(33.00')
(N 00°31'55" W)

46.75'
(N 90°00'00" E)

(166.75')
762.25 + (N 00°00'00" E)

(20.84')
(N 89°59'07" E)

(L=166.78')
(Rad.=34066.78')

(28.23')
(S 89°58'12" W)

(166.77')
(S 01°17'30" W)

(289.00')
(N 89°57'19" E)

EXISTING RESIDENCE TO BE DEMOLISED.

EXISTING DRIVEWAY TO BE REMOVED.

EXISTING SEPTIC SHALL BE FIELD LOCATED AND ABANDONED PER DUPAGE COUNTY AND STATE OF ILLINOIS HEALTH DEPARTMENT SPECIFICATIONS AND PROCEDURES.

EXISTING RESIDENCE

BITUMINOUS DRIVEWAY

APPROXIMATE LOCATION OF EXISTING WATERMAIN (FIELD VERIFY LOCATION)

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

PROPOSED RESIDENCE

FRAME SHED

WOOD DECK

EXISTING UTILITY POLE

ST-1 ST-2 ST-3 ST-4 ST-5 ST-6 ST-7 ST-8 ST-9 ST-10 ST-11 ST-12 ST-13 ST-14 ST-15 ST-16 ST-17 ST-18 ST-19 ST-20 ST-21 ST-22 ST-23 ST-24 ST-25 ST-26 ST-27 ST-28 ST-29

#1 29" #2 10" #3 30" #4 18" #5 12"/18" #6 9"/13" #7 8"/12"/10" #8 17" #9 15" #10 11" #11 24" #12 10" #13 24" #14 18" #15 10" #16 36" #17 31" #18 15" #19 10" #20 15" #21 47" #22 11" #23 15" #24 9" #25 21" #26 17"/13" #27 9" #28 26" #29 11" #30 21" #31 22" #32 12" #33 14" #34 14" #35 16" #36 16" #37 14" #38 14"/13" #39 33" #40 11" #41 15" #42 27" #43 42" #44 42" #45 29" #46 30" #47 16" #48 19" #49 18" #50 12" #51 14" #52 16" #53 17" #54 20" #55 13" #56 11" #57 15" #58 11" #59 65" #60 11"/6" #61 13" #62 10" #63 6"/6"/5" #64 39" #65 32" #66 24" #67 22" #68 21" #69 15"/10"/7" #70 32" #71 15" #72 32" #73 41" #74 22"

T/F=770.41

NOTES

1. All distances shown hereon are in feet and decimal parts thereof corrected to 68° f. Distances shown along curved lines are Arc Measurements unless otherwise noted.
2. Compare the Legal Description, Building Lines, and Easements as shown hereon with your Deed, Title Insurance Policy or Title Commitment.
3. Consult local authorities for additional setbacks and restrictions not shown hereon.
4. Compare all survey points and report any discrepancies immediately.
5. Consult utility companies and municipalities prior to the start of any construction.
6. Dimensions to and along buildings are exterior foundation measurements.
7. Do Not Assume distances from scaled measurements made hereon.

STORM STRUCTURE LEGEND

- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED CURB INLET

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

TOPOGRAPIC SURVEY LEGEND

- 760 — EXISTING CONTOUR
- + 762.75 EXISTING GRADE
- SP DRAINAGE FLOW ROUTE
- SP SUMP PUMP DISCHARGE
- DS DOWNSPOUT DISCHARGE
- UNDERGROUND STORM DRAIN
- T/F TOP OF FOUNDATION ELEVATION
- G/F GARAGE FLOOR ELEVATION
- SILT FENCE WITH CONSTRUCTION SAFETY FENCE

SURVEY LEGEND

- Monumentation Found
- Monumentation Set (MLS 35-2001)
- (50') Record Dimension
- Fence Line

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SWPP DEMOLITION PLAN APPENDIX C
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Sheet 2 or 3

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
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(630) 588-0416 (FAX) 653-7682 carradus_survey@yahoo.com

Project # 895

DRAWING FILE NAME: 895-AP-C

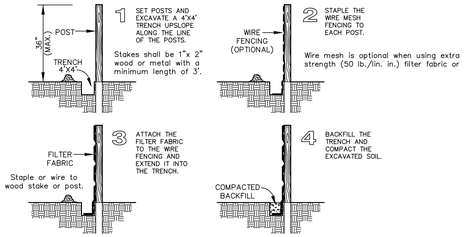
Harding - SWPP Demolition Plan, 10/04/2021

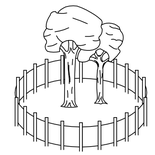
EROSION CONTROL NOTES

1. Sediment and erosion control devices shall be installed and functional before the site is otherwise disturbed.
2. If a stockpile is to remain in place for more than seven days, it shall be surrounded by silt fence. If a stockpile is to remain in place for more than fourteen days, it shall be protected with temporary seeding.
3. All flared end sections shall be protected by sediment settling basins and/or straw bales until ground cover has been established. Filter fabric shall be placed under all inlet grates until ground cover has been established.
4. Water pumped, or otherwise discharged, from the site as part of construction dewatering shall be filtered.
5. All soil, mud and debris washed, tracked or deposited onto the street pavement shall be removed at the end of each work day.
6. Vehicular access to the site shall be restricted to a gravel drive after the foundation has been backfilled. The gravel drive shall be installed within seven days of the foundation backfilling and prior to the start of any construction above the top of foundation.
7. Ground cover (seed and mulch or sod) shall be placed on all disturbed areas within fourteen days of the completion of top soil placement and final grading. If weather conditions preclude the placement of seed and mulch or sod, all disturbed areas shall be protected with erosion blanket.

EROSION CONTROL DETAILS

Plans and Specifications
For Silt Fence and Straw Bale Placement





NOTES: INSTALL PROTECTIVE FENCING TO A MINIMUM HEIGHT OF 4.0', FENCING SHALL BE POSITIONED SUCH THAT DRIP LINE OF TREE IS PROTECTED.

Maintenance

1. Filter barriers shall be inspected immed–iately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

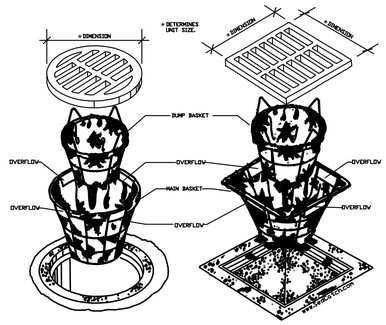
All Construction Shall be Governed by: "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois", October 1981 edition as Revised.

SEDCATCH® SEDIMENT BASKET®
SQUARE, RECTANGULAR, OR ROUND GRATES

LEGEND

SB	SEDIMENT BASKET®

SIZING INSTRUCTIONS:
MEASURE THE ACTUAL SIZE OF THE GRATE; CHECK FOR ANY OBSTRUCTIONS THAT COULD INTERFERE WITH THE SEDCATCH® SEDIMENT BASKET®



US PATENTS D 598,196, D 600,324, D 604,800, OTHER PATENTS PENDING

1. INLET PROTECTION SHALL BE INSTALLED AT THE TIME THE STRUCTURE IS SET.
2. TO INSTALL: REMOVE GRATE, DROP MAIN SEDIMENT BASKET IN OPENING, PLACE DUMP BASKET IN MAIN BASKET, REPLACE GRATE.
3. INSPECT AFTER EACH RAIN OR AS DIRECTED BY ENGINEER OR INSPECTOR.
4. IF THERE IS AN ACCUMULATION OF SEDIMENT; SLIDE THE GRATE OFF THE INLET, LIFT THE DUMP BASKET OUT OF THE MAIN BASKET, EMPTY CONTENTS IN A SUITABLE LOCATION, REPLACE DUMP BASKET, REPLACE GRATE.
5. AFTER APPOOXIMATELY 10–20 DUMPS, OR AS NEEDED, EMPTY THE MAIN BASKET OF ANY ACCUMULATED SEDIMENT.
6. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE TO BE BLOCKED ENTIRELY. DO NOT INSTALL IF IT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

ALL PROPOSED STORM STRUCTURES AND THE EXISTING STRUTURES IN FRONT OF THE SITE SHALL HAVE A FILTER BASKET INSTALLED AND MAINTAINED UNTIL THE VEGITATION WITHIN THE SITE IS ESTABLISHED.

PENALTY FOR UNLAWFUL DISCHARGE

IT SHALL BE UNLAWFUL TO DISCHARGE TO ANY NATURAL OUTLET, WATERCOURSE OR STORM SEWER WITHIN THE VILLAGE OF GLEN ELLYN, OR IN ANY AREA UNDER THE JURISDICTON OF SAID VILLAGE, ANY SEWAGE OR OTHER POLLUTED WATERS, EXCEPT WHERE SUITABLE TREATMENT HAS BEEN PROVIDED IN ACCORDANCE WITH SUBSEQUENT PROVISIONS OF THIS ORDINANCE AND/OR PROVISIONS AS OUTLINED IN THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. (VILLAGE CODE SECTION 23–04)

ANY USER WHO IS FOUND TO HAVE VIOLATED AN ORDER OF THE VILLAGE OR WHO HAS FAILED TO COMPLY WITH ANY PROVISION OF THIS CHAPTER AND THE ORDERS, RULES AND REGULATIONS AND PERMITS HEREUNDER, SHALL BE FINED IN AN AMOUNT NOT LESS THAN ONE THOUSAND DOLLARS ($1,000.00) MINIMUM FOR EACH VIOLATION (VILLAGE CODE SECTION 23–35)

GENERAL NOTES FOR EROSION CONTROL

1. SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENT CONTROL IN ILLINOIS", AND SHALL MEET ALL REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY, N.P.D.E.S. PERMIT FOR "CONSTRUCTION SITE ACTIVITIES".
2. SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE PROPERTY WHERE BERMS, STOCKPILES, OR OTHER EARTHWORK WILL TAKE PLACE AND AROUND ANY EXISTING STORM SEWER STRUCTURES, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT A VALID NOTICE OF INTENT (N.O.I.) IS ON RECORD WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (I.E.P.A.), AND THAT COPIES OF ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CERTIFICATES ARE SIGNED, AND ON FILE PRIOR TO DISTURBING ANY GROUND.
4. A COPY OF THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MAINTAINED ON SITE AT ALL TIMES.
5. A STABILIZED CONSTRUCTION ENTRANCE(S) FOR MUD AND DUST CONTROL SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF THE PROJECT. CONSTRUCTION ENTRANCE(S) SHALL BE LOCATED WHERE SHOWN ON THE PLANS, AND AT ANY OTHER POINTS WHERE CONSTRUCTION TRAFFIC FREQUENTLY LEAVES THE PUBLIC ROADWAY TO ENTER THE SITE. THE STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE A MINIMUM 30' WIDE, 50' LONG, AND SHALL BE CONSTRUCTED OF A 6" THICK MINIMUM LAYER OF 2" ANGULAR CRUSHED AGGREGATE COMPACTED IN PLACE, LAID OVER A GEOTEXTILE FABRIC.
6. STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND OTHER DEBRIS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY DIRT, MUD OR DEBRIS THAT MAY BECOME DEPOSITED UPON THE ADJACENT STREETS.
7. HAULING WILL NOT BE ALLOWED WHEN THE WORK SITE IS TOO WET TO MAINTAIN ACCEPTABLE CONDITIONS ON ADJACENT STREETS.
8. ADJACENT STREETS SHALL BE MECHANICALLY SWEPT PERIODICALLY AS DIRECTED BY THE VILLAGE INSPECTOR.
9. NO SEDIMENT SHALL BE ALLOWED TO ENTER THE STORM SEWER SYSTEM.
10. ALL STORM SEWER STRUCTURES EXISTING OR PROPOSED, LOCATED IN GRADED AREAS, SHALL BE PROTECTED SILT FENCE AND REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. ALL OPEN GRATE STORM SEWER STRUCTURES LOCATED IN PAVED AREAS, ON SITE OR WITHIN 300' OF THE PROJECT, SHALL BE PROTECTED BY A REUSABLE FILTRATION BASKET INSTALLED UNDER THE GRATE. CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED AND/OR CONSTRUCTION IS COMPLETE. FILTRATION BASKETS SHALL BE FLEXSTORM OR EQUAL.
11. TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFF SITE AREAS, I.E. THE STOCKPILE SHALL BE LOCATED SO THAT AN ONSITE DRAINAGE SWALE IS LOCATED BETWEEN THE STOCKPILE AND THE DOWNSTREAM OFF SITE PROPERTY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN TWELVE MONTHS, IT IS REQUIRED THAT THE STOCKPILE BE SEEDED SO AS TO MINIMIZE SOIL EROSION BY BOTH WIND AND RAIN.
12. CONCRETE TRUCKS SHALL WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONLY IN DESIGNATED WASHOUT LOCATIONS. THE CONTRACTOR SHALL TAKE SUFFICIENT PRECAUTIONS TO PREVENT SURPLUS CONCRETE OR DRUM WASH WATER FROM ENTERING THE STORM SEWER SYSTEM.
13. ALL STORM SEWER STRUCTURES, PERMANENT SEDIMENT BASINS AND RETENTION BASINS PROVIDED WITHIN THIS PROJECT ARE TO BE CLEANED AT THE END OF CONSTRUCTION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE. CLEANING MAY ALSO BE REQUIRED DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT IF IT IS DETERMINED THAT THE SILT AND DEBRIS TRAPS ARE NOT PROPERLY FUNCTIONING AND THEIR PERFORMANCE IS IMPAIRED.
14. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS OF FINAL INSPECTION, OR AFTER THE CONTROL MEASURES ARE NO LONGER NEEDED.
15. IF FOUND BY INSPECTON THAT THE CONDITIONS ARE NOT SUBSTANTIALLY AS STATED OR SHOWN IN THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, THE VILLAGE ENGINEER MAY STOP FURTHER WORK UNTIL DEFICIENT CONDITIONS ARE CORRECTED.
16. SOIL STABILIZATION (TEMPORARY SEEDING OR EROSION CONTROL BLANKETS) SHALL BE INITIATED AS SOON PRACTICAL IN THOSE PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. IN NO CASE SHALL AN AREA THAT IS AT FINAL GRADE REMAIN EXPOSED TO THE ELEMENTS FOR MORE THAN FIFTEEN (15) DAYS. SOIL STABILIZATION SHALL ALSO BE INITIATED WITHIN FIFTEEN (15) DAYS FOR THOSE AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN UNDISTURBED FOR LONGER THAN SIXTY (60) DAYS.

SEQUENCE FOR SOIL EROSION CONTROL ITEMS

1. DIVERSION AND STRUCTURAL MEASURES – WILL BE INSPECTED AT WEEKLY INTERVALS OR AFTER EVERY RAINSTORM PRODUCING RUNOFF.
2. SEDIMENT BASINS – WILL BE CHECKED WEEKLY FOR SEDIMENT ACCUMULATION.
3. VEGETATIVE PLANTINGS – SPRING PLANTINGS WLL BE CHECKED DURING SUMMER OR EARLY FALL.
4. REPAIRS – ANY EROSION CONTROL MEASURES, STRUCTURAL MEASURES OR OTHER RELATED ITEMS IN NEED OF REPAIR, ARE EXPECTED TO BE BROUGHT INTO COMPLIANCE IMMEDIATELY.
5. MOWING – DRAINAGEWAYS, DITCHES AND OTHER AREAS THAT SUPPORT A DESIGNATED FLOW OF WATER WILL BE MOWED REGULARLY TO MAINTAIN THAT FLOW.
6. RESEEDING – SEEDED AREAS WHERE THE SEED HAS NOT PRODUCED A GOOD COVER WILL BE RESEEDED AND FERTILIZED.

SEQUENCE FOR SOIL EROSION CONTROL ITEMS

EACH RESPECTIVE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND ANY NECESSARY CORRECTIVE ACTION ASSOCIATED WITH THE EROSION CONTROL MEASURES SO DESIGNATED FOR THAT CONTRACTOR. THE FOLLOWING ITEMS ARE TO BE PROVIDED BY THE DESIGNATED CONTRACTOR AT THE TIME AND IN THE GENERAL SEQUENCE INDICATED BELOW.

I. MASS GRADING / EARTHWORK CONTRACTOR
   A. PROVIDE CONSTRUCTION ENTRANCE, AND SILT FENCE PRIOR TO THE START OF CONSTRUCTION.
   B. PROVIDE DIVERSION SWALES AROUND SITE PERIMETER (WHICH ARE PART OF OVERALL GRADING PLAN) AS NECESSARY TO PREVENT AND/OR INTERCEPT STORM WATER RUNOFF TO OFFSITE AREAS, AS PART OF THE INITIAL MASS GRADING IMPROVEMENTS.
   C. OVER–EXCAVATE PROPOSED TEMPORARY SILTATION BASIN(S) AS NECESSARY
   D. OVER–EXCAVATE AROUND PROPOSED YARD INLETS.
   E. PROVIDE A DIVERSION DITCH OR BERM IN ACCORDANCE WITH THE TEMPORARY STOCKPILE DETAIL FOR ALL STOCKPILES PRIOR TO ANY PLACEMENT OF MATERIAL IN SAID STOCKPILE.

II. UNDERGROUND CONTRACTOR
   A. PROVIDE SILT FENCE AROUND ALL STORM STRUCTURES IMMEDIATELY UPON INSTALLATION OF SAID STRUCTURE(S).
   B. PROVIDE REUSABLE FILTRATION BASKETS AT ALL OPEN GRATE STORM STRUCTURES DURING CONSTRUCTION. REUSABLE FILTRATION BASKETS SHALL BE PLACED BETWEEN THE GRATE AND CAST IRON FRAME TO ALLOW MAINTENANCE BY REMOVING GRATE WITH FRAME TO REMAIN IN PLACE. REUSABLE FILTRATION BASKETS SHALL BE MAINTAINED UNTIL ALL "UPSTREAM" AREAS TO A RESPECTIVE STORM STRUCTURE HAVE BEEN COMPLETED THROUGH ESTABLISHMENT OF VEGETATIVE COVER.
   C. PROVIDE CLEANING OF THE STORM SEWER SYSTEM AND SEWER STRUCTURES.

SITE SCHEDULE

TASK	MONTH OF CONSTRUCTION											
	1	2	3	4	5	6	7	8	9	10	11	12
SILT FENCE INSTALLATION												
SITE CLEANING & HAUL OFF												
EXCAVATION & SITE GRADING												
STORM SEWER & DETENTION												
RETAINING WALLS & CURBS												
STONE BASE & PAVING												
SANITARY & WATER SERVICE												
LANDSCAPE												
SILT FENCE MAINTENANCE												
CLEANING OF ROADWAY												

Date Of Field Work:	09/08/17	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48–00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
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09/10/21	VILLAGE REVIEW

SWPPP DEMOLITION PLAN APPENDIX C
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 3 of 3

Project # 895

DRAWING FILE NAME: 895–AP–C

Harding - SWPP Demolition Plan, 10/04/2021

SCALE: 1"=20'

HARDING AVENUE

ST-1
REMOVE EXISTING MANHOLE AND REPLACE WITH 72" MANHOLE WITH TYPE 1 FRAME & CURB INLET. MATCH EXISTING CURB GRADES. RIM=756.74

SITE BENCHMARK
SANITARY MANHOLE
RIM=757.23
INV.=743.68 (8" E)
INV.=743.68 (8" W)
INV.=744.33 (8" N)

CURB INLET
RIM=756.74
INV.=751.59 (W)
INV.=751.69 (E)

CURB INLET
RIM=757.03
INV.=752.03 (W)
INV.=752.28 (N)

EXISTING STREET LIGHT

FIRE HYDRANT

EXISTING 12" STORM SEWER @ 0.65% (1.5 c.f.s.)

EXISTING 8" SANITARY SEWER

EXISTING WATERMAIN

EXISTING CONCRETE WALK

EXISTING BITUMINOUS DRIVEWAY

EXISTING BITUMINOUS ROADWAY

EXISTING CONCRETE SIDEWALK ENDS

EXISTING CONCRETE CURB & GUTTER ENDS

EXISTING STREET LIGHT
EXISTING STREET LIGHT CONTROLLER
EXISTING POWER POLE & GUY WIRE WITH POWER DROP TO UNDERGROUND

WATER VALVE RIM=757.08

WATER VALVE RIM=757.70

WATER VALVE RIM=760.28

EXISTING 6" WATERMAIN

EXISTING OVERHEAD UTILITY WIRES

SANITARY MANHOLE
RIM=758.98
INV.=749.48 (8" W)

LIMITS OF WETLANDS

5' STONE WALKWAY

EXISTING 30' UTILITY EASEMENT

UTILITY PEDESTAL

UTILITY PEDESTALS

ELECTRIC TRANSFORMER

B.F.E.751

BASE FLOOD ELEVATION = 751.0
NO RAISING OF THE FINISH GRADE BELOW ELEVATION 751.0

(310.87')

PROPOSED 5' WIDE CONCRETE WALK

66.00'

Lot One

Lot Two

Lot Three

Lot Four

144.80'

144.79'

144.77'

144.75'

(L=166.84')

144.84'

68.22'

(287.46')

DIVERSION BERM ALONG LOT LINE TO DIRECT RUNOFF TOWARD INLETS AND AWAY FROM ADJOINING PROPERTIES

TOPSOIL STOCKPILE LOCATION

LOCATION OF FUTURE TOWNHOUSE WITH LOOKOUT EASEMENT (PHASE 2)

T/F=764.50

T/F=768.50

NOTE:
GRADING BEYOND THE BOUNDARY OF THE SINGLE FAMILY DEVELOPMENT IS TEMPORARY AND WILL BE FINALIZED WITH THE TOWNHOME GRADING PLANS (PHASE 2). ALL GRADED AREAS, SWALES AND THE STOCKPILE AREA SHALL BE SEEDED AND MULCHED FOR STABILIZATION AND EROSION CONTROL IMMEDIATELY UPON COMPLETION. THE STOCKPILE SHALL BE REMOVED UPON THE COMPLETION OF THE HOMES ON THE 4 LOTS.

TEMPORARY SWALE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AT A MINIMUM OF 6" BELOW THE EXISTING GRADE AT THE ADJACENT PROPERTY LINE.

IMPERVIOUS SHADING / HATCH LEGEND

- BUILDINGS
- CONCRETE WALKS
- BITUMINOUS DRIVEWAYS

DRAINAGE STRUCTURE LEGEND

- STORM CATCHBASIN WITH CURB INLET
- STORM CATCHBASIN (D)
- STORM MANHOLE (D)
- SANITARY SEWER MANHOLE (S)
- DENOTES LOCATION OF PLANNED EMERGENCY OVERFLOW BY PASS ROUTE AT ELEV.=744.00

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10'± NORTH & 40'± EAST OF THE NORTHWEST CORNER OF THE SITE.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	02/26/20	Drawn By:	CMG
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SWPP PLAN APPENDIX D
HARDING CUSTOM HOMES SUBDIVISION UNIT 1
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 1 of 3

Project # 895

Harding - SWPP - 10/04/2021

Drawing File Name: 895-MF9-SWPP-SH1

SWPPP PLAN

CARRADUS

ILLINOIS ROUTE 53

HARDING COURT

HARDING AVE.

PERVIOUS AREAS OF SITE ARE NOT HATCHED OR SHADED. (TYPICAL)

BOUNDARY LINE OF ENTIRE AREA OF SUBDIVISION. (TYPICAL)

BITUMINOUS ROADWAY

(100' R/W)

EDGE OF PAVEMENT

CONCRETE CURB & GUTTER

FIRE HYDRANT

EXISTING POWER POLE

(L=31.24')
(Rad.=20.00')

VALVE VAULT RIM=762.65

(Rad.=34327.48')
(L=552.92')

PROPOSED 5' CONCRETE WALK

EXISTING CONCRETE WALK

LOT 1 — BUILDING A — UNIT 1, UNIT 2, UNIT 3, UNIT 4

LOT 2 — BUILDING A — UNIT 5, UNIT 6, UNIT 7, UNIT 8

LOT 3 — UNIT 9, UNIT 10, BUILDING A, UNIT 11, UNIT 12

LOT 4 — BUILDING B — UNIT 13, UNIT 14, UNIT 15, UNIT 16, UNIT 17

LOT 5 — BUILDING C — UNIT 18, UNIT 19, UNIT 20, UNIT 21, UNIT 22, UNIT 23

ST-1 RIM=766.80
ST-2 RIM=767.20
ST-3 RIM=759.70
ST-4 RIM=762.50
ST-5 RIM=764.50
ST-6 RIM=769.65
ST-7 RIM=762.50
ST-8 RIM=763.30
ST-9 RIM=770.00
ST-10 RIM=767.30
ST-11 RIM=766.90
ST-12 RIM=766.00
ST-13 RIM=766.00
ST-14 F/L=768.50
ST-15 F/L=768.50
ST-16 F/L=759.49
ST-17 F/L=759.49
ST-18 F/L=764.25
ST-19 F/L=764.25
ST-20 RIM=761.50
ST-21 RIM=762.25
ST-22 RIM=762.90
ST-23 RIM=764.00
ST-24 RIM=766.00
ST-25 F/L=769.15
ST-26 F/L=769.75
ST-27 F/L=769.75
ST-28 RIM=767.20
ST-29 RIM=759.30

SAN-1 SAN-2 SAN-3 SAN-4 SAN-5

W-1 W-2

FH-1 FH-2

STREET LIGHT

SIGN

PROPOSED 12' X 14' PERGOLA & CONCRETE WALK

PROPOSED 21' PUBLIC ROADWAY WITH CONCRETE CURB & GUTTER

CLN. RAD.=200.0'

PROPOSED APRON

PROPOSED DRIVEWAY

EXISTING APARTMENT BUILDING

EXISTING IBT PEDESTAL

EXISTING UTILITY POLE

EXISTING FIRE HYDRANT

EXISTING WATER VALVE RIM=760.28

EXISTING SANITARY MANHOLE RIM=758.98 INV.=749.48 (8" W)

EXISTING RESIDENCE

(217.73') (N 90°00'00" E)

(33.00') (N 00°31'55" W)

(46.75') (N 90°00'00" E)

(20.84') (N 89°59'07" E)

(166.75') (N 00°00'00" E)

(166.78') (Rad.=34066.78')

(28.23') (S 89°58'12" W)

(166.77') (S 01°17'30" W)

(289.00') (S 89°57'19" E)

1-00 (CL-FL)

RUNOFF DIVERSION BERM

FRAME SHED

WOOD DECK

EXISTING RESIDENCE

PROPOSED RESIDENCE

BITUMINOUS DRIVEWAY

CONNECTION POINT OF ONSITE SANITARY OUTFALL WITH SANITARY SEWER.

CONCRETE WASHOUT AREA. WASHOUT DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR BUT ALL WASHOUT ACTIVITY SHALL TAKE PLACE ON PRIVATE PROPERTY AND NOT WITHIN THE PUBLIC RIGHT OF WAY. SEE DETAIL ON SHEET 13 OF 16

STORMWATER DISCHARGE STRUCTURE

NOTE:
ALL CATCH BASINS SHALL BE PROTECTED WITH SEDIMENT BASINS WHERE POSSIBLE AND FILTER BASKETS FOR ALL OTHER INLETS AND CATCH BASINS. SEE SHEET 3 OF 19 FOR DETAILS

SITE BENCHMARK ELEV.= 757.23 (NAVD 88)

SANITARY MANHOLE IN HARDING AVENUE APPROXIMATELY 10± NORTH & 40± EAST OF THE NORTHWEST CORNER OF THE SITE.

IMPERVIOUS SHADING / HATCH LEGEND

BUILDINGS

CONCRETE WALKS

BITUMINOUS DRIVEWAYS

DRAINAGE STRUCTURE LEGEND

STORM CATCHBASIN WITH CURB INLET

STORM CATCHBASIN (I)

STORM MANHOLE (D)

SANITARY SEWER MANHOLE (S)

DENOTES LOCATION OF PLANNED EMERGENCY OVERFLOW BY PASS

OVERFLOW ROUTE & ELEVATION 759.25

NO OTHER CONTIGUOUSLY OWNED PROPERTY.

NO AREA OF THE SITE IS LEFT UNDEVELOPED ALL PERVIOUS AREAS CONTAIN LANDSCAPING.

TOTAL PROJECT AREA = 146,695 SQ.FT., 3.368 ACRE.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

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09/10/21	VILLAGE REVIEW

SWPP PLAN APPENDIX D
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

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Sheet 2 of 3

Project # 895

DRAWING FILE NAME: 895-SWPP

SWPPP PLAN

LEGAL DESCRIPTION OF CONSTRUCTION SITE

(REFER TO SHEET 2 FOR PARCEL LOCATIONS)

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.

(787 HARDING AVENUE)
PIN 05-23-223-020
47,101 Sq. Ft.

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

(NO ADDRESS ASSIGNED)
PIN 05-23-223-005
43,468 Sq. Ft.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

(138 IL. STATE ROUTE 53)
PIN 05-23-223-008
43,562 Sq. Ft.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS

(PART OF 128 IL. STATE ROUTE 53)
PART OF PIN 05-23-223-025
4,624 Sq. Ft.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AN ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS

EXISTING 33' HARDING RIGHT OF WAY
7,913 Sq. Ft.

O&M PRACTICES

1.) O&M PLAN PROCEDURES AND PRACTICES MUST BE REVIEWED AND ASSESSED ANNUALLY

2.) ACCESS ROUTES INCLUDING ROADWAYS AND SIDEWALKS SHALL BE INSPECTED ANNUALLY AND MAINTAINED AS NEEDED.

3.) DRAINAGE STRUCTURES AND FLOW RESTRICTORS MUST BE INSPECTED AND CLEANED SEMI-ANNUALLY.

4.) VOLUME CONTROL BMPs SHALL BE INSPECTED SEMI-ANNUALLY AND AFTER SIGNIFICANT RAINFALL EVENTS EXCEEDING 1.5 INCHES.

5.) THE OWNER SHALL KEEP AN UPDATED LOG BOOK DOCUMENTING THE PERFORMANCE OF THE REQUIRED O&M ACTIVITIES FOR PERPETUITY. LOG BOOKS MUST BE PRODUCED UPON THE REQUEST OF THE VILLAGE INSPECTOR.

6.) VEGETATION SHALL BE MAINTAINED ON A REGULAR BASIS.

7.) PEST CONTROL MEASURES SHALL BE IMPLEMENTED TO ADDRESS INSECTS AND RODENTS.

8.) SIGNAGE AND FENCING SHALL BE INSTALLED AND MAINTAINED WHERE NECESSARY TO PROTECT PROPERTY AND THE PUBLIC.

9.) UNDERGROUND VAULTS MUST INCLUDE DESIGN MEASURES TO FACILITATE CLEANING AND MAINTENANCE. CONFINED SPACE SAFETY PROCEDURES MUST BE FOLLOWED.

NOTE:
THERE ARE NO RECORDED FLOODPLAIN/FLOODWAY, RIPARIAN OR WETLAND AREAS ON THE SITE OR ADJACENT THERETO.
BUILDINGS ONSITE ARE PROTECTED FROM FLOODING BY THE ONSITE OVERFLOW BYPASS ELEVATION BEING SET AT ELEVATION 760.0, WHICH IS 2.10' BELOW THE TOP OF FOUNDATION ELEVATION OF THE LOWEST FOUNDATION ON SITE (UNIT 1 OF BUILDING 1) AT 764.10, AND 4.50' BELOW THE LOWEST GARAGE FLOOR ELEVATION ONSITE (UNIT 23 BUILDING 5) AT 766.50.

