



Agenda
Village of Glen Ellyn
Plan Commission Meeting
Thursday, April 27, 2023
7:00 PM
Glen Ellyn Civic Center, Galligan Board Room

Visitors are most welcome to attend all public meetings and can find copies of the Agenda online at www.glenellyn.org prior to the meeting. Any individual with a disability requiring reasonable accommodation in order to participate in a meeting should contact the Village of Glen Ellyn ADA Coordinator, 630-469-5000, at least five (5) business days in advance of the next scheduled meeting.

- A. Call to Order**
- B. Public Comment (Non-Agenda Items)**
- C. Approval of Draft Minutes**
 - 1) March 9, 2023 Plan Commission Meeting Minutes
- D. New Business**
 - 1) Public Hearing – 525 S. Park Boulevard: Willowbrook Wildlife Center: Forest Preserve District of DuPage County, is petitioning the Village for a Special Use Permit, Zoning Variations, and Exterior Appearance to accommodate Phases B-D of the improvements to the Willowbrook Wildlife Center located at 525 S. Park Boulevard in the CR Zoning District.
 - 2) Public Hearing (Continued from March 9, 2023) – 1102 Hill Avenue: Special Use Permit to allow the addition of DISH Wireless 5G capable antennas and support equipment to an existing cellular tower.
1102 Hill Avenue: Special Use Permit to allow the addition of DISH Wireless 5G capable antennas and support equipment to an existing cellular tower.
 - 3) Public Hearing – 415 Taft Avenue: Special Use Permit to allow the addition of DISH Wireless 5G capable antennas and support equipment to an existing cellular tower.
 - 4) Discussion and Recommendation - Proposed Zoning Text Amendments: Possible amendments to the Zoning Code relating the keeping of hens.
- E. Trustee Liaison's Report**
- F. Chairman's Report**
- G. Staff Report**
- H. Other Business**
- I. Adjourn**

DRAFT MINUTES
REGULAR PLAN COMMISSION MEETING
March 9, 2023

Call to Order and Roll Call

Chairperson Tim Loftus called the meeting to order at 7:05 p.m., and explained the Plan Commission's function and operating procedure as an advisory body. He described the public hearing protocol including for public comment, and announced that comments would be recorded. Mr. Loftus introduced Trustee Liaison Steve Thompson, Community Development Director Marty Scott, Senior Planner Atrian Fard, Recording Secretary Barbara Dutton-Thomas and new student member Emma Smith. Roll was called. Chairperson Loftus, Plan Commissioners Arango, Brown, Dawson, Kreuzer, Saeed, Thakkar and Wyant; Commissioner Cooper was absent.

Approval of Minutes

Commissioner Dawson moved to approve the draft minutes of the December 8, 2022 Plan Commission meeting; seconded by Commissioner Saeed, the motion passed by voice vote.

Public Comment Non-Agenda Items

Village President Mark Senak, on behalf of the Village Board and the residents of the community, thanked the Plan Commission members for their input and their effort to serve the community.

Public Hearing – 1102 Hill Avenue

Commissioner Arango moved to open the Public Hearing to consider approval of a special use permit to allow an addition of DISH Wireless 5G antennas and support equipment to an existing cellular tower. Seconded by Commissioner Brown, the motion passed by voice vote.

Staff Introduction

Sworn in, Atrian Fard, Sr. Planner, 535 Duane, reported receiving an email from the attorney of the Petitioner requesting that the hearing be continued to the next regular meeting date. Commissioner Kreuzer, seconded by Commissioner Wyant, moved to continue the Public Hearing until April 27, 2023. The motion passed by voice vote, with all voting, "Yes," except Commissioner Dawson, who voted, "No."

Public Hearing – Proposed Text Amendments

Commissioner Saeed moved to open the Public Hearing to consider text amendments to the Zoning Code. Seconded by Commissioner Brown, the motion passed by voice vote. Chair Loftus noted that each proposed amendment could be discussed separately to provide direction to staff and possible recommendations to the Village Board

KEEPING HENS

Staff Introduction

Sworn in, Marty Scott, Director of Community Development, 535 Duane, Glen Ellyn, gave an overview of the process for updating zoning text, and introduced the topic of keeping of hens in the Village. He explained that a local community group named Hen Ellyn that has been part of the process, and that peer community research had been performed, as well. Mr. Scott said the proposed focuses on type and number of birds, and said that a coop would be treated like other structure put in a yard – like a shed or a deck – and has to be compatible with the home, and that a fenced yard would be required. He related his experience in regulating hen-keeping, mentioning that complaints are rare, and cited benefits of the practice, including environmental and educational.

Commissioner Questions

Chairperson Loftus remarked that he didn't see any proposed concerning licensing, as well as observed that a range of setbacks mentioned in regulations, and wondered if zoning districts need to be defined for hen-keeping purposes. Development Director Scott stated that most communities haven't delineated zones, as coops are looked at as similar to accessory structures, such as playhouses. Wondering if a distinction needs to be made between hen shelter and associated outdoor area, and perceiving a conflict relative to building permitting, Mr. Loftus suggested additional language to clarify the requirements. Mr. Scott noted that a large space isn't needed for eight hens, but saw no problem in defining a size specifically for the coop. In response to a query from Commissioner Arango, Mr. Scott said a permit would be required to verify all aspects of a proposed set-up. Ms. Arango asked about aesthetics, to which Mr. Scott said that people spend [considerable] money on coops, and speculated that the worst-case scenario would be a cedar or natural application.

Commissioner Wyant asked why some communities don't allow keeping hens. Director Scott responded that concerns in one town arose about yards not being big enough as well as a fear of cleanliness issues. Mr. Wyant suggested talking to some communities that rejected the idea, and cited a University of Minnesota study that yielded concerns over disease, noise, odor, pests and waste management. Mr. Scott related that noise, if any, is minimal, and that in his observation, cleanliness was not a factor. Commissioner Wyant expressed concern over coops, given the trend toward outdoor living and the incidence of coyotes. Commissioner Saeed asked if hens had any environmental impacts, to which Mr. Scott replied that he is not aware of any, adding that chicken droppings are used as fertilizer. Relating that she has seen neighbors with hens, Ms. Brown asked how this is currently regulated. Mr. Scott replied that responses to such situations are complaint-driven. Commissioner Kreuzer asked how waste is addressed in other communities. Mr. Scott said that it is typically bagged, separately, for garbage pick-up. Mr. Kreuzer asked if the Village's waste hauler would allow this waste; Mr. Scott said this is a good question. Mr. Kreuzer asked about the proposal for keeping ducks and about fence type required, to which Mr. Scott deferred the duck question to Hen Ellyn, and said the fencing he's observed is typically at least 4-ft. high. In response to a query from Mr. Kreuzer about commercial sales of eggs, Director

Scott said he believes it would be prohibited from homes. To a question about lot-size requirements, he said this is a consideration of the Commission, but there's "no real science to it."

Commissioner Dawson asked if any restrictions might be placed on paint colors for coops. Calling this the "weakest link" in the proposed ordinance, Mr. Scott said Staff would take on the risk of monitoring this, though guidelines could be drawn up. Mr. Dawson argued for a minimum lot size requirement and asked if periodic inspections would be performed. Mr. Scott replied that there were no complaints in three years of experience he had with a hen-keeping ordinance, and that hen owners tend to be responsible, though said there's a possibility of performing inspections. Mr. Dawson asked if proportional aspects of setback calculations for non-conforming lots would prohibit hen space. Sworn in, Ms. Fard, Sr. Planner, 535 Duane, explained that this regulation, unlike setbacks for a house, specifies 10 ft. from the rear and side, a flat rate, she said, that, if there is an objection to it, could be adjusted to reflect lot width. Commissioner Wyant said he's not sure how the community feels about having chickens near their homes, so would like some quantifiable data from communities that have disallowed hens, as well as opinions of realtors as to the effect of hens on home valuations. Chairperson Loftus asked if power would be needed to maintain a habitable temperature. Mr. Scott said he can't speak to this, but that it would probably be covered by the initial permit. Ms. Brown suggested tabling the discussion, pending further information.

Public comment

The following individuals, sworn in, made respective comments:

Emily Henkels, 779 Harding Ave., representing Hen Ellyn, a group promoting hen-keeping in the community, said she doesn't intend to keep hens herself, but would like to have neighbors who do. She invited questions to the group.

Jenna Lindman, 365 S. Kenilworth, said she's always wanted to keep chickens, and having lived near people who kept them on narrow lots, observed that the practice had never been a nuisance. She said hens were a joy to see and that they typically only take up a small space.

Matthew Guadette, 409 Hill, who stated that he had kept four hens on a 5,600SF lot in Oak Park, said waste was put into the trash but it could also be composted. He added that hen-keeping is educational for children, and gives them a sense of how food ends up on a plate.

William Weicher, 241 Traver, asked the Commission to take some time in its decision and to draw on available resources for more information. He said having hens gives children a reason to get outside and interact with nature and to learn where food comes from. He maintained that a hen's cluck is not as loud as a dog's bark.

Billy Joe Mills, 611 Maiden Lane, who introduced himself as a co-organizer of Hen Ellyn, said the community is already surrounded by hens, pointing to nearby towns including Lombard and Lisle. He urged Glen Ellyn to be a leader in encouraging development of a local food supply and fostering resilience.

Margaret Kamm, 230 Crest Road, said she almost didn't move to Glen Ellyn because it didn't allow chickens, but real estate choices narrowed for her as properties in towns with a hen-keeping ordinance were snapped up quickly. She added that chickens teach sustainability, particularly in this age of high egg prices.

Patrick Lopardo, 365 S. Kenilworth Ave., said he'd assumed Glen Ellyn already allowed chickens, and upon learning it didn't, got involved in the hen-keeping movement, and has come to the meeting to express support for the practice.

Angel Oakley, 641 Prairie, said she didn't come to the meeting over the hen question, but applauds the thoughtful commentary of the evening. She said she's familiar with hen-keeping through family members who kept chickens on small lots in an expensive area of California. She favored a 3-ft. setback.

Stephanie Giancarli, 84 N. Parkside, expressed concerns over the safety of 5G wireless, but was told by the Chairperson that the Public Hearing on the proposed cell tower had been continued to April 27, 2023.

A motion was made by Commissioner Dawson to close the Public Hearing; seconded by Commissioner Saeed, the motion passed by voice vote.

Commissioner Discussion

Commissioners Saeed and Thakkar agreed that any ordinance should cover hens only. Commissioner Brown said she is not well enough informed to make a determination about hens in the Village. Director Scott said he could come back with a report addressing a wide variety of topics. Commissioner Wyant said run-size guidance is needed. While voicing support for hens in the Village, Commissioner Dawson said he can't vote on the ordinance as written, wishing to see the maximum number of chickens reduced to four, setback deficiencies addressed, and a minimum lot size set. Mr. Kreuzer requested definitions of coop/run dimensions and shed height. Ms. Fard noted that relevant regulations for accessory structure placement already exist in the Code, and recommended against broadening restrictions, thereby creating a less inclusive environment. Chairperson Loftus favored tabling the discussion to allow opportunity to enhance ordinance language for review. Commissioner Thakkar moved to table the topic concerning an updated amendment for keeping hens until the April 27, 2023 Commission meeting. Seconded by Commissioner Brown, the motion passed by roll call vote, with all Commissioners present voting, "Yes."

OUTDOOR DINING AND PLATFORMS; FOOD TRUCKS; AND TOBACCO, VAPE AND SMOKE SHOPS

A motion to open the Public Hearing to consider amendments to text of the Zoning Code governing outdoor dining and platforms, food trucks, and tobacco, vape and smoke shops was made by Commissioner Thakkar; seconded by Commissioner Wyant, the motion carried by voice vote. Sworn in, Marty Scott, Director of Community Development, 535 Duane, Glen Ellyn, stated that these ordinances are already in place, but the Village is working to enhance them. He said that some of the outdoor dining perhaps enjoyed in the past year or two were pilot programs, for which more specifics are desired to help Staff manage application. Hence, he explained, proposed is new language, which also addresses

outdoor dining platforms such as those constructed at A Toda Madre. New regulations, continued Mr. Scott, apply to public and private spaces, whether on right-of-ways (ROW) or into a side yard. The focus, he indicated, is on permission, allowable dates, safety and so forth. Platforms, he added, present some challenges, specifically location, structural integrity, pedestrian traffic safety, maintenance and upkeep, lighting compliance, proper site management.

Chairperson Loftus asked for a description of wind blocks, to which Mr. Scott explained that they are add-ons (e.g., fencing, lattice) for stability, but that “igloos” wouldn’t be allowed to infringe. Commissioner Wyant noted date exceptions (for flexibility). The Chairperson asked if platform size is limited by Code, to which Mr. Scott replied, “No,” but said they are reviewed for ADA and pedestrian/vehicle safety by Staff and Public Works, respectively. Emphasizing the value of restaurateur feedback, Commissioner Wyant asked if Glen Ellyn is considering closing Main Street in summer months, as Wheaton does, to accommodate street dining. Mr. Scott said he hasn’t heard of any such conversations. Commission Arango asked if the process to extend for good weather is seamless (i.e., not a lot of red tape) for restaurants, to which Mr. Scott replied affirmatively. To respond to a query by Commissioner Kreuzer about lighting near residential space above restaurants, Atrian Fard, Sr. Planner, 535 Duane St., was sworn in. She explained that when apartments are above dining establishments, though the mixed-use building is considered commercial, a ½ foot candle restriction applies. Observing that the Code was written before LED technology was invented, Commissioner Kreuzer said that nothing in the ordinances addresses it (e.g., color and temperature). Ms. Fard said LED considerations can be addressed in the final Zoning Code cleanup. He then asked how noise is measured. Mr. Scott responded that loud noise (i.e., diner) or disturbing amplified music is likely complaint-driven and addressed by the Police Department. Commissioner Kreuzer asked if restaurants will be asked to turn off their outdoor dining lights when they close, to which Ms. Fard explained that outdoor dining is subject to regular restaurant operation rules, which stipulate lights be turned off at closing. Commissioner Brown moved for the following:

After conducting a public hearing and deliberating on the requests of the petitioner, the Village of Glen Ellyn, for approval of proposed amendments to Chapter 2 and Chapter 5 of the Zoning Code as well as Chapter 1 (Streets and Sidewalks) of the Public Ways and Property of the Glen Ellyn Village Code, the Plan Commission hereby recommends:

1. Approval as discussed or amended at the Plan Commission public hearing on March 9, 2023, which are hereby incorporated into the Motions 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, of proposed amendments to Chapter 2 (Definitions) and Chapter 5 (Supplementary Regulations) of the Zoning Code as well as Chapter 1 (Streets and Sidewalks) of the Public Ways and Property of the Glen Ellyn Village Code, all relating to outdoor dining and outdoor platform regulations.

Seconded by Commissioner Arango, the motion passed on a roll call vote with Commission members Brown, Arango, Dawson, Kreuzer, Saeed, Thakkar and Wyant and Chairperson Loftus voting, "Yes."

Director Scott introduced the next set of proposed text amendments by saying that food truck activity also stems from a pilot program. He indicated that to respond to this commercial endeavor via code requirements, best practices from other communities, namely St. Charles, were examined. Staff, he continued, focused on location, products sold, compliance with Health Department, site management, sales tax procedure, and number of days and hours of operation. He said he anticipates food trucks would be allowed on private property to supplement existing businesses and at special events if invited by local taxing bodies and not-for-profits, but prohibited from street operation on random days.

In response to a query from Chairperson Loftus about parking on public ROWs, Director Scott said ROW parking would only be allowed at a public event, such as one sponsored by the Park District or the College of DuPage. The Chairperson then asked whether a truck could be on a street if the Village-sponsored an event. Mr. Scott replied that it would only be permitted on the site, unless a Board waiver is granted. Chairperson Loftus asked for a definition of accessibility in a food truck context. Mr. Scott said accessibility refers to placement of the truck to allow disabled individuals access to it. Mr. Loftus asked if a food truck is permitted to be on a sidewalk; on a private one, replied Mr. Scott. Sworn in, audience member Dawn Smith, 147 Kenilworth, related that trucks are on the road leading to the Boathouse and sit on brick pavers on Lenox along Lake Ellyn Park, as well as park in back of municipal lots during the French Market. Mr. Scott special events would be looked at on a case-by-case basis. Chairperson Loftus asked about a power source. Noting that generators are loud and circuit overload is a concern, Director Scott said requirements could be reviewed to see if any flexibility is needed. Mr. Loftus asked if private lot parking is curtailed by food trucks, in violation of Code; Mr. Scott noted that situations are temporary. Chairperson Loftus asked if a three-day limit would be more appropriate than a two-day limit. Ms. Smith related that the carnival lasts one week, "The Taste" runs four days, and everything else is a one-day event. Mr. Scott said language could perhaps be added pertinent to extended limits for special events. Ms. Smith suggested language be included to prevent grease being dumped into sewers. Mr. Scott said it's not a bad idea to call this out. In response to a question from the Chairperson about hour restrictions, Mr. Scott said he doesn't think a truck would operate beyond eight hours, while Commissioner Kreuzer observed that trucks usually run out of food after two to three hours. Commissioner Wyant wondered whether restaurants look at food trucks as cutting into their business, expressing a wish for feedback on this, while Commissioner Arango stressed a need to be specific about proximity to restaurants. Sworn in, Trustee Steve Thompson, 535 Duane St., Glen Ellyn, observed that local restaurants typically don't want to participate in "Taste," and don't view food trucks as competition, seeing them as temporary, while Mr. Kreuzer noted that restaurants benefit from takeout by Beer Cellar patrons. The distinction between food trucks and vendor carts, and the desire for flexibility in regulating temporary signage were discussed. Commissioner Dawson moved for the following:

After conducting a public hearing and deliberating on the requests of the petitioner, the Village of Glen Ellyn, for approval of proposed amendments to Chapter 5 (Supplementary Regulations) of the Glen Ellyn Zoning Code, the Plan Commission hereby recommends:

1. Approval as discussed or amended at the Plan Commission public hearing on March 9, 2023, which are hereby incorporated into the Motions 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, of proposed amendments to Chapter 5 (Supplementary Regulations) of the Zoning Code, relating to food truck regulations.
2. No dumping of grease in the Village storm or sanitary sewer.
3. For food truck hours and duration, Staff to provide final language to address Plan Commission concerns.
4. To item 12 add “unless expressly approved by the Village” to the end of the sentence.
5. Strike final sentence from item #10.

Seconded by Commissioner Arango, the motion carried on a roll call vote with Commission members Dawson, Arango, Brown, Kreuzer, Saeed, Thakkar and Wyant and Chairperson Loftus voting, “Yes.”

Director Scott related that tobacco shops and vape stores are currently permitted uses in the C3 District, which is entirely along Roosevelt Road, and that it is proposed to reclassify them as special uses. While saying these are fine businesses that serve a need, Director Scott said they have a connotation to them that goes along with garish signs, names and lighting, and that complaints received are being addressed.