DEWATERING NOTE:
DEWATERING OF TRENCHES, EXCAVATIONS AND THE DETENTION SYSTEM SHALL BE VIA OVERLAND FLOW TOWARD THE OUTFALL STRUCTURES ADJACENT TO THE SITE. ALL DEWATERING SHALL BE FILTERED WITH TEMPORARY SILTATION BARRIERS AND SEDIMENT BASINS TO PREVENT CONTAMINATED RUNOFF FROM LEAVING THE SITE. NO DIRECT PUMPING OR DISCHARGE FROM THE DEWATERING PROCESS SHALL BE DIRECTED TOWARD ADJOINING PROPERTIES OR THE RIGHT OF WAYS WITHOUT BEING PROPERLY FILTERED.

ONSITE IMPERVIOUS AREA TABLE				
	BEFORE CONSTRUCTION		AFTER CONSTRUCTION	
BUILDINGS=	2,593 SQ.FT.	1.8 %	35,456 SQ.FT.	24.2 %
DRIVEWAY=	4,770 SQ.FT.	3.3 %	19,327 SQ.FT.	13.2 %
WALK & STEPS=	346 SQ.FT.	0.2 %	7,142 SQ.FT.	4.9 %
ROADWAY=	0 SQ.FT.	0.0 %	14,713 SQ.FT.	10.0 %
TOTAL IMPERVIOUS=	7,709 SQ.FT.	5.3 %	76,638 SQ.FT.	52.2 %
TOTAL SITE AREA=	146,695 SQ.FT.	100.0 %	146,695 SQ.FT.	100.0 %
NET ONSITE IMPERVIOUS AREA INCREASE = 68,929 SQ.FT.				
ROUTE 53 RIGHT OF WAY IMPERVIOUS AREA TABLE				
ROADWAY/DRIVEWAY=	570 SQ.FT.		0 SQ.FT.	
PUBLIC SIDEWALK=	0 SQ.FT.		710 SQ.FT.	
TOTAL NET IMPERVIOUS AREA INCREASE = 69,069 SQ.FT.				

RUNOFF CHARACTERISTICS OF SITE

IMPERVIOUS AREA (RESTRICTED) = 76,638 SQ.FT.
PERVIOUS AREA (RESTRICTED) = 70,057 SQ.FT.
TOTAL AREA OF SITE = 146,695 SQ.FT.

STORAGE PROVIDED

ALL STORMWATER STORAGE FOR THIS SITE IS PROVIDED AT AN OFFSITE VILLAGE OF GLEN ELLYN DETENTION BASIN SYSTEM DESIGNED TO ACCOMMODATE THIS PROPERTY.

AREA DISTURBED BY CONSTRUCTION

ENTIRE ONSITE AREA	= 76,638 SQ.FT	IMPERVIOUS
	= 70,057 SQ.FT	PERVIOUS
RT. 53 PARKWAY BETWEEN WALK & PROPERTY LINE	= 11,170 SQ.FT	PERVIOUS
RT. 53 DRIVEWAY ACCESS REMOVE & REPLACE	= 0 SQ.FT	IMPERVIOUS

BUILDINGS FOR LOWEST UNIT

TOP OF FOUNDATION = 769.10
GARAGE FLOOR = 768.60

FOR EROSION CONTROL AND SEDIMENT PROTECTION DETAILS AND EROSION PROTECTION SCHEDULE SEE SHEET 2 OF 22.

CARRADUS LAND SURVEY, INC. PROFESSIONAL DESIGN FIRM NO. 184-007086
FOR LAND SURVEYING & PROFESSIONAL ENGINEERING EXPIRES 04/30/2023

Date Of Field Work:	02/26/20	Drawn By:	CMG
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
03/30/21	VILLAGE REVIEW
06/25/21	VILLAGE REVIEW
09/10/21	VILLAGE REVIEW

SWPPP PLAN APPENDIX D
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 3 of 3

Project # 895

DRAWING FILE NAME: 895-MF-SWPP

Harding - SWPP - 10/04/2021

THIS INSTRUMENT PREPARED BY AND RETURN TO:

Huck Bouma[PC]
Attn: Bruno W. Tabis
1755 S. Naperville Road
Suite 200
Wheaton, IL 60189

Affected PINs:
05-23-223-020
05-23-223-005
05-23-223-008
05-23-223-025

DECLARATION OF MAINTENANCE AND EASEMENT AGREEMENT FOR HARDING CUSTOM HOMES SUBDIVISION UNIT 2

THIS DECLARATION is made and entered into this _____ day of _____, 2021, by HARDING CUSTOM HOMES, an Illinois limited liability company ("Owner") and the VILLAGE OF GLEN ELLYN, an Illinois municipal corporation ("Village").

RECITALS:

A. Owner is the legal title holder of the real estate legally described on Exhibit "A" hereto.

B. Owner intends to subdivide the aforementioned real estate and the develop said real estate with five (5) detached townhome buildings improved with a total of twenty-three (23) individual dwelling units. Following the recording of this document with the Recorder of Deeds of DuPage County, the Owner intends to file the final Plat of Harding Custom Homes subdivision ("Plat"). The legal description for the real estate after recording the Plat shall be as set forth on Exhibit "B" hereto. The Lots and Units to be shown on the Plat are hereafter referred to as the "Property."

C. Upon construction and sale of townhomes on the Property, and turnover of ownership and maintenance responsibility for common areas therein to a duly incorporated association of townhome owners ("Association"), Owner will irrevocably assign its rights and responsibilities under this Declaration to said Association, as further provided herein;

D. Owner and Village have elected to provide for and clarify the allocation of responsibility for the use, conduct and maintenance of the Property, and the roadways and areas adjacent thereto, together with certain easements, rights and obligations related thereto; and

E. Owner and Village have further elected to declare that the several owners, mortgagees, occupants and other persons acquiring any interest in the Property or any part thereof shall at all

times enjoy the benefits of and hold their interests subject to the rights, easements, privileges and restrictions hereinafter set forth herein, all of which are declared to be in furtherance of a plan to promote and protect the cooperative aspect of ownership and to facilitate the proper administration of the Property and are established for the purpose of enhancing and perfecting the value, desirability and attractiveness of the Property.

NOW, THEREFORE, Declarant does hereby make and publish this Declaration as follows:

PART ONE
GENERAL MATTERS

ARTICLE ONE

1.0 INCORPORATION OF RECITALS: By this reference, the representations, recitations and definitions set forth in the foregoing Recitals are hereby incorporated into and made a part of this Declaration as if fully set forth in this Section 1.0.

ARTICLE TWO
Scope of Declaration/Easements

1.2.01 PROPERTY SUBJECT TO DECLARATION: The Property, inclusive of all subdivided lots, townhomes, condominiums, common areas and common elements therein and the dedicated streets set forth on the Plat, are subject to the provisions of this Declaration.

1.2.02 CONVEYANCES SUBJECT TO DECLARATION: All covenants, conditions, restrictions, easements, reservations, liens, charges, rights, benefits, and privileges which are granted, created, reserved or declared by this Declaration shall be deemed to be covenants appurtenant to and running with the land of the Property, and shall at all times inure to the benefit of and be binding on any Person having at any time any interest or estate in any part of the Property and the Village.

PART TWO
GENERAL MAINTENANCE RESPONSIBILITIES

ARTICLE ONE
Harding Court

2.1.01 HARDING COURT: Harding Court, as shown on the Plat, is a dedicated street.

2.1.02 VILLAGE RESPONSIBILITIES: Except as set forth below in 2.1.03 (Owner/Association Responsibilities) and in Article 3 (Special Provisions Regarding Harding Court Spur), the Village shall own and shall maintain, repair and replace all improvements located within the dedicated area of Harding Court as shown on the Plat, including:

a) the roadbed, including snow plowing and removal and ice control (but excluding driveways and aprons for the individual Units);
b) the curbs on and along both sides of Harding Court, including the cul-da-sac and the "Island" as shown on the Plat, but specifically excluding curbs along the off-street parking areas and the Harding Court Spur;
c) parkway trees, street signs, sidewalks, street lights (including foundations, conduits, wiring, controllers and the like; the "Island" street light is included), but excluding the USPS mail boxes;
d) hydrants; and
e) but excluding all "dry" utilities.

2.1.03 OWNER/ASSOCIATION RESPONSIBILITIES: Except as set forth in Article 3 (Special Provisions Regarding Harding Court Spur) and elsewhere herein, the Owner or the Association, as applicable, shall maintain, repair and replace the following improvements located within Harding Court:

a) driveways and driveway approaches;
b) off-street parking areas, including curbs;
c) grass and plantings other than trees, including mowing and trimming;
d) USPS mail boxes;
e) all maintenance, repair and replacements on the "Island" area shown on the Plat, except for curbs and the street light.

2.1.04 EASEMENTS: The Owner or Association, as applicable, is granted a permanent easement appurtenant for its own benefit and that of the owners of the individual Units as shown on the Plat for the purpose of installing the improvements described in Section 2.1.03 above, enjoying the use thereof and performing the maintenance, repair and replacement thereof.

ARTICLE TWO
Sewers and Water Mains

2.2.01 STORM SEWERS: The Village will accept ownership of and will maintain, repair and replace all Storm Sewers (including all structures and mains) which accommodate drainage for Harding Court as shown on Exhibit "C" hereto. The Owner or Association, as applicable, will own, maintain, repair and replace all other storm sewers on the Property and/or in Public Right-of-Way.

2.2.02 SANITARY SEWERS: The Village will accept, own, maintain, repair and replace solely the main line sanitary sewers (manholes and mains) up to and including all tee-wye connections for service to individual Units. The balance of the sewer lines (from the tee-wye to the individual Units) shall be maintained by the individual Unit Owners they serve.

2.2.03 WATER MAINS WITH 23 CONNECTIONS: The Village will accept, own and maintain solely the mains, valves, hydrants and portions of the service lines from the mains to the

Buffalo boxes for the individual Units. The balance of the services lines from the Buffalo box to the individual Units shall be maintained by the individual Unit Owners they serve.

ARTICLE 3
Emergency Access Drive

2.3.01 EMERGENCY ACCESS DRIVE: This Article sets forth the rights of the Village and the obligations of the Owner or Association, as may be applicable, and the individual owners of Units located on Lot 4 with respect to the Sidewalk and Emergency Vehicle Easement shown on the Plat.

2.3.02 GRANT OF EASEMENT: The Village is hereby granted a non-exclusive easement over and across the Sidewalk and Emergency Vehicle Easement for passage of emergency vehicles between Illinois Route 53 and Harding Court.

2.3.03 OWNER/ASSOCIATION OBLIGATIONS: The Owner or Association, as may be applicable, shall install a driveway consisting of permeable pavers varying in width from 5 feet to 13 feet in combination with a 5 foot wide concrete sidewalk across the Sidewalk & Emergency Vehicle Driveway Easement Area between Illinois Route 53 and Harding Court and an emergency access-gate at the Property line closest to Route 53. The Owner or Association, as may be applicable, shall maintain, repair, and replace the driveway, sidewalk, and gate as may be needed. The Owner or Association, as may be applicable, shall keep the driveway free and clear of vehicles or other obstructions, including snow and ice. The Owner or Association, as may be applicable, shall install and maintain the Emergency Vehicle Driveway Entryway between the Route 53 Pavement and Property in accordance with Illinois Department of Transportation permit requirements and dictates. Maintenance of the Entryway, including snow and ice removal, shall be the responsibility of the Owner or Association, as may be applicable.

2.3.04 UNIT OWNER OBLIGATIONS: No Owner of any Unit shall park or permit to be parked any vehicle on the Emergency Access Drive driveway or otherwise obstruct access across the Sidewalk and Emergency Vehicle Easement driveway. The Association shall install appropriate signage prohibiting parking.

PART THREE
Special Provisions Regarding Harding Court Spur

3.1.01 HARDING COURT SPUR: The "Harding Court Spur" is identified as such on the Plat. It is a portion of Harding Court, a dedicated street owned by the Village and shown on the Plat, but subject to the special provisions of this Article 3.

3.1.02 PURPOSE. The primary purpose of the Harding Court Spur is to provide access to a public thoroughfare, Harding Court, for the benefit of the separate parcel of real estate located adjacent to the Property and immediately west of the west boundary of the Harding Court Spur (the "Kohler Parcel"), legally described on Exhibit "D" hereto. Without such access, the Kohler Parcel would be landlocked.

3.1.03 GRANT OF KOHLER DRIVEWAY EASEMENT: The Owner and the Village hereby grant to the owner of the Kohler Parcel, its successors and assigns (collectively, the "Kohler Owners"), a perpetual easement appurtenant on and across the Harding Court Spur to construct and maintain a driveway from the Harding Court roadbed not to exceed ten (10) feet in width, exclusive of curbs, and a paved sidewalk along the driveway, both to be within the area identified as "Driveway to be maintained by Owners of Lot 2 of Ruddecks Assessment Plat" (the "Kohler Area") on Exhibit "E," subject to the terms and conditions set forth in Section 3.1.04. The Kohler Owners' use of the easement shall not interfere with the use of the Lot 2 driveway use described in Section 3.1.05 hereof.

3.1.04 CONDITIONS OF USE: The driveway in the Kohler Area described in Section 3.1.03 shall be for the exclusive use of the Kohler Owners and their guests and invites. The Kohler Owners shall have the following obligations and responsibilities with respect to the driveway:

a) maintenance, repair and replacement of the driveway, the driveway apron and any sidewalk;
b) installation, maintenance, repair and replacements of curbs along the driveway;
c) snowplowing and ice removal; and, in addition
d) repair and replacement of any damage to the remainder of the Harding Court Spur resulting from their use of the easement or driveway thereon, or from the performance of any of the installation, maintenance, repair or replacement permitted to them or required of them in this Article.

3.1.05 LOT 2 DRIVEWAY USE: For purposes of clarification, all of the easements granted in Section 21.04 hereof are intended to apply to the Harding Court Spur, including specifically the driveways and driveway apron servicing Units 5 and 6 of Lot 2 which will be located within that portion of the Harding Spur other than the Kohler Area (the "Owner/Association Area") on Exhibit "E." The Owner or Association, as applicable, shall maintain the driveways and driveway apron servicing Units 5 and 6 of Lot 2.

3.1.06 USE OF REMAINDER: The Owner and Association are hereby granted a perpetual, exclusive easement over the remainder of the Harding Court Spur "Remainder," i.e. that portion not used for driveways and the driveway apron for Units 5 and 6 of Lot 2 or by the Kohler Owners for driveways, curbs or sidewalks, for use as Common Area, including the right to landscape, for the enjoyment of the owners of the Property.

3.1.07 MAINTENANCE OF REMAINDER: The Village shall have no obligation to maintain any portion of the Harding Court Spur. The Owner or the Association, as may be applicable, shall maintain the Remainder portion of the Harding Court Spur as part of its "Common Area."

3.1.08 SHARED USE AND MAINTENANCE: Notwithstanding the easements, use and maintenance responsibilities set forth above, the driveway for Units 5 and 6 of Lot 2 and the driveway for the Kohler Owner will intersect. A single, continuous driveway apron will serve both the driveway for Units 5 and 6 of Lot 2 and the Kohler Owners' driveway. Accordingly:

a) the Owner or Association, as may be applicable, shall install the shared driveway apron at its own expense; thereafter the Owner or Association, as may be appliable, shall maintain, repair and replace the apron, and the Kohler Owner shall promptly reimburse the Owner or Association, as applicable, for fifty percent (50%) of the costs thereof.
b) notwithstanding, the Owner or Association, as applicable shall have the right, but not the obligation, at its own cost, to (a) plow and remove snow and provide ice control over any portion of the Kohler Area and (b) maintain, repair or replace any portion of the driveway pavement and curbs in the Kohler Area.

PART FOUR
Miscellaneous

4.1.01 CAPTIONS: The Article and paragraph headings are intended for convenience only and shall not be construed with any substantive effect in this Declaration. In the event of any conflict between statements made in recitals to this Declaration and the provisions contained in the body of this Declaration, the provisions in the body of this Declaration shall govern.

4.1.02 SEVERABILITY: Invalidation of all or any portion of any of the easements, restrictions, covenants, conditions, or reservations, by legislation, judgment or court order shall in no way affect any other provisions of this Declaration which shall, and all other provisions, remain in full force and effect.

4.1.03 PERPETUITIES AND OTHER INVALIDITY: If any of the options, privileges, covenants or rights created by this Declaration would otherwise be unlawful or void for violation of (a) the rule against perpetuities or some analogous statutory provision, (b) the rule restricting restraints on alienation, or (c) any other statutory or common law rules imposing time limits, then such provisions shall continue only until twenty-one (21) years after the death of the survivor of the now living lawful descendants of the President of the United States at the time of Recording of this Declaration.

4.1.04 AMENDMENT: The provisions of this Declaration may only be amended by written agreement by the Owner (or the Association as may be applicable) and the Village.

4.1.05 ASSIGNMENT: The rights, responsibilities and obligations of Owner may be assigned to the Association, upon Owner's recording of a Declaration of Protective Covenants, Restrictions and Easements for Harding Glen Town Homes and incorporating the Association of unit owners within the Townhome Property in accordance with the Illinois Common Interest Community Association Act (765 ILCS 160), and conveying record title to Lots 1, 2, 3, 4 and 5 (exclusive of the Units) of the Property to that Association, said Association shall thereafter be solely responsible for the exercise of all the rights, responsibilities and obligations of Townhome Owner under this Declaration. Owner shall thereafter have no further obligation hereunder.

4.1.06 BINDING EFFECT: The rights, obligations, covenants, agreements and easements made and granted in this Declaration shall run with the land of the Property and shall be binding

upon Owner and its respective successors, transferees and assigns in title to the Property for so long as this Declaration is in force.

4.1.07 GOVERNING LAW. This Declaration shall be governed, construed and enforced in accordance with the laws of the State of Illinois and any action brought hereunder shall be initiated in the Circuit Court for DuPage County.

4.1.08 COUNTERPARTS. This Declaration may be executed and delivered in any number of counterparts, each of which, when executed and delivered, shall constitute an original, and all of which together shall constitute one and the same agreement.

PART FIVE
Special Provisions – Village

5.1.01 VILLAGE ENFORCEMENT. The Village shall have the right to enforce any provision contained in this Agreement and to enforce the ordinances of the Village. This shall be an absolute right of enforcement, that the Village, through its employees, contractors, or duly authorized agents may, but shall not be required to perform. The Village, through its employees, contractors, or duly authorized agents, is hereby given a limited right of entry in, on, and through any portion of the Property and Harding Court (the "Development") to enforce the provisions of this Agreement, including onto the lots of any individual Unit owner. Except in the event of an emergency where there is a reasonable possibility that an injury to a person or propertyshall occur, the Village shall not exercise its right of entry under this Paragraph 5.1.01 without first providing 15 days prior written notice to Harding Glen Town Homes Homeowners Association ***("Association"),*** or any individual unit owner. The reasonable costs and expenses of any work performed by the Village, its employees, contractors, or duly authorized agents ***("Village Work")*** shall be fully charged to and paid by Association. In the event of a failure by the Association or any individual unit owner to pay sums properly due and payable within 30 days after receipt of written demand for payment from the Village, then, in addition to any other remedies or rights available to it at law or in equity, the Village shall have a lien against the Property, or any portion thereof including, without limitation, the common areas, as well as any individual Unit owner's Unit, to secure payment of all amounts as properly due hereunder. Such lien shall arise immediately upon recording of a notice of lien in the Office of the DuPage County Recorder of Deeds, Illinois, identifying this Agreement, the Parties, the date of recording this Agreement, the document number of such recording, the legal description of the Property, or any portion thereof, or the Unit of any individual unit owner, identification of Association, or any individual Unit owner, as the fee owner of the Property, or any portion thereof, and the amounts then due and payable under this Agreement. Such lien shall remain in full force and effect until such amounts are paid in full. Said lien may be foreclosed by any proceeding at law or in equity. The Village, in addition to any other rights it has in this Agreement, shall have the right to file suit in any court of competent jurisdiction against the Association or any individual unit owner to enforce and require the performance of any obligation in this Agreement, and to enforce by any proceeding in law or in equity all other easements, restrictions, covenants, and agreements in this Agreement. If the Association or any individual unit owner is found by a court of competent jurisdiction to be in violation of any of the foregoing, the Association or any individual unit owner shall also be liable for reasonable attorneys' fees, and cost and expenses of litigation, and which fees and costs, if

unpaid, shall constitute an additional lien against the Property, or any portion thereof including, without limitation, the common areas, as well as any individual unit owner's Unit. Failure by the Village to enforce any easements, restrictions, covenants, and agreements in this Agreement shall in no event be deemed a waiver of the right to do so thereafter.

5.1.02 Amendment: Termination. No amendment or termination of this Agreement which affects the rights of the Village shall be valid without the prior written consent of the Village.

5.1.03 Special Service Area. The Village may, in lieu of pursuing and enforcing its lien rights as established in Paragraph 5.1.01, elect to declare the Property a special service area and levy a special service tax against the Property. In the event that the Village proceeds to establish a special service area pursuant to this Paragraph 5.1.03, the Association, or anyone on its behalf, covenant and agree not to challenge or object, in any way, the establishment of such a special service area. Any special service area established pursuant to this Paragraph 5.1.03 shall be for the sole and limited purpose of recouping costs and expenses incurred by the Village in enforcing the provisions of this Agreement, including, without limitation, performing Village Work.

IN WITNESS WHEREOF, the parties have executed this Declaration as of the day first stated above.

OWNER:

HARDING CUSTOM HOMES, an Illinois limited liability company

By: _____
Name: Mark White
Its: Manager

VILLAGE:

VILLAGE OF GLEN ELLYN, an Illinois municipal corporation

By: _____
Name: _____
Its: President

R:\45000s\45000-45099\45060-1\Maintenance Declaration\Declaration of Maintenance Agmt 9.29.2021.doc

STATE OF ILLINOIS)
)
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY, that Mark White as Manager of Harding Custom Homes, an Illinois limited liability company, personally known to me to be the same person whose name is subscribed to the foregoing instrument as such Manager, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, and as the free and voluntary act of said company, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this _____ day of _____, 2021.

_____
Notary Public

STATE OF ILLINOIS)
)
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY, that _____ as President of the Village of Glen Ellyn, an Illinois municipal corporation, personally known to me to be the same person whose name is subscribed to the foregoing instrument as such President, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, and as the free and voluntary act of said companies, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this _____ day of _____, 2021.

_____
Notary Public

CONSENT OF MORTGAGEE

The undersigned, _____, _____ of West Suburban Bank, as holder of that certain Mortgage, Assignment of Rents and Security Agreement, dated as of _____ ("Mortgage"), hereby consents to and joins in the execution of the foregoing grant of that certain Declaration of Master Maintenance and Easement Agreement for the Harding Custom Homes Subdivision Unit 2 Subdivision, and agrees that any sale under foreclosure of such Mortgage shall be subject to the Declaration.

West Suburban Bank

By: _____
Name:
Its:

STATE OF ILLINOIS)
)
COUNTY OF _____)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY, that _____, as _____ of _____, personally known to me to be the same person whose name is subscribed to the foregoing instrument as such officer, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, and as the free and voluntary act of said bank, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this _____ day of _____, 2021.

_____
Notary Public

EXHIBIT "A"

Legal Description of Real Estate

PARCEL 1
LOT 2 OF WHITE'S HARDING AVENUE RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT RECORDED FEBRUARY 26, 2018 AS DOCUMENT R2018-016603, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 2
THE EAST 260.73 FEET AS MEASURED ON THE NORTH LINE AND ON THE SOUTH LINE (BEING THE EAST ONE ACRE) AND MEASURED WEST FROM THE WEST LINE OF STATE HIGHWAY ROUTE 53 OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 3
LOT 1 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 4
THE NORTH 16 FEET OF THE EAST 289 FEET OF LOT 2 IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PARCEL 5
ALL OF THAT PART OF HARDING AVENUE RIGHT OF WAY LYING SOUTH OF AND ADJACENT TO WILL-BRYANT CONDOMINIUM SUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF WILL-BRYANT CONDOMINIUM PLAT RECORDED DECEMBER 30, 1977 AS DOCUMENT R77-120078, IN DUPAGE COUNTY, ILLINOIS.

EXHIBIT "B"

Legal Description of Subdivided Property

Lots 1, 2, 3, 4 and 5 of Harding Custom Homes Subdivision Unit 2, being a subdivision the Southeast quarter of Section 23, Township 39 North, Range 10, East of the Third Principal Meridian in DuPage County, Illinois, according to the plat thereof recorded with the Recorder of Deeds of DuPage County, Illinois as Document No. _____.

EXHIBIT "C"

Village Owned Storm Sewers

SEE FOLLOWING PAGE

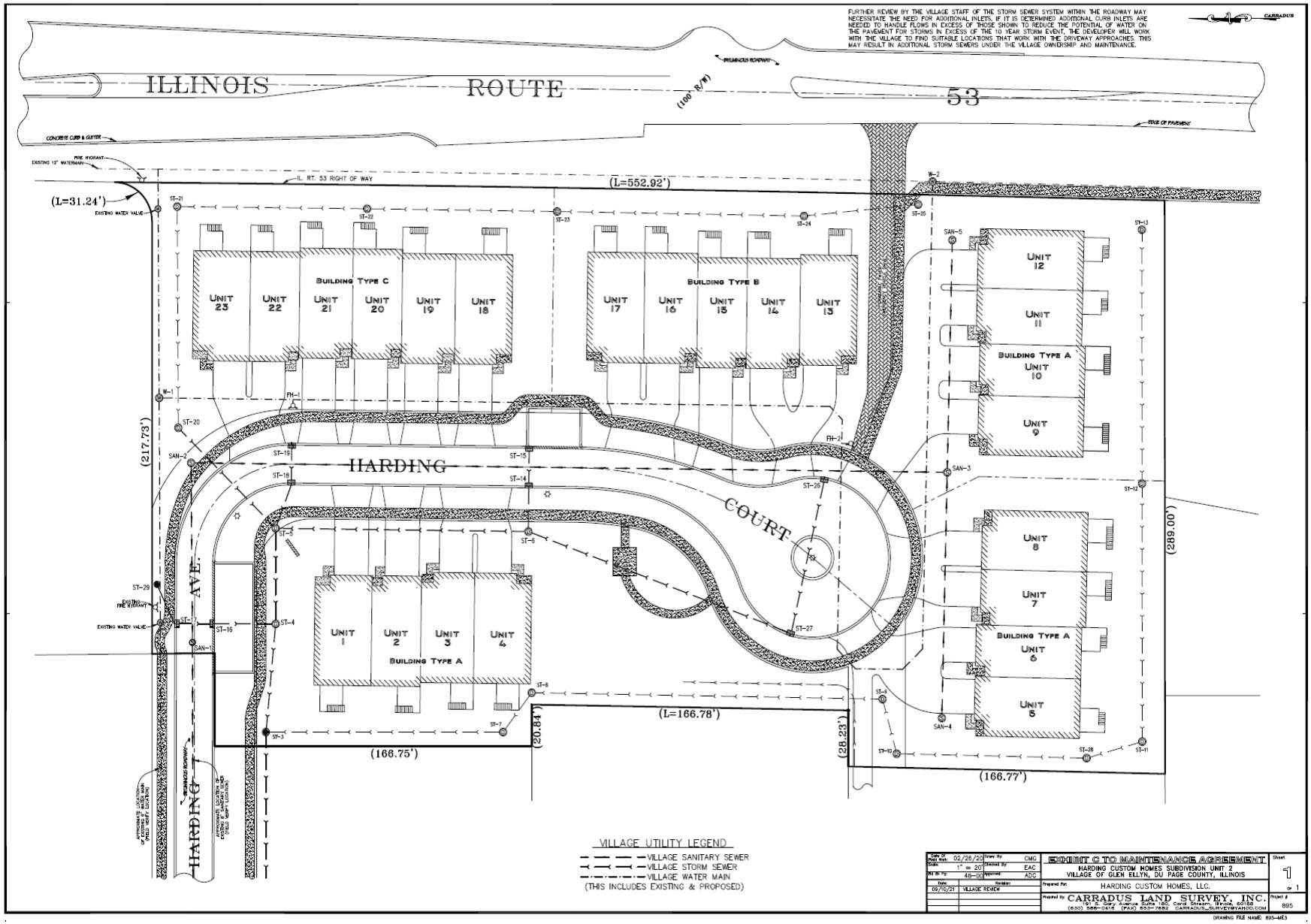

FURTHER REVIEW BY THE VILLAGE STAFF OF THE STORM SEWER SYSTEM WITHIN THE ROADWAY MAY NECESSITATE THE NEED FOR ADDITIONAL INLETS. IF IT IS DETERMINED ADDITIONAL CURB INLETS ARE NEEDED TO HANDLE FLOWS IN EXCESS OF THOSE SHOWN TO REDUCE THE POTENTIAL OF WATER ON THE PAVEMENT FOR STORMS IN EXCESS OF THE 10 YEAR STORM EVENT, THE DEVELOPER WILL WORK WITH THE VILLAGE TO FIND SUITABLE LOCATIONS THAT WORK WITH THE DRIVEWAY APPROACHES. THIS MAY RESULT IN ADDITIONAL STORM SEWERS UNDER THE VILLAGE OWNERSHIP AND MAINTENANCE.
CARRADUS
ILLINOIS ROUTE 53
(100' R/W)
PREVIOUS ROADWAY
CONCRETE CURB & GUTTER
EDGE OF PAVEMENT
FIRE HYDRANT
EXISTING 12" WATERMAIN
IL. RT. 53 RIGHT OF WAY
(L=552.92')
(L=31.24')
EXISTING WATER VALVE
BUILDING TYPE C
UNIT 23
UNIT 22
UNIT 21
UNIT 20
UNIT 19
UNIT 18
BUILDING TYPE B
UNIT 17
UNIT 16
UNIT 15
UNIT 14
UNIT 13
UNIT 12
UNIT 11
BUILDING TYPE A
UNIT 10
UNIT 9
UNIT 8
UNIT 7
BUILDING TYPE A
UNIT 6
UNIT 5
UNIT 1
UNIT 2
UNIT 3
UNIT 4
BUILDING TYPE A
HARDING COURT
HARDING AVE.
(217.73')
(269.00')
(166.75')
(20.84')
(L=166.78')
(28.23')
(166.77')
ST-1
ST-2
ST-3
ST-4
ST-5
ST-6
ST-7
ST-8
ST-9
ST-10
ST-11
ST-12
ST-13
ST-14
ST-15
ST-16
ST-17
ST-18
ST-19
ST-20
ST-21
ST-22
ST-23
ST-24
ST-25
ST-26
ST-27
ST-28
ST-29
W-1
W-2
FH-1
FH-2
SAN-1
SAN-2
SAN-3
SAN-4
SAN-5
VILLAGE UTILITY LEGEND
VILLAGE SANITARY SEWER
VILLAGE STORM SEWER
VILLAGE WATER MAIN
(THIS INCLUDES EXISTING & PROPOSED)
EXHIBIT C TO MAINTENANCE AGREEMENT
HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS
Prepared For: HARDING CUSTOM HOMES, LLC.
Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0418 (FAX) 653-7852 CARRADUS_SURVEY@YAHOO.COM
Date Of Field Work: 02/26/20
Scale: 1" = 20'
Bd Bk Pg: 48-06
Drawn By: CMG
Checked By: EAC
Approved: ADC
Date: 05/10/21
Revision: VILLAGE REVIEW
Sheet 1 of 1
Project # 895
DRAWING FILE NAME: 895-ME3