Mr. Saeed asked if verbiage “and other places of worship” be added to references to churches and temples. Commissioner Wyant asked where dispensaries fit in, to which Director Scott replied they aren’t permitted. Trustee Thompson interjected that medical use is permitted, but not recreational. Commissioner Dawson moved for the following:

After conducting a public hearing and deliberating on the requests of the petitioner, the Village of Glen Ellyn, for approval of proposed amendments to Chapter 4 (District Regulations) of the Glen Ellyn Zoning Code, the Plan Commission hereby recommends:

1. Approval as discussed or amended at the Plan Commission public hearing on March 9, 2023, which are hereby incorporated into the Motions 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, of proposed amendments to Chapter 4 (District Regulations) of the Zoning Code, relating to tobacco, vape, and smoke shop regulations.
2. Add to item 10-4-15 (B5) “or other places of worship.”
3. Add to item 10-4-15 (E1) “or other places of worship.”

Seconded by Commissioner Saeed, the motion passed on a roll call vote with Commission members Dawson, Saeed, Arango, Brown, Kreuzer, Thakkar and Wyant and Chairperson Loftus voting, “Yes.”

A motion to close the Public Hearing was made by Commissioner Saeed; seconded by Commissioner Wyant, the motion passed by voice vote.

Official Zoning Map

Sr. Planner Fard explained that the Illinois Compiled Statutes require that the Village publish an updated Zoning Map by April 1st of each year. This update, she explicated, typically includes annexations, zoning map amendments, and the correction of any platting errors. Staff, she said, requests the Plan Commission review and make a recommendation regarding the Official Zoning Map of 2023 to the Village Board. She proceeded to describe the changes to the map adopted by the Village Board in 2022:

Harding Glen Townhomes: This is a zoning map amendment and a re-subdivision for a 23-unit residential townhome development to be known as Harding Townhomes. The property was rezoned from R2 Residential to R4 Multi-family Development District.

413 N. Main Street: The ordinance rezoned an area of the building from the C5A to C5B to accommodate the redevelopment of the back half of the existing building on the property to accommodate 12 loft-style apartments. (C5A, she noted, doesn't allow apartment use on the first floor.)

Glen Estates Subdivision: P.J. Murphy sub-divided a big lot into eight lots, seven of which will include single-family homes, a process underway.

Arboretum Estates East: This change encompasses the annexation of 28 properties, which were added to the map.

She outlined Plan Commission action on the Official Zoning Map for 2023. Chairperson Loftus declared that the recommendation is, "Let's go with it."

Trustee's Report

Trustee Thompson said the Board is engaged in multiple Village initiatives, listing the Streetscape, the train station, the US Bank property, the hotel site, the Comprehensive Plan and the McKee House, Glenwood Station, Apex garage, and the Katy's site. He invited questions.

Staff Report

Sr. Planner Fard said there are several cases under review, but nothing scheduled for the March meeting. Commissioner Dawson expressed that he'd rather attend an additional meeting than have to endure an exceptionally long one.

Adjournment

Chairperson Loftus adjourned the meeting at 10:40 p.m., following passage by voice vote of a motion by Commissioner Thakkar and seconded by Commissioner Saeed.

Respectfully submitted,

Barbara Dutton-Thomas, Recording Secretary



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

Meeting 4/27/2023 7:00 PM
Department: Community Development
Department Head:
Category: Discussion Item
Prepared By:

**AGENDA ITEM (ID
2023-472)**

DOC ID: 2023-472

Public Hearing – 525 S. Park Boulevard: Willowbrook Wildlife Center: Forest Preserve District of DuPage County, is petitioning the Village for a Special Use Permit, Zoning Variations, and Exterior Appearance to accommodate Phases B-D of the improvements to the Willowbrook Wildlife Center located at 525 S. Park Boulevard in the CR Zoning District.

Statement of the Issue:

Please see the attached Staff Report.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. PC Staff Report 4-27-23- Willowbrook Wildlife Center Phases B-D
2. Draft Motion to Approve
3. WWC Phase B-D Applications
4. Aerial Map
5. Zoning Map
6. 1' Contour Map
7. Public Notice - Willowbrook Wildlife Center Phases B-D - April 27 2023
8. Public Hearing Certification
9. WWC Phase B-D Development-All Exhibits
10. WWC Phase B-D_Development Plan-Drawings
11. WWC Phase B-D_Development Plan Review - Supporting Documents
12. WWC Phase B-D Dev Plan-Landscape Plan
13. WWC Phase B-D Lighting Plan

14. 2001 Comprehensive Plan Section
15. 2022 Draft Comprehensive Plan Section

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Scott Viger, Consultant Planner

DATE: April 20, 2023

FOR: April 27, 2023 Plan Commission Meeting

SUBJECT: Willowbrook Wildlife Center Phases B-D, 525 S. Park Boulevard
Special Use Permit and Zoning Variations

PETITIONER: The petitioner is the Forest Preserve District of DuPage County, owner of the Willowbrook Wildlife Rehabilitation Center located at 525 S. Park Boulevard.

REQUEST: Approval of a Special Use Permit and Zoning Variations associated with a proposed Master Plan for the Willowbrook Wildlife Center Phase B-D, including demolition of the existing clinic building; renovation of the existing Propagation Building; improvement of the parking lot and construction of a new clinic & visitor center, six new animal enclosures, ground-mounted solar energy systems, a decorative fence, and a new walking path throughout the site. In order to accommodate the project, the petitioner is specifically requesting approval of the following:

1. A Special Use Permit in accordance with Section 10-4-3(B)5 for a Public Recreational Facility (wildlife education and rehabilitation center).
2. The following variations from the Glen Ellyn Zoning Code:
 - a. Zoning Variation: *Accessory structure floor area*. Per Section 10-5-4(A)-2(a), the total combined area of all freestanding accessory structures on a zoning lot shall be limited to 1,000 square feet, but no more than 30 percent of a required rear yard (23,907 square feet), whichever is less. Building N and the existing clinic are the principal buildings on the lot and the remaining structures, including enclosures, barns, and sheds, are accessory structures. The total combined area of the existing and proposed accessory structures is approximately 34,200 square feet, which exceeds the maximum allowable combined area of 1,000 square feet for freestanding accessory structures.

- b. Zoning Variation: *Accessory structure setback*. Per Section 10-5-4(A)-4(a), accessory structures shall be located no closer to the property line than the principal structure on the lot. The proposed ground-mounted photovoltaic array is closer to the front lot line than the principal buildings on the lot.
- c. Zoning Variation: *Fence height*. Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be a maximum of 4 feet tall, where an 8-foot-tall decorative and chain link fence is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and the new clinic) on the lot. A variation is thus required for the 8-foot-tall decorative and chain link fences extending beyond the front face of Building N, which is the closest principal building to the street.
- d. Zoning Variation: Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be at least 33.3% open, where a chain-link fence with a dense screen shade cloth is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the privacy fence extending beyond the front face of building N, which is the closest principal building to the street.
- e. Zoning Variation: Per Table 10-5-5(B)4#11, the maximum allowable height for fences placed behind the front face of the principal structure is 6 feet. Therefore, additional variation would be needed to install 8-foot-tall solid fences throughout the site, behind the front face of Building N.
- f. Zoning Variation: *Landscaping*. Section 10-5-13(L)1 proscribes the quantity, type and size of shade, ornamental and evergreen trees. The applicant is requesting a variance to these standards in the event that the existing trees on the site do not meet the standards of Section 10-5-13(L)1.
- g. Zoning Variation: As proposed, there is a partially landscaped island, smaller than the size of the proposed parking stalls (20' by 10') at the end of north staff parking row, thus a variation from Section 10-5-8(H) will be required.
- h. Zoning Variation: *Building height*. Per Section 10-4-3(D), maximum building height from average existing grade in the CR

District is 35 feet. As proposed, the new clinic will have a finished height of 42.89 feet above the average existing grade.

- i. Zoning Variation: A zoning variation is required from Section 10-4-3(G)1 for the required minimum number of parking spaces on the lot.
- j. Zoning Variation: *Building sign quantity*. Per Section 4-5-8(A) of the Sign Code, only one wall sign is permitted for each principal building open to the public. Two wall signs are proposed on the new clinic building.
- k. Zoning Variation: *Fence openness factor*. Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be at least 33.3 per cent open. The applicant is proposing a chain-link fence with a dense screen shade cloth located closer to the street (Park Blvd) than the principal structures (Building N and the new clinic) on the lot.

LOCATION/ ZONING:

The subject property is comprised of approximately 41 acres and is located on the east side of Park Boulevard between Buena Vista Drive and Glen Valley Road in the CR Conservation Recreation zoning district. The proposed improvements cover approximately 15 acres of the site. Considerable distance and trees separate the improved area from the properties to the north, south and east. The surrounding zoning and land uses are as follows:

	<u>Land Use</u>	<u>Zoning</u>
North:	Single-Family	Village R1 and County R4
South:	Single-Family	County R3
East:	Single-Family	County R4
West:	Church and COD Campus	Village R1 and CC

COMP PLAN: According to the 2001 Comprehensive Plan, the subject property is designated as Parks and Open Space. The current and expanded use is appropriate as it includes park-like features along open space.

PUBLIC NOTICE:

Notice of the public hearing was published in the April 12, 2023 edition of the *Daily Herald*. Property owners within 250 feet of the property were notified by mail of the public hearing and a placard was placed on the property.

REVIEW**PROCESS:**

In order to accommodate the project, the Forest Preserve is requesting approval of a Special Use Permit and Zoning Variations for the proposed Phase B-D improvements. The requested Sign Variations and proposed Exterior Appearance was reviewed by the Architectural Review Commission on Wednesday, April 12, 2023. The Commission was very complementary of the plans and unanimously recommended approval.

PROJECT**SUMMARY:**

The Willowbrook Wildlife Center provides care and treatment to injured and orphaned animals and hosts educational programs for schools and other organizations. The Forest Preserve District has embarked on a multi-year, multi-phase plan to enhance and upgrade this unique asset so that it can accommodate increases in the number of animals being admitted as well as the number of visitors to the site. The requested actions before the Commission now are part of Phase B-D, which the Forest Preserve District desires to start later this year. Specific details of the project are contained in the petitioner's application packet. An overview of the proposed improvements as they relate to the requested Special Use Permit and Zoning Variations is below.

1. Phasing. The petitioner has developed a Master Plan for the property that would be constructed in four phases, A through D. The Plan Commission reviewed an application related to early phases of master plan in July 2013 and August 2022. This phase included: outdoor rehabilitation (first phase); removal of dilapidated enclosures; and relocation of existing resident animals to new enclosures.
The petitioner is requesting that the requested Special Use Permit and Zoning Variations be valid for up to 10-years to allow the Forest Preserve sufficient time to complete the Phase II improvements. Zoning approvals are typically valid for two years, with the potential of an additional one-year extension by staff. Longer time frames have been granted up-front for other projects. Staff is not aware of any prior approvals being granted in excess of 10 years.
2. Parking. Upon completion of the Master Plan a total of 106 parking spaces will be required for the site. The existing parking lot, constructed in 2013 will be slightly modified. Four additional spaces will be added and the existing employee parking north of the entry drive will be redesigned to accommodate 11 cars. Staff's calculation is that the Site contains 102 parking spaces, three short of the 106 required by Section 10 – 4 -3(G)1. The three existing bus spaces will remain. The landscaped islands abutting the new employee parking spaces appear to be in compliance with Section 10 – 5- 8 (H).
3. Access. The entrance to the site is located at the lighted intersection of

Fawell and Park Boulevards. No material changes to the access drive are planned.

4. Clinic / Visitor's Center. A new 28,088 square foot Clinic and Visitor's Center will be erected south of the existing Clinic & Education Center that will be demolished. The design of the new facility will support an efficient and safe rehabilitation process for the animals. The building is proposed at 42.89' in height, exceeding the Code maximum of 35' in the Conservation Recreation District. Therefore, a variation is necessary. Given the more than 300-foot setback of the building from Park Boulevard and the unique size and nature of the facility, the impact of the additional building height should be nominal. The design of the building was reviewed by the Architectural Appearance Commission.
5. Enclosures. Five new animal enclosures are proposed for the site. Two are immediately north of the new Clinic/Visitor's Center. While the other three are clustered around the existing northern enclosure (K on the Plan)
6. Fencing. Several fencing variations are proposed. The nature of the variations is due in large part to the large site and necessity of animal enclosure and safety. Section_10 – 5 – 5(B)4#11 prohibits fences in excess of 4' to be closer to the street than the principal structure on the lot. The Forest Preserve proposes an 8' high aluminum picket and rail fence to enclose the Photovoltaic Array west of the existing and to remain Building N. Also, and 8' black chain link fence with black shade cloth shielding the new and existing animal enclosures from visitors in keeping with wildlife rehabilitation standards.
7. Landscape Plan. Due to the large site area the required formal tree survey was not prepared. However, an extensive landscape Plan was submitted and reviewed by staff. Revisions to the plan were made based on staff commentary. The plan includes foundation plantings at the new building(s), And specifies trees, shrubs, grasses and forbs throughout the site. In keeping with the natural theme, various areas will be planted with shortgrass prairie, natural BMP mix, low profile "drivable" mix and savanna mix grasses.
8. Floodplain. A 100-year floodplain runs along the eastern edge of the developed area. No improvements are proposed in this area.
9. Site Engineering and Stormwater. The engineering plans have been reviewed by the staff engineers and is preliminarily approved. Any revisions thereto can be made at final/permit engineering.

PLAN

COMMISSION**ACTION:**

The Plan Commission should review the petitioner's requests for approval of the requested Special Use Permits and Zoning Variations and make a recommendation to the Village Board for approval, approval with conditions or denial. In reviewing the requested Special Use Permits, the Commission should consider the criteria in Section 10-10-14(E) of the Zoning Code. In reviewing the requested Zoning Variations, the Commission should consider the criteria in Sections 10-10-12(C) and (D) of the Zoning Code.

In considering the applications, the Commission should also consider and make a recommendation to the Village Board on the proposed 10-year length of the approvals.

cc: Martin Scott, Community Development Director
Kevin Horsfall Forest Preserve District of DuPage County
Dane Svoboda, Wight & Company

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(DRAFT) MOTION TO RECOMMEND APPROVAL A SPECIAL USE PERMIT AND ZONING VARIATIONS TO ALLOW PHASE B-D OF THE IMPROVEMENTS TO WILLOWBROOK WILDLIFE CENTER LOCATED AT 525 S. PARK BOULEVARD

After conducting a public hearing and deliberating on the requests of the petitioner, Karen Gray, on behalf of the Forest Preserve District of DuPage County, for approval of a Special Use Permit and Zoning Variations to accommodate Phases B-D of the improvements to the Willowbrook Wildlife Center located at 525 S. Park Boulevard, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on April 27, 2023 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. The project shall be constructed in substantial conformance with the Phase B-D plans as submitted and the testimony presented at the April 27, 2023 Plan Commission public hearing.
2. That the proposed landscaping on the site shall be installed in compliance with the approved landscape plan and be continuously maintained in perpetuity.
3. That the proposed structures shall be constructed in compliance with the approved Exterior Appearance.
4. The stormwater management plan shall be reviewed and approved by the Village Stormwater Engineer prior to the issuance of a building permit for Phase B-D.
5. The wetland delineation shall be reviewed and approved by the Village Environmental Engineer prior to the issuance of a building permit for Phase B-D.
6. The petitioner shall return to the Plan Commission and Village Board for review and approval of the remaining phases of the project.

Motion by: _____ Seconded by: _____

APPLICATION FOR SPECIAL USE PERMIT

The undersigned petitions the President and Village Board of Trustees of the Village of Glen Ellyn, Illinois, to consider the Special Use described in this application.

Date Filed: October 27, 2022 Application No: _____

Name of Applicant: Kevin Horsfall, Assistant Director of Resource Management and Development - Forest Preserve District of DuPage County

Address of Applicant: 3S580 Naperville Rd. Wheaton, IL 60189

Business Phone: 630-933-7242 Fax: _____

Home Phone: _____ Mobile Phone: _____

Email: khorsfall@dupageforest.org

Property Interest of Applicant: Owner Representative

(Owner, Contract Purchaser, Owner Representative)

Name of Owner: Karie Frilling, Executive Director - Forest Preserve District of DuPage County

Address of Owner: 3S580 Naperville Rd. Wheaton, IL 60189

Business Phone: 630-933-7200 Fax: _____

Home Phone: _____ Mobile Phone: _____

Email: kfrilling@dupageforest.org

Address: Willowbrook Wildlife Center 525 S. Park Blvd. Glen Ellyn, IL 6013

Legal Description of Property: _____

Refer to attached Chase Land Title Survey dated October 5, 1970

Refer to attached WMA Land Title Survey dated January 2, 1997

Permanent Index No. (PIN): 05-26-200-001 Zoning: CR Conservation Recreation

Lot Dimensions: 1393' x 1,324' Lot Area: 43.08 Acres

Present Use: Rehabilitation Center

Requested Use/Construction: Rehabilitation Center

Estimated Date to Begin New Use/Construction: March 1, 2023

Name(s), Address(es) and Phone No(s). of Experts (architects, engineers, etc.):

Wight & Company
2500 N. Frontage Rd., Darien, IL 60561
630-969-7000

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 10-10-14 of the Zoning Code:

Refer to attached Narrative Statement

Describe How the Special Use:

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:

The proposed improvements to the Willowbrook Wildlife Center support the goal of the comprehensive plan to emphasize parks and open space as distinguishing features of the community and to continue collaboration and cooperation with the forest preserve district to foster community spirit. The improvements also support the goal of preserving and protecting natural resources in in Glen Ellyn and DuPage County while connecting people to nature.

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:

The new clinic and visitor center is designed at a scale and with materials consistent with the surrounding residential areas. The construction materials are a mix of grays, earth tones, and other muted natural colors selected to blend in with the surrounding trees and grasses. Pedestrian access to the facility via walking paths and sidewalks will be maintained.

3. Will not be hazardous or disturbing to existing or future neighborhood uses:

The current operating hours public facilities and services such as animal intake, exhibit space and walking paths will be maintained. Approximately 275 feet of dense forest will remain between the new enclosures and adjacent residential properties. Development is concentrated on the west of Glen Crest Creek to minimize impacts to neighbors to the north, east, and south,

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:

Programs accessible to the public such as the visitor center, picnic grounds, and walking paths will remain. Vehicle and pedestrian access from Park Boulevard will be maintained. Public services such as police, fire, and refuse disposal will be maintained. Connection of water and sewer to municipal systems will be maintained. Storm water run-off is designed to be managed on site to meet the Village of Glen Ellyn storm water regulations, incorporating best storm water management practices in accordance with the DuPage County Countywide Stormwater and Floodplain Ordinance.

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:

Willowbrook Wildlife Center will continue to serve as a resource for residents of Glen Ellyn and wider DuPage County to learn about living in harmony with local wildlife and champions the interconnection between healthy wildlife and healthy ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in Glen Ellyn, DuPage County and beyond.

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:

The current hours of operation will be maintained. Wildlife rehabilitation activities will not change and remain at their current capacities. The general public will continue to not have access to the animal rehabilitation spaces. Animal rehabilitation spaces are regularly maintained and disinfected as required by Minimum Wildlife Rehabilitation Standards.

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:

The current controlled vehicular entrance from Park Avenue will remain. In 2014 the parking lot was expanded in anticipation of the final master plan build out. The three designated bus spaces on the west side of the parking lot will remain to accommodate school field trips. For special events, the adjacent church property has agreed to allow their parking lot be used for overflow parking.

8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief:

The new improvements are designed to meet the Village of Glen Ellyn storm water regulations, incorporating best storm water management practices in accordance with the DuPage County Countywide Stormwater and Floodplain Ordinance..

9. Will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community:

Impacts to surrounding landscape will be held to minimum to maintain the large woodland buffer surrounding the property. Best management practices for storm water management will be implemented. Illinois Department of Natural Resources has been consulted for threatened or endangered species impacts as well as Illinois Historic Preservation Agency with no adverse impacts likely.

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 until and upon payment of transcribing fees.

<u>1/12/2023</u>	<u>Kevin Horsfall</u>	<u><i>Kevin Horsfall</i></u>
Date	Print Name	Signature of Applicant
<u> </u>	<u> </u>	<u> </u>
Date	Print Name	Signature of Applicant
<u> </u>	<u> </u>	<u> </u>
Date	Print Name	Signature of Applicant

**THE BEST INTERESTS OF THE APPLICANT WILL BE SERVED
BY COMPLETING THIS APPLICATION IN DETAIL**



EXTERIOR APPEARANCE

1. *Section 1.2 of the Village Design Guidelines does not recommend glass storefront wall systems that extend to the ground and mirrored or reflective glass materials as the building walls. Curtainwalls will be used extensively for the walls of the new clinic at ground level as well as in upper parts. Therefore, a deviation from Section 1.2 will be required.*

RESPONSE: Limited areas of “full-height” glass curtainwall are located in areas that register access points such as the Animal Intake area, the Lobby, and the Classroom. The full-height glass wall is used much as a retail storefront might be used to invite users into the space and provide a connection from the interior to the exterior of the building (forest preserve). These spaces are used as a design feature to demonstrate our connection to nature. The glass itself will be etched with a bird deterrent pattern as an educational tool, drawing attention to the mission of the building to promote interconnection between healthy wildlife, healthy ecosystems, and human impact. Although the specified glass does not fall into the category of ‘mirrored’ or ‘reflective’ glass, these etchings are provided to interrupt the standard level of glass reflections that will exist. Additionally, all glass ‘full-height’ walls are designed to be elevated on a curb for maintenance and durability purposes.

EXTERIOR APPEARANCE REVIEW
APPLICATION

CLEAR ALL PAGES

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

I. APPLICATION INFORMATION:

A. Date Filed: 10/27/2022 B: Application No. _____

C. Project Name: Willowbrook Wildlife Center Additions and Renovations

D. Project Description:

Additions and renovations to the Willowbrook Wildlife Center including a new rehabilitation center, new outdoor animal enclosures, existing propagation building renovations, and related sitework.

E. Address of Property: Willowbrook Wildlife Center 525 S. Park Blvd. Glen Ellyn, IL 60137

F. Permanent Index No.: 05-26-200-001 G. Zoning: CR Conservation Recreation

H. Name of Applicant: Kevin Horsfall/Assistant Director of Resource Management and Development

I. Address of Applicant: 2500 N. Fontage Rd., Darien, IL 60561

J. Phone No. (Business): 630-933-7200 (Home) _____

K. (Mobile) _____ (Other) 630-933-7242 (direct)

L. Fax No.: _____

M. E-mail Address of Applicant: khorsfall@dupageforest.org

N. Name of Property Owner: Forest Preserve District of DuPage County

O. Address of Property Owner: 3S580 Naperville Rd. Wheaton, IL 60189

P. Phone No. (Business): 630-933-7200 (Home) _____

Q. E-Mail Address of Property Owner: kfrilling@dupageforest.org / Executive Director Forest Preserve District of DuPage County

II. CONFORMANCE WITH APPEARANCE REVIEW GUIDELINES:

(You may attach separate sheets of paper as needed to answer any of the following questions)

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

Designed to fit into the natural landscape, the new Clinic and Visitor Center is planned around significant oak and walnut trees on the property. The front entrance features an oak tree that forms a soft separation between the animal intake entry and public visitor entry. Low slope roofs with long horizontal edges provide a low profile to the building while vertical and horizontal textures blend the building into the surrounding trees and grasses. Layers of structure and extended canopies help the profile of the architecture visually dissolve into the forest. Elements of sustainability and wellness are incorporated into the project in addition to features that support healthy wildlife such as bird-friendly glass and screening elements.

New outdoor enclosures that will be used for animal rehabilitation and will not be open to the public. The architectural style of the animal enclosures are designed to meet functional requirements of animal rehabilitation and durability of materials for their safety and security, rather than aesthetic.

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

The Willowbrook Wildlife Center site is surrounded by incorporated and unincorporated residential uses to the north, east, and south and a school and church to the west. The residential areas are buffered by over 275 feet of forest. Many of the surrounding residences are single family with traditional materials including horizontal siding, brick, and sloped- shingle roofs. The school and church are single and multi-story structures with brick, concrete, metal and wood trim, and glass with flat and sloped roofs. All adjacent developments are heavily buffered by a parkway along Park Avenue or trees within Willowbrook Forest Preserve.

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

As a non-residential principle building, the new Clinic and Visitor Center is designed to fit in the context of the site and complement the architectural character of the existing structures on the site. Exterior materials of composite wood siding, exposed wood beams, and natural stone are selected to blend with the natural environment and complement the landscaping.

The new Clinic and Visitor Center is located in the center of the site, out of direct view from South Park Boulevard. The public entrance with sidewalk leading to an entrance canopy that clearly identifiable.

Outdoor enclosures have minimally sloped roofs to keep overall height at a minimum. Enclosures are set back from the street more than the required setbacks. Enclosures are located in the center of the site, screened from direct view from South Park Boulevard with landscaping.

U. Please explain why any deviations from the Appearance Review Guidelines are proposed:

Refer to attached Appearance Review Guidelines Deviations Summary

Signature: Kevin Horsfall Date: 10/27/2022

Variation 1: Accessory structure floor area

Building N and the existing clinic are the principal buildings on the lot and the remaining structures, including enclosures, barns, and sheds, as accessory structures. Per Section 10-5-4(A)-2(a), the total combined area of all freestanding accessory structures on a zoning lot shall be limited to 1,000 square feet, but no more than 30 percent of a required rear yard (23,907 square feet), whichever is less. The total combined area of the existing and proposed accessory structures is approximately 34,200 square feet which exceeds the maximum allowable combined area of 1,000 square feet for freestanding accessory structures. Therefore, a variation will be required.

Project Application: Outdoor caging/housing is critical component of animal rehabilitation. Animals undergoing rehabilitation are housed in outdoor enclosures prior to release for exercise, behavior rehabilitation, and acclimation of weather conditions. The sizes and configurations of enclosures depend on species housed. The zoning ordinance limitations on the accessory structure size and height would not meet the minimal standards for wildlife rehabilitation to occur.

Variation 2: Fence height

Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be a maximum of 4 feet tall, where an 8-foot-tall decorative and chain link fence is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the 8-foot-tall decorative and chain link fences extending beyond the front face of building N, which is the closest principal building to the street.

Project Application: 8 foot high fencing is required to control access and visibility to the animal holding areas. Animal holding areas need to be visually screened from people outside of the enclosures to protect the animal without habituating it to human activity. To avoid habituation to humans, an 8-foot-high fence with a dense screen shade cloth is utilized to effectively screen all people from view. Current zoning limitations on fence height would not meet the minimal standards required for wildlife rehabilitation for the Willowbrook Wildlife Center to operate effectively. This applies to all perimeter fencing proposed on the site.

Variation 3: Landscaping

A variation from the specific landscape requirements in Section 10-5-13(L)1 related to the number, type and size of required trees on the property in the event that the site as a whole would not fulfill the specific requirements of this section.

Project Application: A variation from the requirements of this Section is requested in the event that the existing breakdown of trees on the site does not meet the strict requirements of the Code. A tree survey of the 43-acre site to determine compliance with Section 10-5-13(L)1 would be very costly and detrimental to forest health, requiring clearing of the undergrowth. While the proposed improvements will require removal of multiple trees and vegetation, a large portion of the property will remain undisturbed wooded.

The strategy for the tree preservation is to first save and protect healthy trees within the developed open areas where possible. It is the Forest Preserve District's mission to use exclusively native plants and manage the landscaped areas accordingly. This would preclude evergreens as they would not survive the planned prescribed fires. The species being proposed, specifically the high number of oaks, have higher stress rates being transplanted at larger sizes, negatively impacting their survival and growth rates. The design intent is to emulate and showcase the various natural ecosystems found in the county, to better assist with educational programming, which dictated the plant types, quantities, sizes, and species used.

ZONING VARIATION SUMMARY

Forest Preserve District of DuPage County – Willowbrook Wildlife Center
Development Plan Phase B-D Submittal

Proposed Tree Planting Schedule

Tree Type	#/ Acre	Greenspace	Total Required	Shown
Deciduous Shade 2"-2.5"	6	1.7	10.2	0
Deciduous Shade 3"-4"	5	1.7	8.5	15
Deciduous Shade 4.5" and larger	3	1.7	5.1	0
Deciduous Shade Total	14	1.7	23.8	15
Ornamental 6'-8'	3	1.7	5.1	7
Ornamental 8.5' and larger	2	1.7	3.4	0
Ornamental Total	5	1.7	8.5	7
Evergreen 6'-8'	2	1.7	3.4	0
Evergreen 8.5'-10'	2	1.7	3.4	0
Evergreen 10.5' and larger	1	1.7	1.7	0
Evergreen Total	5	1.7	8.5	0

Variation 4: Building Sign Quantity

Per Section 4-5-8(A)2 of the Sign Code, only one wall sign is permitted for each principal building open to the public, where two wall signs are proposed on the new clinic building. A variation is required if over one sign is required.

Project Application: Two signs are being requested for the new clinic building. The new clinic includes a separate entrance for animal intake and a separate entrance for the exhibit space. Signage at each entrance is required to direct the public to the appropriate service. The proposed building signage is designed to blend with the building and will not be lighted. The total surface area of the two building signs combined will meet the requirements of the requirements for a single sign (less than 100 SF).

Variation 5: Accessory Structure Setback

Per Section 10-5-4(A)-4(a), accessory structures shall be located no closer to the front property line than the principal structure on the lot. The proposed ground mount photovoltaic array is closer to the front property line than the principal buildings on the lot. Therefore, a variation will be required.

Project Application: Locating the photovoltaic array behind the primary structures as required by the zoning ordinance would encroach upon the creek bed that runs directly behind the primary structures. Building along the creek bed will be physically challenging to construct due to the steep grading.

Variation 6: Building Height

Per Section 10-4-3(D), maximum building height from average existing grade is 35 feet in CR District. As proposed, the new clinic will have a finished height of 42.89 feet from the average existing grade; therefore, a variation will be required.

Project Application: The physical conditions of the property present particular hardship to meeting the requested building height requirements of the ordinance based on the 'average existing grade' defined in Section 10-11-12. The existing topography of the property slopes significantly toward the creek behind the proposed clinic. This equates to an 'average existing grade' that is substantially lower than the typical grade at the public parking lot on the front side of the new clinic. Please note, the building height is less than the code maximum height when measured from the primary public parking and the clinic roof was designed to minimize the perceived visual height to better blend into the surrounding context. Limiting the building height relative to the average existing grade would require a single-story structure with a larger footprint. A larger footprint would increase the environmental disturbance of the site as well as reduce the operational efficiencies of the rehabilitation center. Refer to the **AVERAGE EXISTING GRADE CALCULATION** exhibit within the *Submission Materials-Supporting Documents*.

Variation 7: Fence openness factor

Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be at least 33.3% open, where a chain-link fence with a dense screen shade cloth is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the privacy fence extending beyond the front face of building N, which is the closest principal building to the street.

Project Application: Outdoor animal enclosures need to be screened from people outside of the enclosures to protect the animal without habituating it to human activity. a dense screen shade cloth is utilized to effectively screen people from view. Current zoning limitations on openness factor would not meet the minimal standards required for wildlife rehabilitation for the Willowbrook Wildlife Center to operate effectively. This applies to selected fence locations surrounding the animal enclosures. Refer to the **FENCING TYPES** exhibit within the *Submission Materials-Supporting Documents* document for fencing type locations.

VILLAGE OF GLEN ELLYN
535 Duane Street
Glen Ellyn, Illinois 60137
(630) 547-5250

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APPLICATION FOR VARIATION

For the property at 525 S. Park Blvd. Glen Ellyn, IL 60137

Note to the Applicant: This application should be filed with, and any questions regarding it, should be directed to the Director of the Village Community Development Department.

You may attach separate sheets if additional space is needed for the following answers.

The undersigned hereby petitions the Village of Glen Ellyn, Illinois, for one or more variations from the Glen Ellyn Zoning Code (Ordinance No. 3617-Z, as amended), as described in this application.

I. APPLICANT INFORMATION:

(Note: The applicant must comply with Section 10-10-10(B) of the Zoning Code).

Name: Kevin Horsfall/Assistant Director of Resource Management and Development

Address: 3S580 Naperville Rd. Wheaton, IL 60189

Phone No.: 630-933-7200 Cell Phone No.: 630-933-7242 (direct)

Fax No.: _____

E-mail: khorsfall@dupageforest.org

Ownership Interest in the Property in Question:

Corporation

II. INFORMATION REQUIRED BY SECTION 10-10-10(B) OF THE ZONING CODE, IF APPLICABLE:

NOTE: All parties, whether petitioner, agent, attorney, representative and or organization et al. must be fully disclosed by true name and address in compliance with Section 10-10-10(B) of the Zoning Code. Disclosure forms are attached for your convenience.

Name and address of the legal owner of the property (if other than the applicant):

Forest Preserve District of DuPage County
3S580 Naperville Rd.
Wheaton, IL 60189

Name and address of the person or entity for whom the applicant is acting (if the applicant is acting in a representative capacity):

Karie Frilling, Executive Director - Forest Preserve District of DuPage County
Forest Preserve District of DuPage County
3S580 Naperville Rd.
Wheaton, IL 60189

Is the property in question subject to a contract or other arrangement for sale with the fee owner? (Choose "Yes" or "No")

☐ YES

☒ NO

If YES, the contract purchaser must provide a copy of the contract to the Village and must either be a co-petitioner to this application or submit the attached Affidavit of Authorization with the application packet.

Is the property in question the subject of a land trust agreement? (Choose "Yes" or "No")

☐ YES

☒ NO

If YES, (1) either the trustee must be a co-petitioner or submit the attached Affidavit of Authorization from the trustee to represent the holders of the beneficial interests in the trust and (2) the applicant must provide a trust disclosure in compliance with "An Act to Require Disclosure of All Beneficial Interests", Chapter 148, Section 71 et seq., Illinois Revised Statutes, signed by the trustee.

III. PROPERTY INFORMATION:

Common address: 525 S. Park Blvd. Glen Ellyn, IL 60137

Permanent tax index number: 05-26-200-001

Legal description:

Refer to attached Chase-Willowbrook Plat of Survey dated October 5, 1970 and WMA
Land Title survey dated January 2, 1997

Zoning classification: CR Conservation Recreation

Lot size: 1,393 ft. x 1,324 ft. Area: 43.08 acres

Present use:

Rehabilitation Center

IV. INFORMATION REGARDING THE VARIATION(S) REQUESTED:

Description of the variation(s) requested (including identification of the Zoning Code provisions from which variation is sought) and proposed use(s):

Refer to attached Variations Summary

Estimated date to begin construction: March 1, 2023

Names and addresses of any experts (e.g., planner, architect, engineer, attorney, etc.):

Architects, Engineers, and Builders:
Wight & Company
2500 N. Frontage Rd.
Darien, IL 60561

V. EVIDENCE RELATING TO ZONING CODE STANDARDS FOR A VARIATION:

The following items are intended to elicit information to support conclusions by the ZBA or PC and the Village Board that the required findings/standards for a variation under the Zoning Code have been established and met. Therefore, please complete these items carefully.

A. Standards Applicable to All Variations Requested:

1. Provide evidence that due to the characteristics of the property in question, there are practical difficulties or particular hardship for the applicant/owner in carrying out the strict letter of the Zoning Code:

- Current zoning limitations on accessory structure size and quantity for outdoor animal caging and housing would not meet the minimal standards required for wildlife rehabilitation for the Willowbrook Wildlife Center to operate effectively.
- Current zoning limitations on fence height and openness factor would not meet the minimal standards required for wildlife rehabilitation for the Willowbrook Wildlife Center to operate effectively.
- Current zoning limitations on landscaping would impact the Forest Preserve District's mission to use exclusively native plants and manage the landscaped areas accordingly.
- Current zoning limitations on signage quantity limit the effectiveness for directing the public to the appropriate services available in the new clinic building.
- Current zoning limitations on accessory structure setback would limit the location for the ground mount photo-voltaic array to take advantage of maximum sun exposure.
- Current zoning limitations on building height would limit the efficiency of the rehabilitation center program and construction.

2. a. Provide evidence that the property in question cannot yield a reasonable return if permitted to be used under the conditions allowed by the Zoning Code (i.e., without one or more variations):

- Current zoning limitations on accessory structure size and height would not meet the minimal standards for wildlife rehabilitation to occur. Outdoor caging/housing is critical component of animal rehabilitation. Animals undergoing rehabilitation are housed in outdoor enclosures prior to release for exercise, behavior rehabilitation, and acclimation of weather conditions. The sizes and configurations of enclosures depend on species housed.
- Outdoor enclosures ideally protect the animal without habituating it to human activity. To avoid habituation to humans, an 8 foot high fence with a dense screen shade cloth is utilized to effectively screen people from view.
- Current zoning limitations on landscaping including a tree survey of the 43-acre site to determine compliance with Section 10-5-13(L)1 would be very costly and detrimental to forest health, requiring clearing of the undergrowth.
- Current zoning allows for a single building sign. The new animal rehab facility includes both a wild animal intake clinic and a public exhibit space. Signage at each entrance is required to direct the public to the appropriate service.
- Current zoning limitations on accessory structure (PV Array) setback would limit the location for the ground mount photo-voltaic array that is most effective when positioned to maximize sun exposure.
- Current zoning limitations on building height would require a larger building footprint A larger footprint would increase the environmental disturbance of the site as well as reduce the operational efficiencies of the rehabilitation center.

OR

- b. Provide evidence that the plight of the applicant/owner is due to unique circumstances relating to the property in question:

Section V.A.2.a. is chosen in lieu of V.A.2.b to address the plight of the applicant that is due to restrictions of the zoning ordinance and not due to the unique circumstances of the property.

3. Provide evidence that the requested variation(s), if granted, will not alter the essential character of the locality of the property in question:

-The density and height of the proposed outdoor animal enclosures are similar to the density and heights of the outdoor enclosures currently on the site.
-The proposed internal site fencing is designed to match the existing fencing required to screen the multiple outdoor enclosures which from public. The site will maintain its character as heavily forested from Park Boulevard and surrounding residential areas.
- Landscaping is designed to continue to emulate and showcase the various natural ecosystems found in the county, to better assist with educational programming, which dictated the plant types, quantities, sizes, and species used.
-The proposed building signage is designed to blend with the building and will not be lighted.
-The ground-mount photovoltaic array will be visually screened to the public areas with decorative fencing and landscape to blend in with the surrounding forest.
- The Willowbrook Wildlife Center will continue to be characterized by low profile buildings and multiple outdoor animal enclosures that are designed to blend into the forest.