EXHIBIT "D"

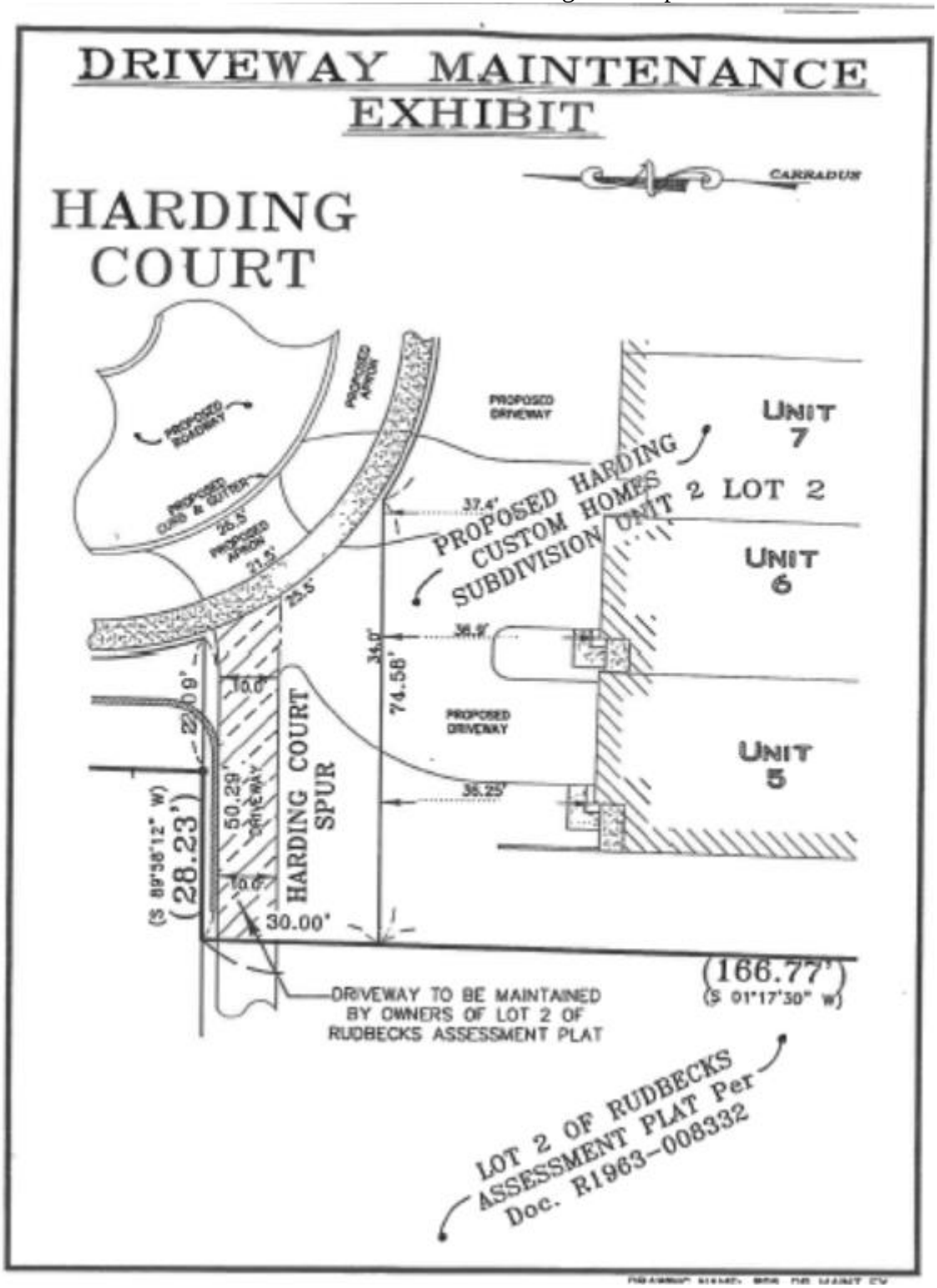
Legal Description – Kohler Property

LOT 2 EXCEPT THE NORTH 16.0 FEET OF THE EAST 289.0 FEET THEREOF, IN RUDBECK'S ASSESSMENT PLAT OF THE EASTERLY 550.23 FEET OF LOT "C" IN MILTON TOWNSHIP SUPERVISOR'S ASSESSMENT PLAT NUMBER 5, BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID RUDBECK'S ASSESSMENT PLAT RECORDED MARCH 20, 1963 AS DOCUMENT R63-8332, IN DUPAGE COUNTY, ILLINOIS.

PIN: 05-23-223-021

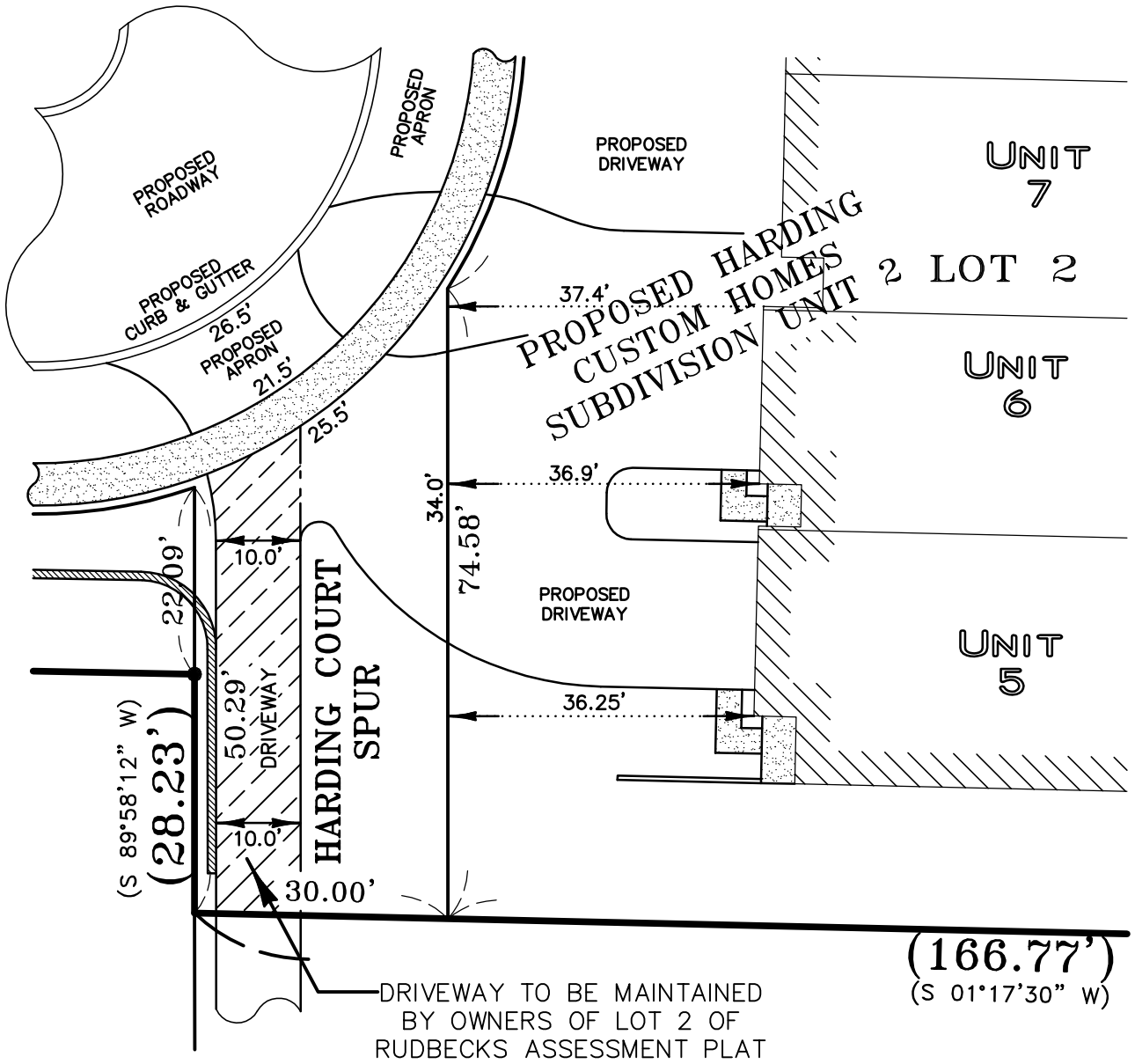
EXHIBIT "E"

Description of the Owner/Association Area and the
Kohler Area within the Harding Court Spur



DRIVEWAY MAINTENANCE EXHIBIT

HARDING COURT



Harding - 10/04/2021

DRAWING NAME: 895-DR MAINT EX

FURTHER REVIEW BY THE VILLAGE STAFF OF THE STORM SEWER SYSTEM WITHIN THE ROADWAY MAY NECESSITATE THE NEED FOR ADDITIONAL INLETS, IF IT IS DETERMINED ADDITIONAL CURB INLETS ARE NEEDED TO HANDLE FLOWS IN EXCESS OF THOSE SHOWN TO REDUCE THE POTENTIAL OF WATER ON THE PAVEMENT FOR STORMS IN EXCESS OF THE 10 YEAR STORM EVENT, THE DEVELOPER WILL WORK WITH THE VILLAGE TO FIND SUITABLE LOCATIONS THAT WORK WITH THE DRIVEWAY APPROACHES. THIS MAY RESULT IN ADDITIONAL STORM SEWERS UNDER THE VILLAGE OWNERSHIP AND MAINTENANCE.

CARRADUS

ILLINOIS ROUTE 53

BITUMINOUS ROADWAY

(100' R/W)

CONCRETE CURB & GUTTER

EDGE OF PAVEMENT

FIRE HYDRANT

EXISTING 12" WATERMAIN

IL. RT. 53 RIGHT OF WAY

(L=552.92')

(L=31.24')

EXISTING WATER VALVE

W-1

W-2

ST-21

ST-22

ST-23

ST-24

ST-25

SAN-5

ST-13

BUILDING TYPE C

UNIT 23

UNIT 22

UNIT 21

UNIT 20

UNIT 19

UNIT 18

BUILDING TYPE B

UNIT 17

UNIT 16

UNIT 15

UNIT 14

UNIT 13

PRIVATE ALLEY EMERGENCY VEHICLE ONLY

UNIT 12

UNIT 11

BUILDING TYPE A

UNIT 10

UNIT 9

FH-1

FH-2

ST-20

SAN-2

ST-19

ST-15

HARDING

ST-18

ST-14

SAN-3

ST-26

ST-12

COURT

(217.73')

(289.00')

ST-5

ST-6

UNIT 8

UNIT 7

BUILDING TYPE A

UNIT 6

UNIT 5

ST-29

EXISTING FIRE HYDRANT

EXISTING WATER VALVE

ST-17

ST-16

ST-4

ST-27

SAN-1

UNIT 1

UNIT 2

UNIT 3

UNIT 4

BUILDING TYPE A

ST-8

ST-9

(L=166.78')

(20.84')

(28.23')

ST-7

SAN-4

ST-3

ST-10

ST-28

ST-11

(166.75')

(166.77')

APPROXIMATE LOCATION OF EXISTING 6" WATERMAIN (FIELD VERIFY LOCATION)

BITUMINOUS ROADWAY

APPROXIMATE LOCATION OF EXISTING 8" SANITARY SEWER (FIELD VERIFY LOCATION)

HARDING AVE.

VILLAGE UTILITY LEGEND

VILLAGE SANITARY SEWER

VILLAGE STORM SEWER

VILLAGE WATER MAIN

(THIS INCLUDES EXISTING & PROPOSED)

Date Of Field Work:	02/26/20	Drawn By:	CMC
Scale:	1" = 20'	Checked By:	EAC
Fld Bk Pg:	48-00	Approved:	ADC

Date:	Revision:
09/10/21	VILLAGE REVIEW

EXHIBIT C TO MAINTENANCE AGREEMENT

HARDING CUSTOM HOMES SUBDIVISION UNIT 2
VILLAGE OF GLEN ELLYN, DU PAGE COUNTY, ILLINOIS

Prepared For: HARDING CUSTOM HOMES, LLC.

Prepared By: CARRADUS LAND SURVEY, INC.
191 S. Gary Avenue Suite 180, Carol Stream, Illinois, 60188
(630) 588-0416 (FAX) 653-7682 CARRADUS_SURVEY@YAHOO.COM

Sheet 1 of 1

Project # 895

DRAWING FILE NAME: 895-ME3

THIS DOCUMENT PREPARED BY
AND AFTER RECORDING RETURN TO:
Bruno W. Tabis, Jr.
Huck Bouma PC
1755 South Naperville Road, Suite 200
Wheaton, Illinois 60187
(630) 221-1755 Fax (630) 221-1756

**DECLARATION OF PROTECTIVE COVENANTS,
CONDITIONS, RESTRICTIONS AND EASEMENTS
FOR HARDING GLEN TOWN HOMES
_____, 2021**

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DECLARATION OF COVENANTS,
CONDITIONS, RESTRICTIONS AND EASEMENTS
FOR HARDING GLEN TOWN HOMES

This Amendment and Restatement Declaration is made this _____ day of _____, 2021 by Harding Custom Homes LLC, an Illinois limited liability company, hereinafter referred to as the ADeveloper@.

R E C I T A L S:

A. Developer is the record owner of certain property legally described on Exhibit "A" attached hereto and incorporated herein by reference, being a subdivision in the Village of Glen Ellyn, DuPage County, Illinois (the "Property") (the Property and the underlying development of which it is a part are depicted on the plat attached hereto as Exhibit "B" and made a part hereof by this reference); and

B. Developer intends to develop upon the Property a residential community of townhouses to be commonly known as Harding Glen Town Homes and has expended substantial sums of money for architectural and engineering design and services and site construction for such development; and

C. It is the desire and intention of the Developer to establish for their own benefit and for the benefit of all future owners or occupants of the Property, or any part thereof certain easements and rights in, over and upon said premises and certain mutually beneficial restrictions and obligations with respect to the use and maintenance thereof; and

D. The Developer has elected to declare that the several owners, mortgagees, occupants, and other persons acquiring any interest in the Property shall at all times enjoy the benefits of, and shall at all times hold their interest subject to, the rights, easements, privileges, and restrictions hereinafter set forth, all of which are declared to be in furtherance of a plan to promote and protect the cooperative aspect of ownership and to facilitate the proper administration of such property and are established for the purpose of enhancing and perfecting the value, desirability and attractiveness of the Property.

NOW, THEREFORE, the Developer, for the purposes above set forth, hereby declare that all of the Property, shall be held, transferred, occupied, sold and conveyed subject to the following covenants, conditions, easements, restrictions, charges and liens which shall run with the Property and be binding on all parties having any right, title or interest in the described properties or any part thereof, their heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

ARTICLE I
DEFINITIONS

For the purposes of clarity and brevity, certain words used herein, unless the context otherwise requires, are defined as follows:

1.1 Additional Maintenance Area. That portion, if any, of all the Units outside the footprint of the Townhouses constructed thereon; the entirety of each portion of the Additional Maintenance Area is for the exclusive use of the Unit Owner of that portion thereof subject to an easement hereby granted to the Association to perform its maintenance obligations, or as otherwise set forth in this Declaration. No portion shall be available for the common use or enjoyment by any other member of the Association.

1.2 Assessment. The portion of the cost of maintaining, repairing, and managing the Property, which is to be paid by each Owner.

1.3 Association. HARDING GLEN TOWN HOMES Homeowners Association or such other Illinois Not-for-Profit Corporation organized pursuant to the provisions of Article 9 of this Declaration.

1.4 Board. The Board of Directors acting for the Association.

1.5 Building. A continuous structure containing single family residence units with party walls straddling the boundaries between such units.

1.6 By-laws. The provisions of Articles 9 and 10 of this Declaration together with all other applicable provisions of this Declaration.

1.7 Common Area. All real estate owned by the Association for the common use and enjoyment of all members of the Association and such uses thereto by way of easements or other grant from the Declarant, the Association or others may be granted to or by the Association for the common use and enjoyment of the Owners, except with respect to patios, driveways and walkways as limited by Sections 3.19 and 3.20 hereof. The Common Area shall also include that portion of the Harding Court Spur granted to the Association as an easement for Common Area use in the Maintenance Declaration.

1.8 Common Expenses. The actual and estimated costs of:

(a) Maintenance, management, operation, repair, improvements and replacements of the Common Area, the Additional Maintenance Area, those parts of the Units as to which pursuant to other provisions hereof it is the responsibility of the Board to maintain, repair and replace, and the Association's obligations under the Maintenance Declaration.

(b) Management and administration of the Property, including, without limiting the same, compensation paid to a managing agent, accountant, attorneys and other employees.

(c) Any other items deemed by or in accordance with the provisions of this Declaration to be Common Expenses.

1.9 Common Interest Community Act. The Illinois Common Interest Community Association Act, 765 ILCS 160/1-1, et seq, as amendment from time to time.

1.10 Declarant. The Developer, and its successors and assigns. Such term shall also mean and refer to any party so designated by developer or to any party entitled to exercise the rights of Declarant pursuant to Section 14.14 of this Declaration.

1.11 Declaration. This instrument and as from time to time amended.

1.12 Developer. Harding Custom Homes LLC, an Illinois limited liability company, and its successors and assigns.

1.13 Development. The development of the area known as Harding Glen Town Homes.

1.14 Easement. The right of a non-owner to use a specific part of the Development for a specific purpose.

1.15 Improve. To enhance in value or quality. Make better. To increase the value of land and property by betterment.

1.16 Improvement. The act or process of being improved. Enhanced value or quality. The structure, addition or modification by which value or quality enhanced.

1.17 Lot. Each of the five (5) separate parcels of property identified as a Lot on the plat of subdivision of Harding Custom Homes Subdivision Unit 2, attached hereto as Exhibit "B."

1.18 Maintain. To keep in an existing state (repair and efficiency), preserve from failure, decline or deterioration.

1.19 Maintenance. The acts by which failure, decline or deterioration is avoided.

1.20 Maintenance Declaration. The Declaration of Maintenance and Easement Agreement for Harding Custom Homes Subdivision Unit 2 by and between Developer and the Village and dated _____, 2021.

1.21 Majority or Majority of the Unit Owners. The owners who own more than 50% of the Units.

1.22 Member. Every person or entity that holds membership in the Association by virtue of ownership of one or more Units.

1.23 Mortgagee. The lender of money to the owner of any interest in the subject real property to whom a title interest in said property is transferred to secure payment of the debt.

1.24 Mortgagor. The owner of an interest in the subject real property who pledges said interest as security for a loan of money or other consideration.

1.25 Occupant. Person or persons, including Owner, in lawful possession of a Townhouse Unit.

1.26 Owner or Unit Owner. The person or persons whose estates or interests, individually or collectively, aggregate fee simple ownership of a Unit. Unless otherwise specifically provided herein, the said word shall include any beneficiary of a trust, shareholder of a corporation or partner of a partnership holding legal title to a Unit.

1.27 Person. A natural individual, corporation, partnership trustee or other trust entity capable of holding title to said property.

1.28 Prior Covenants. The Declaration of Covenants, Conditions, Easements and Restrictions relating to the subject property, if any, which existed prior to the acquisition of the subject property by the Developer. None existed prior to acquisition.

1.29 Property. All the land, building and space comprising the real estate described in this Declaration, all improvements and structures constructed or contained therein or thereon, including the buildings and all easements, rights and appurtenances belonging thereto, and all fixtures and property intended for the common and mutual use, benefit or enjoyment of the owners and such additions as may hereafter be made subject to this Declaration.

1.30 Townhouse Unit. A Unit improved with a one family dwelling constructed on a Lot and attached to one or more townhouses by party walls.

1.31 Unit. Each separate parcel of property identified as a Unit on the plat of subdivision of Harding Custom Home Subdivision Unit 2, attached hereto as Exhibit “B.”

1.32 Unit Ownership. A part of the Property consisting of one Unit and easements appurtenant thereto.

1.33 Village. The Village of Glen Ellyn, an Illinois municipal corporation.

ARTICLE 2
PROPERTY RIGHTS AND EASEMENTS

2.1 Owners' Easement Enjoyment. Every owner shall have a right and easement of enjoyment in and to the Common Area, except as limited by Sections 2.3, 2.11, 3.19 and 3.20 hereof or elsewhere herein, which shall be appurtenant to and shall pass with the title to every Unit, and shall have fee simple ownership in that portion of the Additional Maintenance Area within their separate Unit, all subject to the following provisions:

(a) The right of the Board of the Association to prescribe reasonable regulations governing the use, operation and maintenance of the Common Area and Additional Maintenance Area.

(b) The right of the Association, in accordance with the Declaration and the Articles of Incorporation and By-laws of the Association, to borrow money for the purpose of improving the Common Area and Additional Maintenance Area and

facilities and in aid thereof to mortgage the Common Area, provided that the rights of such mortgagee in the Common Area shall be subordinate to the rights of the individuals having easements of enjoyment under Paragraph 1 of this Article.

(c) The right of the Association to take such steps as are reasonably necessary to protect the Common Area against foreclosure.

(d) The right of the Association to dedicate or transfer all or any part of the Common Area to any public agency, authority or utility for such purposes.

2.2 Delegation of Use. Any owner may delegate, in accordance with the By-laws, his rights of enjoyment to the Common Area and facilities to the members of his family, his tenants, or contract purchasers who reside on the Property.

2.3 Encroachments and Overhangs. Should any of the individual townhouses in a building be aesthetically and functionally designed with structures that may encroach or overhang adjoining Units or the Common Area, each such adjoining Unit or Common Area shall be subject to a perpetual easement for any such overhang or encroachment.

2.4 Easements to Run with the Land. All easements and rights described herein are easements appurtenant, running with the land, perpetually in full force and effect, and at all times shall inure to the benefit of and be binding on the undersigned, its successors and assigns, and any Owner, purchaser, Mortgagee, and other person having any interest in the Property or any part or portion thereof.

2.5 No Severance of Ownership. No Owner shall execute any deed, mortgage, lease or other instrument affecting title to his Unit Ownership without including therein both his interest in the Unit and the easements and covenants contained herein, it being the intention hereof to prevent any severance of such combined ownership. Any such deed, mortgage, lease or other instrument purporting to affect the one without including also the other shall be deemed and taken to include the interest so omitted even though the latter is not expressly mentioned or described herein.

2.6 Easement to Board. The Property, including the Common Area and Additional Maintenance Area, shall be subject to a perpetual easement to the Board, its successors and assigns, for ingress and egress; to perform its obligations and duties as required by this Declaration and By-laws. Should it be necessary to enter a Townhouse Unit to make any repairs as authorized in this Declaration, employees, agents and workmen shall be entitled to entrance by exhibiting to the Unit Owner an order from the Board or its agent.

2.7 Easements to Others. Each Unit Owner, his or her guests, permitted invitees and licensees, the U.S. Postal Service, other permitted services, delivery persons and parties to contracts with the Association or Lot Owners, the personnel of public and private utilities serving the subject subdivision, and governmental personnel shall have easement for ingress and egress to the subject Units over and across the Common Area, including the use of walkways, streets, and parking areas, on foot or by automobile vehicles.

2.8 Reservation by Developer. The Developer expressly reserves the right to it, its successors and assigns, to grant such easements for ingress and egress in the future for the

benefit of the real estate in the Harding Glen Town Homes area and for the benefit of all future Owners and occupants within said area.

2.9 No Dedication to Public Use. Nothing contained in this Declaration shall be construed or be deemed to constitute a dedication, express or implied, of any part of the Common Area or Additional Maintenance Area to or for any public use or purpose whatsoever. Any dedication made or to be made shall be expressed in writing and shall not be implied from anything stated herein.

2.10 Title to Common Area. Declarant may retain the legal title to the Common Area until such time as the improvements are completed and until such time as, in the opinion of the Declarant, the Association is able to maintain the same; notwithstanding any provision herein, Declarant hereby covenants to convey the Common Area to the Association. The title to Common area is to be conveyed no later than the turnover date without liens and encumbrances.

2.11 Ground Mechanical Units. Each Unit Owner shall be entitled to an exclusive easement to maintain outside air conditioning units, heat exchangers, generators and similar ground mechanical units, in the Common Area adjacent to and serving that Unit Owner's Unit as the Association may approve and condition.

ARTICLE 3
USE AND OCCUPANCY

3.1 Use of Unit. No Unit shall be used for other than housing and related common purposes for which the Property was designed. Each Townhouse Unit or any two or more adjoining Townhouse Units used together shall be used as a residence for a single family or such other uses permitted by this Declaration and for no other purposes.

3.2 Access To Additional Maintenance Area. Except as otherwise provided in this Declaration, the Additional Maintenance Area shall be used only for access, ingress and egress to and from the respective Units by the respective families residing therein and their respective guests, household help and other authorized visitors, and for such other purposes which are incidental to the residential use of the respective Units. No portion of the Additional Maintenance Area may be used for construction of any improvement or outside storage or landscaping unless approved by the Board or as otherwise provided in this Declaration.

3.3 Commercial Use. No industry, business, storage, warehousing, trade, occupation or profession of any kind, whether commercial, religious, educational or otherwise, designed for profit, altruism, exploration or otherwise, shall be conducted, maintained or permitted on any part of the Property, nor, except with the consent of the Board, shall any signs or other window displays or advertising be maintained or permitted by any Owner on any part of the Property or in any Unit therein, except that one "For Rent" or "For Sale" sign of not more than five square feet may be displayed on the Owner's Unit. The right is reserved for the Developer, their beneficiaries or agents to place "For Sale" or "For Rent" signs not exceeding the lesser of fifteen square feet or that size permitted by the Village of Glen Ellyn Zoning Code or Sign Code on any unsold or unoccupied Units, and to place such other signs on the Property as may be required to facilitate the sale of said unsold units or the Property.

3.4 Uses Not Considered Commercial. The restrictions contained in paragraphs 3.1 and 3.3 above shall not be construed to prohibit any Unit Owner from:

(a) Maintaining his or her personal professional library in his or her Unit;

(b) Keeping his or her personal business or professional records or account in his or her Unit; or

(c) Handling his or her personal business or professional telephone calls or correspondence from his or her Unit.

(d) The conduct of a "Home Occupation" as defined from time to time in the Village's Zoning Code.

Such uses are permissible as being customarily incident to the principal residential use and not in violation of paragraphs 3.1 and 3.3.

3.5 Obstruction of Common Area. The use, maintenance and operation of the Additional Maintenance Area shall not be obstructed, damaged or unreasonably interfered with by any Owner, nor shall anything be stored in the Common Area or Additional Maintenance Area without the prior written consent of the Board. This includes but not limited to; basketball hoops, skateboard ramps, lawn furniture, toys and swing sets. The Kohler Driveway described in the Maintenance Declaration, the Emergency Vehicle Drive easement between Lot 3 and Lot 4 shown on the Plat, the common driveway to Lot 2 and the sidewalk running from the cul-de-sac to the edge of Route 53 are to remain unobstructed at all times.

3.6 Hazardous Use. Nothing shall be done or kept in any Townhouse Unit or in the Additional Maintenance Area which will increase the rate of insurance applicable to residential buildings or contents thereof, without the prior written consent of the Board. No Owner shall permit anything to be done or kept in his Townhouse Unit or in the Additional Maintenance Area which will result in the cancellation of insurance on the Building or contents thereof, or which would be in violation of any law. No waste shall be committed in any portion of the Additional Maintenance Area.

3.7 Exterior Wall. Owners shall not cause or permit anything to be placed on the outside walls of the Unit and no sign, awning, canopy, radio, television antenna, or satellite dish shall be affixed to or placed upon the exterior walls or roof, or any part thereof, without the prior written consent of the Board.

3.8 Animals. No animals, rabbits, livestock, fowl or poultry of any kind shall be raised, bred or kept in any Townhouse Unit or in the Additional Maintenance Area, except dogs, cats or other household pets (not exceeding three household pets in total) may be kept in Townhouse Units subject to rules and regulations adopted by the Board, provided they are not kept, bred or maintained for any commercial purpose, and provided further that any such pet causing or creating a nuisance or unreasonable disturbance shall be permanently removed from the Property, upon three (3) days written notice from the Board and loss occasioned due to such animals shall be the financial responsibility of the animal's owner. Animal waste must be properly disposed of upon occurrence. It cannot remain in or on any portion.

3.9 Offensive Activities. No unlawful, noxious or offensive activity shall be conducted in any Townhouse Unit or in the Additional Maintenance Area, nor shall anything be done therein, either willfully or negligently, which may be or become an annoyance or nuisance to the other owners or Occupants.

3.10 Impairment of Structural Integrity of Building. Nothing shall be done in any Townhouse Unit or in, on or to the Additional Maintenance Area which will impair the structural integrity of any Building. No owner shall overload the electric wiring in a Building, or operate any machines, appliances, accessories or equipment in such manner as to cause, in the judgment of the Board, an unreasonable disturbance to others.

3.11 Laundry and Rubbish. No clothes, sheets, blankets, laundry of any kind, or other articles shall be hung out or exposed on any part of the Additional Maintenance Area. The Additional Maintenance Area shall be kept free and clear of rubbish, debris and other unsightly materials. Trash, garbage and other wastes shall be kept within the garage, only in enclosed sanitary containers (of such type, color, composition and design as may be determined by the Board), and shall be, disposed of in a clean, sightly, healthy and sanitary manner, and as may be prescribed from time to time by the rules and regulations of the Board.

3.12 Signs. "For Sale" or "For Rent" signs, advertising or other displays, shall not be maintained or permitted on any part of the Property except at such location and in such form as shall be determined by the Board and except as permitted under Section 3.3.

3.13 Use of Common Area. The Common Area is planned for the use and enjoyment of all owners, occupants and guests. No one or no group shall appropriate any part of them for their special uses or activities. No activities shall be allowed which interfere with the peaceful enjoyment of the Property by others. This includes but not limited to basketball playing and skateboarding.

3.14 Covering of Interior Surfaces. The covering of the interior surfaces of the windows and glass doors, storm doors, screen doors appurtenant to the Townhouse Units whether by draperies, shades or other items visible from the exterior of a Townhouse Unit, shall be subject to the rules and regulations of the Board.

3.15 Other Responsibilities of Townhouse Unit Owners. Each Townhouse Unit Owner shall be obligated to maintain and keep in good order and repair the interior of his own Townhouse Unit. Each Unit Owner shall be responsible to provide insurance on his personal property in his Townhouse Unit and his personal property stored elsewhere on the Property and insurance against personal injury and property damage liability to the extent not covered by the liability insurance for all Townhouse Unit Owners obtained by the Board as herein provide. Each Townhouse Unit Owner shall be responsible for sewer and water lines servicing that Unit Owner's Unit, as provided in the Maintenance Declaration. Each Townhouse Unit Owner shall provide proof of such insurance to the Board at all times and shall provide certificates of insurance thereof naming the Association as a certificate holder to receive notice of changes in the owners' insurance policy, or such other method approved by the Board.