- B. For the purpose of supplementing the above standards, the ZBA or PC, in making its recommendation that there are practical difficulties or particular hardships, shall also take into consideration the extent to which the evidence establishes or fails to establish the following facts favorably to the applicant:

1. Provide evidence that the particular physical surroundings, shape or topographical condition of the property in question would bring particular hardship upon the applicant/owner as distinguished from a mere inconvenience if the strict letter of the Zoning Code were to be carried out:

The physical conditions of the property present particular hardship to meeting the requested building height requirements of the ordinance based on the 'average existing grade' defined in Section 10-11-12. The existing topography of the property slopes significantly toward the creek in the middle of the site that equates to an 'average existing grade' that is 9 feet lower than the proposed floor elevation for the rehabilitation center.

2. Provide evidence that the conditions upon which the petition for variation is based would not be applicable generally to other property within the same zoning district:

Not applicable. There are no other properties or facilities within this zoning district. The physical environmental characteristics of the site are unique only to this parcel within the zoning District.

3. Provide evidence that the purpose of the variation is not based exclusively upon a desire to make more money out of the property in question:

The purpose of the requested variations are to provide the best care and effectively follow the best practices for the rehabilitation of the animals to meet the Minimum Standards for Wildlife Rehabilitation. The facility will continue to serve as a free resource for residents of Glen Ellyn to learn about living in harmony with local wildlife and champions the interconnection between healthy wildlife and healthy ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in Glen Ellyn. The Wildlife Center operations are funded by private donations and a Zoological fund established by the Downstate Forest Preserve Act. In addition, minor program fees (that do not fully offset program costs) are charged for special programs provided for the residents of Glen Ellyn.

4. Provide evidence that the alleged difficulty or particular hardship has not been created by any person presently having an interest in the property in question or by the applicant.

The hardship is created by the unique physical characteristics of the site and desire to minimize impacts to existing natural resources (Glen Crest Creek, woodlands, a remnant prairie, and marsh) as well as constraining development to the west of the creek to avoid disturbing neighbors to the north, south, and east. The Forest Preserve District has sufficient bonding capacity to issue debt and fund this project without causing a net increase in property taxes for Glen Ellyn residents. The Willowbrook Wildlife Center will continue to be a free public facility.

5. Provide evidence that the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property in question is located.

Granting the requested variations will not impact the forest buffer to the surrounding properties. All improvements will maintain at least a 250' buffer from adjacent residences.

6. Provide evidence that the proposed variation will not:

a. Impair an adequate supply of light and air to adjacent property;

Granting the requested variations will not impact the the supply of light and air to adjacent properties as a forest buffer to the surrounding properties will remain. Animal enclosures are disinfected on a regular basis as required by Wildlife Rehabilitation Standards.

b. Substantially increase the hazard from fire or other dangers to the property in question or adjacent property;

Granting the variations will not increase the hazard from fire or other dangers. Separations from surrounding residential properties will remain over 275 feet. The clinic will be designed with code required emergency sprinkler and fire alarm systems.

c. Otherwise impair the public health, safety, comfort, morals or general welfare of the inhabitants of the Village;

Willowbrook Wildlife Center serves as a resource for residents of Glen Ellyn to learn about living in harmony with local wildlife and champions the interconnection between healthy wildlife and healthy ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in Glen Ellyn and beyond. The "Net Zero" energy designed facility will actually contribute to a healthier environment and healthier wildlife, which creates healthier and safer communities.

d. Diminish or impair property values within the neighborhood;

Granting the variations will not impact the forest buffer to the surrounding properties. The facility will continue to be a free access facility open to the public that the provide a sense of pride and a place to strengthen the community

e. Unduly increase traffic congestion in the public streets and highway;

The current controlled vehicular entrance from Park Avenue will remain. In 2014 the parking lot was expanded to the current configuration in anticipation of the final master plan build out. The three designated bus spaces on the west side of the lot will remain to accommodate school field trips. For special events, the adjacent church property has agreed to allow their parking lot be used for overflow parking.

f. Create a nuisance; or

Willowbrook Wildlife Center will continue its operation as a wildlife rehabilitation facility, managed by the Forest Preserve District of DuPage County, following Wildlife Rehabilitation Standards. All animals are contained. The general public will continue to not have access to animal rehabilitation areas.

- g. Results in an increase in public expenditures.

The Forest Preserve District has sufficient bonding capacity to issue debt and fund this project without causing a net increase in property taxes for DuPage residents. Operated by the DuPage Forest Preserve District since 1956, all of Willowbrook's operating expenses are funded by the Forest Preserve District, grants and private donations. The center does not receive state or federal funding.

7. Provide evidence that the variation is the minimum variation that will make possible the reasonable use of the land, building or structure.

To minimize impacts on the existing site and surrounding woodlands, the new improvements are designed to be as compact as possible while providing sufficient space to support the rehabilitation programs. Best management practices for storm water management will be implemented. Illinois Department of Natural Resources has been consulted for threatened or endangered species impacts.

8. Please add any comments which may assist the commission in reviewing this application.

Improvements to Willowbrook Wildlife Center are needed so the facility can remain a national leader in engaging visitors in veterinary science, medical care and wildlife rehabilitation while championing healthy interconnected ecosystems to foster safe, healthy and sustainable communities for all living things in Glen Ellyn and beyond.

The design for the new improvements apply what has been learned over the past 65 years; incorporating new guidelines and best practices for wildlife rehabilitation; taking into consideration public concerns and community needs; and making an effort to remain true to the District's and Willowbrook's missions.

VI. CERTIFICATIONS, CONSENT AND SIGNATURE(S)

I (We) certify that all of the statements and documents submitted as part of this application are true and complete to the best of my (our) knowledge and belief.

I (We) consent to the entry in or upon the premises described in the application by any authorized official of the Village of Glen Ellyn.

I (We) certify that I (we) have carefully reviewed the Glen Ellyn Zoning Variation Request Package and applicable provisions of the Glen Ellyn Zoning Code.

I (We) consent to accept and pay the cost to publish a notice of Public Hearing as submitted on an invoice from the publishing newspaper. I (we) understand that our request will not be scheduled for a Village Board agenda until and unless this invoice is paid.

<u>2/14/2023</u>	<u>Kevin Horsfall</u>	<u><i>Kevin Horsfall</i></u>
Date	Print Name	Signature of Applicant
<u></u>	<u></u>	<u></u>
Date	Print Name	Signature of Applicant
<u></u>	<u></u>	<u></u>
Date	Print Name	Signature of Applicant

VILLAGE OF GLEN ELLYN
535 Duane Street
Glen Ellyn, Illinois 60137
(630) 547-5250

APPLICATION FOR SIGN VARIATION

Note to the Applicant: This application should be filed with, and any questions regarding it, should be directed to the Director of the Village Planning and Development Department.

You may attach separate sheets as needed to answer any of the following questions.

The undersigned hereby petitions the Village of Glen Ellyn, Illinois, for one or more variations from the Glen Ellyn Sign Code, as described in this application.

I. **APPLICANT INFORMATION**

CLEAR PAGE

Name: Kevin Horsfall/Assistant Director of Resource Management and Development

Address: 3S580 Naperville Rd. Wheaton, IL 60189

Phone No.: 630-933-7200 Fax No.: 630-933-7242 (direct)

E-mail: khorsfall@dupageforest.org

Ownership Interest in the Property in Question: Corporation

Name and address of the legal owner of the property (if other than the applicant):

Forest Preserve District of DuPage County
3S580 Naperville Rd.
Wheaton, IL 60189

II. **PROPERTY INFORMATION**

Common address: 525 S. Park Blvd. Glen Ellyn, IL 60137

Permanent tax index number: 05-26-200-001 Zoning classification: CR Conservation Recreation

Present use: Rehabilitation Center

III. INFORMATION REGARDING THE VARIATION(S) REQUESTED

CLEAR PAGE

List of the variation(s) requested, including identification of the Sign Code provisions from which the variation is sought:

Per Section 4-5-8(A)2 of the Sign Code, only one wall sign is permitted for each principal building open to the public. Two wall signs are proposed on the new rehabilitation center building.

IV. EVIDENCE RELATING TO SIGN CODE STANDARDS FOR A VARIATION

The following items are intended to elicit information to support conclusions by the Plan Commission and the Village Board that the required findings/standards for a variation have been established and met. Therefore, please complete these items carefully.

Please note that a showing that granting the requested variation would be more profitable to the applicant or that the sign would be more valuable is not grounds for granting approval for a variation (Section 4-5-17(G)3(c) of the Sign Code).

A. Standards Applicable to All Variations Requested

1. Indicate how you believe the requested variation(s) complies with the Statement of Purpose in Section 4-5-2 of the Sign Code (attached):

Per the sign code, the stated purpose of signage is to help people find what they need without difficulty or confusion. The new rehabilitation center includes a separate public entrance for animal intake and a separate public entrance for the exhibit space. A single sign is proposed over each entrance to effectively communicate the locations of each service, visible from the parking area.

Clear signage for each service will reduce distractions and confusion caused by visitors arriving at the wrong service entrance.

The proposed building signage is simple single line text designed to be aesthetically pleasing, of appropriate scale and materials that blend with the building. The signage will not be lighted.

2. Provide evidence that the practical difficulties or hardship in complying with the Sign Code is based on unique circumstances due to an unusual physical limitation, such as an irregular lot shape, substantial lot depth, unusual geographic location, exceptional topographic feature, or other condition, that is peculiar to the subject property or establishment. Also share how the conditions upon which the request is based are not generally applicable to other property within the same zoning district:

The hardship is based upon unique operations of the center and not physical aspects of the property. The Public requires clear defined direction to the appropriate entrance to provide quicker care for wildlife and minimize conflicts between panicked people bringing in injured wildlife and children and families visiting the visitor center and exhibit hall. This is the only facility like this as well as the only facility in this zoning district.

3. Provide evidence that the variation(s), if granted, would have no adverse impact on property values in the surrounding area or be injurious to other property or improvements in the neighborhood in which the property is located:

The new rehabilitation center is surrounded by forest so will not be visible to adjacent properties in the neighborhood. The proposed variance will improve pedestrian traffic on the site. The signage will not be lighted.

4. Provide evidence that the variation(s), if granted, would have no adverse impact on the existing or desired character of the surrounding area:

The proposed building signage is simple single line text designed to be aesthetically pleasing, of appropriate scale and materials that blend with the building. The signage will not be lighted.

5. Provide evidence that the variation(s), if granted, would not endanger the public health, safety, or welfare:

The variation if granted will improve public safety by minimizing a situation where a single sign on the building would potentially confuse a visitor to the location of the service options, creating a burden on the attendants at each entrance. When people bring injured wildlife to the center they are usually panicked in addition to the injured animal so the quicker the animal can be brought to the appropriate emergency entrance is better for all parties and reduces the time it takes to examine and triage animals for appropriate care.

- B. For the purpose of supplementing the above standards, the PC, in making its recommendation that there are practical difficulties or particular hardships, may also take into consideration the extent to which the evidence establishes or fails to establish the following facts favorably to the applicant:

1. Provide evidence that the purpose of the variation(s) is not based exclusively upon a desire to make more money out of the property:

The Willowbrook Wildlife Center will continue to be a free service to the public.

2. Provide evidence that the alleged difficulty or particular hardship has not been created by any person presently having an interest in the property or by the applicant:

The hardship is being generated strictly by the building program to provide multiple services to the public and not an individual.

3. Provide evidence that the requested variation(s) is/are the minimum variation(s) necessary.

Only a variance for sign quantity is being sought. The total surface area of the two building signs combined will be below the requirements of the requirements for a single sign (less than 100 SF).

4. Provide evidence that the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located:

If a single sign is used. The public is less informed on the services available if the need for other services were to come up in the future

Please add any additional comments which you believe may assist the PC in reviewing this application:

VIII. CERTIFICATIONS, CONSENT AND SIGNATURE(S)

I (We) certify that all of the statements and documents submitted as part of this application are true and complete to the best of my (our) knowledge and belief.

I (We) consent to the entry in or upon the premises described in the application by any authorized official of the Village of Glen Ellyn.

I (We) certify that I (we) have carefully reviewed the Glen Ellyn Sign Variation Request Package and applicable provisions of the Glen Ellyn Sign Code.

I (We) understand that this application will not be submitted to the Review Boards and Commissions until all items on the attached list are reviewed by Village staff.

<u>1/12/2023</u>	<u>Kevin Horsfall</u>	<u><i>Kevin Horsfall</i></u>
Date	Print Name	Signature of Applicant
<u> </u>	<u> </u>	<u> </u>
Date	Print Name	Signature of Applicant
<u> </u>	<u> </u>	<u> </u>
Date	Print Name	Signature of Applicant

SIGN CODE

4-5-2: STATEMENT OF PURPOSE

It is hereby determined that the primary purpose of signage is to help people find what they need without difficulty or confusion. Thus, while not restricting freedom of expression, regulations must be established for preventing an overload of graphic messages in the environment. The purpose of SIGNS is subordinate to the structures and land use functions they reference. SIGNS are to be considered accessory components of an overall composition of architectural elements, not as freestanding or dominant architectural elements by themselves. There should not be a proliferation of off-premise SIGNS as it can obscure the legitimate efforts of local business ESTABLISHMENTS to reasonably identify the location and nature of their businesses.

This Code establishes standards and regulations for the erection, display, safety and maintenance of SIGNS which are intended to allow a person to observe or ignore graphic messages, according to that person's own purpose, as well as to encourage the general attractiveness of the community and to protect property values. These standards and regulations are intended to meet the following objectives:

- (A) Effective Communication: A reasonable, orderly and effective display of SIGNS is to be promoted by authorizing the use of SIGNS which:
 - 1. Are legible in the context in which they are viewed;
 - 2. Are appropriate to the functions to which they pertain;
 - 3. Clearly and efficiently identify and classify the goods, services, facilities, activities and locations made available to the community by businesses, COMMUNITY SERVICE ORGANIZATIONS and other enterprises; and
 - 4. Eliminate or reduce the "canceling out" effect created by the inappropriate placement of SIGNS in proximity to one another.
- (B) Public Welfare: The public health, safety and welfare is to be preserved, protected and promoted through SIGN regulations which:
 - 1. Recognize that SIGNS are a necessary means of visual communication for the convenience of the general public taken as a whole, as opposed to the convenience of any individual person;
 - 2. Minimize the blighting influence posed by visual clutter, decay and neglect;
 - 3. Reduce distractions, obstructions, and hazards to pedestrian and automobile traffic caused by the indiscriminate placement and use of SIGNS and to protect pedestrians and motorists from injury and property damage caused by, or which may be fully or partially attributable to, cluttered, distracting or illegible signage;
 - 4. Prohibit the placement of SIGNS which obstruct vision or access in a manner which creates dangerous conditions;

5. Protect the physical and mental well-being of the general public by encouraging a sense of aesthetic appreciation for the Village's visual environment and ensuring that SIGNS harmonize with their surroundings and are consistent with the character of their community context;
6. Promote the use of graphics which are aesthetically pleasing, of appropriate scale, and integrated with surrounding buildings and landscaping, in order to meet the community's expressed desire for quality development;
7. Protect the value of the Village's architectural resources, by ensuring that the integrity of the architectural elements and character of buildings and sites to which SIGNS principally relate is maintained;
8. Assure that public benefits derived from expenditures of public funds for the improvement and beautification of streets in accordance with the Downtown, Roosevelt Road and Historic Stacy's Corners streetscape plans, and other public structures and spaces, are protected by exercising reasonable controls over the character and design of graphic structures;
9. Preserve the value of private property by assuring the compatibility of SIGNS with surrounding land uses;
10. Promote economic development by encouraging a more attractive economic and business climate within the commercial areas of the Village;
11. Further the objectives of the Comprehensive Plan and Downtown Strategic Plan;
12. Protect the general public from damage and injury caused by the faulty and uncontrolled construction and use of SIGNS within the Village; and
13. Respect the rights of nearby property OWNERS.

SIGNAGE WORKSHEET

**List all proposed new, and existing signs to remain, on the establishment,
building and property for the specific type of facility**

CLEAR PAGE

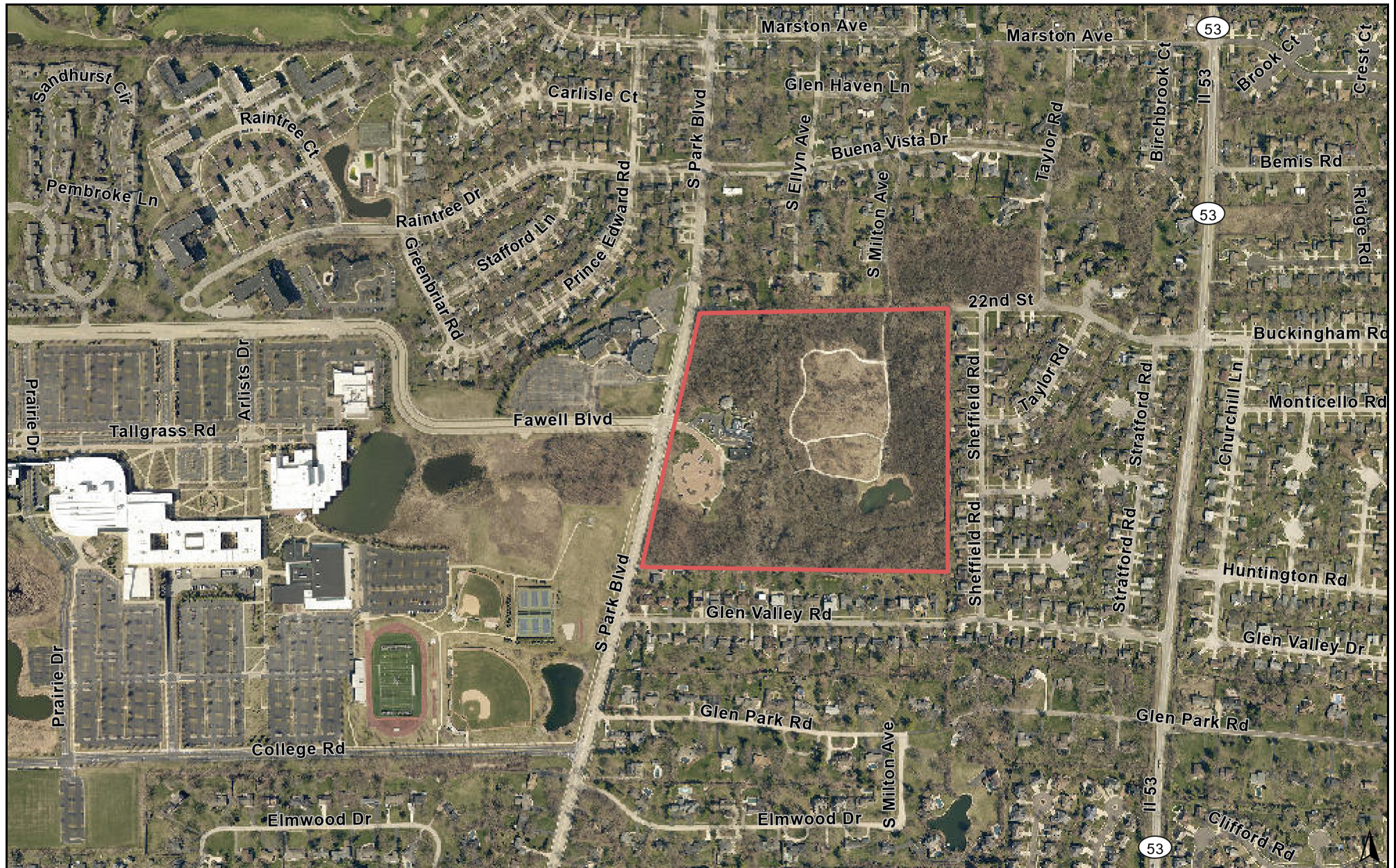
FACILITY TYPES:

- ☐ NONRESIDENTIAL ESTABLISHMENT *(For one establishment in one building on one property)*
- ☐ NONRESIDENTIAL ESTABLISHMENT *(For one establishment if more than one establishment is in the building or on the property)*
- ☐ MULTI-TENANT DEVELOPMENT *(For a development with more than two establishments on one property)*
- ☐ OFFICE COMPLEX *(For a development with more than one business office on one property)*
- ☐ RESIDENTIAL DEVELOPMENT *(For a development with more than twenty dwelling units on one property)*
- ☒ MULTI-FAMILY DWELLING *(For a development with more than three dwelling units on one property)*
- ☒ PARK OR PUBLIC RECREATION FACILITY
- ☒ OTHER FACILITY - DESCRIBE: Animal Rehabilitation Center

SIGN TYPES: (*Please specify one of the following sign types)

Awning, Breezeway, Common Program, Drive-thru Canopy, Freestanding, Indexing, Marquee, Menu Board, Message Board, Nameplate, Off-premises, Office Directory, Order Confirmation, Political Campaign, Portable, Private Parking Lot, Traffic Directional, Wall, Video Display, and Window Sign. *(Sign Definitions Section 4-5-3)*

Sign	New	Existing	Sign Type *	Dimensions (Length x Width)	Sign Area	Height
1	☒	☐	Individual Letter Sign	10'-4" X 9"	8 SF	2"
Words/Symbols: WILDLIFE HOSPITAL						
2	☒	☐	Individual Letter Sign	9'-6" X 2'-8"	22 SF	2"
Words/Symbols: WILLOWBROOK WILDLIFE CENTER VISITOR ENTRY						
3	☐	☐				
Words/Symbols:						
4	☐	☐				
Words/Symbols:						
5	☐	☐				
Words/Symbols:						
6	☐	☐				
Words/Symbols:						
7	☐	☐				
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8	☐	☐				
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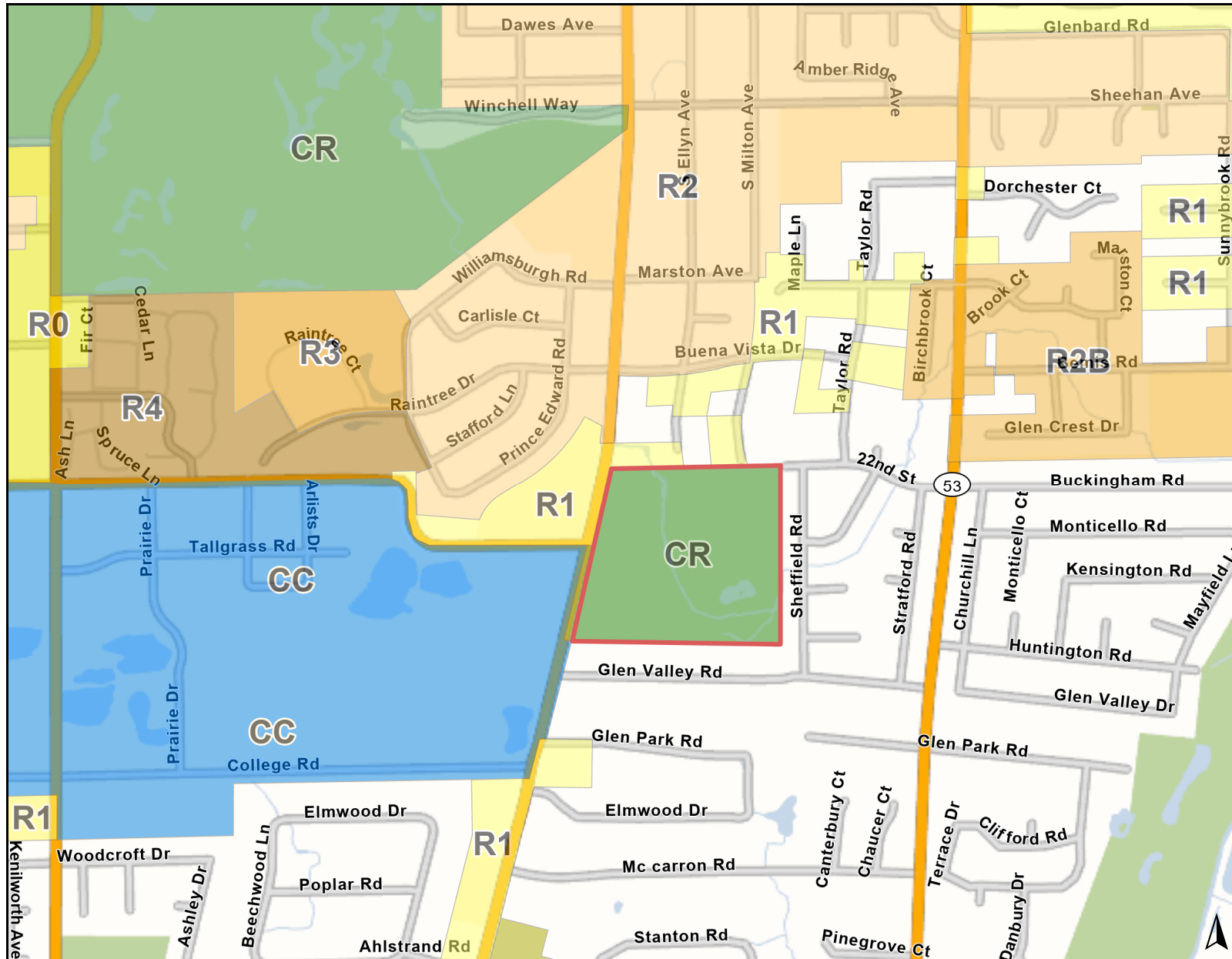
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Print Date: 8/18/2022

Notes

Willowbrook Wildlife Center

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**Legend**

Zoning and Development

Zoning

- CC: Community College District
- CR: Conservation/Recreation District
- RE: Residential Estate District
- R0: Single Family Residential District
- R1: Single Family Residential District
- R2: Single Family Residential District
- R2B: Single Family Residential District
- R3: Multi-Family Residential District
- R4: Multi-Family Residential District

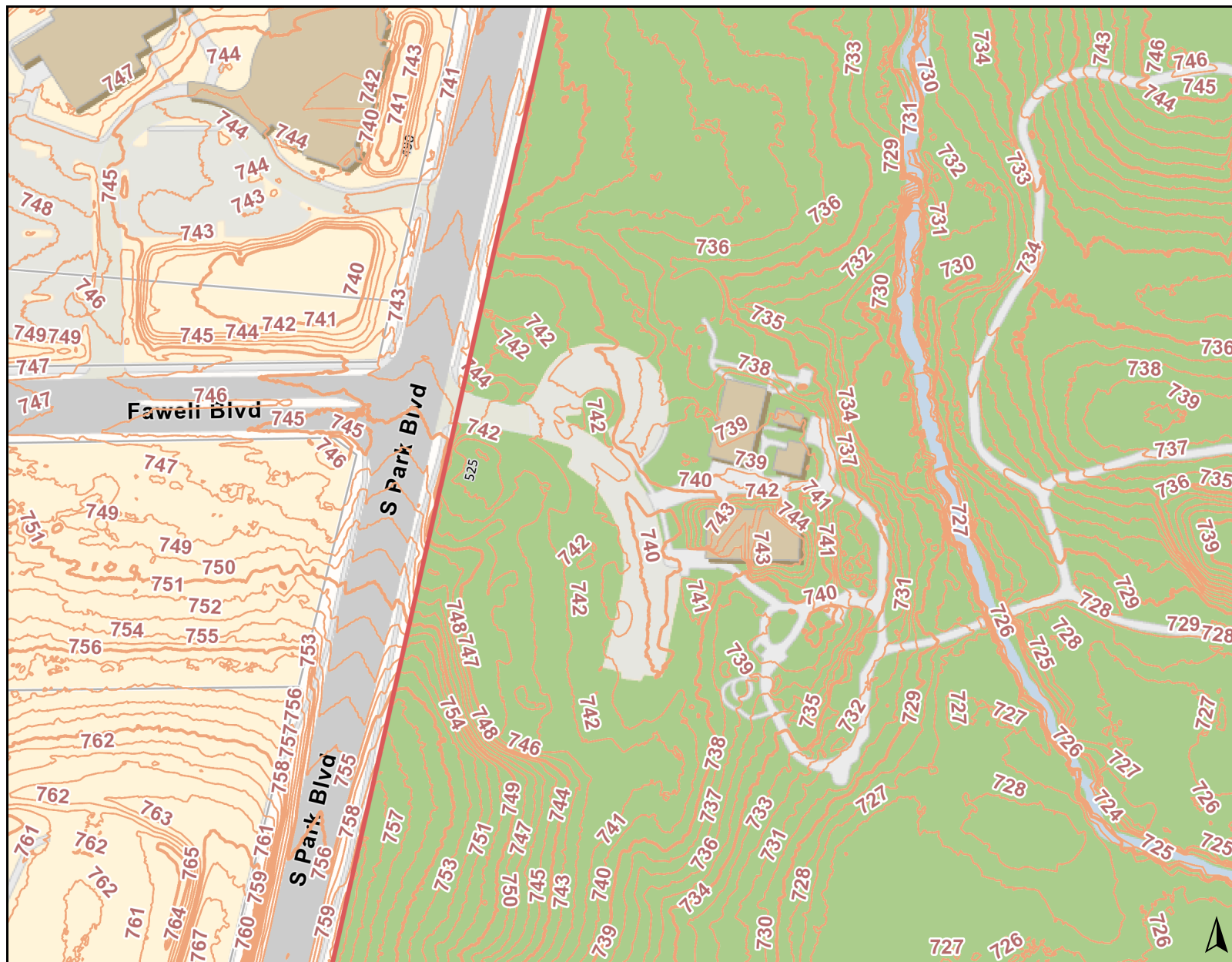
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Print Date: 8/17/2022

Notes

Willowbrook Wildlife Center

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Print Date: 8/17/2022

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Legend

DuPage County

DuPage County 1' 2017 Contours

- Contour Line, Intermediate
- Contour Line, Major

Notes

Willowbrook Wildlife Center

NOTICE OF PUBLIC HEARING

The Forest Preserve District of DuPage County, owner of property located at 525 S. Park Boulevard, and commonly known as Willowbrook Wildlife Center, is requesting approval of a Special Use Permit and Zoning Variations, to allow Phase B-D of the improvements to the Willowbrook Wildlife Center including the renovation the existing propagation/research building, construction of a new clinic and visitor center, and a variety of outdoor rehabilitation enclosures. The subject property is comprised of approximately 43.12 acres and is located on the east side of Park Boulevard between Buena Vista Drive and Glen Valley Road in the CR Conservation Recreation District.

Before the Glen Ellyn Village Board can consider the requests, the Plan Commission must conduct a public hearing. The Plan Commission will consider the request for Special Use Permit, Zoning and Variations, on **Thursday, April 27, 2023, at 7:00 p.m.** in the Galligan Board Room on the 3rd floor of the Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois, 60137.

The petitioner is specifically requesting approval of the following:

1. A Special Use Permit in accordance with Section 10-4-3(A) of the Glen Ellyn Zoning Code to allow improvements to Willowbrook Wildlife Center including the renovation the existing propagation/research building, construction of a new clinic and visitor center, and a variety of outdoor rehabilitation enclosures.
2. The following variations from the Glen Ellyn Zoning Code:
 - a. Zoning Variation: Per Section 10-5-4(A)-2(a), the total combined area of all freestanding accessory structures on a zoning lot shall be limited to 1,000 square feet, but no more than 30 percent of a required rear yard (23,907 square feet), whichever is less. The total combined area of the existing and proposed accessory structures is approximately 34,200 square feet which exceeds the maximum allowable combined area of 1,000 square feet for freestanding accessory structures.
 - b. Zoning Variation: Per Section 10-5-4(A)-4(a), accessory structures shall be located no closer to the front property line than the principal structure on the lot. According to the Site Plan, the proposed photovoltaic arrays are closer to the front property line than the principal buildings on the lot.
 - c. Zoning Variation: Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be a maximum of 4 feet tall and shall be at least 33.3% open, where 8-foot-tall decorative and chain-link fence are proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the 8-foot-tall decorative and chain-link fences extending beyond the front face of building N, which is the closest principal building to the street.
 - d. Zoning Variation: Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be at least 33.3% open, where a chain-link fence with a dense screen shade cloth is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the privacy fence extending beyond the front face of building N, which is the closest principal building to the street.

- e. Zoning Variation: Per Table 10-5-5(B)4#11, the maximum allowable height for fences placed behind the front face of the principal structure is 6 feet. Therefore, additional variation would be needed to install 8-foot-tall solid fences throughout the site, behind the front face of Building N.
- f. Zoning Variation: As a tree survey of the entire site has not been submitted, a variation will be needed from the specific landscape requirements in Section 10-5-13(L)1 related to the number and type of required trees on the property in the event that the site as a whole would not fulfill the specific requirements of this section.
- g. Zoning Variation: As proposed, there is a partially landscaped island, smaller than the size of the proposed parking stalls (20' by 10') at the end of north staff parking row, thus a variation from Section 10-5-8(H) will be required.
- h. Zoning Variation: Per Section 10-4-3(D), maximum building height from average existing grade is 35 feet in CR District. As proposed, the new clinic will have a finished height of approximately 42.9 feet from the average existing grade; therefore, a variation will be needed.
- i. Zoning Variation: A zoning variation is required from Section 10-4-3(G)1 for the required minimum number of parking spaces on the lot.
- j. Sign Variation: Per Section 4-5-8(A)2 of the Sign Code, only one wall sign is permitted for each principal building open to the public, where two wall signs are proposed on the new clinic building. A variation for the number of wall signs will be required.

The subject property is legally described as follows:

THAT PART OF THE NORTH HALF OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF THE JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) WITH THE NORTH LINE OF SAID SECTION 26 AND RUNNING THENCE NORTH 89 DEGREES 36 MINUTES EAST 1305.2 FEET TO FENCE CORNER; THENCE SOUTH 0 DEGREES 52 MINUTES WEST 1324 FEET TO FENCE CORNER; THENCE NORTH THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD); THENCE NORTH 13 DEGREES 30 MINUTES EAST ALONG THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) 1307 FEET, MORE OR LESS, TO THE PLACE OF BEGINNING, IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-26-200-001

All persons in the Village of Glen Ellyn who are interested are invited to attend the public hearing to listen and be heard. To view plans related to the proposed project, please visit the Village website here: <http://www.glenellyn.org/246/Public-Notice-Portal>. Information related to the request is also available for public review in the Community Development Department at the Civic Center, 535 Duane Street, Glen Ellyn, Illinois. Questions related to the request should be directed to Marty Scott, Director of Community Development, at (630) 547-5240.

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 24 hours in advance of the meeting.

NOTICE OF PUBLIC HEARING

The Forest Preserve District of DuPage County, owner of property located at 525 S. Park Boulevard, and commonly known as Willowbrook Wildlife Center, is requesting approval of a Special Use Permit and Zoning Variations, to allow Phase B-D of the improvements to the Willowbrook Wildlife Center including the renovation of the existing propagation/research building, construction of a new clinic and visitor center, and a variety of outdoor rehabilitation enclosures. The subject property is comprised of approximately 43.12 acres and is located on the east side of Park Boulevard between Buena Vista Drive and Glen Valley Road in the CR Conservation Recreation District.

Before the Glen Ellyn Village Board can consider the requests, the Plan Commission must conduct a public hearing. The Plan Commission will consider the request for Special Use Permit, Zoning and Variations, on **Thursday, April 27, 2023, at 7:00 p.m.** in the Galligan Board Room on the 3rd floor of the Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois, 60137.

The petitioner is specifically requesting approval of the following:

1. A Special Use Permit in accordance with Section 10-4-3(A) of the Glen Ellyn Zoning Code to allow improvements to Willowbrook Wildlife Center including the renovation of the existing propagation/research building, construction of a new clinic and visitor center, and a variety of outdoor rehabilitation enclosures.

2. The following variations from the Glen Ellyn Zoning Code:

a. Zoning Variation: Per Section 10-5-4(A)-2(a), the total combined area of all freestanding accessory structures on a zoning lot shall be limited to 1,000 square feet, but no more than 30 percent of a required rear yard (23,907 square feet), whichever is less. The total combined area of the existing and proposed accessory structures is approximately 34,200 square feet which exceeds the maximum allowable combined area of 1,000 square feet for freestanding accessory structures.

b. Zoning Variation: Per Section 10-5-4(A)-4(a), accessory structures shall be located no closer to the front property line than the principal structure on the lot. According to the Site Plan, the proposed photovoltaic arrays are closer to the front property line than the principal buildings on the lot.

c. Zoning Variation: Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be of a maximum of 4 feet tall and shall be at least 33.3% open, where 8-foot-tall decorative and chain-link fence are proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the 8-foot-tall decorative and chain-link fences extending beyond the front face of building N, which is the closest principal building to the street.

d. Zoning Variation: Per Table 10-5-5(B)4#11, fences located closer to the street than the principal structure on the lot shall be at least 33.3% open, where a chain-link fence with a dense screen shade cloth is proposed to be closer to the street (Park Blvd) than the principal structures (Building N and new clinic) on the lot. A variation will be required for the privacy fence extending beyond the front face of building N, which is the closest principal building to the street.

e. Zoning Variation: Per Table 10-5-5(B)4#11, the maximum allowable height for fences placed behind the front face of the principal structure is 6 feet. Therefore, additional variation would be needed to install 8-foot-tall solid fences throughout the site, behind the front face of Building N.

f. Zoning Variation: As a tree survey of the entire site has not been submitted, a variation will be needed from the specific landscape requirements in Section 10-5-13(L)1 related to the number and type of required trees on the property in the event that the site as a whole would not fulfill the specific requirements of this section.

g. Zoning Variation: As proposed, there is a partially landscaped island, smaller than the size of the proposed parking stalls (20' by 10') at the end of north staff parking row, thus a variation from Section 10-5-8(H) will be required.

h. Zoning Variation: Per Section 10-4-3(D), maximum building height from average existing grade is 35 feet in CR District. As proposed, the new clinic will have a finished height of approximately 42.9 feet from the average existing grade; therefore, a variation will be needed.

i. Zoning Variation: A zoning variation is required from Section 10-4-3(G)1 for the required minimum number of parking spaces on the lot.

j. Sign Variation: Per Section 4-5-8(A)2 of the Sign Code, only one wall sign is permitted for each principal building open to the public, where two wall signs are proposed on the new clinic building. A variation for the number of wall signs will be required.