3.16 Use During Construction and Sale Period. During the period of construction of the Buildings on the Property by the Developer, the Developer, contractors, and subcontractors, and their respective agents and employees, shall be entitled to access, ingress and egress to said Buildings and Property as may be required in connection with said construction. During the period in

which sales of Units within the subdivision of which the Property is a part by the Developer are in progress, but in no event for any period extending beyond ninety-six (96) months from the recordation of this Declaration, the Developer or Owner may occupy or grant permission to any person or entity to occupy, with or without rental, one or more Townhouse Units for business or promotional purposes" including all business activities of Developer regardless of any connections with the herein described real estate, including clerical activities, sales offices, model Townhouse Units for display and the like and may maintain customary signs in connection therewith, provided that the activities in the Townhouse Units so occupied do not interfere with the quiet enjoyment of any other owner or Occupant.

3.17 Parking. Any part of the Common Area allocated to parking purposes shall be part of the Common Area and not part of any individual Unit. The Emergency Assess Drive shall not be parked upon or obstructed in any way.

3.18 Recreational Vehicle. Trucks, boats, recreational vehicles, trailers or other vehicles (other than automobiles and pick-up or sport utility trucks not exceeding three tons in total weight) shall at all times be parked in the garage of the Unit and their repair or maintenance shall not be permitted except within the confines of the garage; not included in this prohibition is time, less than seven (7) days annually, during which said vehicles are being readied for usage.

3.19 Patios. Notwithstanding anything in this Declaration to the contrary, if a patio appurtenant to a Townhouse Unit is located within the Common Area, only the Owner or Occupant of the Townhouse Unit shall have the exclusive right to the use of said patio and an easement of enjoyment and access to said patio.

3.20 Driveways and Walkways. Notwithstanding anything in this Declaration to the contrary, each Owner shall have the sole and exclusive use of the paved driveway lying within the Common Area leading from the Townhouse Unit garage to the street and the entry way stoop and paved service walkway, constructed on the Common Area, leading from the front door of the Townhouse Unit to the driveway serving that Townhouse Unit.

3.21 Rentals. Except as otherwise limited by law, no rental of a term of less than one (1) year shall be permitted. Owner shall deliver to the Association full and complete copies of all leases, together with insurance certificates as elsewhere in this Declaration provided applicable to the ownership as a landlord in form and coverage acceptable to the Association. The Owner shall be responsible for all acts and omissions of his or her tenant.

ARTICLE 4
PARTY WALLS

4.1 General Rules of Law to Apply. Each wall which is built as a part of the original construction of the homes upon the Property and placed on the dividing line between the Units shall constitute a party wall, and, to the extent not inconsistent with the provisions of this Article, the general rules of law regarding party walls and liability for property damage due to negligence or willful acts or omissions shall apply thereto.

4.2 Sharing of Repair and Maintenance. The cost of reasonable repair and maintenance of a party wall shall be shared by the Owners who make use of the wall in equal proportion to such use.

4.3 Destruction by Fire or Other Casualty. If a party wall is destroyed or damaged by fire or other casualty, any Owner who has used the wall may restore it, and if the other Owners thereafter make use of the wall, they shall contribute to the cost of restoration thereof in proportion to such use without prejudice, however, to the right of any such owners to call for a larger contribution from the others under any rule of law regarding liability for negligent or willful acts or omissions.

ARTICLE 5
JOINT CONNECTION OF SEWER, WATER, ELECTRICAL, GAS, CABLE TV, INTERNET AND TELEPHONE LINES

The rights and duties of the Unit Owners within the subdivisions with respect to sewer, water, electricity, gas, cable TV, internet and telephone shall be governed by the following:

(a) Wherever joint house connections of sanitary and storm sewer, water, electricity, gas, cable TV, internet or telephone lines are installed within the Property, and the connections, or any portion thereof, lie in or upon units owned by Owners other than the owner served by said connections, the Association and the Owners of any Townhouse Unit served by said connection shall have the right, and are hereby granted an easement to the full extent necessary therefore, to enter upon the Units or to have the utility companies enter upon the Townhouse Units within the Property in or upon which said connection, or any portion thereof is located, to repair, replace and generally maintain said connection as and when the same may be necessary as set forth below. If the Board deems the repair, replacement or maintenance of such connection to be an emergency, the Association shall have the right to repair, replace or maintain such connection and assess the costs thereof against the Townhouse Unit served by such connection in the amounts the Owners would otherwise be responsible for under paragraphs (c) and (d) herein, and each such owner shall pay the Association (or its collecting agent) said assessment upon demand or in such periodic payments as may be determined by the Board. Said assessment, if not so paid on the date when due, shall become delinquent, and shall be a continuing lien on the Unit and shall be the personal obligation of the Owner of such Townhouse Unit and shall be subject to collection, enforceability, foreclosure and remedies of the Association in the manner set forth in Article 11 hereof for other assessments by the Association.

(b) Wherever joint house connections of storm and sanitary sewer, water, electricity, gas, or telephone lines are installed within the Property and the connections serve more than one Townhouse Unit, the Owner of each Townhouse Unit served by such connection shall be entitled to the full use and enjoyment of such portions of said connection as services his or her Townhouse Unit.

(c) In the event any portion of said connection or line is obstructed, damaged or destroyed through the act of an Owner of a Townhouse Unit being served by said connection, or any of his agents, guests, or members of his family, whether or not such act is negligent or otherwise culpable, so as to deprive the other Owners being served by said connection of the full use and enjoyment of said connection, then the Owner responsible therefore, shall forthwith proceed to replace or repair the same to as good condition as formerly without cost to the other Owners served by said connection.

(d) In the event any portion of said connection or line is obstructed, damaged or destroyed by some cause other than the act of any of the owners being served by said connection, his agents, guests, or members of his family (including ordinary wear and tear and deterioration from lapse of time), then in such event if said obstruction, damage or destruction shall prevent the full use and enjoyment of said connection by the Owner of a Townhouse served by said connection, all such Owners who are thereby deprived of said use and enjoyment shall proceed forthwith to replace or repair said connection to as good condition as formerly at their joint and equal expense.

ARTICLE 6
MAINTENANCE AND REPAIR

6.1 Responsibility of Unit Owner. Each Unit Owner shall provide at his own expense, all of the maintenance, decorating, repairs and replacements within his own Townhouse Unit and keep same in good condition. Specifically, each Townhouse Unit Owner shall be responsible for repair, replacement and maintenance of decks and patios, garage doors and stoops and service walkways leading from the front of the Townhouse Unit to the driveway and, as provided in the Maintenance Declaration, for sanitary and storm sewer services and water lines servicing the Unit.

6.2 Responsibility of Association. The Association shall be responsible for the maintenance of the Common Area and Additional Maintenance Area, including the maintenance of private streets, driveways, retaining walls, landscaping, the pergola amenity area, snow removal, sewer and water lines, and everything affecting the Common Area except as may be provided otherwise in this declaration. The Association shall also be responsible for maintenance, repair and replacement as provided in the Maintenance Declaration.

6.3. Exterior. The Association shall also provide exterior maintenance upon each Townhouse Unit which is subject to assessment hereunder, as follows: paint, repair, replace and care for gutters, downspouts, exterior building surfaces including siding and roof, trees, shrubs, grass, and other exterior improvements including entrance entry doors, patios and window sashes. Such exterior maintenance responsibilities shall neither include glass surfaces nor electric/automatic garage door openers.

However, in the event that the need for maintenance or repair is caused through the willful or negligent act of the owner, his family or invitees, the cost of such maintenance or repairs shall be added to and become a part of the assessment to which such Unit is subject.

6.4 Maintenance of Unit. Whenever the Board shall determine, in its discretion, that any maintenance or repair of any Townhouse Unit is necessary to protect the Common Area or Additional Maintenance Area or any other portion of a Building, the Board may cause a written notice of the necessity for such maintenance or repair to be served upon such Owner, which notice may be served by delivering a copy thereof to the occupant of such Townhouse Unit, or by mailing the same by certified or registered mail addressed to the owner of the Townhouse Unit. If such Owner fails or refuses to perform any such maintenance or repair within a reasonable time stated in the notice (or any extension thereof approved by the Board), the Board may cause such maintenance and repair to be performed at the expense of such Owner.

6.5 Board's Discretion. The Board shall have exclusive authority to take or refrain from taking any action pursuant to this Article. All expenses which, pursuant to this Article, are chargeable to any Owner, may be specifically assessed to such Owner and shall be payable by such Owner as prescribed by the Board.

6.6 Alterations, Additions and Improvements. No alterations of the Additional Maintenance Area, or any additions or improvements thereto, shall be made by any Owner without the prior written approval of the Board. The Board may authorize and charge as common expenses alterations and improvements of, and additions to the Common Area, provided, however, that in the event the costs thereof are to be charged to common expenses the Board shall not approve such alterations, improvements or additions requiring an expenditure in excess of $10,000.00 without the

approval of 75% of voting members as defined in Article 9, with the exception of any situation or condition which may cause immediate or substantial liability, risk or physical property damage. Any Owner may make alterations, additions or improvements within his Townhouse Unit without the prior written approval of the Board, but, in any event, such Owner shall be responsible for any damage to other Townhouse Units, the Common Area or Additional Maintenance Areas or the Property as a result of such alterations, additions and improvements.

6.7 Liability for Expense, etc. All Owners shall be liable for the expense of any maintenance, repair or replacement tendered necessary by his act, neglect or carelessness or by that of any Member of his family or his or their animals, guests, employees, agents or lessees, but only to the extent that such expense is not met by the proceeds of insurance carried by the Board or other Unit Owners. Such liability shall include any increase in fire insurance rates occasioned by use, misuse, occupancy or abandonment of a Townhouse Unit or its appurtenances. Nothing herein contained, however, shall be construed so as to modify any waiver by insurance companies of rights of subrogation.

6.8 Waiver of Claims. Each Unit Owner hereby waives and releases any and all claims which he may have against any other Unit Owner, the Association, its officers, members of the Board, the Developer, the owner, the manager and managing agents of the Building, if any, and their respective employees and agents, for damage to the Common Area, the Units, or to any personal property located in the Units or Common Area, caused by fire or other casualty, to the extent that such damage is covered by fire or other form of casualty insurance.

ARTICLE 7
ARCHITECTURAL CONTROL

No building, fence, wall or other structure shall be commenced, erected or maintained upon the Property nor shall any exterior addition to or change (including storm doors) or alteration therein be made, except such as are installed and approved by the Developer in connection with the initial construction of the Units, until the plans and specifications showing the nature, kind, shape, height, materials and location of the same shall have been submitted to and approved in writing as to harmony of external design and location in relation to surrounding structures and topography by the Board of the Association, or by an architectural committee composed of three (3) or more representatives appointed by the Board. In the event the Board, or its designated committee, fails to approve or disapprove such design and location within thirty (30) days after said plans and specifications have been submitted to it, approval will not be required and the Article will be deemed to have been fully complied with.

ARTICLE 8
INSURANCE

8.1 Fire Insurance. Each Owner shall be responsible for and shall procure fire and extended coverage insurance upon such Owner's Townhouse Unit for not less than the full insurable replacement value thereof under a policy or policies of Insurance with such company or companies, in such form, and or such premiums and periods as he may determine to be appropriate, but shall name the Association as an additional insured. A current copy of the policy must be maintained with the Association at all times. Each Owner shall also be responsible for his own insurance on the contents of his Townhouse Unit and furnishing and personal property therein, and his personal property stored elsewhere on the Premises.

8.2 Rebuilding. In the event of damage to or destruction of any portion of a Townhouse Unit by fire or other casualty, the Owner thereof shall within a reasonable time after such damage or destruction, repair or rebuild the same in a substantial and workmanlike manner with materials comparable to those used in the original structure, and in conformity in all respects to the laws or ordinances regulating the construction. Subject to Article 7 hereof, the exterior of such Townhouse Unit, when rebuilt, shall be substantially similar to and of architectural design in conformity with the surrounding Townhouse Units which are not so damaged or destroyed.

8.3 Association's Right to Rebuild. In the event that any Owner shall fail, within a reasonable time after the occurrence of damage or destruction referred to in Article 8.2, to perform the necessary repair or rebuilding, then, and in any such event, the Association may cause such repairs or rebuilding to be furnished, provided and installed in the manner as provided in Article 8.2. And in such event, the Association shall have, and is hereby given, a continuing lien on such Unit in the aggregate amount of (a) the cost thereof, (b) interest at the rate of 10% per annum from the date of the Association's payment of such costs, and (c) reasonable attorneys' fees and any costs incurred by the Association in connection therewith. The lien upon the Unit shall additionally be a claim against the owner, his heirs, devisees, personal representatives, grantees and assigns. In the event such Owner does not forthwith fully pay the Association, as aforesaid, and the insurance proceeds are insufficient to pay same, the lien may be foreclosed by the Association against the Unit, in the same manner as hereinafter provided in connection with unpaid assessments. The lien of the Association upon said Unit and insurance proceeds shall be subject and subordinate to the lien of any first mortgage or first trust deed owned or held by a bank, savings and loan association, insurance company or other institutional investor recorded prior to the fire loss.

ARTICLE 9
ASSOCIATION - MEMBERS - VOTING RIGHTS

Subject to the Common Interest Community Association Act:

9.1 Association. Prior to the date of the first conveyance of a Unit, the Trustee or Developer shall cause to be incorporated a not-for-profit corporation of the State of Illinois to be called the HARDING GLEN TOWN HOMES HOMEOWNERS ASSOCIATION or any name similar thereto.

9.2 Membership. Every Unit Owner shall be a member of said Association, which membership shall automatically terminate upon the sale, transfer or other disposition of such member of his Unit Ownership, at which time the new Owner shall automatically become a member therein. The Association may issue certificates evidencing membership therein. Such corporation shall have all of the powers, duties and obligations, and shall be operated in the manner, as set forth in this Article pertaining to them administration of the Association. Each Owner agrees to be bound by and observe the terms and provisions of the Association charter, its by-laws and the rules and regulations promulgated from time to time by said Association, its Board of Directors and Officers. The holder of an interest for security purposes only shall not be a member.

9.3 Voting Rights. The association shall have two classes of voting members. Homeowners shall have the right to vote immediately upon turnover date.

Class A: Class A members shall be all Unit Owners other than the Declarant and shall be entitled to one vote for each Unit owned. When more than one person holds an interest in any Unit, all such persons shall be deemed a single member. The vote for such Unit shall be exercised as they among themselves determine, but in no event shall more than one vote be cast with respect to any Unit.

Class B: The Class B members shall be the Declarant and shall be entitled to five (5) votes for each Unit owned. The Class B membership shall cease and be converted to Class A membership at such time as the Declarant shall elect, but shall occur absolute, with no further action being necessary at such time as the total votes outstanding in the Class A membership equal the total votes outstanding in the Class B Membership.

9.4 Suspension of Voting Rights. The Association shall have the right to suspend the voting rights of any Member for any period during which any assessment against his Unit remains unpaid.

9.5 Meeting. Meetings of the voting members shall be held at the Property or at such other place in DuPage County as designated in any notice of a meeting or as provided in the Common Interest Community Act. The presence in person-or by proxy at any meeting of the voting members having a majority of the total votes shall constitute a quorum. Unless otherwise expressly provided herein, any action may be taken at any meeting of the voting members having a majority of the total votes present at such meeting.

9.6 Annual Meetings. The initial meeting of the voting members, at which the initial board of directors is elected, shall be held upon no less than ten (10) and no more than thirty (30) days written notice given by the Developer. Such meeting shall be held not later than sixty (60) days after 75% of the Units are conveyed by the Developer or three (3) years after recording the Declaration, whichever is earlier. Thereafter there shall be an annual meeting of the voting members on the first Tuesday of October following such initial meeting, and on the first Tuesday of October of each succeeding year thereafter at 7:30 p.m. or at such other reasonable time or date (not more that thirty (30) days before or after such date) as may be designated by written notice of the Board delivered to the voting members not less than ten (10) days prior to the date fixed for said meeting.

9.7 Special Meetings. Special meetings of the voting members may be called at anytime for the purpose of considering matters which by terms of this Declaration require the approval of all or some of the voting members, or for any other reasonable purpose. Said meetings shall be called by written notice, authorized by the Developer or by a majority of the Board, or by the voting members having one-fourth of the total votes and delivered not less than ten (10) days prior to the date fixed for said meeting. The notice shall specify the date, time and place of the meeting and the matters to be considered.

9.8 Notices of Meetings. Notices of meetings required to be given herein may be delivered either personally or by mail or electronically as provided in the Common Interest Community Act to the persons entitled to vote thereat, addressed to each such person at the address given by him to the Board for the purpose of service of such notice, or to the Unit of the owner with respect to which such voting right appertains, if no address has been given to the Board.

ARTICLE 10
BOARD OF DIRECTORS

Subject to the Common Interest Community Association Act:

10.1 Administration of the Association. The direction and administration of the Association shall be vested in the Board of Directors (the ABoard@) which shall consist of not more than three (3) persons who shall be elected in the manner hereinafter set forth; provided, however, that, irrespective of anything else contained in this Declaration, for a period commencing on the date of this Declaration and ending upon the qualification of the directors elected at the initial meeting of the members, the Developer shall have the right to designate the number and selection of the individuals who shall serve as the Board of Directors to exercise the powers of the Board as herein set forth. Except for Directors so designated by the Developer, each member of the Board shall be an owner within the Development, elected for a one-year term at the annual meeting of Members; provided, however, that in the event an owner is a corporation, partnership, trust or other legal entity other than a natural person or persons, then any designated agent of such corporation, partnership or other legal entity or beneficiary of such trust shall be eligible to serve as a member of the Board. If a Director fails to meet such qualifications during his term, he shall thereupon cease to be a Director and his place on the Board shall be deemed vacant. The board members shall meet annually immediately following the annual meeting of the members, and at least 3 additional times annually.

10.2 Election of Officers. The Board shall elect from among its members a President who shall preside over both its meetings and those of the voting members, and who shall be the chief executive officer of the Board, a Secretary who shall keep the minutes of all meetings of the Board and of the voting members and who shall, in general, perform all the duties incident to the office of Secretary, and a Treasurer to keep the financial records and books of account and such additional officers as the Board shall see fit to elect. Such election shall take place at the annual meeting (Section 10.1) of the Board of Directors.

10.3 Removal of Board Member or Officer. Any Board member or Officer may be removed from office by affirmative vote of the voting members having at least two-thirds of the total votes, at any special meeting called for the purpose. A successor to fill the unexpired term of the Board member removed may be elected by the voting members having at least two-thirds of the total votes at the same meeting or any subsequent meeting called for that purpose.

10.4 Execution of Documents. All agreements, contracts, deeds, leases, vouchers for payment of expenditures and other instruments shall be signed by such officer or officers, agent or agents of the Board and in such manner as from time to time shall be determined by written resolution of the Board. In the absence of such determination by the Board, such documents shall be signed by the President or any Vice-President and countersigned by the Secretary of the Board.

10.5 General Powers. Without limiting the general power of the Board as provided by law and this Declaration, the Board shall have the following powers and duties:

(a) To engage the services of a manager or managing agent to manage and operate the Property for all Owners upon such terms and with such authority as the Board may approve.

(b) To formulate policies for the administration, maintenance and operation of the Property.

(c) To adopt rules and regulations with written notice to all Owners, governing the administration, management, maintenance, use, conservation and beautification of the Property and for the health, comfort, safety and general welfare of the Owners, and to amend such regulations from time to time with written notice to all Owners.

(d) To provide for any construction, alteration, installation, maintenance, repair, painting and replacement for which the board under the Declaration or the By-Laws is authorized for such purposes to enter or authorize entry into any Unit, causing as little inconvenience to the Owner as practicable and repairing any damage caused by any such entry at the expense of maintenance fund.

(e) To provide for the designation, hiring and removal of a property manager and other personnel, including lawyers and accountants, and to employ and contract for the services of others, and to make purchases for improvement, maintenance, repair, replacement, administration, management and operation of the Property, and to delegate any such powers to the manager or managers (and any such employees or other personnel as may be employees of the managing agent).

(f) To estimate the amount of the annual budget, and to provide the manner of assessing and collecting from the owners their respective shares of such estimated expenses as hereinafter provided.

(g) To pay out of the maintenance fund hereinafter provided for the following:

(i) Water, waste removal, gas, electricity and telephone and other necessary utility services for the Common Area and Additional Maintenance Area.

(ii) The services of a manager or managing agent or any other person or firm employed by the Board.

(iii) Materials, equipment, labor, services, maintenance, repairs, structural alterations or assessments which the Board is required to secure or pay for, or which, in its opinion is necessary for the maintenance or operation of the Property or for the enforcement of restrictions, including without limitation its obligations or authority under the Maintenance Declaration.

(iv) Fire insurance of the Common Area and Additional Maintenance Areas, liability insurance, Workmen's Compensation Insurance and such other insurance as the Board shall deem desirable.

(v) Any amount necessary to pay the proportionate cost by the Association assessed by any Corporation pursuant to any contract described in subparagraph (h) of this Article, in connection with the maintenance, repair, improvements of Common and Additional Maintenance Areas and other lawful expenses of said corporation.

(h) To make contracts with the various Unit Owners or in the neighboring area.

(i) To comply with the instructions of a majority of the Owners as expressed in a resolution duly adopted by any annual or special meeting of the Owners.

(j) To exercise the architectural control vested in the Association under Article 7.

(k) To exercise all other powers and duties of the Board or Unit Owners as a group.

(l) To grant such easements and rights of way which they may deem necessary or desirable.

10.6 Indemnity. The members of the Board and the officers thereof or of the Association shall not be liable to the Unit Owners for any mistake of judgment, or any acts or omissions made in good faith as such members or officers. The Unit Owners shall indemnify and hold harmless each of such member or officers against all contractual liability to others arising out of contracts made by such members or officers on behalf of such Owners or the Association unless any such contract shall have been made in bad faith or contrary to the provisions of this Declaration. The liability of any Owner arising out of any contract made by such members or officers or out of the aforesaid indemnity shall be limited to such proportion of the total liability there under as his percentage of assessment bears to the total assessment as provided in Article 11.1. Each agreement made by such members or officers or by the managing agent on behalf of the Owner or the Association shall be executed by such members or officers or the managing agent, as the case may be, as agents for the Owners or for the Association.

10.7 Board's Determination Binding. In the event of any dispute or disagreement between any Owners relating to the Property, or any question of interpretation or application of the provisions of the Declaration or By-Laws, the determination thereof by the Board shall be final and binding on each and all such Unit Owners.

ARTICLE 11
ASSESSMENTS - MAINTENANCE FUND

11.1 Estimate of Maintenance Costs. Each year on or before December 1st, the Board shall estimate the total amount necessary to pay the cost of wages, materials, insurance, services and supplies which will be required during the ensuing calendar year for the rendering of all services, together with a reasonable amount considered by the Board to be necessary for a reserve for contingencies and replacements, and shall on or before December 15th notify each Owner in

writing as to the amount of such estimate, with reasonable itemization thereof. Said estimated cash requirement shall be assessed to the Owners at a uniform rate for all Owners share and share alike. On or before January 1st of the ensuing year, and the 1st of each and every month of said year, each Owner shall be obligated to pay to the Board or as it may direct, one-twelfth of the assessment made pursuant to this paragraph. On or before May 1st of each calendar year, the Board shall supply to all Owners an itemized accounting of the maintenance expenses for the preceding calendar year actually incurred and paid, together with a tabulation of the amounts collected pursuant to the estimates provided, and showing the net amount over or short of the actual expenditures plus reserves. At the Board's option, any amount accumulated in excess of the amount required for actual expenses and reserves shall be credited to the next monthly installments due from Owners under the current year's estimate, until exhausted, and any net shortage shall be added to the installments due in the succeeding six months after rendering of the accounting.

11.2 Reserve for Contingencies and Replacements. The Board shall build up and maintain a reasonable reserve for contingencies and replacements. Extraordinary expenditures not originally included in the annual estimate which may become necessary during the year, shall be charged first against such reserve. If said estimated cash requirement proves inadequate for any reason, including non-payment of any Owner's assessment, the Board may at any time levy a further share and share alike assessment. The board shall serve notice of such further assessment on all Owners by a statement in writing giving the amount and reasons therefore, and such further assessment shall become effective with the next month's maintenance payment which is due more than ten (10) days after the delivery or mailing of such notice of further assessments. All Unit Owners shall be obligated to pay the adjusted monthly amount.

11.3 Estimate of Cash Requirements. When the first Board elected hereunder takes office, it shall determine the estimated cash requirement, as herein above defined, for the period commencing thirty (30) days after said election and ending on December 31st of the calendar year in which said election occurs. Assessments shall be levied against the owners during said period as provided in Section 11.1.

11.4 Failure or Delay in Preparation of Estimate. The failure or delay of the Board to prepare or serve the annual or adjusted estimate on an Owner shall not constitute a waiver or release in any manner of such Owner's obligation to pay the maintenance costs and necessary reserves, as herein provided, whenever the same shall be determined; in the absence of any annual estimate or adjusted estimate the Owner shall continue to pay the monthly maintenance charge at the then existing monthly rate established for the previous period until the next monthly maintenance payment which is due more than ten (10) days after such new annual or adjusted estimate shall have been mailed or delivered.

11.5 Owners' Liability. Owners of Units shall be personally liable for all assessments. Each grantee shall be personally liable for all assessments due at time of conveyance without prejudice, however, to grantee's rights to reimbursement from grantor. Liability for such assessment may not be avoided by non-use of Common Area or abandonment of his Unit.

11.6 Unsold Units. Developer shall not be obligated to pay any assessment with respect to any unsold Units or unimproved Units. Developer shall pay assessments for unsold occupied Units.

11.7 Books and Records. The Board shall keep full and correct books of account in chronological order of the receipts received by and expenditures made by the Board affecting the Property and the Association's obligation herein, specifying and itemizing the maintenance and repair expenses. Such records and the vouchers authorizing the payments shall be available for inspection by any Owner or any representative of an owner duly authorized in writing, at such reasonable time or times during normal business hours as may be requested by the Owner. Upon ten (10) days' notice to the Board and payment of a reasonable fee, any Owner shall be furnished a statement of his account setting forth the amount of any unpaid assessments or other charges due and owing from such Owner.

11.8 Default. If an Owner is in default in the monthly payment of the aforesaid charges or assessment for thirty (30) days, the Association may bring suit for and on behalf of itself and as representatives of all owners, to enforce collection thereof or to foreclose the lien therefore as hereinafter provided, and there shall be added to the amount due the costs of said suit, and other fees and expenses together with legal interest and reasonable attorneys' fees to be fixed by the Court. To the extent permitted by any decision or any statute or law now or hereafter effective, the amount of any delinquent and unpaid charges or assessments and interest, costs and fees as above provided, shall be and become a lien or charge against the Unit Ownership of the Owner involved when payable and may be foreclosed by an action brought in the name of the Board as in the case of foreclosure of liens against real estate. However, any recorded first mortgage or first trust deed made, owned or held by a bank, saving and loan association or insurance company or any institutional investor shall be superior to the lien of all common expenses which become due and are unpaid subsequent to the date of recording of such first mortgage or trust deed except for such common expenses on the encumbered Unit which becomes due and payable after the date said encumbrancer either takes possession of the Unit, accepts a conveyance of any interest in the Unit or has a receiver appointed in a suit to foreclose its lien. Notwithstanding, the foregoing is subject to applicable laws of the State of Illinois.

11.9 Eviction. In addition to the rights and remedies set forth in Section 11.8, if any Owner shall default in the payment, when same shall be due, of the aforesaid charge or assessments and said default shall continue for thirty (30) days after written notice to said Owner by the Board, of the amount of unpaid charges, or assessments and a demand for payment thereof, the Board shall have the right to declare said default a forcible detainer against the Unit and shall have the right, on behalf of the other Owners, to enter and take possession of the Unit from any defaulting owner, to put out said Owner, or any occupant or tenant claiming by, through or under said Owner, using such reasonable force as the Board shall deem necessary under the circumstances and, in addition, to exercise any other rights or remedies provided in the Illinois Eviction Act (formerly the Forcible Entry and Detainer Act), 735 ILCS 5/Article IX.

ARTICLE 12
DISCLAIMER AND ADVERTISING BY DECLARANTS

12.1 Disclaimer. The Developer specifically disclaim any intent to have made any warranty or representation in connection with the Development except as specifically set forth in contracts for the sale of townhouses to be built therein and no person shall rely upon any warranty or representation not so specifically made in such contracts for the benefit of such person. The expression of an intention, reference to any plan or development, shall not be construed as a commitment on the Developer. Any estimates of Common Expenses furnished to prospective Unit

Owners are believed to be reasonably accurate, but no warranty or guarantee is made nor intended to be made thereby, nor may one be relied upon as so having been made.

12.2 Advertising by the Developer. Notwithstanding any provisions hereof to the contrary, at all times and from time to time prior to Developer conveying all Units to third parties and the completion of the development of the entire Development, Developer (and successors and mortgagees), shall have the right and privilege to erect and maintain advertising signs, sales flags, sales trailer, other sales devices and banners for the purpose of aiding the sale of Units and to facilitate the completion of construction of the buildings and improvements comprising Harding Glen Town Homes and sale of Units thereof. The construction of the buildings and improvements by the Developer shall not be considered a nuisance, and Developer hereby reserves the right and privilege for themselves (and their successors and mortgagees) to conduct the activities enumerated in this paragraph.

ARTICLE 13
AMENDMENTS

13.1 Amendment. The provisions of this Declaration may be changed, modified or rescinded by an instrument in writing setting forth such change, modification or rescission, signed by Owners having at least three-fourths (3/4) of the total vote, and certified by the secretary of the Board, provided, however, that all lien holders of record have been notified either by personal service or mailing by certified mail of such change, modification or rescission, and an affidavit by said secretary certifying the same is a part of such instrument.

13.2 Notice of Amendment. The change, modification or rescission, accomplished under the provisions of the preceding paragraph, shall be effective upon recordation of such instrument in the office of the Recorder of Deeds of DuPage County, Illinois.

13.3 Special Amendment Reservation. Declarant hereby reserves the right and power to record a special amendment (hereinafter the "Special Amendment") to this declaration at any time and from time to time which amends this Declaration (i) to comply with requirements of the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Department of Housing and Urban Development, the Federal Housing Association, the Veterans' Administration, or any other governmental agency or any other public, quasi-public or private entity which performs (or may in the future perform) functions similar to those currently performed by such entities, (ii) to induce any of such agencies or entities to make purchase, sell, insure or guarantee first mortgages encumbering any Unit, or (iii) to correct clerical or typographical errors in this Declaration or any Exhibit hereto or any supplement or amendment thereto. In addition, a Special Amendment shall also be deemed to include, until title is conveyed to the Association, such amendment to this Declaration as Declarant elects to record at any time and from time to time for any other purpose, so long as such amendment will not materially impair the rights of the Owners hereunder or materially increase the expenses to be borne by them hereunder. In furtherance of the foregoing, a power coupled with an interest is hereby reserved and granted to the Declarant to vote in favor of, make or consent to a Special Amendment on behalf of each Owner as proxy or attorney-in-fact, as the case may be. Said power shall be irrevocable. Each deed, mortgage, trust deed, other evidence of obligation, or other instrument affecting a Unit and the acceptance thereof shall be deemed to be a grant and acknowledgment of, and a consent to the reservation of, the power of the Declarant to vote in favor of, make, execute and record Special Amendment. Subject to the provisions of Section 13.3 hereof, the right of the Declarant to act

pursuant to rights reserved or granted under this Section shall terminate at such time as the Declarant no longer holds title to any Unit.

13.4 Additional Property. Developer may, at its sole discretion, from time to time, elect to bring within the scheme of this Declaration real estate then adjacent to the Property and designated on Exhibit "B" as Lots 1, 3, 4 and 5 (hereinafter referred to as the "Additional Property"). Developer is not obligated in any manner by this Declaration to annex the Additional Property to the Property or to annex any particular tract, or to annex tracts in any particular sequence, or to annex contiguous tracts, it being the intention hereof that Developer may decline to exercise the rights granted in this Section 13.4 or may elect to exercise such rights only to a limited extent. The additions authorized by the following and succeeding provisions of this Section 13.4 shall be made by recording in the Office of the Recorder of Deeds for DuPage County, Illinois, a Supplementary Declaration with respect to the Additional Property, or portion thereof, which shall extend the scheme of this Declaration to the property to be annexed (hereinafter referred to as the "Annexed Property"). Such Supplementary Declaration may contain such complementary additions and modifications of the covenants and restrictions contained in this Declaration as are not inconsistent with the scheme of this Declaration. At such time as the Declarant causes the recording of such Supplementary Declaration or Declarations, then in such event:

(a) The provisions of this Declaration applicable to the Common Area and Additional Maintenance Areas located on such Annexed Property, and the rights of Declarant and Developer with respect thereto, and all other rights, easements, covenants, restrictions, burdens, uses and privileges appurtenant to the Common Area and Additional Maintenance Areas shall include and apply to the Common Area as extended by such annexation;

(b) Every person or entity who shall become an Owner of any Unit located in such Annexed Property shall be and become a Member of the Association on the same terms and conditions and subject to the same qualifications and limitations, as those Members who are then Owners of Units located on the Property. Developer and Declarant shall have and enjoy in such Annexed Property all easements and exercise all rights, privileges and immunities reserved to them or either of them in this Declaration in the same manner and with the same force and effect as though the term Property as used in this Declaration included such Annexed Property; and

(c) In all other respects, all the provisions of this Declaration shall include and apply to such Annexed Property in the same manner and with the same force and effect as though such Annexed Property had been subject to the provisions of this Declaration.

ARTICLE 14
GENERAL PROVISIONS

14.1 Notices. Notices provided for in the Declaration or Bylaws shall be in writing and shall be addressed to the Board at such address in Glen Ellyn, Illinois as is hereinafter provided, to a Unit Owner at the number of the respective Unit or at such other address as is hereinafter provided. The Board may designate its address for notices to it by giving written notice of the establishment or change of address to all Owners, from time to time. Any Owner may also

designate a different address or addresses for notices to him by giving written notice of his change of address to the Board. Notices addressed as above shall be deemed delivered when mailed by United States Registered or certified mail, or delivered in person, or if addressed to a Unit Owner, when deposited in his mailbox in the Building or at the door of his Unit in the Building.

Notices required to be given any devisee or personal representative of a deceased unit owner may be delivered either personally or by mail to such party at his or its address appearing in the records of the court wherein the estate of such deceased owner is being administered, or if address is unknown, by mailing same addressed to such person at the number of the Unit involved.

Upon written request to the Board, the holder of any recorded mortgage or trust deed encumbering any Unit shall be given a copy of all notices permitted or required by this Declaration to be given to the Unit Owner whose Unit is subject to such mortgage or trust deed.

14.2 Severability. If any provision of the declaration or any section, sentence, clause, phrase or word, or the application of any such provision, section, sentence, clause, phrase or work in any other circumstances shall not be affected thereby.

14.3 Perpetuities and Other Rules of Property. If any of the options, privileges, covenants or rights created by this Declaration would otherwise violate (a) the rule against perpetuities or some analogous statutory provision, or (b) any other statutory or common law rules imposing time limits, then such provision shall continue only until twenty-one (21) years after the death of the survivor of the now living lawful descendants of the incumbent President of the Village of Glen Ellyn and the incumbent President of the United States.

14.4 Rights and Obligations. Each grantee by the acceptance of a deed of conveyance, and each purchaser under any contract for such deed or conveyance, accepts the same subject to all restrictions, conditions, covenants, reservations, liens and charges, and the jurisdiction, rights and powers created or reserved by this Declaration, and all rights, benefits and privileges of every character hereby granted, created, reserved or declared, and all impositions and obligations hereby imposed shall be deemed and taken to be covenants running with the land, and shall bind any person having at any time any interest or estate in said land, and shall inure to the benefit of such person in like manner as though the provisions of this Declaration were recited and stipulated at length in each and any deed of conveyance. Reference to the respective deeds of conveyance, or in any mortgage or trust deed or other evidence of obligation, to the rights described in this Article or described in any other part of this Declaration, shall be sufficient to create and reserve such easements and rights to the respective grantees, mortgagees and trustees of such Unit Ownerships as fully and completely as though such rights were recited fully and set forth in their entirety in such documents.

14.5 Liberal Construction. The provisions of this Declaration shall be liberally construed to effectuate its purpose of creating a uniform plan for the operation of first-class townhouses.

14.6 Unit Ownership in Trust. In the event title to any Unit Ownership is conveyed to a title holding trust, under the terms of which all powers of management, operation and control of the Unit Ownerships remain vested in the trust beneficiary or beneficiaries, then the beneficiaries there under from time to time shall be responsible for payment of all obligations, liens or indebtedness and for the performance of all agreements, covenants and undertakings chargeable or created under this Declaration against such Unit Ownership. No claim shall be made against any such title

holding trustee personally for payment of any lien or obligation hereunder created and the trustee shall not be obligated to sequester funds or trust property to apply in whole or in part against such lien or obligation. The amount of such lien or obligation shall continue to be a charge or lien upon the Unit Ownership and the beneficiaries of such trust, notwithstanding any transfers of the beneficial interest of any such trust or any transfers of title to such Unit ownership.

14.7 Enforcement. These covenants and restrictions shall run with, and be binding upon, all land which by Declaration, as elsewhere herein provided for, is brought within these covenants and restrictions and shall be binding upon the Association and upon all persons owning, leasing, subleasing, or occupying any such land, their heirs, executors, administrators, personal representatives, successors and assigns. These covenants and restrictions may be enforced by the Association, which shall have the right to expend Association monies in pursuance thereof, and may also be enforced by the owner of any Unit in the subdivisions or any one or more of said parties. If these covenants and restrictions are enforced by appropriate proceedings by any such Owner or Owners, such Owner or Owners, if successful in such enforcement and if the Association had theretofore refused such enforcement, may be reimbursed by the Association for all or any part of the cost incurred, but such reimbursement shall be solely in the discretion of the Board of Directors of the Association.

14.8 Duration. These covenants and restrictions shall remain in full force and effect for a period of forty (40) years from the date hereof, and thereafter they shall be deemed to have been renewed for successive terms of ten (10) years.

14.9 Captions. Captions used are inserted solely as a matter of convenience and shall not be relied upon or used in construing the effect or meaning of any of the text of this Declaration.

14.10 No Waiver. No covenants, restrictions, conditions, obligations or provisions contained in this Declaration shall be deemed to have been abrogated or waived by reason of any failure to enforce the same, irrespective of the number of violations or breeches which may occur.

14.11 Interest. The Board shall have authority to establish the prevailing rate of interest to be charged on any account or indebtedness referred to in this Declaration.

14.12 Real Estate Taxes. In the event that any such taxes are not separately assessed to the owners of any Units but are taxed upon the whole subdivision or upon parcels containing more than one Unit, each Unit owner will pay his proportionate share thereof upon the basis of assessed valuation of each Unit.

14.13 Condemnation. If all or any part of the Common Area only shall be taken through condemnation by any governmental authority having power so to do, the net proceeds of such taking shall be paid to and retained by the Association. If any part of the Property including one or more Units shall be taken by one or more concurrent condemnation proceedings, the entire net proceeds of such taking or takings, including without limitation, all proceeds received on account of such taking of any part of the Common Area, shall be divided equitably among, and retained by, the Owners of the Units (subject to any prior rights thereto of first mortgagees of such Units) and the Association. If the effect of such condemnation shall be to isolate any part of the Property from the remainder of the Property, then all the Units lying wholly or partly within the portion of the Property so isolated shall be deemed to have been and shall be removed from and released from all of the terms and provisions of this Restatement and this Declaration shall be of no further force or effect

with respect thereto. For purposes of this paragraph, "condemnation" shall include also any sale under threat of condemnation to any governmental authority having condemnation power.

14.14 Declarant's Rights. Notwithstanding anything contained in this Declaration or in the By-Laws to the contrary, all rights which are specified in this Declaration or in the By-Laws to be rights of the Declarant are mortgageable, pledgeable, assignable and transferable. Upon any exercise of rights by the holder of any said mortgage or pledge or upon any transfer by reason of any default under any said mortgage or pledge, any one or more of such holders, its nominee or designee, any party appointed pursuant to such mortgage or pledge and any successor or assign by foreclosure or by deed in lieu of foreclosure, or otherwise, shall from time to time hold or be entitled to exercise the rights of the Declarant hereunder as fully as if named as such party herein. Any other transfer or assignment of the rights of the Declarant hereunder shall be deemed effective upon recording an assignment of such rights in the Office of the Recorder of Deeds of DuPage County, Illinois. Upon the recording of such assignment, such transferee or assignee shall be entitled to exercise the rights of the Declarant hereunder as fully as if named as such party herein. No party exercising rights as the Declarant hereunder shall have or incur any liability for the acts of any other party which previously exercised or subsequently shall exercise such rights.

14.15 Rights of Mortgagees. Notwithstanding any provision of this Declaration or the By-Laws to the contrary, the following provisions shall control:

(a) Upon written notice to the Association by any Mortgagee, the following actions will require notice to all Mortgagees:

(i) Abandonment or termination of the Association;

(ii) Any material amendment to the Declaration, Bylaws or Articles of Incorporation of the Association.

(b) Upon written request to the Association by any Mortgagee, such Mortgagee shall have the right:

(i) To examine current copies of this Declaration, the By-Laws, the Articles of Incorporation of the Association, the rules and regulations the books and records and financial statements of the Association during normal business hours;

(ii) To receive, without charge and within a reasonable time after such request, an audited financial statement prepared by the Association at the end of each of its respective fiscal years;

(iii) To receive written notices of all meetings of the Association and to designate a representative to attend all such meetings;

(iv) To receive written notice of any lapse, cancellation or material modification of any insurance policy or fidelity bond maintained by the Association;

(v) To receive notice of any delinquency in the payment of assessments or charges owed by an Owner of a Unit subject to such mortgage, where such delinquency has continued for a period of thirty (30) days;

(vi) To receive written notice of any proposed action that would require the consent of a specified percentage of first Mortgagees;

(vii) To receive written notice of any judgment rendered against the Association; and

(viii) To receive written notice of any condemnation loss or casualty loss which affects a portion of the Common Area, which loss exceeds Ten Thousand Dollars ($10,000), or which affects any Townhouse or any Unit, which loss exceeds Five Thousand Dollars ($5,000), on which there is a mortgage held by such Mortgagee.

(c) No provision of this Declaration or of the By-Laws or Articles of Incorporation of the Association, or any similar instrument pertaining to the Property or the dwellings thereon, shall be deemed to give an Owner or any other party priority over any rights of bona fide first Mortgagees in the case of a distribution to Owners of insurance proceeds or condemnation awards for losses to or a taking of the Common Area or any portion thereof or interest therein.

14.16 Applicability of Common Interest Act. Notwithstanding anything to the contrary set forth in this Declaration, the provisions of this Declaration are subject to the Common Interest Act and the provisions thereof.

ARTICLE 15
MAINTENANCE DECLARATION

15.1 Maintenance Declaration. The Developer and the Village entered into the Maintenance Declaration to clarify, define and allocate among the Association, the Village and the Unit Owners certain rights and obligations with respect to the Property and Harding Court, a dedicated street, which includes the Harding Court Spur. This Declaration and the rights and obligations of the Association and the Unit Owners are specifically subject to the terms and provisions thereof. All of the expenses of the Association in connection with its obligations under the Maintenance Declaration shall be deemed Common Area maintenance expenses and shall be included in any estimate of Association maintenance costs.

15.2 Harding Court Spur. The Harding Court Spur is designated on the Plat. The rights and obligations of the Village, the Association and the Unit Owners with respect to the Harding Court Spur are set forth in the Maintenance Declaration.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals effective upon the date set forth above.

Harding Custom Homes LLC, an Illinois limited liability company

By: _____
Mark White, Manager

STATE OF ILLINOIS)
) SS .
COUNTY OF DuPAGE)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, do hereby certify that Mark White, Manager of Harding Custom Homes LLC, an Illinois limited liability company (the "Company"), personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument pursuant to authority of the Company as his own free and voluntary act and as the free and voluntary act of the Company, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal, this _____ day of _____, 2021.

_____
Notary Public

CONSENT OF MORTGAGEE

_____, holder of a Mortgage and Assignment of Leases and Rents (the "Mortgage@) dated as of _____and recorded in the office of the Recorder of Deeds of DuPage County, Illinois, on _____ as Document Number_____, hereby consents to the execution and recording of the attached Declaration of Covenants, Conditions, Restrictions and Easements for Harding Glen Town Homes and agrees that said Mortgage is subject thereto.

IN WITNESS WHEREOF, said Bank has caused this Consent of Mortgagee to be signed by its duly authorized officers on its behalf in Illinois, on this _____ day of _____, 2021.

_____

By: _____
Title: _____

ATTEST:

_____

STATE OF ILLINOIS)
) SS
COUNTY OF DuPAGE)

I, and the State aforesaid, DO HEREBY CERTIFY that _____, the _____ _____ and _____, the _____ of_____, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such _____ and _____, respectively, appeared before me this day in person and acknowledged that they signed and delivered said instrument as their own free and voluntary act and as the free and voluntary act of said Bank, for the uses and purposes therein set forth; and said _____, the _____ then and there acknowledged that he, as custodian of the corporate seal of said Bank, did affix the corporate seal of said Bank to said instrument as his own free and voluntary act and as the free and voluntary act of said Bank, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal this _____day of _____, 2021.

_____
Notary Public

EXHIBIT "A"

Legal Description

Lot 2 of Harding Custom Homes Subdivision Unit 2, being a subdivision of the Southeast Quarter of the Northeast Quarter of Section 23, Township 39 North, Range 10, East of the Third Principal Meridian, in DuPage County, Illinois according to the Plat thereof recorded with the Recorder of Deeds of DuPage County, Illinois as document number _____, and located in the Village of Glen Ellyn, DuPage County, Illinois.

Commonly known as:	Harding Glen Town Homes Lot 2 Harding Glen Town Homes Glen Ellyn, IL 60137
Permanent Index Number:	A portion of 05-23-223-020, 05-23-223-005, 05-23-223-008 and 05-23-223-025

EXHIBIT "B"

Plat

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: Harding Custom Homes, LLC
Contact: Marvin K. Ritter
Address: 540 Duane Street, 2nd Floor
Glen Ellyn, IL 60137

IDNR Project Number: 1805192
Date: 12/22/2017

Project: Harding Avenue Townhomes
Address: Directly east of 765 Harding Avenue, Glen Ellyn

Description: Redevelopment of 3+ acres of residential R2 land to R4 to construct townhomes.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

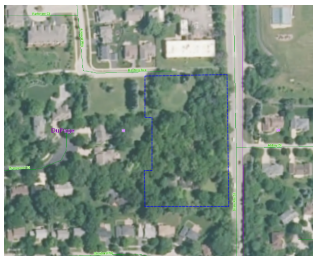
Consultation is terminated. This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage

Township, Range, Section:
39N, 10E, 23



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
Village of Glen Ellyn, Illinois
John Sterrett
535 Duane Street
Glen Ellyn, Illinois 60137

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

EcoCAT Receipt

Project Code 1805192

APPLICANT	DATE
Harding Custom Homes, LLC Marvin Ritter 540 Duane Street 2nd Floor Glen Ellyn, IL 60137	12/22/2017

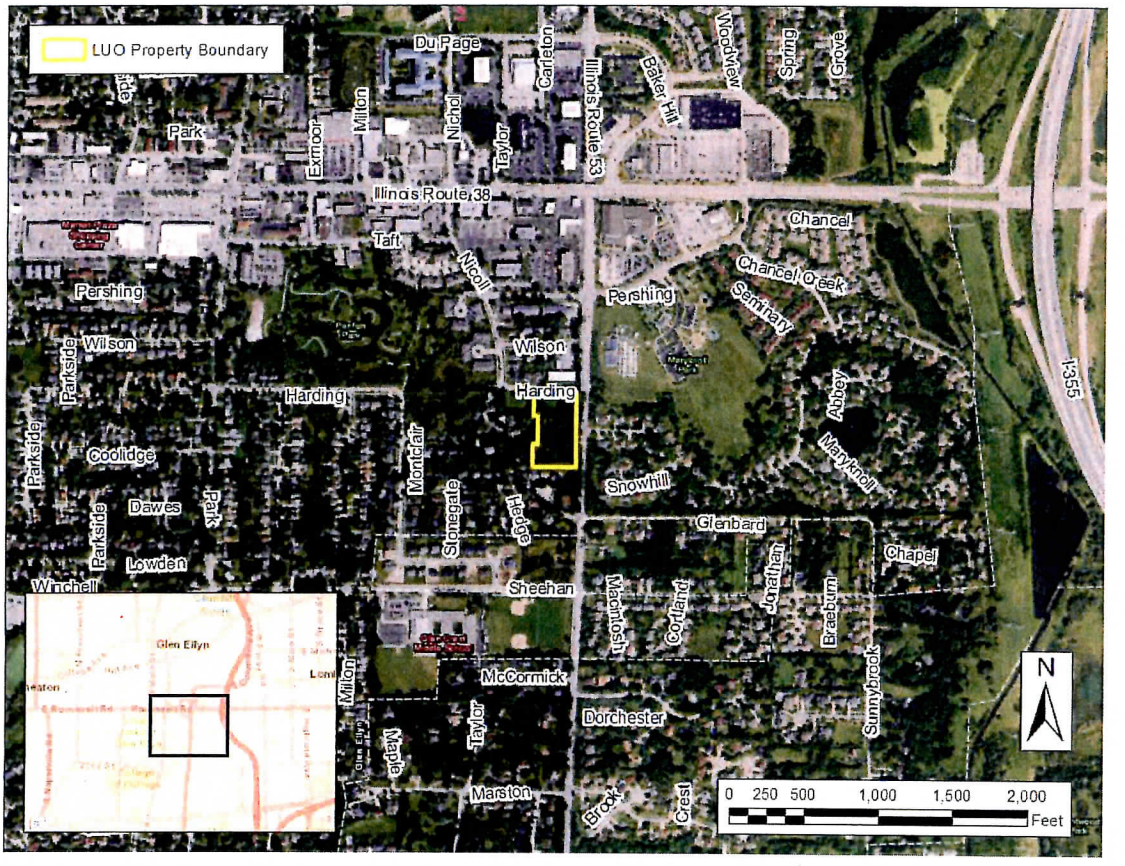
DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
EcoCAT Consultation	$ 500.00	$ 11.75	$ 511.75

TOTAL PAID $ 511.75

Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
217-785-5500
dnr.ecocat@illinois.gov

KANE-DUPAGE
SOIL AND WATER CONSERVATION DISTRICT

LAND USE OPINION
17-126



December 18, 2017

Prepared for:
Village of Glen Ellyn

Petitioner:
Harding Custom Homes, LLC
540 Duane Street, 2nd floor
Glen Ellyn, IL 60137

2315 Dean Street, Suite 100, St. Charles, IL 60175 | Phone: (630) 584-7960

Petitioner: Harding Custom Homes, LLC
Contact Person: Marv Ritter, 630-790-8144
Unit of Government Responsible for Permits: Village of Glen Ellyn
Acreage: 3.28
Location of Parcel: Section 23, Township 39 N, Range 10 E
Property Address/PIN#: SW corner of Harding Avenue and Route 53
Existing Land Use: Single Family and Vacant land
Surrounding Land Use: Single Family and Townhomes
Proposed Land Use: Townhomes

Natural Resource Concerns

Land Cover in the Early 1800's: This site is located in an area previously identified as prairie. (See page 2 for more information.)

Wetlands: The DuPage County Wetland map does not identify wetland areas on this site. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of any wetlands. (See page 3 for more wetland information.)

Floodplain: There are no floodplain areas identified on this site. (See page 4.)

Streams: There are no streams on this site. (See page 5.)

Regulations: Please note that additional permits are required for any development impacting wetlands, streams or floodplain areas. Please see page 6 for regulation information.

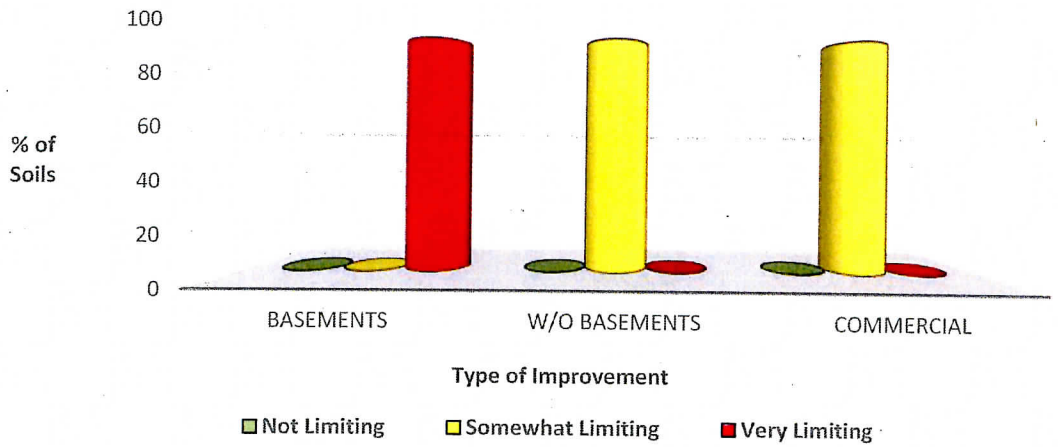
Aquifer Sensitivity: This site is classified as having a very limited potential for aquifer contamination. (See page 7.)

Topography and Drainage: Please refer to page 8 for information regarding site topography and drainage.

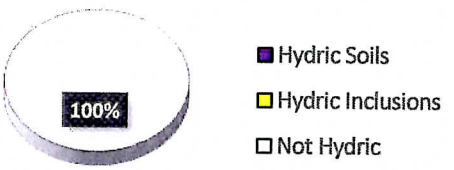
Stormwater: See page 9 for information regarding stormwater management.

Soil Erosion: Any development on this site should include a soil erosion and sediment control plan. (See page 9.)

Building Limitations: Soils at this site may contain limitations for dwellings with basements, dwellings without basements, and small commercial buildings. See page 11 and attached Soils Tables located on the final pages this report. All information is from the Soil Survey of DuPage County, Illinois.



Hydric Soils: There are no hydric soils identified on this site. (See page 12.)



LAND USE OPINION

Land Use Opinion: The most current natural resource data indicates the following concerns for this site: **Soil Limitations, Soil Erosion and Sediment Control, and Stormwater Management.** Based on the information in this report, it is the opinion of the Kane-DuPage Soil and Water Conservation District Board that this site **may be suited** for land use change **if** the previously mentioned concerns are addressed.

SITE INSPECTION

A site inspection was conducted by Resource Assistant, Jennifer Shroder on January 9, 2018. The following photos were taken during this inspection and reflect the site conditions at that time.

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PURPOSE AND INTENT

This report presents natural resource information to officials of the local governing body and other decision makers. Decisions concerning variations, amendments or relief of local zoning ordinance may reference this report. Also, decisions concerning the future of a proposed subdivision of vacant or agricultural lands, and the subsequent development of these lands because of these decisions may reference this report. This report is a requirement under the Soil and Water Conservation District Act contained in ILCS 70, 405/1 ET seq.

This report intends to present the most current natural resource information available in an understandable format. It contains a description of the present conditions and resources available and their potential impact on each other. This information comes from standardized data, on-site investigations and other information furnished by the petitioner.

Please read the entire report to coordinate and interrelate all natural resource factors considered. This report, when used properly, will provide the basis for good land use change decisions and proper development while protecting the natural resource base of the county.

The conclusion of this report in no way indicates the impossibility of a certain land use. However, it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Please direct technical questions about data supplied in this report to:

Kane-DuPage
Soil and Water Conservation District
2315 Dean Street, Suite 100
St. Charles, IL 60175
Phone: (630) 584-7960

LAND COVER IN THE EARLY 1800'S

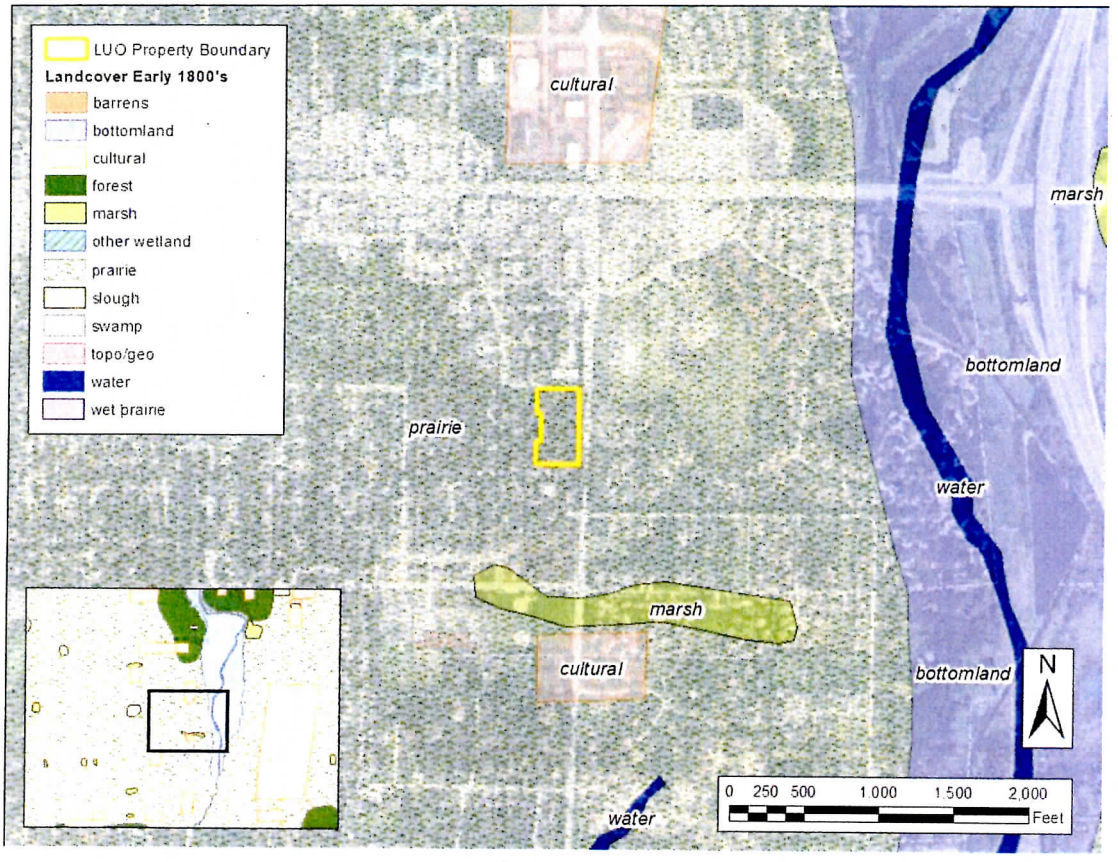

Figure 1: Land Cover in the Early 1800's

Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.

These surveys represent one of the earliest detailed maps for Illinois. The surveys began in 1804 and were largely completed by 1843. They predate our county land ownership maps and atlases. These plat maps and field notebooks contain a wealth of information about what the landscape was like before the flood of settlers came into the state.

The vast majority of the landscape in this part of Illinois in the early 1800's consisted of two different natural resource areas. These two areas were prairie and forest. Prairie and woodland ecosystems are extremely valuable resources for many reasons. These areas:

- provide wildlife habitat and support biodiversity
- provide areas for recreational opportunities
- improve soil health and reduce soil loss
- improve air and water quality

Other designations include, cultural or (agricultural area), marsh, wet prairie, wetland and water. Please note that these designations are based on surveys taken in the early 1800's, and may not represent exact site conditions.

This site is located in an area surveyed as prairie on the land cover in the early 1800's map. The District recommends preserving as much as of the natural character of the site as possible during this land use change. It is also recommended that native plants be utilized for landscaping whenever possible. Removal of invasive species is also encouraged.

WETLANDS

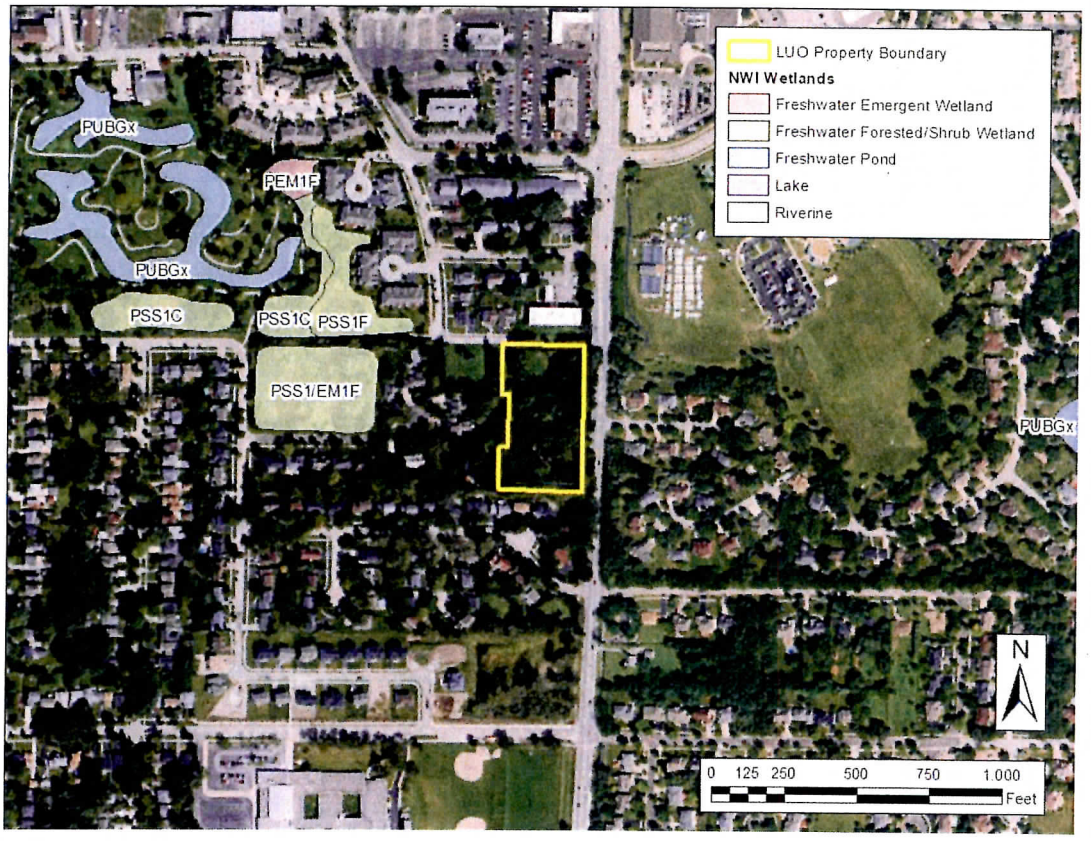

Figure 2: DuPage County Wetlands

Wetlands of DuPage County Illinois. http://gis.dupageco.org/arcgis/rest/services/OpenData. 2015 DuPage County.