The subject property is legally described as follows:
THAT PART OF THE NORTH HALF OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF THE JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) WITH THE NORTH LINE OF SAID SECTION 26 AND RUNNING THENCE NORTH 89 DEGREES 36 MINUTES EAST 1305.2 FEET TO FENCE CORNER; THENCE SOUTH 0 DEGREES 52 MINUTES WEST 1324 FEET TO FENCE CORNER; THENCE NORTH THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD); THENCE NORTH 13 DEGREES 30 MINUTES EAST ALONG THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) 1307 FEET, MORE OR LESS, TO THE PLACE OF BEGINNING, IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-26-200-001

All persons in the Village of Glen Ellyn who are interested are invited to attend the public hearing to listen and be heard. To view plans related to the proposed project, please visit the Village website here:

<http://www.glenellyn.org/246/Public-Notice-Portal>. Information related to the request is also available for public review in the Community Development Department at the Civic Center, 535 Duane Street, Glen Ellyn, Illinois. Questions related to the request should be directed to Marty Scott, Director of Community Development, at (630) 547-5240.

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 24 hours in advance of the meeting.

Published in Daily Herald April 12, 2023 (4598277)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

DuPage County Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **DuPage County DAILY HERALD**. That said **DuPage County DAILY HERALD** is a secular newspaper, published in Naperville, DuPage County, State of Illinois, and has been in general circulation daily throughout DuPage County, continuously for more than 50 weeks prior to the first Publication of the attached notice, and a newspaper as defined by 715 ILCS 5/5.

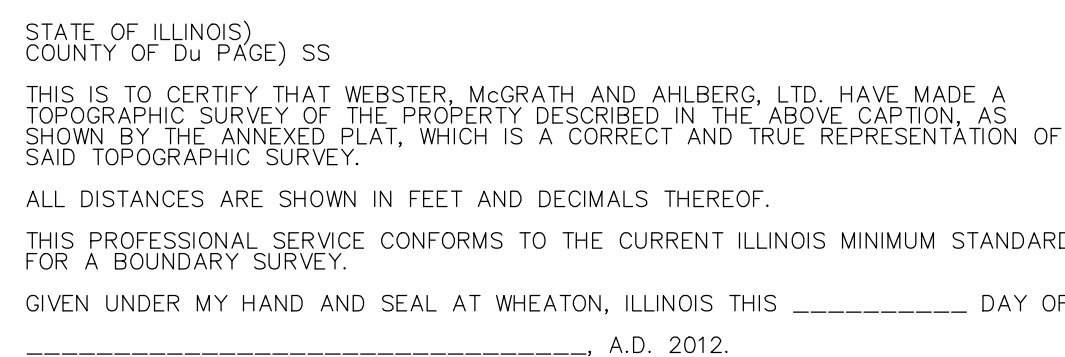
I further certify that the **DuPage County DAILY HERALD** is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 04/12/2023 in said **DuPage County DAILY HERALD**. This notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1.

BY

Designee of the Publisher of the Daily Herald

Control # 4598277





WEBSTER, McGRATH AND AHLBERG, LTD.

BY: _____
ILLINOIS LAND SURVEYOR NO. _____
LICENSE EXPIRATION DATE: NOVEMBER 30, 2011
207 S. NAPERVILLE STREET
WHEATON, ILLINOIS 60187
(630) 668-7603

LEGEND

⊙	SANITARY MANHOLE	—	DR	WALDRI
⊙	STORM CLEANOUT	—	CH	COMPOST
⊙	STORM MANHOLE	—	—	LIGHT POLE
⊙	STORM CATCH BASIN	—	—	OVERHEAD LIGHT POLE
⊙	STORM INLET	—	—	ELECTRIC MANHOLE
⊙	STORM CLEANOUT	—	—	TRAFFIC SIGNAL POLE
⊙	STORM CLEANOUT	—	—	TRAFFIC LIGHTING POLE
⊙	STORM CLEANOUT	—	—	STORM SIGNAL VOLT
⊙	STORM CLEANOUT	—	—	RAINFALL SIGNAL VOLT
⊙	STORM CLEANOUT	—	—	RAINFALL SIGNAL VOLT
⊙	STORM CLEANOUT	—	—	UTILITY POLE
⊙	STORM CLEANOUT	—	—	OVERHEAD WIRE
⊙	STORM CLEANOUT	—	—	UNDERGROUND ELECTRIC
⊙	STORM CLEANOUT	—	—	UNDERGROUND GAS
⊙	STORM CLEANOUT	—	—	UNDERGROUND TELEPHONE
⊙	STORM CLEANOUT	—	—	UNDERGROUND CABLE T.V.
⊙	STORM CLEANOUT	—	—	WATER MAIN
⊙	STORM CLEANOUT	—	—	SEWER MAIN
⊙	STORM CLEANOUT	—	—	STORM SEWER
⊙	STORM CLEANOUT	—	—	FENCE LINE
⊙	STORM CLEANOUT	—	—	QUARD RAIL
⊙	STORM CLEANOUT	—	—	OCCLUSIVE TREE
⊙	STORM CLEANOUT	—	—	POLE TREE
⊙	STORM CLEANOUT	—	—	FLAG ON POE
⊙	STORM CLEANOUT	—	—	FLUOR ROOF PIPE
⊙	STORM CLEANOUT	—	—	ORISH OF IN CONCRETE
⊙	STORM CLEANOUT	—	—	R = REINFORCED MATERIAL
⊙	STORM CLEANOUT	—	—	R = REINFORCED MATERIAL

ILLINOIS STATE PLANE NAD 83 (EAST ZONE)

- 1 UTILITIES SHOWN ARE FROM ABOVE GROUND OBSERVATIONS, MANHOLE INSPECTIONS, UTILITY MARKINGS AND AVAILABLE RECORD. AT THE TIME THIS SURVEY WAS PERFORMED AND DOES NOT DEPICT ALL EXISTING UNDERGROUND INSTALLATIONS.
- 2 THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT WHICH WOULD DISCLOSE EASEMENTS, SETBACKS AND RESTRICTIONS AFFECTING THE SUBJECT PROPERTY AT TIME OF THIS SURVEY.
- 3 TREES ARE NOT SHOWN HEREON FOR CLARITY PURPOSES. SEE CAD FILE FOR TREE LOCATIONS AND TAG NUMBERS.

Rev	Date	Description	By	BOUNDARY AND TOPOGRAPHIC SURVEY			
				LOCATION:	WILLOWBROOK WILDLIFE REFUGE		
				PREPARED FOR:	FOREST PRESERVE DISTRICT 3 S. 500 NAPIERVILLE RD. P. O. BOX 5000 WHEATON, IL 60189 630.933.7300		
WEBSTER, MCGRATH & AHLBERG LTD.							
							
LAND SURVEYING - CIVIL ENGINEERING - LANDSCAPE ARCHITECTURE				JOB #:	42922	DATE:	2-13-12
				DRAWN:	TMB	SCALE:	1"=50'
				FILE #:	T-13029-T	SHEET #:	1 of 1

FINAL



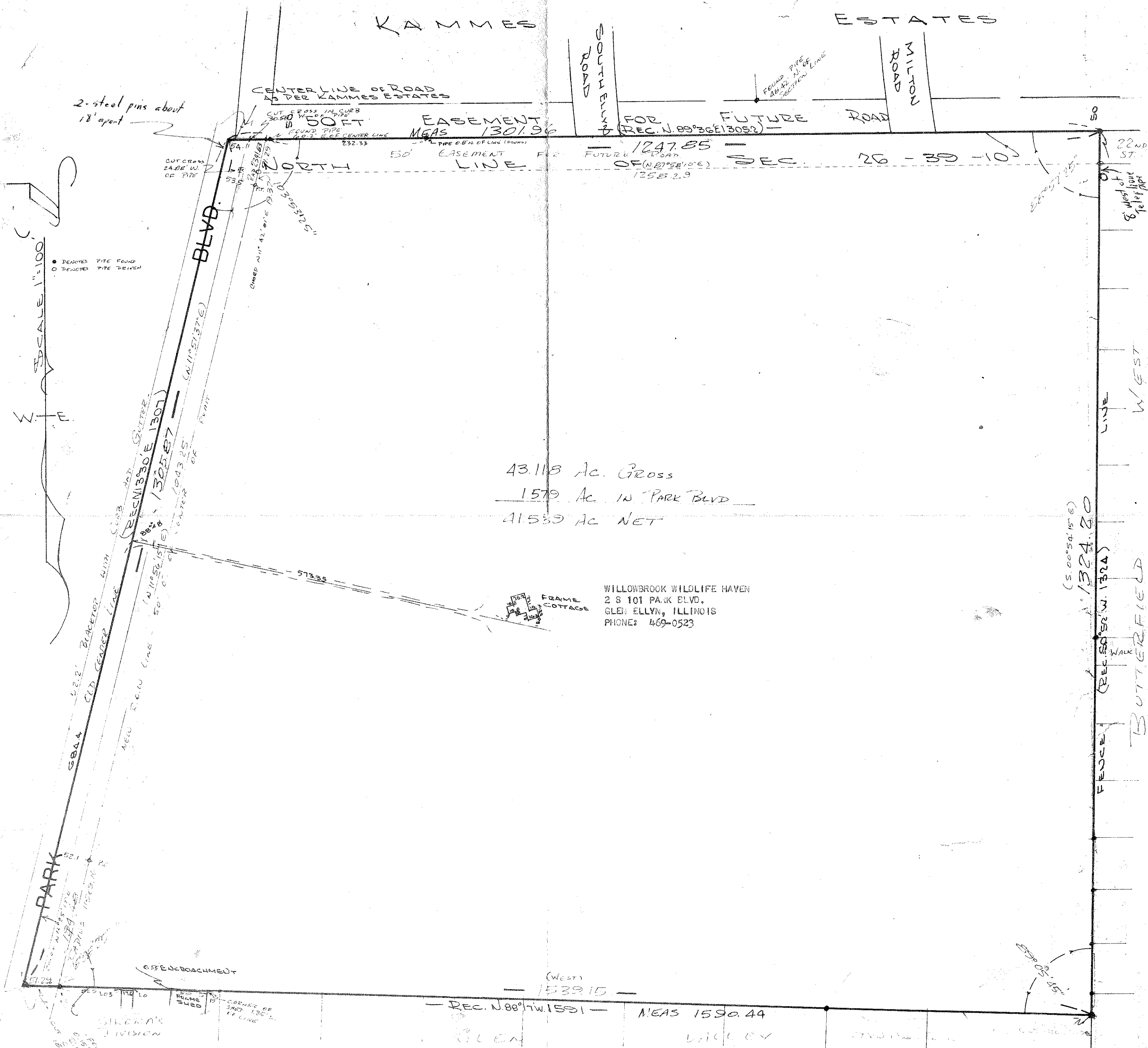
PLAT OF SURVEY

PROPERTY DESCRIBED IN WARRANTY DEED RECORDED AUGUST 15, 1956 AS DOCUMENT 812135, OF THAT PART OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF JOLIET ROAD WITH THE NORTH LINE OF SAID SECTION 26 AND RUNNING THENCE NORTH 89° 36' EAST ON SAID NORTH LINE OF SECTION 26, 1305.2 FEET TO FENCE CORNER; THENCE SOUTH 0° 52' WEST 1324.0 FEET TO FENCE CORNER; THENCE NORTH 88° 17' WEST ALONG FENCE LINE 1591 FEET MORE OR LESS, TO THE CENTER OF JOLIET ROAD; THENCE NORTH 13° 30' EAST ALONG THE CENTER OF JOLIET ROAD 1307 FEET, MORE OR LESS TO THE POINT OF BEGINNING, IN DUPAGE COUNTY, ILLINOIS.

LEGAL DESCRIPTION AS PER CHICAGO TITLE AND TRUST COMPANY POLICY 240879

THAT PART OF THE NORTH HALF OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF THE JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) WITH THE NORTH LINE OF SAID SECTION 26 AND RUNNING THENCE NORTH 89° 36' EAST 1305.2 FEET TO FENCE CORNER; THENCE SOUTH 0° 52' WEST 1324 FEET TO FENCE CORNER; THENCE NORTH 88° 17' WEST ALONG FENCE LINE, 1591 FEET, MORE OR LESS, TO THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD); THENCE NORTH 13° 30' EAST ALONG THE CENTER OF JOLIET ROAD (ALSO KNOWN AS PARK BOULEVARD) 1307 FEET, MORE OR LESS, TO THE PLACE OF BEGINNING, IN DU PAGE COUNTY, ILLINOIS.

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check corners
Oct 1970 - 408



DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #	GLEON-AA-04-LED-E1-5WQ-AP	Type
Project	Willowbrook Wildlife Center	A2 (DUAL HEAD) C (SINGLE HEAD)
Comments		Date
Prepared by		10-11-13

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Choice of 12 patented, high-efficiency AccuLED Optics™ manufactured from injection molded acrylic. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in

4000K (+/- 275K) CCT and nominal 70 CRI. Optional 6000K CCT and 3000K CCT (80 CRI).

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. 90% lumen maintenance expected at 60,000 hours.

Mounting

Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Designed for pole or

wall mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish

Housing finished in Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

GAN
GALLEON LED

1-10 Light Squares
Solid State LED

AREA / ROADWAY LUMINAIRE

DIMENSIONS

POLE MOUNT

WALL MOUNT

DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.



COOPER Lighting

www.cooperlighting.com

*www.designlights.org

SYSTEMS



ADW121636

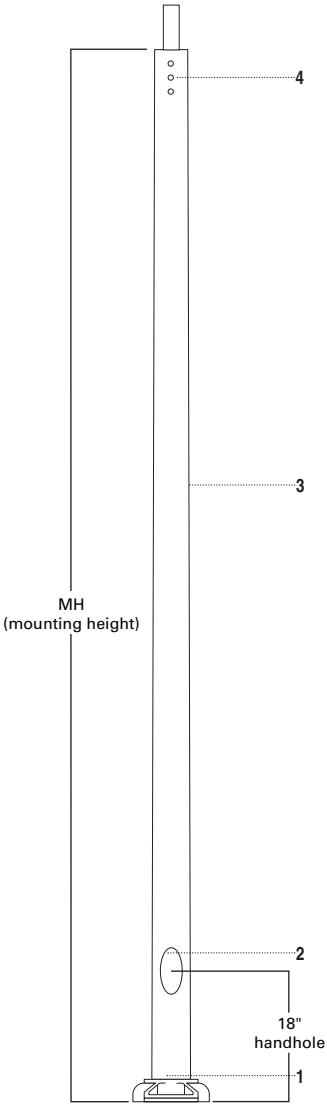
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RTA ROUND TAPERED ALUMINUM

10'—40' MOUNTING HEIGHT

Willowbrook Wildlife Center
Type S1 pole
part # RTA6L20ABM2



POLE HEIGHT FROM GRADE
TO FIXTURE = 23'-0"

SPECIFICATION FEATURES

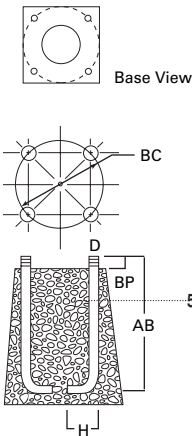
- 1···Cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.
- 2···Flush reinforced 2 3/8" x 4 1/2" for 4" shafts. Hand hole assembly with internal reinforcing frame. 3" x 5" for 5" and 6" shafts, 4" x 6" for 7", 8", 10" shafts. Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.
- 3···Tapered aluminum lighting shaft with polished finish.
- 4···Drilled or Tenon (specify).
- 5···Anchor bolt per ASTM A576 with (1) nut, (1) flat washer, and (2) shims. Nuts, washers and threaded portion of bolt are hot dip galvanized.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat



WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED FOR VOIDS THE COOPER LIGHTING WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE. COOPER LIGHTING'S POLE WARRANTY IS ALSO VOIDED IF LUMINAIRE IS NOT INSTALLED AT TIME OF POLE INSTALLATION.



WST LED

Architectural Wall Sconce



Catalog
Number

Notes

Type

TYPE:F16

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

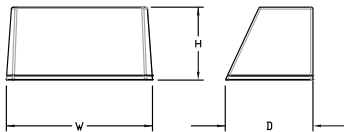
Luminaire

Height: 8-1/2"
(21.59 cm)

Width: 17"
(43.18 cm)

Depth: 10-3/16"
(25.9 cm)

Weight: 20 lbs
(9.1 kg)

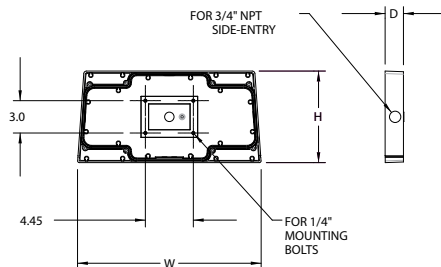


Optional Back Box (PBBW)

Height: 8.49"
(21.56 cm)

Width: 17.01"
(43.21 cm)

Depth: 1.70"
(4.32 cm)

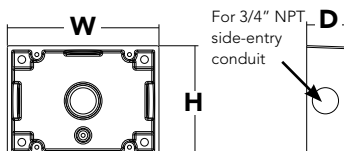


Optional Back Box (BBW)

Height: 4"
(10.2 cm)

Width: 5-1/2"
(14.0 cm)

Depth: 1-1/2"
(3.8 cm)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a **shaded background**. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability¹
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a **shaded background**¹

To learn more about A+, visit www.acuitybrands.com/aplus.

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

Ordering Information

EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

WST LED							
Series	Performance Package	Color temperature	Distribution	Voltage		Mounting	
WST LED	P1 1,500 Lumen package	27K 2700 K	VF Visual comfort forward throw	MVOLT ¹	277 ²	Shipped included (blank) Surface mounting bracket Shipped separately BBW Surface-mounted back box ³ PBBW Premium surface-mounted back box ^{3,4}	
	P2 3,000 Lumen package	30K 3000 K	VW Visual comfort wide	120 ²	347 ²		
	P3 6,000 Lumen package	40K 4000 K		208 ²	480 ²		
		50K 5000 K		240 ²			

Options			Finish (required)		
NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights ^{5,6,7}	E7WC	Emergency battery backup, CA Title 20 Noncompliant (cold, 7W) ^{7,12}	DDBXD	Dark bronze
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights ^{5,6,7}	E7WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 7W) ^{7,13}	DBLXD	Black
PE	Photoelectric cell, button type ⁸	E20WH	Emergency battery pack 18W constant power, Certified in CA Title 20 MAEDBS ⁷	DNAXD	Natural aluminum
PER	NEMA twist-lock receptacle only (controls ordered separate) ⁹	E20WC	Emergency battery pack -20°C 18W constant power, Certified in CA Title 20 MAEDBS ^{7,12}	DWHXD	White
PER5	Five-wire receptacle only (controls ordered separate) ⁹	E23WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 20W) ^{7,12,14}	DSSXD	Sandstone
PER7	Seven-wire receptacle only (controls ordered separate) ⁹	LCE	Left side conduit entry ¹⁵	DDBTXD	Textured dark bronze
PIR	Motion/Ambient Light Sensor, 8-15' mounting height ^{5,6}	RCE	Right side conduit entry ¹⁵	DBLBXD	Textured black
PIR1FC3V	Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{5,6}	BAA	Buy America(n) Act Compliant	DNATXD	Textured natural aluminum
PIRH	180° motion/ambient light sensor, 15-30' mounting height ^{5,6}			DWHGXD	Textured white
PIRH1FC3V	Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{5,6}			DSSTXD	Textured sandstone
SF	Single fuse (120, 277, 347V) ²				
DF	Double fuse (208, 240, 480V) ²				
DS	Dual switching ¹⁰				
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) ¹¹				
E7WH	Emergency battery backup, Non CEC compliant (7W) ⁷				

Accessories

Ordered and shipped separately.

WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTXD U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ¹⁷
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ¹⁷
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ¹⁷

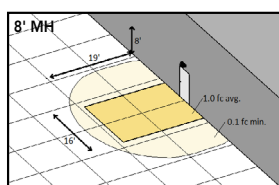
NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory; see accessories information.
- Top conduit entry standard.
- Not available with VG or WG. See PER Table.
- Reference Motion Sensor table.
- Not available with 347/480V.
- Need to specify 120, 208, 240 or 277 voltage.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- Not available with Emergency options, PE or PER options.
- DMG option not available with standalone or networked sensors/controls.
- Battery pack rated for -20° to 40°C.
- Comes with PBBW.
- Warranty period is 3-years.
- Not available with BBW.
- Must order with fixture; not an accessory.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table.

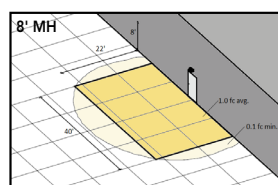
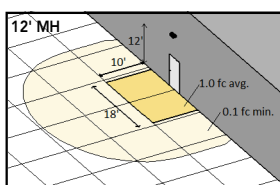
Emergency Battery Operation

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency backup configurations include an independent secondary driver with an integral relay to immediately detect AC power loss, meeting interpretations of [NFPA 70/NEC 2008 - 700.16](#). The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per [International Building Code Section 1006](#) and [NFPA 101 Life Safety Code Section 7.9](#), provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions. The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package and VF distribution product in emergency mode.

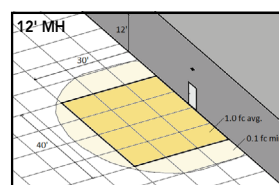
10' x 10' Gridlines
8' and 12' Mounting Height



WST LED P1 27K VF MVOLT E7WH



WST LED P2 40K VF MVOLT E20WH



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.95	>0.92	>0.87

Electrical Load

Performance package	System Watts	Current (A)					
		120	208	240	277	347	480
P1	11	0.1	0.06	0.05	0.04	---	---
	14	---	---	---	---	0.04	0.03
P1 DS	14	0.12	0.07	0.06	0.06	---	---
P2	25	0.21	0.13	0.11	0.1	---	---
	30	---	---	---	---	0.09	0.06
P2 DS	25	0.21	0.13	0.11	0.1	---	---
P3	50	0.42	0.24	0.21	0.19	---	---
	56	---	---	---	---	0.16	0.12
P3 DS	52	0.43	0.26	0.23	0.21	---	---

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

*for use with site wide Dusk to Dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	✗	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion	✗	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof*	✗	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof* with Motion	✗	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture

✓ Recommended

✗ Will not work

⚠ Alternate

*Futureproof means: Ability to change controls in the future.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT ¹)	Dist. Type	27K (2700K, 70 CRI)					30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	12W	VF	1,494	0	0	0	125	1,529	0	0	0	127	1,639	0	0	0	137	1,639	0	0	0	137
		VW	1,513	0	0	0	126	1,548	0	0	0	129	1,659	0	0	0	138	1,660	0	0	0	138
P2	25W	VF	3,163	1	0	1	127	3,237	1	0	1	129	3,469	1	0	1	139	3,468	1	0	1	139
		VW	3,201	1	0	0	128	3,276	1	0	0	131	3,512	1	0	0	140	3,512	1	0	0	140
P3	50W	VF	6,025	1	0	1	121	6,165	1	0	1	123	6,609	1	0	1	132	6,607	1	0	1	132
		VW	6,098	1	0	1	122	6,240	1	0	1	125	6,689	1	0	1	134	6,691	1	0	1	134

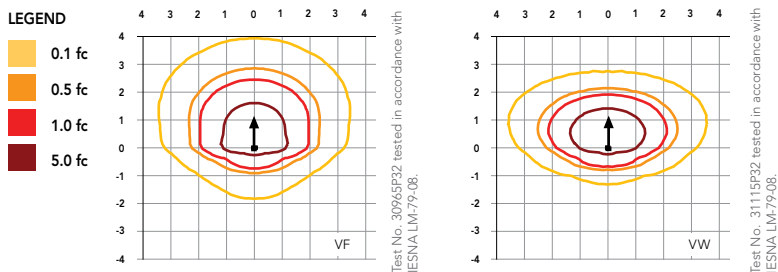


COMMERCIAL OUTDOOR

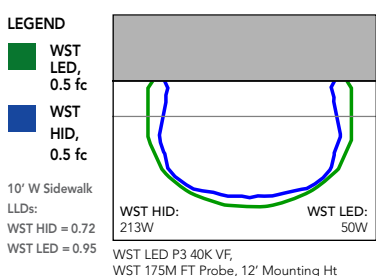
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com
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WST-LED
Rev. 11/22/21

Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



Distribution overlay comparison to 175W metal halide.



FEATURES & SPECIFICATIONS

INTENDED USE

The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WST LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) consist of 98 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 2 electronic driver has a power factor >90%, THD <20%. Easily-serviceable surge protection device meets a minimum Category B (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. PIR and back box options are rated for wet location. Rated for -30°C to 40°C ambient.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

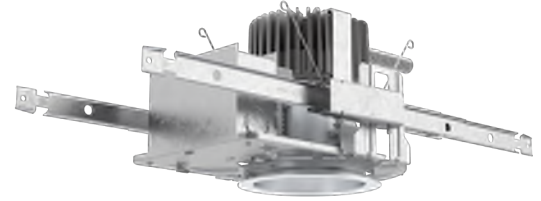
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



General Illumination Round Downlight

4"

TYPE:F17



Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution



Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500
Delivered Lumens	271	573	808	1001	1527	1994	2580	3110	3612
Wattage	3.1	7.2	7.9	8.8	13.7	19.5	25.7	31.2	38.4
Lumens per Watt	87.4	79.6	102.3	113.8	111.5	102.3	100.4	99.7	94.1

Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



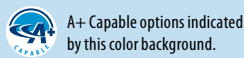
Clean Room



Shower



Steam Room



Design2Ship Quick Ship Program: Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details. **Maximum Order Quantity: 100 units; 50 for Chicago Plenum.**

Luminaire Type:

Catalog Number:

EXAMPLE: EV04 35/25 AR MWD LSS 120 EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Distribution	Finish	Voltage
EV04	27/ 2700 K	02 250 lumens	AR Clear	(blank) Self-flanged FL Flangeless	MD Medium (0.9 s/mh)	LSS Semi-specular	MVOLT
	30/ 3000 K	05 500 lumens	PR Pewter			LD Matte-diffuse	120
	35/ 3500 K	07 750 lumens	WTR Wheat		MWD Medium wide (1.0 s/mh)	LS Specular	277
	40/ 4000 K	10 1000 lumens	GR Gold		WD Wide (1.2 s/mh)		347 ^{2,3}
	50/ 5000 K	15 1500 lumens	WR ¹ White				
		20 2000 lumens	BR ¹ Black				
		25 2500 lumens	WRAMF ¹ White Anti-microbial				
		30 3000 lumens					
		35 3500 lumens					
		40 4000 lumens					
		45 4500 lumens					

Driver ⁴	Control Interface	Options
GZ10 0-10V driver dims to 10%	NLT ⁵ nLight® dimming pack controls	SF Single Fuse. Specify 120V or 277V
GZ1 0-10V driver dims to 1%	NLTER ^{2,6,10} nLight® dimming pack controls emergency circuit	TRW ⁷ White painted flange
EZ10 eldoLED 0-10V EC0drive. Linear dimming to 10% min.	NLTAIR ^{2,13} nLight® Air enabled	TRBL ⁸ Black painted flange
EZ1 eldoLED 0-10V EC0drive. Linear dimming to 1% min.	NLTAIRER ^{2,10,13} nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit	EL ⁹ Emergency battery pack, 10W, with integral test switch
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	NLTAIREM ^{2,13} nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit with battery pack options.	ELR ⁹ Emergency battery pack, 10W, with remote test switch
EDAB ⁴ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.		ELSD ⁹ Emergency battery pack, 10W, with self-diagnostics, integral test switch
EDXB ⁴ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Minimum 1000 lumens. Includes termination resistor. Refer to DMXR Manual .	EXA1 XPoint Wireless, eldoLED 0-10V EC0drive. Linear dimming to 1%. Refer to XPoint tech sheet.	ELRSD ⁹ Emergency battery pack, 10W, with self-diagnostics, remote test switch
ECOS2 ⁵ Lutron® Hi-Lume® 2-wire forward-phase driver. 120V only. Minimum dimming level 1%. Min: 1000LM; Max: 2500LM	EXAB XPoint Wireless, eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. Refer to XPoint tech sheet.	E10WCP ⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch
ECOD ⁵ Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Min: 2500LM; Max: 4000LM.		E10WCPR ⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
		N80 ¹¹ nLight® Lumen Compensation
		BGTD Bodine generator transfer device. Specify 120V or 277V.
		90CRI High CRI (90+)
		CP ¹² Chicago Plenum. Specify 120V or 277V for 5000lm and above.
		RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature.

ACCESSORIES — order as separate catalog numbers (shipped separately)

SCA4	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 .
CTAEV04	4" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5").
CTA4-8 YK	4"-8" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). For use with CWW/DWW trims, EDXB, CP or nTune options.
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC .

ORDERING NOTES

- Not available with finishes.
- Not available with emergency battery pack options.
- Supplied with factory installed step down transformer.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight® and XPoint options.
- Must specify voltage.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- 11" of plenum depth or top access required for battery pack maintenance.
- ER for use as UL924 Emergency Operation via power sense lead. Will require an emergency hot feed and normal hot feed. EM for use as UL924 Emergency Operation via power interrupt detection.
- Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
- Not available with ELR, HAO, EXA1, or EXAB options.
- Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.

Optical Assembly

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from below the ceiling. Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control. Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Electrical

The luminaire shall operate from a 50 or 60 Hz ± 3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output. The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output. Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages. Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Luminaire shall be equipped with interface for nLight wired or wireless network with integral power supply as per specification.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%. eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered. Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

Construction

Luminaire housing shall be constructed of 20-gauge galvanized steel and have telescopic mounting bars with maximum 26" and minimum 15" extension and 4" vertical adjustment. Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 2"). Tool-less adjustments shall be possible after installation. The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration. 25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise). For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling. Luminaire configurations are Energy Star certified through testing in EPA-recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit www.energystar.gov for specific configurations listed.

Buy American

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to <https://www.acuitybrands.com/resources/buy-american> for additional information.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours. Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by a point at the intersection of the CCT line and the black body locus line in CIE chromaticity space.

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note:

Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

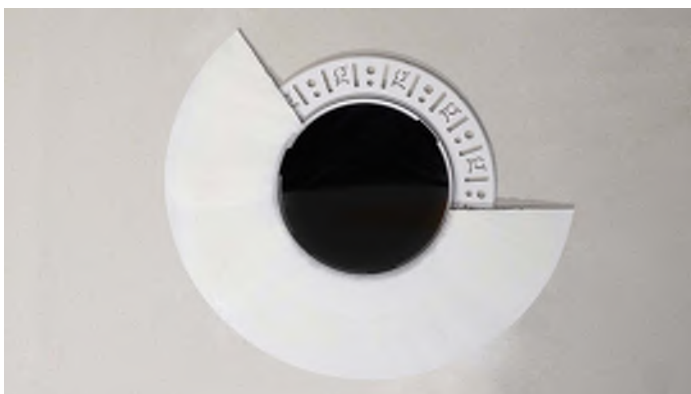
- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details



Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.



EVO with flangeless trim

Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.

EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EXA1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic	Linear
EXAB	<1%	Logarithmic	Linear
EDXB	<1%	Logarithmic	Linear

Distributions	
Distribution	Beam
MD	51
MWD	57
WD	73

CCT/CRI Multiplier Table		
CRI	CCT	Multiplier
80	2700K	0.96
	3000K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	3000K	0.83
	3500K	0.85
	4000K	0.87
	5000K	0.91

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73

Driver		Control Provided (note: 347V/UVOLT versions provided with 347 option selected)				
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIR2ER	NLTAIREM2
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2

How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

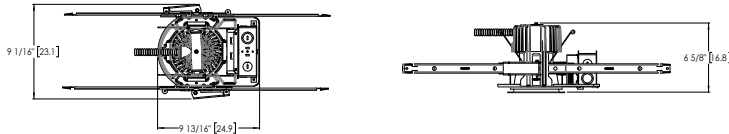
Aperture: 4-5/16" (11)

Ceiling Opening: 5-1/8" (13) self-flanged

Overlap trim: 5-7/16" (13.8)

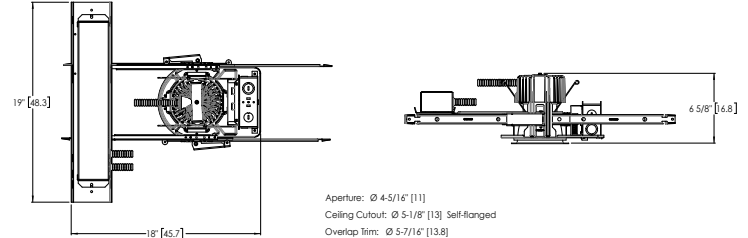
5-1/4" (13.3) flangeless

Standard



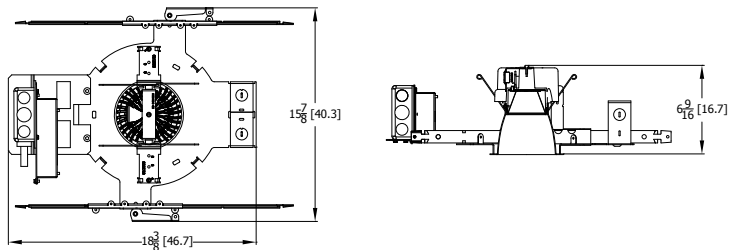
Aperture: $\varnothing$ 4-5/16" (11)
Ceiling Cutout: $\varnothing$ 5-1/8" (13) Self-flanged
Overlap Trim: $\varnothing$ 5-7/16" (13.8)
Ceiling Cutout: $\varnothing$ 5-1/4" (13.3) Flangeless

Battery Pack

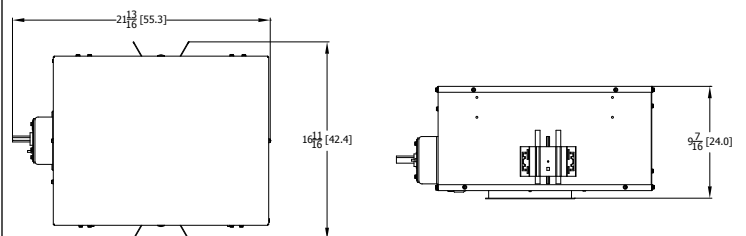


Aperture: $\varnothing$ 4-5/16" (11)
Ceiling Cutout: $\varnothing$ 5-1/8" (13) Self-flanged
Overlap Trim: $\varnothing$ 5-7/16" (13.8)
Ceiling Cutout: $\varnothing$ 5-1/4" (13.3) Flangeless

CP Standard

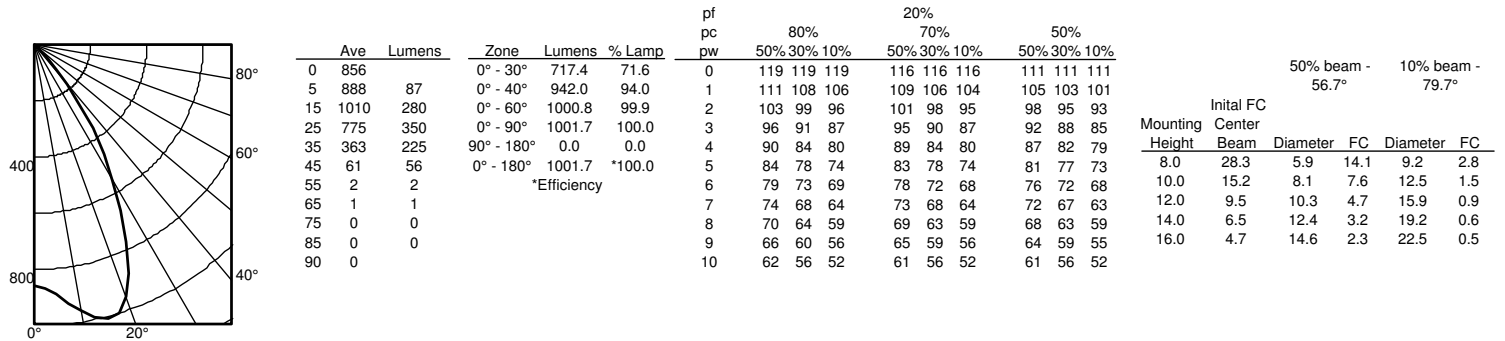


CP Enclosed For Use With Battery Pack & nLight

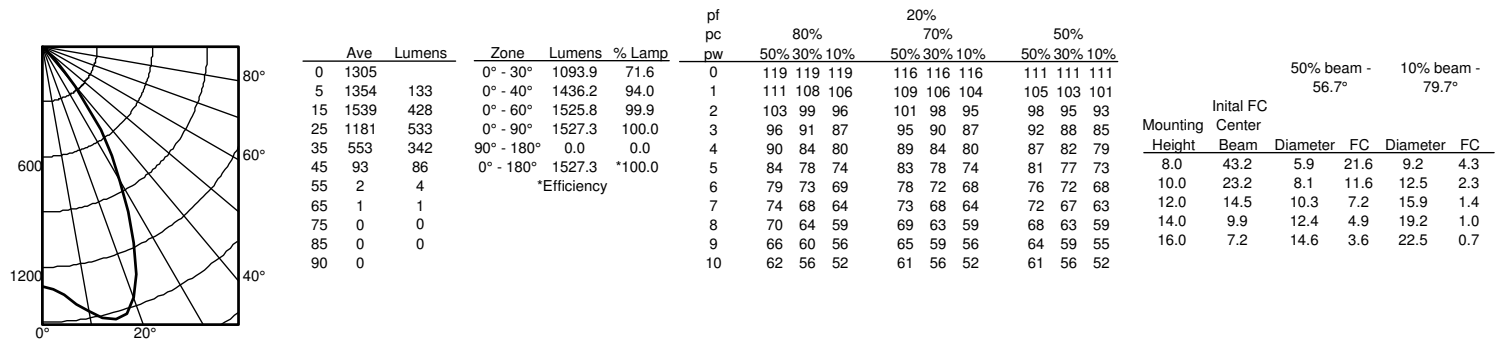


EV04 35/10 MWD LS INPUT WATTS: 8.8W, DELIVERED LUMENS: 1001.7LM, LPW = 113.8, 1.08 S/MH, TEST NO. LTL27786P131

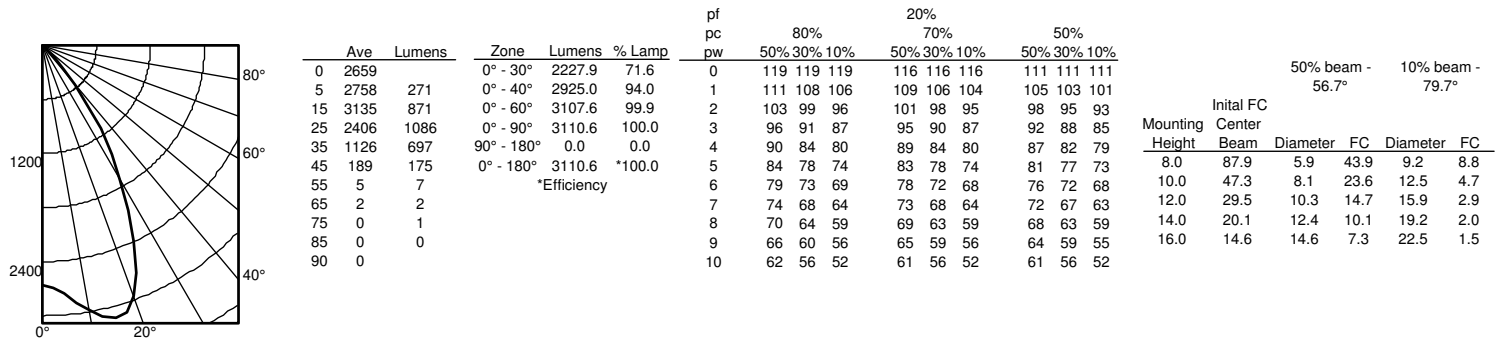
Photometry



EV04 35/15 MWD LSS INPUT WATTS: 13.7W, DELIVERED LUMENS: 1527.3LM, LPW = 111.4, 1.08 S/MH, TEST NO. LTL27786P137



EV04 35/30 MWD LSS INPUT WATTS: 31.2W, DELIVERED LUMENS: 3110.6LM, LPW = 99.6, 1.08 S/MH, TEST NO. LTL27786P155



nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

nLight® AIR Control Accessories

Order as separate catalog number. Visit [nLight AIR](#).