Wetlands are some of the most productive and diverse ecological systems on earth. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency define wetlands as follows, "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Some other common wetlands located in this part of Illinois are fens and wet meadows.

Wetlands function in many ways to benefit mankind. Some of their many functions and benefits include:

- Controlling flooding by offering a slow release of excess water downstream or through the soil.
- Cleansing water by filtering out sediment and pollutants.
- Functioning as rechargers of our valuable groundwater.
- Providing essential breeding, rearing, and feeding grounds for many species of wildlife.

A review of the DuPage County Wetland Map indicates that wetlands do not appear to exist on this site. In the event that any indications of wetlands are identified on this site during the proposed land use change. A wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of these wetlands. Please see page 6 for wetland regulation information.

FLOODPLAIN

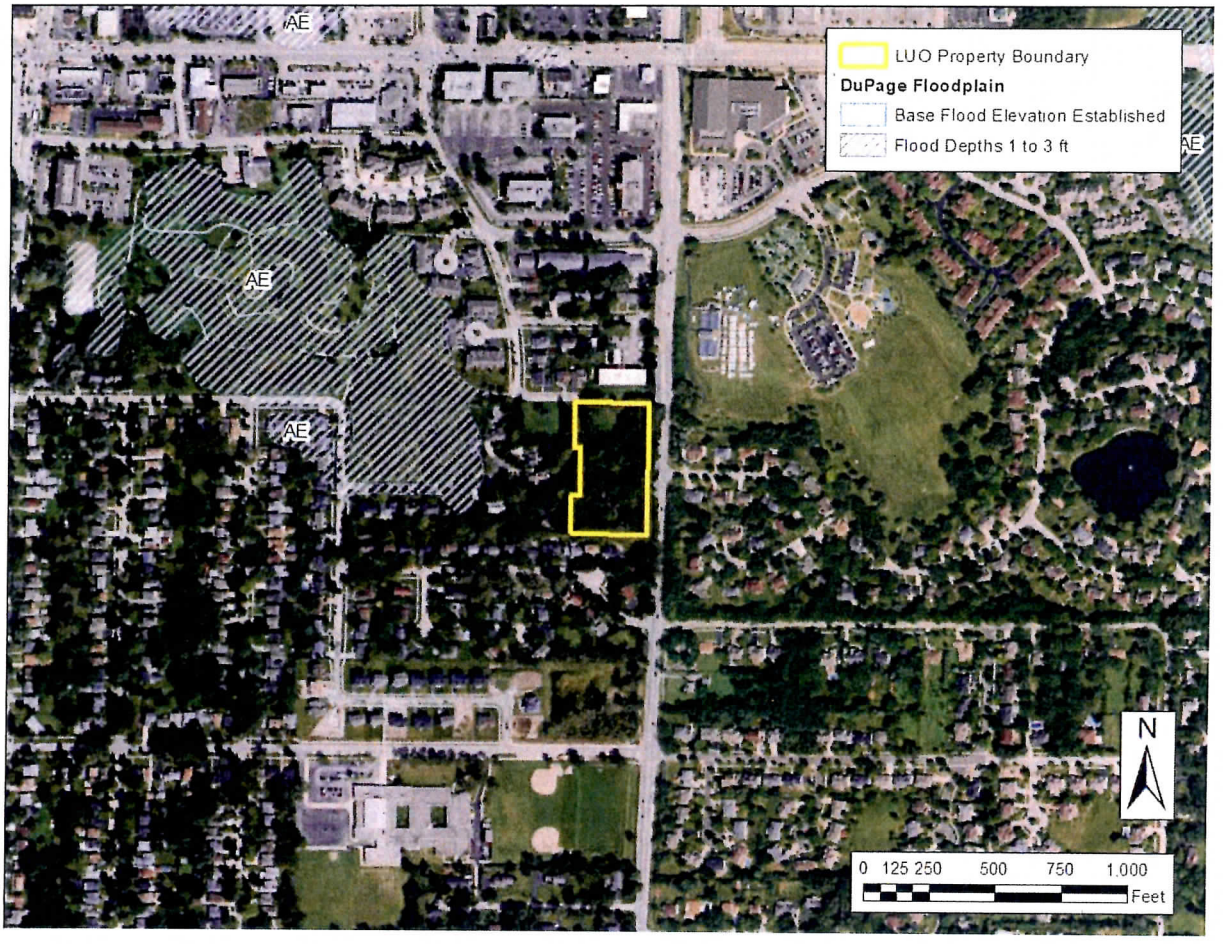

Figure 3: Floodplain Map

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.

From FEMA's Floodplain Natural Resources and Functions Chapter 8, "Undeveloped floodplain land provides many natural resources and functions of considerable economic, social and environmental value. Nevertheless, these and other benefits are often overlooked when local land-use decisions are made. Floodplains often contain wetlands and other important ecological areas as part of a total functioning system that impacts directly on the quality of the local environment."

There are so many benefits of the floodplain that not all can be listed here, but the following is a general list of benefits and functions:

- natural flood storage and erosion control
- water quality maintenance
- groundwater recharge
- nutrient filtration
- biological productivity/wildlife habitat
- recreational opportunities/aesthetic value

According to the Flood Insurance Rate Map, no part of this site is within the boundaries of a 100-year floodplain. This development should not impede the beneficial functions of the floodplain. Please see 6 for information regarding floodplain regulations.

STREAMS AND WATERSHED MANAGEMENT

Rivers and Streams are necessary components of successfully functioning ecosystems. It is important to protect the beneficial functions and integrity of our local streams and rivers. Development near stream systems has the potential to increase flooding, especially in urban areas where there is a lot of impervious surface and a greater amount of stormwater runoff. Pollution is also an issue for stream systems in urban and rural areas. It is rare for any surface waters to be impacted by only one source of pollution. With few exceptions, every land-use activity is a potential source of nonpoint source water pollution (IEPA– Nonpoint Source Pollution).

The Illinois Environmental Protection Agency provides the following in regards to nonpoint source pollution, "Nonpoint source pollution (NPS) occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. Examples of or sources of NPS pollution in Illinois include runoff from farm fields, livestock facilities, construction sites, lawns and gardens, city streets and parking lots, surface coal mines, and forestry. The major sources of NPS pollution in Illinois are agriculture, urban runoff, and habitat modification."

Local watershed management planning is an important effort that involves citizens of a watershed in the protection of their local water resources. Water quality is a reflection of its watershed.

Common Watershed Goals:

- Protect and restore natural resources
- Improve water quality
- Reduce flood damage
- Enhance and restore stream health
- Guide new development to benefit watershed goals
- Preserve and develop green infrastructure
- Enhance education and stewardship

There are many subwatershed plans that have already been developed in DuPage County. Please reference the website below for completed watershed plans in DuPage County, and additional watershed information.

https://www.dupageco.org/EDP/Stormwater_Management/6597/

Nutrient management is of vital importance to the health of our rivers and streams. Nutrient load in our local streams and rivers has contributed to the Gulf of Mexico hypoxia, or a "dead zone" located where the Mississippi River meets the Gulf of Mexico. This dead zone hosts a toxic algal bloom, and supports little to no biological activity. Yearly averages indicate the dead zone to be greater than 5,000 square miles in size. Illinois was required and has introduced a plan to reduce nutrient loss from point source pollution sources, such as wastewater treatment plants and industrial wastewater, as well as nonpoint pollution sources. Read Illinois's Plan for reducing nutrient loss here:

http://www.epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy/index

REGULATORY INFORMATION

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against floodway encroachment, maintenance and enhancement of water quality, protection of fish and wildlife habitat As well as recreational resources. Unregulated use of waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

REGULATORY AGENCIES:

Wetland/U.S. Waters: U.S. Army Corps of Engineers, Chicago District, 111 North Canal Street, Chicago, IL 60606-7206. Phone: (312) 353-6400.

http://www.lrc.usace.army.mil/

Wetland/Isolated: DuPage County Stormwater Management. 421 North County Farm Road, Wheaton, IL 60187. (630) 407-6700.

http://www.dupageco.org/swm/

Floodplains: Illinois Department of Natural Resources\Office of Water Resources, 2050 W. Stearns Road, Bartlett, IL 60103. (847)608-3100.

https://www.dnr.illinois.gov/WaterResources/Pages/Permit%20Programs.aspx

Who Must Apply:

Wetland and/or Floodplain Permit: Anyone proposing to dredge, fill, riprap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, floodplain or floodway subject to State or Federal regulatory jurisdiction should apply for agency approvals.

Construction Permit: Anyone disturbing an acre or more of land during proposed construction activities should apply for the NPDES General Construction Permit ILR10. Building and stormwater permits should also be obtained locally from municipal government and/or DuPage County.

NPDES General Construction Permit ILR10: Illinois Environmental Protection Agency, Division of Water Pollution Control, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794. (217)782-0610.

http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/construction/index

Coordination: We recommend early coordination with the regulatory agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate/compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stage. This could reduce time required to process necessary approvals. Please be advised that failure to coordinate with regulatory agencies could result in project shut down, fines and/or imprisonment.

AQUIFER SENSITIVITY

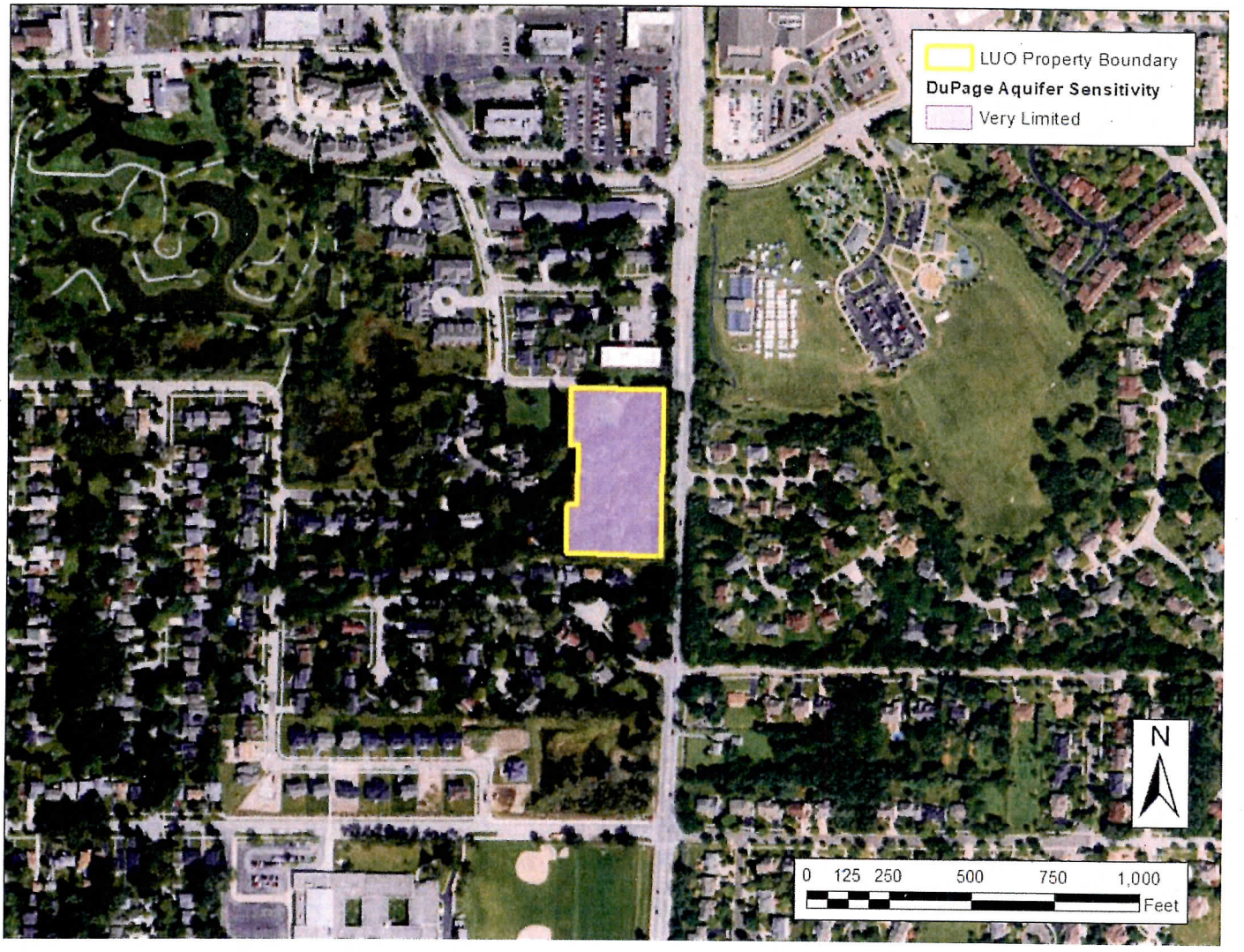

Figure 4: Aquifer Sensitivity Map

Department of Energy and Natural Resources, Illinois State Geological Survey: Potential for Agricultural Chemical Contamination of Aquifers in Illinois: 1995 Revision Environmental Geology 148

The U.S. Environmental Protection Agency (1993) defines aquifer sensitivity/contamination potential as "a measure of the ease with which a contaminant applied on or near the land surface can migrate to an aquifer." Aquifers function as a storage area for groundwater recharge, which makes them a reliable source of fresh water. Groundwater from aquifers is a valuable source of drinking water when it remains uncontaminated.

According to the Potential for Agricultural Chemical Contamination of Aquifers in Illinois: 1995 Revision Environmental Geology 148 prepared by the Department of Energy and Natural Resources, Illinois State Geological Survey, this site lies completely within a zone rated as **very limited** with respect to potential for contamination from spilled or applied substances to the soil surface.

TOPOGRAPHY AND DRAINAGE

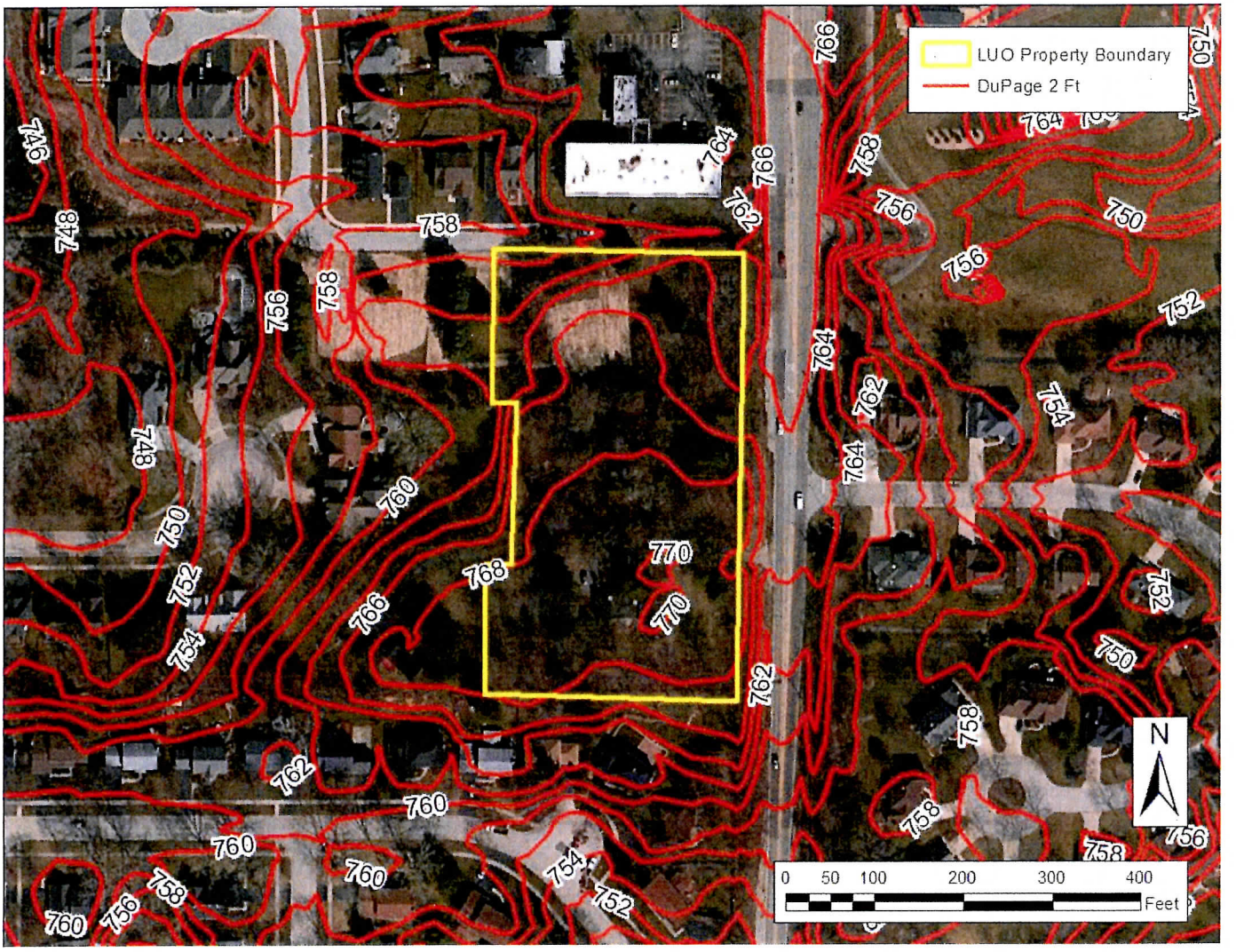

Figure 5: Municipalities 2 Ft Contours

USGS Topographic maps and other topographic surveys give information on elevations, which are important to determine slopes, natural drainage directions, and watershed information. Elevations determine the area of impact of flooding. Slope information determines steepness and erosion potential of the site. Slope has the greatest impact in determining the erosion potential of a site during construction activities. Drainage directions determine where water leaves the property in question, possibly impacting surrounding natural resources.

It is important to consider drainage during any proposed construction onsite. Any areas where water leaves the site should be monitored for potential pollutants which could contaminate downstream waters.

The high point of this property is located in the southern portion of the site at an elevation of 770 feet above mean sea level. The property generally drains to the north via overland, at the lowest elevation on the property at 760 feet above sea level.

STORMWATER

Any proposed removal of vegetation, compaction of soil, and addition of impervious surfaces (rooftops, roadways, etc.) will greatly increase the amount of stormwater runoff generated on this site. The District recommends the use of onsite stormwater management strategies whenever possible. IEPA now recommends that stormwater pollution prevention plans include post-construction stormwater management which retains the greatest amount of post-development stormwater runoff practicable, given the site and project constraints. From the ILR10 permit for construction sites 1 acre or more, "Such practices include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices)."

Site assessment with soil testing should help to determine what stormwater management practices are best for your site. Insufficient stormwater management has the potential to cause or aggravate flooding conditions on surrounding properties, or elsewhere in the watershed. Please refer to the DuPage County Stormwater Ordinance for stormwater requirements and minimum standards.

http://www.dupageco.org/EDP/Stormwater_Management/Regulatory_Services/1420/

SOIL EROSION

Development on this site should include the use of a soil erosion and sedimen-tation control plan. Due to the soil type and slope of the site, the District believes that the potential for soil erosion during and after any proposed construction will be **moderate**. Furthermore, the erosion and resulting sedimentation may become a primary nonpoint source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, degrade water quality, and destroy aquatic ecosystems lower in the watershed. Soil erosion also increases the risk of flooding due to choking culverts, ditches, and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

Erosion and sedimentation control measures include: 1) staging the construction to minimize the amount of disturbed areas present at the same time, 2) maintaining or planting vegetative groundcover, and 3) keeping runoff velocities low.

Soil erosion and sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Special care must be taken to protect any wetlands, streams and other sensitive areas.

Please refer to the Illinois Urban Manual for erosion and sediment control information and technical guidance when creating erosion and sediment control plans. The practice standards and standard drawings from the Illinois Urban Manual represent the minimum standard in Illinois.

SOILS INFORMATION

IMPORTANCE OF SOILS INFORMATION

Soils information is taken from the Soil Survey of Kane County, Illinois, United States Department of Agriculture, Natural Resource Conservation Service. This information is important to all parties involved in determining the suitability of the proposed land use change.

SOIL MAP UNITS

The soil survey map of this area (Figure 1) indicates soil map units. Each soil map unit has limitations for a variety of land uses such as septic systems, and buildings site development, including dwellings with and without basements. All of the soils contain **very limiting** conditions for building site development. **See Soils Interpretations section and attached Soil Tables.**

The Soil Survey Geographic (SSURGO) data base was produced by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies for the Soil Survey of Kane County, Illinois. The soils were mapped at a scale of 1:12,000. The enlargement of these maps to scales greater than that at which they were originally mapped can cause misunderstanding of the detail of the mapping. If enlarged, maps do not show the small areas of contrasting soil that could have been shown at a larger scale. The depicted soil boundaries and interpretations derived from them do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only.

LIST OF SOIL MAP UNITS

SOIL MAP UNIT	PERCENT OF PARCEL	ACRES
Markham— 531C2	100%	3.28
Table 1: Soil Map Units	**Total**	**3.28**

All percentages and acreages are approximate.

We suggest that a geotechnical engineer conduct an on site investigation. This should determine, specifically, what soils type is present at a particular location, along with its associated limitations or potential for a particular use. It will also assist in determining which types of engineering procedures are necessary to account for the limitations of the soil on the site.

BUILDING LIMITATIONS

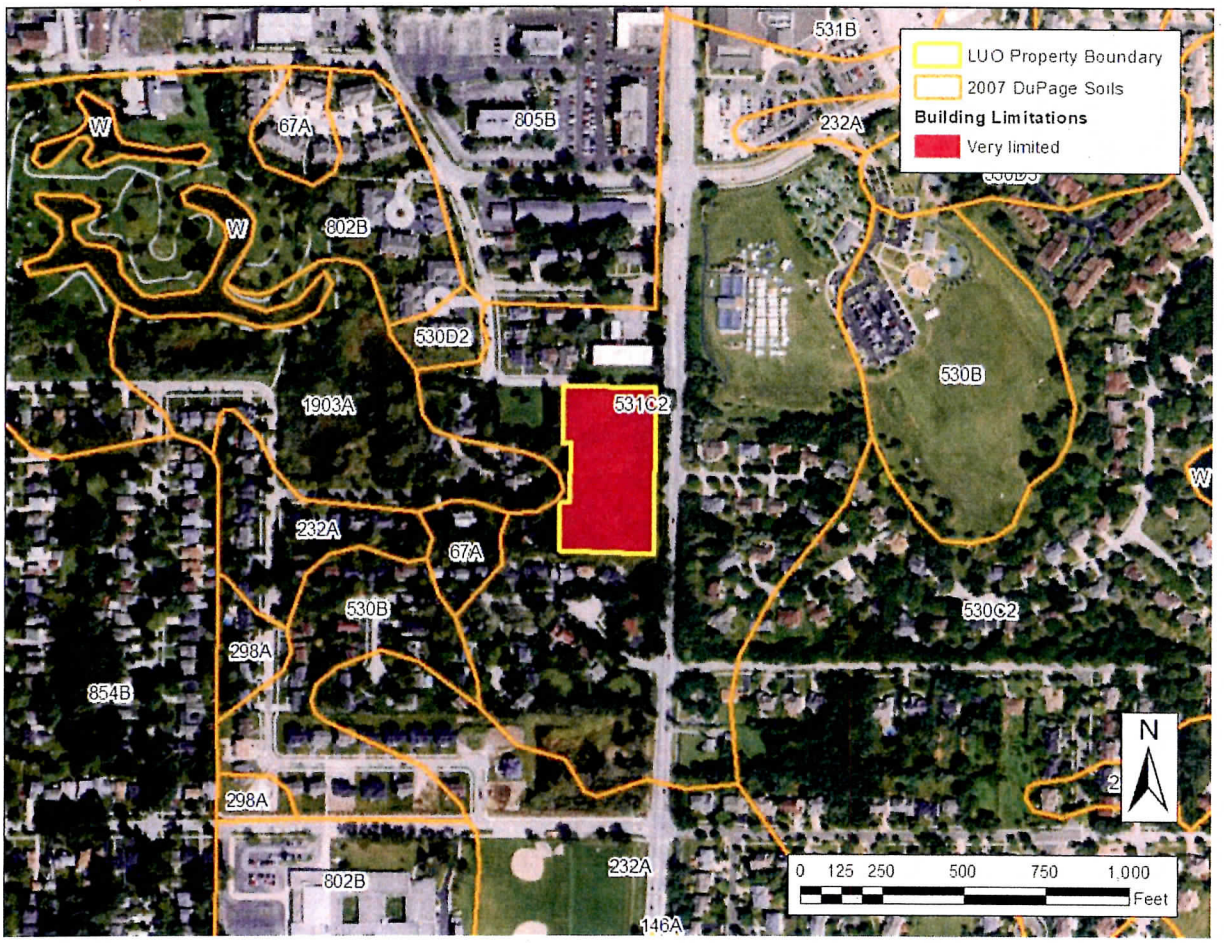

Figure 6: Soil Survey Map

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Areas shaded red represent VERY LIMITING limitations for building site development, areas shaded yellow represent SOMEWHAT LIMITING limitations for building site development, and unshaded areas represent NOT LIMITING limitations for building site development.

The soil limitation ratings are used mainly for engineering designs of dwellings with or without basements, local streets and roads, small commercial buildings, septic tank absorption fields, and etc. The ratings of not limiting, somewhat limiting, and very limiting are based on national averages and are defined and used as follows:

Not Limiting (Slight) - This limitation rating indicates that the soil properties are generally favorable for the specified use and that any limitations are minor and easily overcome.

Somewhat Limiting (Moderate) - This rating indicates that the soil properties and site features are unfavorable for the specified use, but that the limitations can be overcome or minimized with special planning and design.

Very Limiting (Severe) - This indicates that one or more soil properties or site features are very unfavorable and difficult. A major increase in construction effort, special designs, or intensive maintenance is required. These costly measures may not be feasible for some soils that are rated as severe.

There are limitations for building site development on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.

HYDRIC SOILS

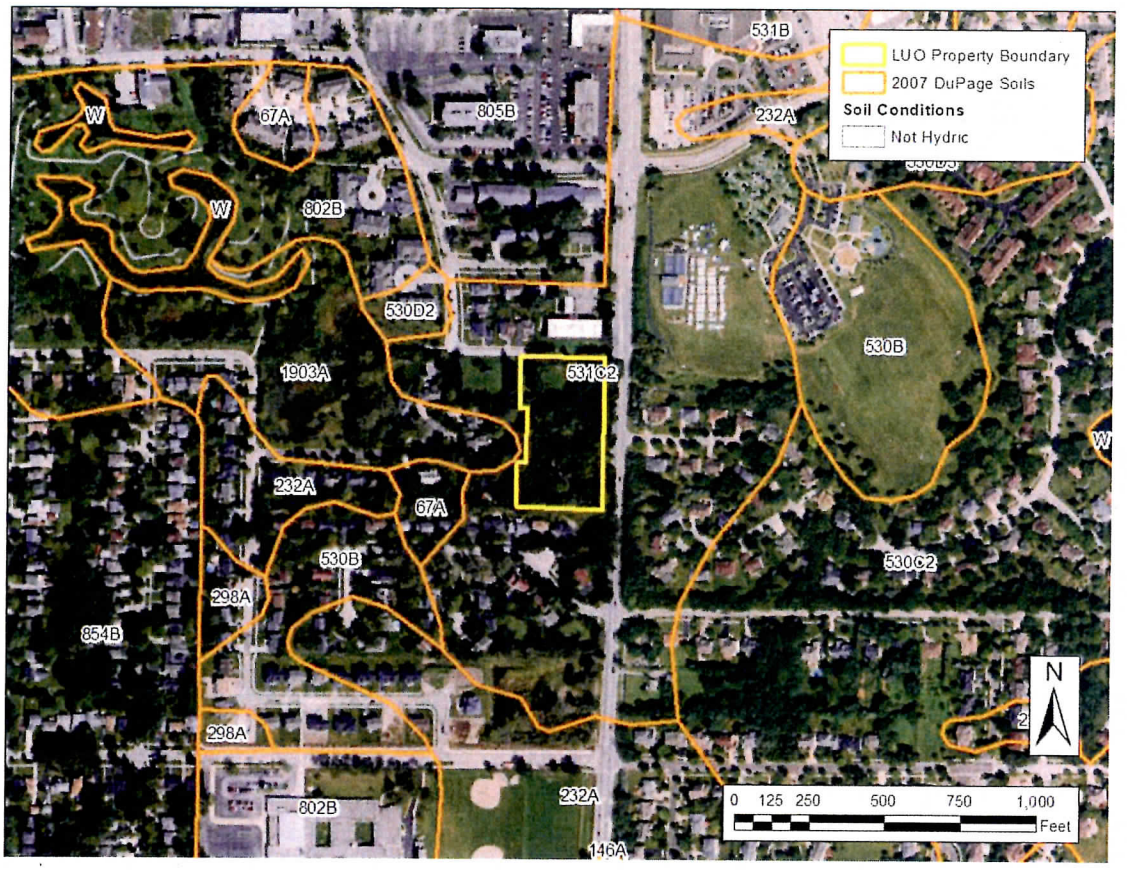

Figure 7: Hydric Soils

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Hydric soils are shaded purple, soils with hydric inclusions are shaded yellow, and not hydric soils are hollow.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Hydric inclusions are small areas, or inclusions, of nonhydric soils in the higher positions of the landform or map units dominantly made of nonhydric soils with inclusions of hydric soils in the low positions on the landform.

Hydric soils provide limitations for building site development due to their potential for ponding and poor drainage capacity. This often results in the need for improved drainage onsite prior to any proposed development. Any change to the natural drainage onsite has the potential to create flooding issues on and adjacent to the site. Hydric soils are often organic (peat or muck) and not suitable construction material. Hydric soils also may indicate wetlands onsite.

There are no hydric soils or hydric inclusions on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.

Our opinion is based on information from the following sources:

Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.

Wetlands of DuPage County Illinois. http:/gis.dupageco.org/arcgis/rest/services/OpenData. 2015 DuPage County.

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.

U.S. Geological Survey, Illinois Digital Orthophoto Quadrangles, 2006 photos, Published: Champaign, Illinois State Geological Survey, 2006.

Nonpoint Source Pollution– What's it All About?. Illinois Environmental Protection Agency. http://www.epa.illinois.gov/topics/water-quality/watershed-management/nonpoint-sources/what-is-nonpoint-source-pollution/index. 2015 Illinois EPA.

Department of Energy and Natural Resources, Illinois State Geological Survey: Potential for Agricultural Chemical Contamination of Aquifers in Illinois: 1995 Revision Environmental Geology 148

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County, IL SSURGO soil layer certified in 2007, and DuPage County, IL SSURGO soil layer certified in 2007 and accompanying interpretations.

An on-site investigation conducted by the SWCD Resource Assistant, Jennifer Shroder on January 9, 2018.

We respectfully submit this information in compliance with the Illinois Soil and Water Conservation Districts Act (ILCS 70, 405/1 et seq). The District Board reviews proposed developments. Jennifer Shroder, Resource Assistant, prepared this report.

cc: Harding Custom Homes, LLC
540 Duane Street, 2nd Floor
Glen Ellyn, IL 60137

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Map unit: 531C2 - Markham silt loam, 4 to 6 percent slopes, eroded

Component: Markham, eroded (96%)

The Markham, eroded component makes up 96 percent of the map unit. Slopes are 4 to 6 percent. This component is on ground moraines. The parent material consists of Thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, densic material, is 20 to 55 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 18 percent.

Dwellings With Basements

Rating Options

Attribute Name: Dwellings With Basements

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Very limited	Markham, eroded 96% Depth to saturated zone Orthents, clayey 2% Shrink-swell Depth to saturated zone

Dwellings Without Basements

Rating Options

Attribute Name: Dwellings Without Basements

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Markham, eroded 96% Depth to saturated zone Shrink-swell

Small Commercial Buildings

Rating Options

Attribute Name: Small Commercial Buildings

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Markham, eroded 96% Slope Depth to saturated zone Shrink-swell

CONTACTS

Federal Agencies

U. S. Army Corps of Engineers
Regulatory Branch
231 S. LaSalle St, Suite 1500
Chicago, Illinois 60604
(312)846-5330

http://www.usace.army.mil

U.S.D.A. Natural Resources Conservation Service
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7960 ext. 3

http://www.il.nrcs.usda.gov/

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
230 S Dearborn Suite 2938
Chicago IL 60604
(847)298-3250

http://www.fws.gov/

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604
(312)353-2000/(800)621-8431

http://www.epa.gov/region5/
r5hotline@epa.gov

State Agencies

Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271
(217)782-6302

http://dnr.state.il.us/

Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-3397

http://www.epa.state.il.us/

Illinois Department of Transportation
2300 South Dirksen Parkway
Schaumburg, Illinois 62764-0001
(217)782-7820/(800)452-4368

http://www.dot.state.il.us/

Illinois Natural History Survey
1816 S Oak St MC652
Champaign, Illinois 61820
(217)333-6880

http://www.inhs.uiuc.edu/

County Offices

DuPage County
Administration Building
421 North County Farm Road
Wheaton, Illinois 60187
(630)407-6500

http://www.co.dupage.il.us/

Development Department
Room 2-800 in Building 421
(630)407-6700

Environmental Concerns Department
Stormwater Management Division
(630) 407-6700

Solid Waste Department
(630)407-6700

Health Department
115 North County Farm Road
Wheaton, Illinois 60187
(630)682-7400

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May 6, 2020
L-91,076

TESTING SERVICE CORPORATION

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Geotechnical & Environmental Engineering

Construction Materials Engineering & Testing

Laboratory Testing of Soils, Concrete & Asphalt

Geo-Environmental Drilling & Sampling

Report of Soils Exploration

Proposed Townhome Buildings

Harding Townhomes

East of Harding Avenue & Nicoll Way

Glen Ellyn, Illinois

Prepared For:

Harding Custom Homes, LLC

540 Duane Street, 2nd Floor

Glen Ellyn, Illinois 60137

GEOTECHNICAL GROUP

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Local Office
May 6, 2020

Mr. Marv Ritter
Harding Custom Homes, LLC
540 Duane Street, 2nd Floor
Glen Ellyn, IL 60137

Re: L-91,076
Proposed Townhome Buildings
Harding Townhomes
East of Harding Avenue and Nicoll Way
Glen Ellyn, Illinois

Dear Mr. Ritter:

This report presents results of a soils investigation performed for proposed townhome buildings for the Harding Townhomes site in Glen Ellyn, Illinois. These geotechnical engineering services are being provided in accordance with TSC Proposal No. 63,923 dated October 15, 2019 and the attached General Conditions, incorporated herein by reference.

The project site is located south of Harding Avenue and east of its intersection with Nicoll Way and bordered by Illinois Route 53 to the east. Single-family homes previously located along Harding Avenue were demolished around 2012. A single family home is presently located on the southern third of the property with driveway connected to IL-53, to be demolished to make way for new construction. The majority of the site consists of a grass and weed covered field with mature trees around its perimeter. Ground surface elevations at the boring locations were in the range of 760 to 770, a grade differential of around 10 feet.

Current plans call for six (6) townhome buildings (4 to 6 units each in size) to be constructed on the property. They will presumably consist of 2 to 3-story wood-frame structures with attached garages and up to 9-foot basements. Top of foundation (T/F) elevations for the subject lots are indicated on grading plans prepared by Carradus Land Survey, Inc. dated February 20, 2020. The T/F elevations typically lie about 1 to 10 feet above existing grades, i.e. most of the site is to be raised as part of mass-grading.

Field Investigation and Laboratory Testing

A total of eight (8) soil borings were performed as part of this soils exploration. They were all extended to 15 feet below existing grade. The boring locations were selected and laid out in the field by TSC. Ground surface elevations at the borings were also acquired by TSC using a Trimble R8s GNSS receiver, being rounded to the nearest 0.5 foot. Reference is made to the enclosed Boring Location Plan for the drilling layout, ground surface elevations at the borings also being shown.

The borings were drilled and samples tested in accordance with currently recommended American Society for Testing and Materials specifications. Soil sampling was performed at 2½-foot intervals in conjunction with the Standard Penetration Test (SPT), for which driving resistance to a 2" split-spoon sampler (N values in blows per foot) provides an indication of the relative density of granular materials and consistency of cohesive soils. It should be noted that the SPT samples were obtained using an automatic hammer which has relatively high energy. Water level readings were taken during and following completion of drilling operations, with the boreholes then immediately backfilled for safety reasons and those in pavement areas also patched at the surface.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the Unified Soil Classification System. Laboratory testing included water content determinations for all cohesive and intermediate (silt or loamy) soil types. An estimate of unconfined compressive strength was obtained for all cohesive soils using a calibrated pocket penetrometer (Qp), with actual measurements of unconfined compressive strength (Qu) performed on representative samples of native clay soils.

Reference is made to the boring logs included with this report indicating subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. Definitions of descriptive terminology are also included. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers is likely to be more gradual. Fluctuations in the groundwater table may also occur due to variations in precipitation (short-term and seasonal) as well as rises or drops in pond, creek or other nearby surface water features, i.e. groundwater levels at a future date may be higher or lower than those recorded at the time of drilling.

Discussion of Test Data

Surficial topsoil (native and/or respread) was 6 to 14 inches thick at Borings 2, 3, 5, 6 and 8 (5 total), being up to 3 feet deep at Borings 1 and 7. These deeper clayey topsoil materials exhibited moisture contents in the range of 26 to 31 percent.

Boring 4 was drilled on an existing asphalt driveway. The bituminous concrete was approximately 3 inches thick overlying 3 inches of sand and gravel base course materials. The pavement thickness was estimated from the side of the augered borehole and should be considered approximate; pavement cores may be taken if more accurate measurements or descriptions of the paving materials (including possible fabric interlayers) are required.

Medium stiff to very stiff native silty clay soils (of apparent medium to high plasticity) were encountered below the topsoil layer at Borings 1, 2, 6 and 7 (4 total). These CL/CH materials (Unified classification) typically extended 3 to 6 feet below existing grade, and up to 8 feet deep at B-7. They were typified by low to moderate unconfined compressive strengths typically ranging from 0.6 to 2.0 tons per square foot (tsf) at relatively high moisture contents between 25 and 31 percent.

Medium stiff to hard native silty clay and very silty clay soils of low to medium plasticity (CL by Unified classification) were found underlying the above materials in the borings and extending to completion depths. They had unconfined compressive strengths ranging from 0.75 to 4.5+ tsf at moisture

contents varying from 13 to 24 percent. Loose to medium dense silt, clayey silt and/or clayey sand and gravel deposits were found interbedded within the cohesive soil mass at Borings 1, 3 - 5 and 7 (5 total), having SPT N-values ranging from 4 to 24 bpf.

Free water was initially encountered at depths of 5 to 8 feet below existing grade in Borings 1, 4 and 7. Upon completion of drilling operations, the water levels in the boreholes remained within 3 feet of initial readings. The remaining borings were “dry” both during and upon completion of drilling operations.

Analysis and Recommendations

Bearing Table/Building Foundations

Borings 1 - 8 were drilled for the six (6) proposed townhome buildings to be constructed on the site. The associated townhomes will presumably consist of 2 to 3-story slab-on-grade structures with attached garages and 9-foot basements. Garage footings will typically bear at T/F -4'-0" (frost depth) and basement footings at T/F -9'-8".

Summarized in the following table are the shallowest depth/elevation at which in-situ soils considered capable (in most cases marginally capable) of supporting a net allowable soil bearing pressure of 3000 pounds per square foot (psf) were encountered at the boring locations. Added notes relate to the presence of relatively low strength clay or loose silt and sand deposits underlying the bearing elevations shown (L), marginal bearing soils for fill placement and/or foundation support (M). Finally, the ground surface and T/F elevations nearest to the borings have been correlated to estimate the depth of fill needed. The 3000 psf bearing value is typical and generally satisfactory for residential construction.

Boring No.	Ground Surface Elevation	Topsoil Depth (Feet)	3000 psf Native Bearing Soils*		Top of Foundation	New Fill**
			Depth (Feet)	Elevation		
1	760.5	2.5	2.5 ML	758.0	771.0	12.0
2	768.5	0.6	1.0 M	767.5	773.0	5.5
3	769.0	1.2	1.5 M	767.5	775.5	7.0
4	770.0	0.0	0.5	769.5	773.5	4.0
5	768.5	1.0	1.0	767.5	773.5	5.0
6	769.0	0.8	1.0 ML	768.0	774.5	5.5
7	764.5	3.0	3.0 ML	761.5	772.5	10.0
8	765.5	0.5	0.5 ML	765.0	768.5	2.5

* The depth/elevation of 3000 psf native bearing soils, to also be used in connection with either foundation or building pad undercuts, have been rounded to the nearest 0.5 foot.

**	The height of new fill is estimated from T/F - 1' -0" after topsoil has been stripped.
M	Marginal bearing soils for fill placement and/or foundation support.
L	Relatively low strength or loose soil deposits found underlying the bearing elevation given in the table.

Native soils found directly underlying the topsoil layer are considered suitable (or marginally suitable) for support of 3000 psf bearing. These are for the most part indicated by bearing depths ranging from 0.5 to 3.0 feet in the above table. Uppermost bearing soils consist of cohesive soils exhibiting unconfined compressive strengths of 1.5 tsf or greater, 0.5 to 1.5 tsf and/or exhibiting relatively high moisture contents in the case of marginal bearing soils.

In these areas of satisfactory (or marginally satisfactory) bearing, footings may also be constructed on new “engineered” fill that is placed as part of mass-grading. Assuming that surficial topsoil and root zone materials are stripped and new fill placed and compacted to the 95 percent criterion, footings constructed on the engineered fill may also be sized for 3000 psf bearing.

Marginal bearing soils were encountered at relatively shallow depths in a majority of the borings. They include silty clay soils having unconfined compressive strengths of 0.5 to 1.5 tsf and/or moisture contents exceeding 25 percent. If relatively low strength or unstable soils are exposed at footing grade, they should be removed and replaced with structural backfill. Undercuts of 1 to 2 feet are typically required based on field observations. Foundation overexcavations are then backfilled and footings constructed at design elevations in accordance with the following recommended procedures.

Relatively low strength or unstable soils exposed at footing grade should be removed and replaced with structural backfill. In this regard, these materials were found underlying a stiffer crust in Borings 1, 6, 7 and 8, to possibly be exposed in deeper foundation excavations. Undercuts of 1 to 3 feet at basement footing grade will likely be required based on field observations. Foundation overexcavations are then typically backfilled and footings constructed at design elevations in accordance with the following recommended procedures.

The base of foundation overexcavations should exceed footing dimensions by at least 12 inches along each side, 6 inches for every foot of overdig where the undercut exceeds 2.0 feet in depth. Replacement materials should consist of crushed stone, crushed gravel or recycled concrete between ¼ to 3 inches in size and containing no fines; IDOT gradations CA-1 and CA-7 meet these criteria. This "structural" fill should be spread in maximum 12-inch layers loose thickness, each lift to be densified using vibratory compaction equipment or by tamping with a backhoe bucket. Footings constructed on the coarse aggregate backfill may also be proportioned for 3000 psf bearing.

In order to preclude disproportionately small footing sizes, it is recommended that all continuous wall footings be made at least 20 inches wide, trench footings at least 12 inches wide and isolated foundations at least 2.5 feet square, regardless of calculated dimensions. For frost considerations, all exterior footings should be constructed at least 3.5 feet below outside finished grade and 4.0 feet for

foundations located outside of heated building limits. Interior footings may be constructed at higher elevations as long as they are protected against frost heave in the event of winter construction. Taking into consideration the marginal soils present in the upper 3 to 8 feet across most of the site and the variable depth of anticipated fill, it is also recommended that foundation walls be reinforced with a minimum of two #5 bars placed top and bottom (or equivalent for grade beams).

Mass-Grading

It is recommended that building and pavement areas be cleared of vegetation prior to mass-grading. Stripping operations should also include the removal of all surficial topsoil and other decomposable plant matter, up to 3 feet thick at Borings 1 and 7. Stripping operations should also include the removal any pavement materials at Boring 4. The building and pavement areas should then be proof-rolled using a loaded dump truck or other approved piece of heavy rubber-tired construction equipment, in order to detect the presence of unsuitable soil types. All soft or unstable materials determined by proof-rolling should be reworked and recompacted or, if that does not substantially improve subgrade stability, removed and replaced. In this regard, exposed subgrade soils will likely have to be reduced in moisture content as part of subgrade preparation.

Marginal subgrade stability, represented by clay soil types having unconfined compressive strengths of 1.5 tsf or less and/or moisture contents in excess of about 25 percent, were otherwise encountered in a majority of the borings. These soils may need to be reduced in moisture content and recompacted in order to provide a stable base. Lime stabilization can achieve similar results and has the advantage of allowing work to proceed under adverse weather conditions. In any event, the need for subgrade reworking or additional undercutting should be evaluated on the basis of proof-rolling.

Prior to the placement of new fill, existing subgrade should be evaluated to determine whether adequate compaction may be achieved for the first lift of fill. Marginal subgrade stability and/or water problems, often mean that clay fill cannot be initially compacted. Where this condition occurs, it is recommended that coarse aggregate be placed in the bottom of the excavation until a stable base for compaction of clay fill is achieved, 12 to 36 inches typically being required. The coarse aggregate may consist of crushed stone or gravel between about 1/4 to 4 inches in size and containing no fines; IDOT gradations CA-1, CA-5 and CA-7 meet these criteria. It should be spread in maximum 18-inch layers and compacted to a dense and stable state.

New fill should consist of inorganic silty clays of low to medium plasticity or approved granular materials. It is recommended that compaction for building pad and pavement areas be to a minimum of 95 and 90 percent of maximum dry density, respectively, as determined by the Modified Proctor test (ASTM D 1557). The upper 2 feet of pavement or roadway subgrade should also be compacted to the 95 percent criterion, to create a stable subgrade for proof-rolling and paving. The fill should be placed in approximate 9 inch lifts loose measure for cohesive soils and up to 12 inches for granular materials, each lift to be compacted to the specified density prior to the placement of additional fill.

Moisture control is important in the compaction of most soil types, and it is recommended that the water content of new fill be within 1 percentage point on the low side and 3 percentage points on the high side of optimum moisture as established by its laboratory compaction curve. If the soil is

compacted too dry, it will have an apparent stability which may be lost if it later becomes saturated. If the soil is too wet, the Contractor will not be able to achieve proper compaction.

Pavement Design and Construction

It is recommended that pavement areas be cleared of vegetation prior to pavement subgrade preparation. Stripping operations should also include the removal of all surficial topsoil and other decomposed plant matter. Pavement subgrade preparation should include compaction of existing subgrade soils and new fill to 95 percent of Modified Proctor density. It is anticipated that existing subgrade will, in many areas, have to be reduced in moisture content and recompacted prior to paving; compaction to at least 95 percent Modified Proctor density is recommended. If paving construction is performed when drying of surficial soils cannot be accomplished, lime stabilization or removal of unstable subgrade and replacement with drier cohesive fill or 1 to 2 feet of coarse granular materials may be required. Granular materials should consist of crushed stone or crushed gravel between ¼ to 3 inches in size and containing no fines; IDOT gradations CA-1 and CA-7 meet these criteria.

A nominal Illinois Bearing Ratio (IBR) value of 3.0 is typically used for the design of asphalt pavements in this area, reflecting the clay subgrade which is prevalent. Use of this value assumes that any soft or unstable areas will be remediated, i.e. subgrade stabilized until passing a proof-roll.

It is recommended that base course materials conform to IDOT gradation specification CA-6 (well-graded sand and gravel mixture). These materials should be compacted to 95 percent Modified Proctor density or 100 percent of the Standard Proctor (ASTM D 698) maximum density value. The granular base course materials should ideally be kept drained by a system of underdrains placed at least 30 inches below pavement grade (critical to all pavement structures). The underdrains should be pitched to allow for positive drainage and outlet into storm sewers, i.e. not have a discharge that would be prone to freezing such as day lighting into a ditch.

Bituminous materials should conform to an approved current IDOT Superpave mix design (N30 or N50 typical for light-duty pavements and N50 or N70 for heavy-duty), as well as Standard Specifications for Road and Bridge Construction, Sections 406 and 1032. They should be compacted to between 93 and 97 percent of their theoretical maximum density, as determined by the supplier.

Portland Cement Concrete (PCC) or heavy-duty bituminous concrete is recommended for pavements with heavy truck traffic and high traffic load areas such as garbage truck dumpster loading areas and aprons approaching parking areas. Standard Specifications for Road and Bridge Construction, Sections 353 and 420, should be followed.

Groundwater Management

Given the predominantly cohesive nature of the upper soils in most of the borings, serious groundwater problems are not anticipated in building and pavement areas. However, the accumulation of run-off water or seepage at the base of the excavations should still be expected to occur during foundation construction and site work. The Contractor should be prepared to implement

dewatering procedures on an as needed basis, as a minimum to include pumping from strategically placed sumps.

The basements should be provided with a perimeter drain tile tied in to a sump pit with automatic pumping system. This is a standard requirement in the project area, the effectiveness of which will be dependent on groundwater at the site being controllable. If problems are encountered at any time during construction, i.e. continuous and/or high rates of groundwater seepage, the design engineer and geotechnical consultant should be notified so that the condition can be further evaluated.

Closure

It is recommended that full-time technician services be provided by Testing Service Corporation personnel during foundation construction, so that the design bearing capacity of the native soils can be verified. In addition, adequacy of associated building materials, stripping and undercutting, fill placement and compaction should be monitored for compliance with the recommended procedures and specifications.

The analyses and recommendations submitted in this report are based upon the data obtained from the eight (8) soil borings performed at the locations indicated on the boring logs. This report does not reflect any variations which may occur between these borings or elsewhere on the site, the nature and extent of which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

Please call if there are any questions in regard to this matter or if we may be of further service.

Respectfully submitted,

TESTING SERVICE CORPORATION

Samuel J. Patrick, E.I.T.
Staff Engineer

TIMOTHY R. PECENIAK
062-061269
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS

Timothy R. Peceniak, P.E.
Project Engineer
Registered Professional Engineer
Illinois No. 062-061269

SJP:TRP:sjp

TESTING SERVICE CORPORATION

GENERAL CONDITIONS

Geotechnical and Construction Services

1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this Agreement. Unless otherwise agreed in writing, TSC's responsibility with respect to underground utility locations is to contact the Illinois Joint Utility Locating Information for Excavators for the location of public, but not private, utilities.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to $50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to $500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

REV 09/08

APPENDIX

UNIFIED CLASSIFICATION CHART

LEGEND FOR BORING LOGS

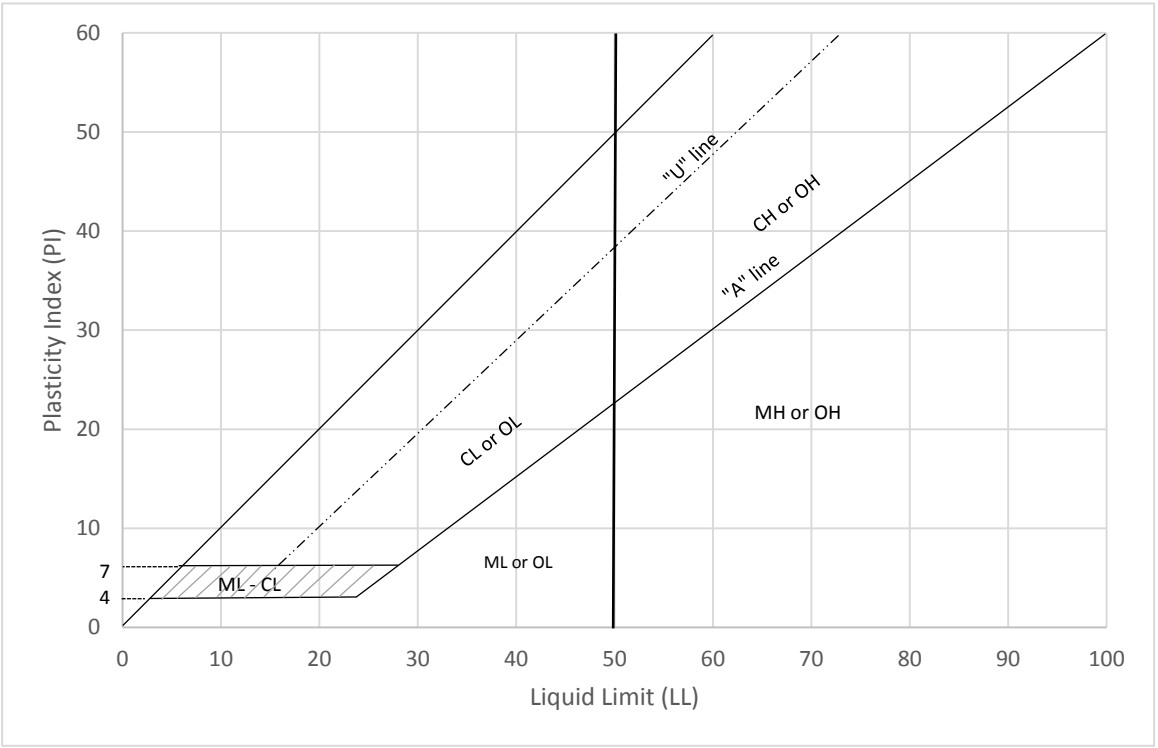
BORING LOGS

BORING LOCATION PLAN

Testing Service Corporation
Unified Classification Chart

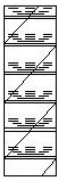
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TEST [o]				SOIL CLASSIFICATION	
				Group Symbol	GROUP NAME [b]
COARSE - GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS less than 5% fines [c]	$C_u \geq 4$ and $1 \leq C_C \leq 3$ [e]	GW	Well-graded gravel [f]
			$C_u < 4$ and/or $1 > C_C > 3$ [e]	GP	Poorly-graded gravel [f]
		GRAVELS WITH FINES more than 12% fines [c]	Fines classify as ML or MH	GM	Silty gravel [f, g, h]
			Fines classify as CL or CH	GC	Clayey gravel [f, g, h]
	SANDS 50% or more of coarse fraction passes No. 4 sieve	CLEAN SANDS less than 5% fines [d]	$C_u \geq 6$ and $1 \leq C_C \leq 3$ [e]	SW	Well-graded sand [l]
			$C_u < 6$ and/or $1 > C_C > 3$ [e]	SP	Poorly-graded sand [l]
		SANDS WITH FINES more than 12% fines [d]	Fines classify as ML or MH	SM	Silty sand [g, h, f]
			Fines classify as CL or CH	SC	Clayey sand [g, h, f]
FINE - GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS & CLAYS Liquid limit less than 50%	Inorganic	PI > 7 or plots on or above "A" line j	CL	Lean clay [k, l, m]
			PI < 4 or plots below "A" line j	ML	Silt [k, l, m]
		Organic	$\frac{\text{Liquid limit – oven dried}}{\text{Liquid limit – not dried}} < 0.75$	OL	Organic clay [k, l, m, n] Organic silt [k, l, m, o]
	SILTS & CLAYS Liquid limit 50% or more	Inorganic	PI plots on or above "A" line	CH	Fat clay [k, l, m]
			PI plots below "A" line	MH	Elastic silt [k, l, m]
		Organic	$\frac{\text{Liquid limit – oven dried}}{\text{Liquid limit – not dried}} < 0.75$	OH	Organic clay [k, l, m, p] Organic silt [k, l, m, q]
Highly organic soils		Primarily organic matter, dark in color, and organic odor		PT	Peat

a. Based on the material passing the 3-inch (75-mm) sieve.
b. If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name
c. Gravels with 5 to 12% fines required dual symbols
GW-GM well graded gravel with silt
GW-GC well graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
d. Sands with 5 to 12% fines require dual symbols
SW-SM well graded sand with silt
SW-SC well graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay
e. $C_u = D_{60}/D_{10}$ $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
f. If soils contains ≥ 15% sand, add "with sand" to group name.
g. If fines classify as CL-ML, use dual symbol GC-GM, SC-SM
h. If fines are organic, add "with organic fines" to group name
i. If soils contains ≥ 15% gravel, add "with gravel" to group name
j. If Atterberg Limits plot in hatched area, soil is a CL – ML, silty clay
k. If soils contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant
l. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
m. If soils contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name
n. PI ≥ 4 and plots on or above "A" line
o. PI ≥ 4 and plots below "A" line
p. PI plots on or above "A" line
q. PI plots below "A" line

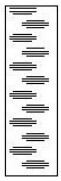


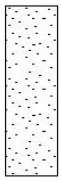
LEGEND FOR BORING LOGS

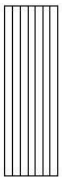
FILL

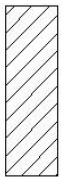

TOPSOIL

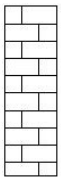
PEAT


GRAVEL


SAND


SILT


CLAY


LIMESTONE/ DOLOMITE

SAMPLE TYPE

SS	=	Split-Spoon
ST	=	Thin-Walled Tube
A	=	Auger
MC	=	Macro-Core (Geoprobe)

WATER LEVEL OBSERVATIONS

▼	While Drilling
▽	End of Boring
▼	24 Hours

FIELD AND LABORATORY TEST DATA

N	=	Standard Penetration Resistance in Blows per Foot (bpf)
WC	=	In-Situ Water Content (%)
Qu	=	Unconfined Compressive Strength in Tons per Square Foot (tsf)
	*	Pocket Penetrometer Reading: Maximum Value = 4.5 tsf
γ_{dry}	=	Dry Unit Weight in Pounds per Cubic Foot (pcf)

SOIL DESCRIPTIONS:

MATERIAL	PARTICLE SIZE RANGE
BOULDER	Over 12 inches
COBBLE	12 inches to 3 inches
Large GRAVEL	3 inches to ¾ inch
Small GRAVEL	¾ inch to No. 4 Sieve
Coarse SAND	No. 4 Sieve to No. 10 Sieve
Medium SAND	No. 10 Sieve to No. 40 Sieve
Fine SAND	No. 40 Sieve to No. 200 Sieve
SILT and CLAY	Passing No. 200 Sieve

COHESIVE SOILS

CONSISTENCY	Qu (tsf)
Very Soft	Less than 0.25
Soft	0.25 to 0.5
Medium Stiff	0.5 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	4.0 and over

COHESIONLESS SOILS

RELATIVE DENSITY	N (bpf)
Very Loose	0 – 3
Loose	4 – 9
Medium Dense	10 – 29
Dense	30 – 49
Very Dense	50 and over

MODIFYING TERM	PERCENT BY WEIGHT
Trace	1 – 10
Little	10 – 20
Some	20 – 35

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **1** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **760.5**

END OF BORING **745.5**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **5.5 '**

AT END OF BORING **6.0 '**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0		
1	SS		7	30.9	1.0*				Black clayey TOPSOIL, very moist (OL)
							2.5	758.0	
2	SS		4	24.7	0.75*				Medium stiff brown trace black silty CLAY, trace sand, trace organic, moist to very moist (CL/CH)
							5		
							5.5	755.0	
3	SS		5	17.8	0.76 0.5*				Medium stiff brown very silty CLAY, little sand, very moist (CL-ML)
							8.0	752.5	
4	SS		7	18.0					Loose brown clayey SAND and GRAVEL, wet (SC/GC)
							10		
							10.5	750.0	
5	SS		9	13.1	1.0*				Medium stiff to stiff gray silty CLAY, some sand and gravel, very moist to moist (CL)
6	SS		11	14.9	2.0*		15		
									End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **2** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **768.5**

END OF BORING **753.5**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **Dry**

AT END OF BORING **Dry**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0.6	767.9	Black clayey TOPSOIL (OL)
1	SS		12	26.3	2.0*				Stiff brown trace black silty CLAY, trace sand, trace organic, moist to very moist (CL/CH)
							3.0	765.5	
2	SS		9	19.0	2.02 1.75*				
3	SS		12	15.6	2.5*				Very stiff to hard brown silty CLAY, little sand and gravel, occasional silt seams, moist (CL)
4	SS		10	15.5	2.28 2.25*				
5	SS		25	14.9	4.5+*				
							13.0	755.5	
6	SS		15	15.9	3.0*				Very stiff brown and gray silty CLAY, little sand and gravel, occasional sand seams, moist (CL)
									End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **3** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **769.0**

END OF BORING **754.0**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **Dry**

AT END OF BORING **Dry**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0		
									Black clayey TOPSOIL (OL)
							1.2	767.8	
1	SS		7	23.4	1.75*				Soft to medium stiff brown silty CLAY, trace to little sand, moist to very moist (CL)
2	SS		6	25.2	0.83 0.75*		5		
							5.5	763.5	
3	SS		7	18.0	1.5*				Stiff brown silty CLAY, little sand and gravel, occasional silt seams, moist to very moist (CL)
							8.0	761.0	
4	SS		18	17.0	4.68 4.5+*				Hard brown silty CLAY, little sand and gravel, occasional silt seams, moist (CL)
							10.5	758.5	
5	SS		24	19.7					Medium dense brown SILT, little sand, moist (ML)
							13.0	756.0	
6	SS		13	14.1	4.13 4.5+*				Hard brown silty CLAY, some sand and gravel, moist (CL)
							15		End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **4** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **770.0**

END OF BORING **755.0**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **8.0 '**

AT END OF BORING **8.0 '**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0.3	769.7	3" Bituminous Concrete
							0.5	769.5	3" Sand and Gravel
1	SS		9	21.5	2.25*				Very stiff to stiff brown silty CLAY, little sand and gravel, moist (CL)
2	SS		9	18.1	1.75 1.25*				
							5.5	764.5	
3	SS		5	21.1					Loose brown clayey SILT, little sand, very moist (ML)
4	SS		4	24.4					
5	SS		5	22.4					
							13.0	757.0	
6	SS		10	23.7	1.89 1.5*				Stiff gray silty CLAY, little sand and gravel, occasional silt seams, moist (CL)
									End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **5** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **768.5**

END OF BORING **753.5**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **Dry**

AT END OF BORING **Dry**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0		
									Black clayey TOPSOIL (OL)
							1.0	767.5	
1	SS		9	21.5	2.28 2.5*				Very stiff to hard brown silty CLAY, little sand and gravel, moist (CL)
2	SS		12	15.9	4.5+*				
							5.5	763.0	
3	SS		7	20.2					Loose brown clayey SILT, little sand, very moist (ML)
							8.0	760.5	
4	SS		11	15.6	2.55 2.75*				Very stiff to hard brown silty CLAY, little to some sand and gravel, moist (CL)
5	SS		17	14.1	4.5+*				
							13.0	755.5	
6	SS		14	12.1	2.75*				Very stiff gray silty CLAY, some sand and gravel, moist (CL)
							15.0		End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **6** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **769.0**

END OF BORING **754.0**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **Dry**

AT END OF BORING **Dry**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0.8	768.2	Black clayey TOPSOIL (OL)
1	SS		9	28.9	1.5*				Medium stiff to stiff brown trace black silty CLAY, trace sand, trace organic, moist to very moist (CL/CH)
2	SS		3	27.1	0.57 0.5*				
							5.5	763.5	
3	SS		13	15.4	3.0*				Very stiff to hard brown silty CLAY, little sand and gravel, moist (CL)
4	SS		13	15.6	4.5+*				
5	SS		14	15.4	2.0*				
							13.0	756.0	
6	SS		11	14.6	2.42 3.0*				Very stiff gray silty CLAY, little sand and gravel, moist (CL)
									End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **7** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **764.5**

END OF BORING **749.5**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **5.5 '**

AT END OF BORING **3.0 '**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0		
1	SS		5	25.9	1.75*				Black clayey TOPSOIL, moist (OL)
							3.0	761.5	
2	SS		10	30.8	2.0*				Stiff to medium stiff brown trace black silty CLAY, trace sand, trace organic, moist to very moist (CL/CH)
3	SS		7	25.3	0.83 0.5*				
							8.0	756.5	
4	SS		10	18.7					Medium dense brown SILT, little sand, very moist (ML)
							10.5	754.0	
5	SS		14	13.7	2.42 2.0*				Very stiff brown and gray silty CLAY, some sand and gravel, moist (CL)
6	SS		13	13.4	2.5*				
							15.0		End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20

PROJECT **Harding Townhomes, Glen Ellyn, Illinois**

CLIENT **Harding Custom Homes, LLC, Glen Ellyn, Illinois**

BORING **8** DATE STARTED **4-9-20** DATE COMPLETED **4-9-20** JOB **L-91,076**

ELEVATIONS

GROUND SURFACE **765.5**

END OF BORING **750.5**

WATER LEVEL OBSERVATIONS

WHILE DRILLING **Dry**

AT END OF BORING **Dry**

24 HOURS

SAMPLE NO.	SAMPLE TYPE	LENGTH RECOVERY	N	WC	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0.5	765.0	Black clayey TOPSOIL (OL)
1	SS		7	24.5	1.23 1.5*				Stiff brown silty CLAY, trace to little sand, moist to very moist (CL)
							3.0	762.5	
2	SS		7	16.3	1.5*				
3	SS		8	16.5	1.0*				Stiff to very stiff brown silty CLAY, little sand and gravel, very moist to moist (CL)
4	SS		9	16.7	2.0*				
5	SS		19	16.0	3.47 4.0*				
							13.0	752.5	
6	SS		13	13.7	2.75*				Very stiff gray silty CLAY, little to some sand and gravel, moist (CL)
									End of Boring at 15.0'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

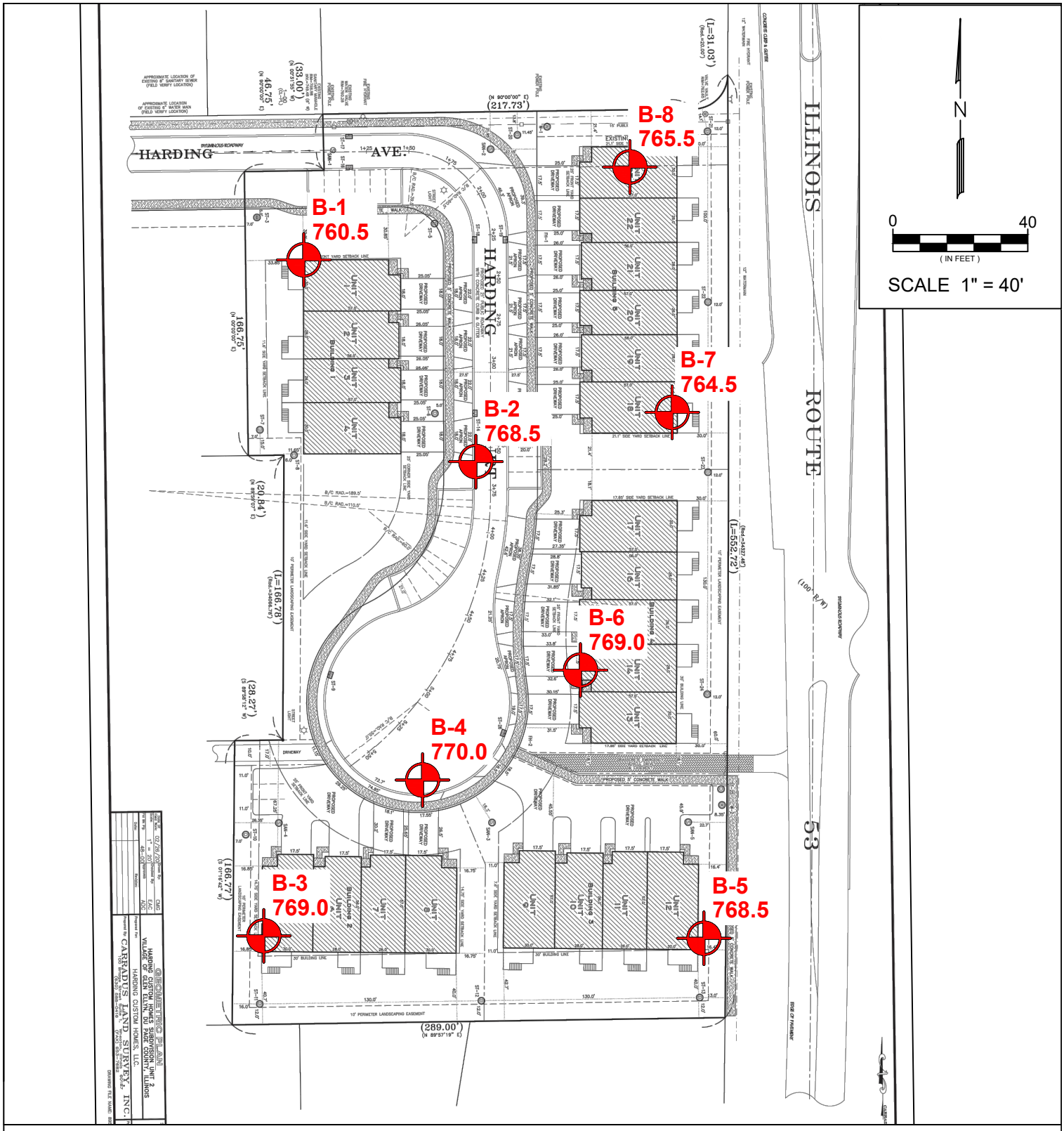
DISTANCE BELOW SURFACE IN FEET

0 5 10 15 20

DRILL RIG NO. **262**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 91076.GPJ TSC_ALL.GDT 4/28/20



NOTE: GROUND SURFACE ELEVATIONS AT THE BORINGS WERE ACQUIRED BY TSC USING A TRIMBLE R8S GNSS RECEIVER, BEING ROUNDED TO THE NEAREST 0.5 FOOT.

LEGEND

SOIL BORING LOCATION

BORING LOCATION PLAN
HARDING COURT DEVELOPMENT
HARDING COURT
GLEN ELLYN, ILLINOIS

TESTING SERVICE CORP.
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188

DRAWN BY:	TJF
CHECKED BY:	SJP
JOB NO. :	L-91076
DATE:	4-3-2020

PAGE NO.
1 OF 1

(DRAFT) FINDINGS OF FACT TO SUPPORT A MOTION TO RECOMMEND APPROVAL OF A SPECIAL USE FOR A PRELIMINARY AND FINAL PLANNED UNIT DEVELOPMENT WITH ZONING DEVIATIONS, A ZONING MAP AMENDMENT, PRELIMINARY AND FINAL MAJOR SUBDIVISION PLATS, SUBDIVISION VARIATIONS AND EXTERIOR APPEARANCE TO ALLOW THE CONSTRUCTION OF A 23-UNIT TOWNHOME DEVELOPMENT AT 787 HARDING AVENUE, 138 IL STATE ROUTE 53, TWO VACANT PARCELS, AND A VILLAGE OWNED RIGHT-OF-WAY

Related to the requests of the petitioner, Marvin Ritter, on behalf of Harding Custom Homes, for approval of a **Special Use for a Preliminary and Final Planned Unit Development with the following zoning deviations:**

1. A deviation from Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 19.45 feet where 90 feet is required on Lot 1; and
2. A deviation from Section 10-4-11(D)(9)(b)(2) to allow a width of a corner lot of 66.05 feet where 90 feet is required on Lot 3; and
3. A deviation from Section 10-4-11(D)1 to allow a front yard setback of 26 feet on Lot 4 where a setback of 30 feet is required; and
4. A deviation from Section 10-4-11(D)(4)(a) to allow a corner side yard setback of 16.4 feet where a setback 19.8 feet is required on Lot 3; and
5. A deviation from Section 10-4-11(D)(2) to allow a rear yard setback of 24 feet where a setback of 30 feet is required on Lot 5; and
6. A deviation from Section 10-5-5-(B)(4) #19 to allow mechanical units to be located within the required front yard where mechanical units are not a permitted encroachment on Lot 5; and
7. A deviation from Section 10-5-5(B)(4) #8 to allow multiple decks to be located in the front yard and to encroach no more than approximately 11 feet 4 inches into the required front yard where decks are not a permitted encroachment on Lot 5; and
8. A deviation from Section 10-5-5(B)(4) #11 to allow a completely closed, 6-foot-tall fence to be closer to the street than the principal structures on Lots 3, 4 and 5 where a 4-foot fence, 33.3% open is permitted; and
9. A deviation from Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of at least 8.8 feet is required on Lot 4 for the emergency access driveway; and
10. A deviation from Section 10-5-5(C)(1) to allow an impervious surface setback of 0 feet where a setback of approximately 1.98 feet is required on Lot 3 for the emergency access driveway; and
11. A deviation from Section 10-5-5(B)(4) #18.a.2 to allow no more than 36.05 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 2; and

12. A deviation from Section 10-5-5(B)(4) #18.a.2 to allow no more than 56.26 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 3; and
13. A deviation from Section 10-5-5(B)(4) #18.a.2 to allow no more than 58.4 percent of the required front yard to covered by impervious surface where no more than 35 percent is permitted on Lot 4; and
14. A deviation from Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 1 to accommodate the shared driveway for units 3 and 4; and
15. A deviation from Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 34 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 5 and 6; and
16. A deviation from Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 2 to accommodate the shared driveway for units 7 and 8; and
17. A deviation from Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 33 feet where a maximum width of 24 feet is permitted on Lot 4 to accommodate the shared driveway for units 16 and 17; and
18. A deviation from Section 10-5-11(F)(1)(a) to allow a curb cut width no more than 30 feet where a maximum width of 24 feet is permitted on Lot 5 to accommodate the shared driveway for units 22 and 23.

…and in accordance with Section 10-10-14(E) of the Glen Ellyn Zoning Code, the Plan Commission hereby makes the following Findings of Fact:

(Draft reasons, taken partially from the petitioner's application packet, as to how the project may comply with the necessary findings have been drafted by Staff; the Commission may wish to consider the findings but should feel free to amend the below reasons to make your own findings of fact based upon information provided at the public hearing).

1. The proposed use will be harmonious and in accordance with the general objectives, or within a specific objective of the Comprehensive Plan and/or Zoning Code <u>because the plan provides a 23-unit low-density attached residential development as referenced and supported in 2001 Comprehensive Plan future land use map. In addition, the Glen Ellyn Draft Comprehensive Plan future land use plan identifies all of the parcels associated with this development as appropriate for single-family attached development. Rezoning of the property from R2 to R4 to accommodate a townhome development will be in-line with the Village's vision for the property.</u>

2. The project will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area <u>because the applicant intends to use the materials, colors, and construction style that is harmonious and appropriate in appearance</u>

with the existing or intended character of the general vicinity. The homeowner association regulations will be also drafted in a manner that would be in harmony with the character of the general vicinity. The applicant has been in contact with several representatives from other nearby attached single-family developments and received a letter in support of the proposed design for Harding Townhome development.

3. The proposed use will not be hazardous or disturbing to existing or future neighborhood uses of the property because the proposed use is consistent with similar residential-related uses and is not anticipated to be hazardous or disturbing to the neighborhood

4. The proposed use will be served adequately by existing public facilities and services such as highways, streets, police, fire protection, drainage structure, refuse disposal, water, sewers and schools, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such services because the existing storm, sanitary and water services have sufficient capacity to serve the proposed development. The traffic impact study also indicates that the traffic generated by the development will not have a material impact.

5. The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the Village because the improvements will be typical of those seen on residential properties and will enhance the economic welfare of the Village over the course of years. Developer donations will also be paid to off-set future demand for public services.

6. The use will not involve activities, processes, materials, equipment and/or conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare and odors because the proposed residential use will not involve uses, activities, processes, materials or equipment that would be detrimental to any persons or property or the general welfare and will not produce excessive traffic, noise, smoke, fumes, glare or odors in excess of other similarly sized residential projects within the Village of Glen Ellyn.

7. The development will have vehicular approaches to the property, which shall be so designed as not to create an undue interference with traffic on surrounding public streets or roads because Traffic Impact Study did not indicate undue interference with traffic on surrounding public streets or roads, which was subsequently confirmed by the Village's traffic consultant.

8. The development will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief because the proposed stormwater management plan for the subject site will reduce the overland waters currently passing through neighboring homesites with no additional public expense for flood protection, rescue or relief.

9. The development will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community because there are not any significant natural, scenic or historic features that will be impacted by this development.

The Plan Commission hereby makes the following findings in relation to the evaluation factors set forth in Section 10-7-7 of the Glen Ellyn Zoning Code:

(Draft reasons, taken partially from the petitioner's application packet, as to how the project may comply with the necessary findings have been drafted by Staff; the Commission may wish to consider the findings but should feel free to amend the below reasons to make your own findings of fact based upon information provided at the public hearing).

1. That the proposed development will not negatively affect the community as a whole because the 23-unit attached single-family development proposed at this location is consistent with the future land use designation and objectives of the 2001 Comprehensive Plan and Draft Comprehensive Plan. The proposed architectural style was chosen to be in context with the surrounding residential uses and neighborhood character. The project will generate a low volume of traffic and will not overburden adjacent streets. No increase in noise or odor is anticipated.

2. That the proposed development will not negatively affect the neighborhood because the proposed project will improve vacant lots that will have a positive impact on the property values of the surrounding properties. The project will meet the height and density requirements of the Village Code. There will be abundant landscaping throughout the site that will provide aesthetically pleasing scenes that will have a positive impact on the surrounding neighborhoods.

3. That the proposed development provides an up-scale development with adequate attached parking garages and is designed so that its size, bulk, and site design will complement the surrounding developments. The development will have various amenities for future residents such as a pergola, sitting areas, and plenty of common, green open spaces.

4. That the proposed development will not negatively affect the development procedures, as this is a typical residential use project that is not expected to negatively affect other developments or improvements planned in the area.

Related to the requests of the petitioner, Marvin Ritter, on behalf of Harding Custom Homes, for approval of **a Zoning Map Amendment** to change the R2 Single-Family Zoning District to R4 Residential District in accordance with 10-10-13(E) of the Zoning Code, the Plan Commission hereby makes the following Findings of Fact:

(Draft reasons, taken partially from the petitioner's application packet, as to how the project may comply with the necessary findings have been drafted by Staff; the Commission may wish to consider the findings but should feel free to amend the below reasons to make your own findings of fact based upon information provided at the public hearing).

1. Existing uses of property within the general area of the affected property primarily include single-family homes, but also townhomes, some multi-family homes, and a conservation district.

2. Existing zoning of property within the general area of the affected property includes R2 Residential District to the west, R2 Residential District and R4 Residential District to the northwest, R4 Residential District to the north, CR Conservation District and R1 Residential District to the west and R2 Residential District to the south.

3. The recommendations outlined in the Land Use Plan of the November 11, 2020 draft of the Glen Ellyn Comprehensive Plan focus on the diversification of housing options by increasing single-family attached and multi-family uses. The parcels which are part of this project have all been identified in the Future Land Use Plan as Single-Family Attached locations. Parcels 1 & 2 were identified in the 2001 Comprehensive Plan as suitable for the type of development this proposed change in zoning district addresses. Parcels 3 & 4 were acquired for the purpose of expanding the townhome development. Parcel 5 is the undeveloped portion of Harding Avenue which as a public property, was not discussed within the 2001 Comprehensive Plan.

4. Parcels 1 & 2 have been owned by the same family since 1952, when there were single family homes on the two parcels. There have been a significant number of single-family homes and townhome units developed within the immediate area since then, as well as numerous commercial properties to the north, northwest and northeast.

5. There has been a mix of both single family and multi-family construction in the general area. The 2001 Comprehensive Plan suggests "low density attached residential" for Parcels 1 and 2 in a chart and noted it as a "possible location for small townhome development similar in scale to the existing development to the north." The November 11, 2020 draft of the proposed Glen Ellyn Comprehensive Plan notes that single-family attached dwelling types should be further integrated to increase the Village's housing diversity and support higher density, and notes that 42% of community members have a desire for more townhomes based on 1,700 responses. One recommended action noted to increase housing diversity is to encourage the provision of single-level floor plans and ADA-compliant amenities. 10 of the 23 units are proposed with first floor master bedrooms.

6. Parcel 1 has been vacant land since 2011. Parcel 2 has been vacant for significantly longer. Parcel 3 has a home which has been vacant since May 2018 which is not habitable. It has had break ins, vandalism and in September 2020 all of the copper plumbing was stolen from the property. Parcel 4 has been a shared driveway for Parcel 3 and the owner of 128 S. Route 53 since 1977. Parcel 5 has been a Village owned, unpaved, portion of Harding Avenue since before 1952.

7. The shape, size and location of this property make it extremely difficult to develop as an R2 property.

In accordance with Section **11-3-10** of the Glen Ellyn Subdivision Code, the Plan Commission hereby makes the following Findings of Fact:

(Draft reasons, taken partially from the petitioner's application packet, as to how the project may comply with the necessary findings have been drafted by Staff; the Commission may wish to consider the findings but should feel free to amend the below reasons to make your own findings of fact based upon information provided at the public hearing).

1. The proposed subdivision conforms to the provisions set forth in this title, including the rules and regulations referenced in section 11-4-1. The requirements of 11-4-1 have been met except for variance items identified. This is the last undeveloped property in the immediate area. Many of the variations being requested are similar to those granted for multi-family developments located within 1-3 blocks of this site. The project requires rezoning from R2 to R4 to accommodate townhomes. The northern 2/3rds of the property was identified for low density, attached residential development in the 2001 comprehensive plan prepared by the Village. The "Future Land Use Plan" in the November 11, 2020 draft of the proposed 2021 Comprehensive Plan identifies all parcels of this project as single-family attached.

2. Definite provision has been made for a water supply system that is sufficient in terms of quantity, dependability, and quality to provide an appropriate supply of water for the type of subdivision proposed. Engineering designs have been provided for the water supply to the project and reviewed to the satisfaction of Village staff.

3. A public sewage system is proposed, and adequate provision has been made for such system and that such system will comply with federal, state and local laws and regulations. Engineering designs have been provided for Glen Ellyn public sewage for the project and reviewed to the satisfaction of Village staff.

4. All areas of the proposed subdivision which may involve soil or topographical conditions presenting hazards or requiring special precaution have been identified by the subdivider and that the proposed uses of these areas are compatible with such conditions. In 2017 an underground storage tank was identified and removed from Parcel 3. It was determined that no leakage had occurred.

5. The proposed subdivision will not be detrimental to the public health, safety and welfare. The proposed subdivision will not be detrimental to the public health, safety and welfare beyond similar types of projects.

6. No development shall be approved if such development, at full occupancy, will result in or increase traffic on an arterial or collector street to such an extent that the street does not function at a level of service deemed acceptable by the Village. Based on the results of the traffic study prepared by Gewalt Hamilton and the Village review prepared by Bemis & Associates, the development at full occupancy will not result in or increase traffic on the arterial or collector streets to such extent that the street does not function at an appropriate level of service. The residential development will add only 16 trips, or about 1 trip every 3-4 minutes during the peak travel hour.

Related to the requests of the petitioner, Harding Custom Homes, LLC, for **approval of the following subdivision variations**:

1. A variation from Section 11-4-2(G) to allow Lots 1, 3, 4, and 5 to have two frontages to public right-of-way where only one frontage per lot is permitted; and
2. A variation from Section 11-4-4(E) to allow a right-of-way width of 55 feet for a local street where 66 feet is required (Harding Avenue, Harding Court); and
3. A variation from Section 11-4-4(E) to allow a right-of-way width of 30 feet for a local street where 66 feet is required (Kohler property connection); and
4. A variation from Section 11-4-4(J)(1), to allow a cul-de-sac length of approximately 1,375 feet where cul-de-sacs are limited to 300 feet; and
5. A variation from Section 11-4-8, to allow 3 out of 8 existing utility poles to not be buried, where burying of electric, communication, and other facilities both within the subdivided property and adjacent rights-of-way is required; and
6. A variation from Section 11-4-7, to not install approximately 438 linear feet of sidewalk along IL-53, where sidewalk along all public rights-of-way is required

…all to allow the development of 23 townhomes and to rezone R2 to R4 the undeveloped portion of Harding Avenue east of Nicoll Way and the 4 parcels located directly south of the undeveloped portion of Harding Avenue and directly west of Illinois Route 53. In accordance with Section 11-3-11(C) of the Glen Ellyn Subdivision Code, the Plan Commission hereby makes the following Findings of Fact regarding the 6 Variations:

1. *The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property or improvements;*

   The lot lines along Route 53 will be heavily landscaped and incorporate a 6' privacy fence. The street width, which has been reviewed by Public Works, will match the width of both Nicoll Way (south of Pershing) and Harding Avenue. The right-of-way is not detrimental to public safety as is serves more as a driveway than a local street. A cul-de-sac and a gated emergency access road from the bulb of the cul-de-sac to Illinois Route 53 will improve the public safety. Leaving two existing utility poles in place on the north end of the project on Harding Roadway will not provide additional detriments to the public safety, health or welfare, or injurious to other property or improvements.

2. *The conditions upon which the request is based are unique to the property for which the relief is sought, create substantial difficulty in developing the property and are not generally applicable to other property;*

   The location, shape and size make this situation unique to the property, creating a substantial difficulty in developing the property and is not generally applicable to other property. The roadways the project will be connecting to (Nicoll Way and Harding Avenue) were designed with a width of 55 feet. The single-family property to the west is currently land locked, without access to a public street. Providing a right-of-way resolves this issue as having a land locked property is highly unusual within the Village of Glen Ellyn. Removing the utility poles will add significant financial risk to proceeding with the project in addition to the physical risk in removing them. All electric utilities running from ComEd sources to individual units will be undergrounded.

3. *Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.*

   Implementing a roadway which is wider than the existing roadway would require substantial engineering challenges and the limited east-west width of the property, would not allow the proposed townhomes to be built due to the combined required front and rear yard setbacks. The Harding parcels are located adjacent to these utility lines which were installed by others without the approval of the owners of the Harding parcels. It should be noted, one of the Members of Harding Custom Homes inherited the northern parcels from her father who purchased the original parcel in 1952. The existing topography is steep and the vegetation in the Route 53 right of way is such that would make installing a public sidewalk very difficult.

In accordance with Section **11-3-11 (D)** of the Glen Ellyn Subdivision Code, the Plan Commission hereby makes the following Findings of Fact regarding the 6 Variations:

1. *The variation, if granted, will not alter the essential character of the locality;*

   Building the new roadway 55' wide is keeping with the essential character of the neighborhood locality, while expanding it to code (66') would change the character. The proposed cul-de-sac design plays a significant role in the placement of individual townhomes. It has written support from the Brentwood Court homeowners association, who share the western property line.

2. *The purpose of the variation is not based exclusively upon a desire to make more money out of the property*

   All alternative designs would require similar variances. The roadway variation allows the new roadway to match the width of the existing roadway. Providing this right-of-way allows the single-family property to the west to no longer be land locked without access to a public street. Having a land locked property is highly unusual within the Village of Glen Ellyn and is generally not applicable to other properties. Incorporating a cul-de-sac creates the sense of a more private destination for residents, instead of an opportunity for cut through traffic to get to Route 53. It is anticipated that only residents, their guests and delivery personnel will regularly drive the street. It will also discourage vandalism and break ins in the entire area, as there will not be a quick escape route to Route 53. Undergrounding the utility lines will not substantially improve the uptime of utility service in the area as this 250' section is essentially the "last mile" of delivery, which represents less than 1% of the distance between the electric source and household, does not improve safety of the neighborhood, and visually only affects those who are currently within eyesight and new residents of the townhome development.

3. *The proposed variation will not:*
   a. *Diminish or impair property values within the neighborhood;*
   b. *Unduly increase traffic congestion in the public streets and highway; or*
   c. *Result in an increase in public expenditures;*

   The traffic study prepared by Gewalt Hamilton and reviewed by the Village's traffic consultant determined the incremental traffic from the townhome development will not have a material

negative impact on the area. The slightly narrower width will reduce the amount of pavement to be plowed, salted, maintained and replaced overtime, thus decreasing public expenditures from what would be required with a 66' roadway. This variation will not result in an increase in public expenditures as the HOA and homeowner to the west will be responsible for maintaining the proposed right-of-way. Installing the cul-de-sac will improve the existing roadway and neighborhood over the existing unimproved dirt roadway. The cost of designing and installing the cul-de-sac is the responsibility of the developer who upon completion and acceptance of the improvements, will donate the roadway to the Village.

4. *The variations are the minimum variation that will make possible the reasonable use of the land*

   Because the improved portion of Harding Avenue is 55' wide, creating a new roadway 66' wide would be problematic to design & implement. The variation will allow the development to continue and maintain harmony with the adjacent property owners to the west. The economic impact is significant and among other things, could be one of several tipping points to postpone, delay or cancel the development plans.

5. *Whether or not the alleged difficulty or particular hardship has been created by any person presently having an interest in the property or by the applicant.*

   The hardship has not been created by Harding Custom Homes or any person having an interest in the property. The land locked single-family home to the west was created when Harding Custom Homes, LLC purchased the shared driveway from the homeowner to be incorporated into the development as requested by the Village. Provision has been provided to allow the property access to a public street. Regarding the right-of-way width, the Village established the existing 55-foot-wide right-of-way for Harding Avenue.

Related to the requests of the petitioner, Marvin Ritter, on behalf of Harding Custom Homes, for approval of the **Exterior Appearance** application, in accordance with Ordinance 5508, the Plan Commission hereby makes the following Findings:

(Draft reasons, taken partially from the petitioner's application packet, as to how the project may comply with the necessary findings have been drafted by Staff; the Commission may wish to consider the findings but should feel free to amend the below reasons to make your own findings of fact based upon information provided at the public hearing).

1. That the proposed development is in substantial conformance with the Appearance Review Guidelines and is compatible with the character and scale of existing buildings in the neighborhood.

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(DRAFT) MOTION TO RECOMMEND APPROVAL OF A OF A SPECIAL USE PERMIT FOR A PRELIMINARY AND FINAL PLANNED UNIT DEVELOPMENT PLANS WITH ZONING DEVIATIONS, PRELIMINARY AND FINAL PLATS OF SUBDIVISION FOR A MAJOR SUBDIVISION, SUBDIVISION VARIATIONS, A ZONING MAP AMENDMENT, AND THE EXTERIOR APPEARANCE FOR THE PROPERTY LOCATED AT 787 HARDING AVENUE, 138 IL STATE ROUTE 53, TWO VACANT PARCELS (WITHOUT ADDRESSES) AND A 33-FOOT VILLAGE RIGHT-OF-WAY.

After conducting a public hearing and deliberating on the requests of the petitioner, Harding Custom Homes, for approval of a Special Use Permit for Preliminary and Final Planned Unit Development Plans with Zoning Deviations, Preliminary and Final Plats of Subdivision for a Major Subdivision, Subdivision Variations, a Zoning Map Amendment, and the Exterior Appearance for the construction of a 23-unit townhome development on the property located at 787 Harding Avenue, 138 IL State Route 53, two vacant parcels (without addresses) and a 33-foot Village right-of-way, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on December 9, 2021, which are hereby incorporated into the Motion by reference as though fully set forth herein, and a copy of which will be attached to the minutes of this meeting and kept on file as part of the permanent records of the Village. The Plan Commission makes this recommendation of approval with the following conditions:

1. That the petitioner construct, maintain, and operate the development in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees;

2. That the developer shall install, maintain, and replace all landscape materials per the approved landscape plan until the common areas are turned over to the HOA;

3. That the HOA shall maintain the landscaping within the common open areas in substantial conformance with the approved landscape plan in perpetuity;

4. That the Declaration of Maintenance and Easement Agreement for Harding Custom Townhomes Subdivision Unit 2 shall be recorded against all 5 Lots with the Document No. referenced on the Plat prior to recordation of the Plat;

5. That the developer must post performance security as required by the DuPage County stormwater ordinance and by the Village Code for stormwater management elements and public improvements;

6. That a fee for stormwater detention in the regional detention basin in Panfish Park in the amount of $132,900.00 per acre foot of required storage shall be submitted prior to the issuance of a building permit;

7. That a soils analysis for each building shall be provided with final permit plans for the project;

8. That a stormwater Pollution Prevention Plan and a copy of the IEPA Notice of Intent shall be submitted with permit plans for the project;

9. That the public improvements list be revised to the satisfaction of the Village Engineer prior to Village Board review;

10. That an updated EcoCat be submitted prior to the issuance of a building permit for the project;

11. That any required clearing or sidewalk repair adjacent to the Rolling Hedge Subdivision be included in the scope of work covered by the IDOT permit and that the developer assist with the actual work (with reimbursement by the Village);

12. That no work on the project should commence until an IDOT right-of-way permit has been issued for the project;

13. That the petitioner prepare a construction management plan for review at a pre-construction meeting with the Police, Fire, Public Works, and Community Development Departments and that said Village staff approve the construction management plan prior to the issuance of a building permit;

Motion by: _____ Seconded by: _____

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