Wall Switches

Model Number	
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

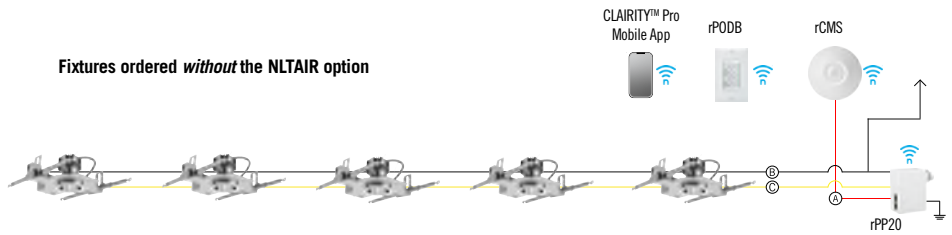
nLight® AIR Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

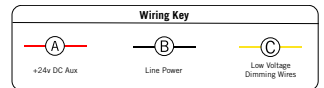
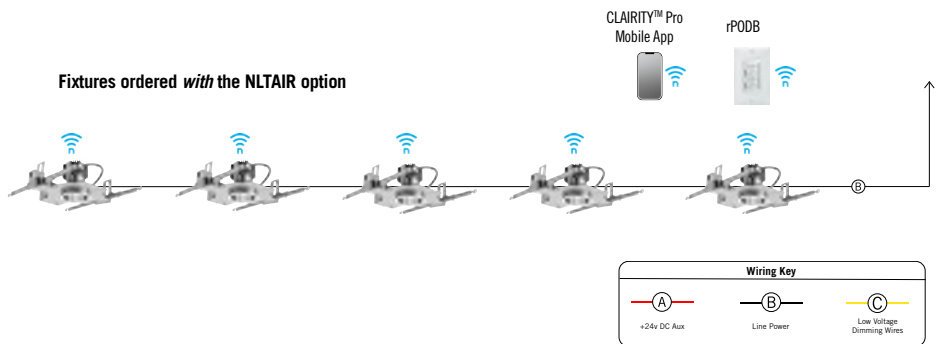
Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

Possibilities for nLight® AIR

Fixtures ordered *without* the NLTAIR option



Fixtures ordered *with* the NLTAIR option



nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit [nLight](#).

Wall Switches

Model Number	
On/Off single pole	nPODM (color)
On/Off two pole	nPODM 2P (color)
On/Off & raise/lower single pole	nPOD DX (color)
On/Off & raise/lower two pole	nPODM 2P DX (color)
Graphic touchscreen	nPOD GFX (color)

Photocell Controls

Dimming	nCM ADCX
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nLight® Wired Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

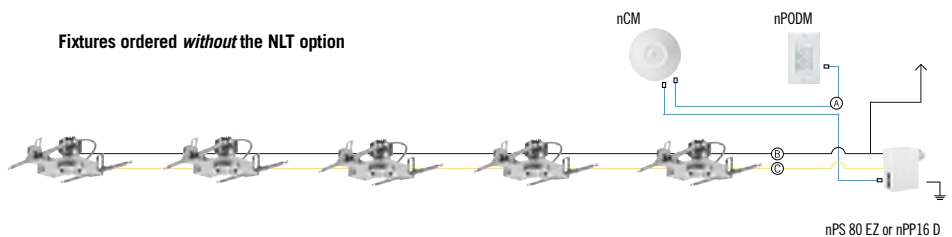
Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

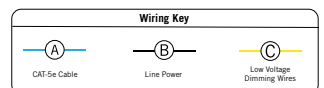
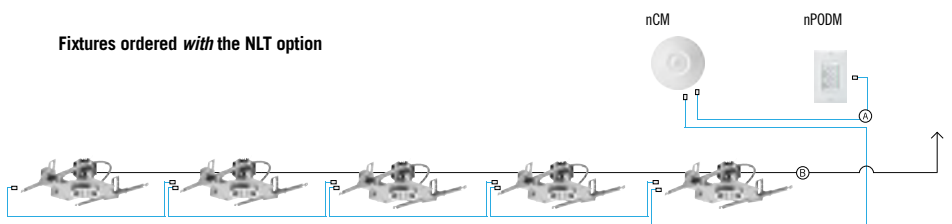
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

Possibilities for nLight® wired

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option



Application

LED wall luminaires with directed narrow beam light distribution on one side that can be oriented ~~upward~~ or downward. Arranged individually or in groups, they are great design elements for a host of lighting applications.

Materials

Luminaire housing and faceplate constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 6.6 lbs

Electrical

Operating voltage 120-277V AC
Minimum start temperature -30°C
LED module wattage 18.1 W
System wattage 21.0 W
Controllability 0-10V dimmable
Color rendering index $Ra > 80$
Luminaire lumens 1,725 lumens (3000K)
Lifetime at $Ta = 15^{\circ}\text{C}$ 395,000 h (L70)
Lifetime at $Ta = 30^{\circ}\text{C}$ 295,000 h (L70)

LED color temperature

- ☐ 4000K - Product number + **K4**
- ☐ 3500K - Product number + **K35**
- ☐ 3000K - Product number + **K3**
- ☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

- Available colors ☐ Black (BLK) ☐ White (WHT) ☐ RAL:
☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS:

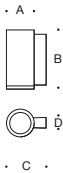
Type:
BEGA Product:
Project:
Modified:

TYPE:F18

fixture to be mounted downward

Available Accessories

- ☐ **79547** Surface mounted wiring box
- See individual accessory spec sheet for details.



LED wall luminaire - one-sided light output							Required wiring box
	LED	β	A	B	C	D	
24035	18.1 W	15°	6	$11\frac{3}{4}$	$7\frac{7}{8}$	$1\frac{5}{8}$	19537

β = Beam angle

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
© copyright BEGA 2018 Updated 02/06/18



**TRAFFIC IMPACTS**

In compliance with the special use permit approved by the Village in 2013, the existing parking lot at Willowbrook Wildlife Center was expanded in 2014 from 53 vehicle spaces (51 standard +2 accessible) to the current configuration of 98 vehicle spaces (93 standard + 5 accessible) and three (3) bus spaces in anticipation of this proposed buildout. The current vehicular entrance from Park Avenue will remain as well as the 98 vehicle spaces and three (3) designated school bus spaces on the west side of the lot.

The proposed Phase B improvements will add four (4) additional spaces near the entrance of the new clinic building to better accommodate animal intake and persons with disabilities. The staff parking on the north side of the site will have a revised layout that adds one (1) additional parking space and shifts the location of the access point to be more intuitive. Volunteers will continue to use the primary south parking lot as they currently do. For special events, the adjacent church property across from Park Avenue has agreed to allow their parking lot to be used for overflow parking if needed.

A detailed traffic and parking analysis was developed by a third-party traffic engineer which evaluated the previous, current, and future traffic impact and parking needs of this program. Reference “*Summary Traffic and Parking Evaluation*” by KLOA Inc dated 11/02/2022. That report found the future development will have negligible impact on the existing traffic and that 103 vehicle spaces and the three (3) bus spaces will meet or exceed the future needs of the facility and related programs.

Delivery and refuse vehicles will access the primary trash and loading areas from a back of house drive which is screened from the main parking lot. The trash enclosure is designed to meet the building ordinance and architectural appearance commission recommendations.

Parking Requirements per Village of Glen Ellyn Zoning:

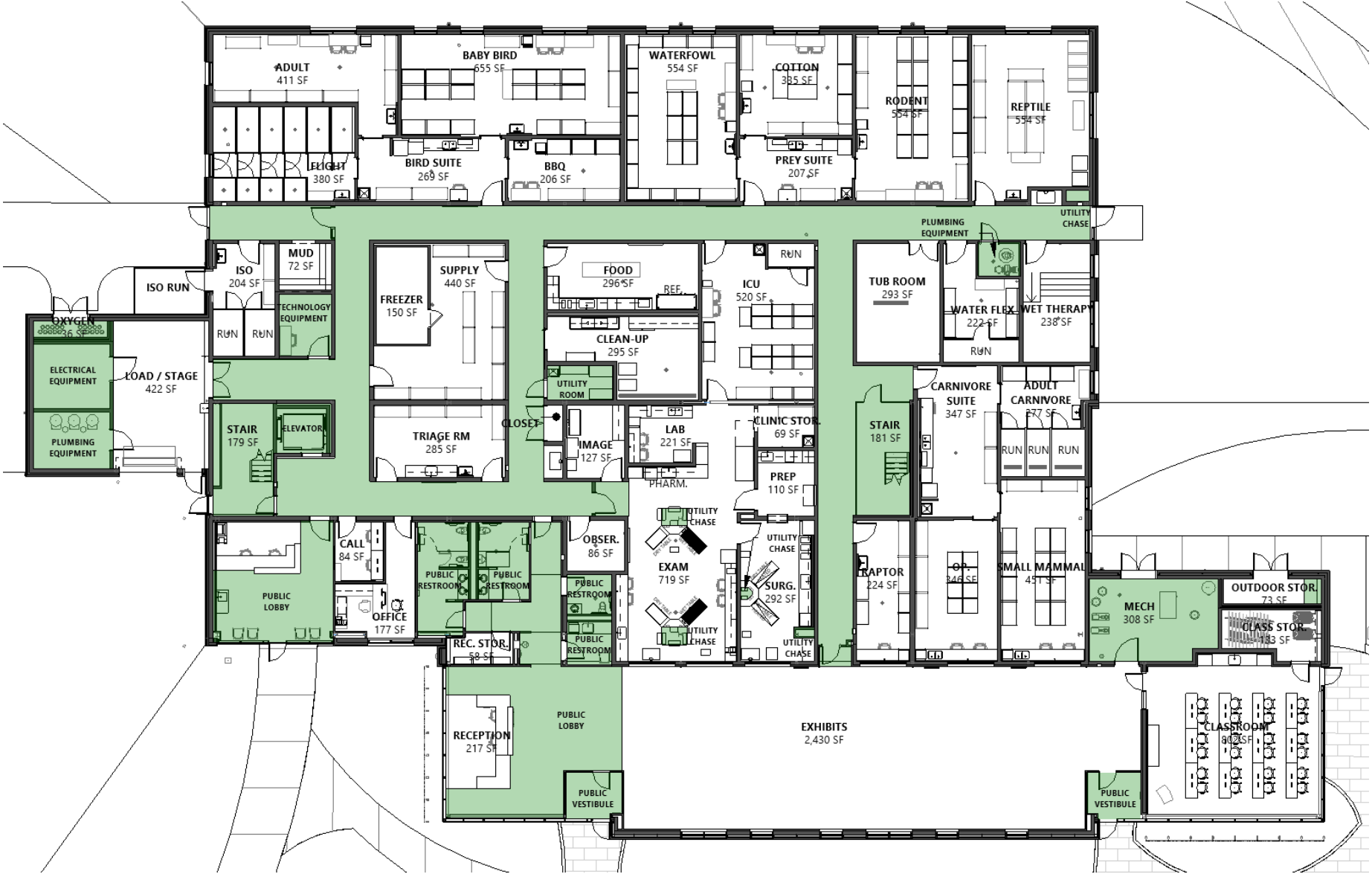
Gross Building Area (Clinic & Propagation Building):	33,028 SF
Subtract stairwells, public restrooms, foyers, shafts, utility rooms, corridors etc. per zoning ordinance:	-6,733 SF
Net area for parking calculation:	26,295 SF

Parking spaces required (1/250 SF Net area): **106 SPACES**

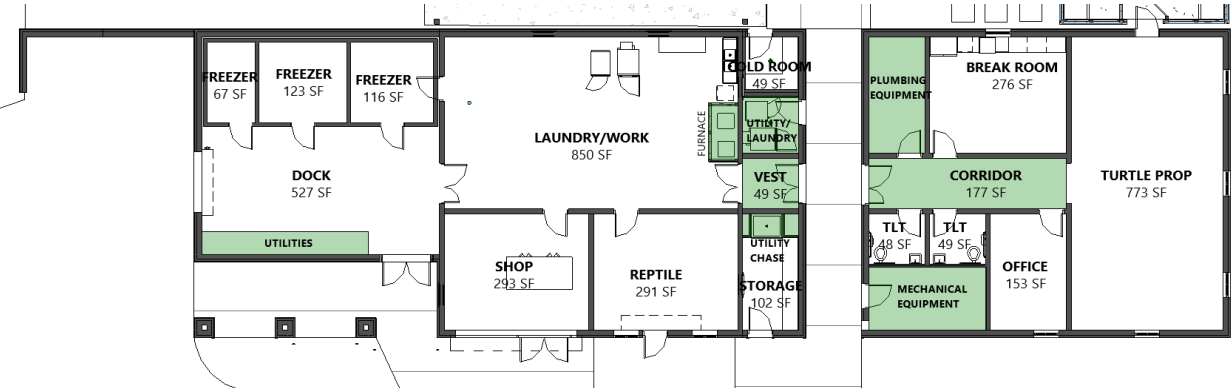
Parking Spaces Provided:

Standard (non- ADA) spaces provided	98 SPACES
Standard ADA spaces provided:	5 SPACES
Special Use (Bus) spaces provided:	3 SPACES
Total	106 SPACES

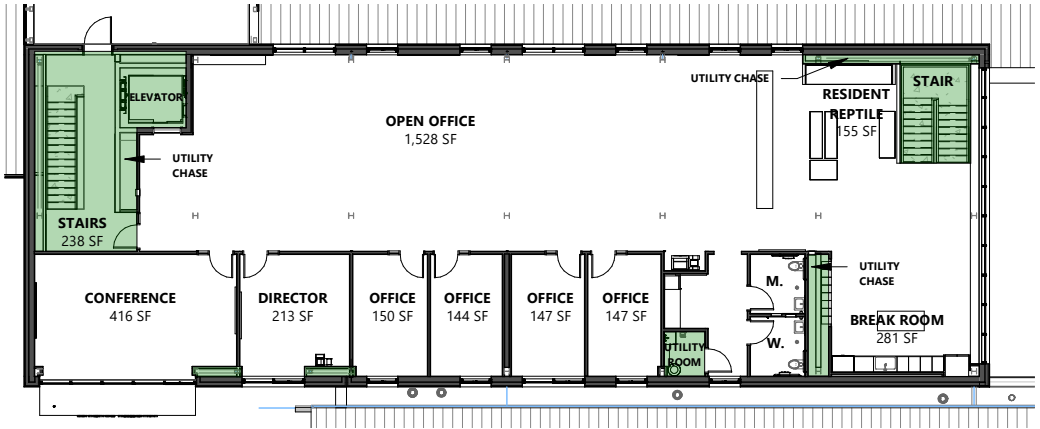
NET AREA PARKING CALCULATION – PER ZONING



CLINIC FIRST FLOOR



PROPAGATION - FLOOR PLAN



CLINIC SECOND FLOOR

GROSS AREA - CLINIC FIRST FLOOR:	22,632 SF
GROSS AREA - CLINIC SECOND FLOOR:	5,456 SF
GROSS AREA - PROPAGATOION BUILDING:	4,940 SF
TOTAL GROSS BUILDING:	33,028 SF
MINUS AREA EXCLUDED IN NET ZONING AREA (MEP, UTILITIES, STAIRWELLS, ELEVATOR, PUBLIC WASHROOMS, FOYERS, ATRIA, CORRIDORS, ETC.)	-6,733 SF

NET AREA FOR CALCULATING PARKING: 26,295 SF

DIVIDED BY 250 106 SPACES REQUIRED

MEMORANDUM TO: Mr. Kevin Horsfall
Willowbrook Wildlife Center

FROM: Kelly Pachowicz
Consultant

Michael A. Werthmann, PE, PTOE
Principal

DATE: November 2, 2022

SUBJECT: Summary Traffic and Parking Evaluation
Proposed Willowbrook Wildlife Center Expansion
Glen Ellyn, Illinois

This memorandum summarizes the findings of a summary traffic and parking evaluation conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Willowbrook Wildlife Center expansion located in Glen Ellyn, Illinois. The center is located on the east side of Park Boulevard (DuPage County Road 5) at its intersection with Fawell Boulevard. Currently, the center has two buildings that include a 4,940 (gross) square-foot building to the north and a 5,840 square-foot building to the south with a total of 98 parking spaces. **Figure 1**, included in the Appendix, shows an aerial view of the site.

As proposed, the expansion plans call for replacing the 5,840 square-foot south building with a 28,088 (gross) square-foot building that will contain offices, labs, prep rooms, surgery rooms, exam rooms, supply rooms, a classroom, and a breakroom. The expanded center will provide a total of 102 parking spaces. Access to the center will continue to be provided via the existing access drive that forms the east leg of the signalized intersection of Park Boulevard with Fawell Boulevard. As part of the expansion, access will be provided between the center and its parking lot to the trail system that is located adjacent to the center. The 4,940 (gross) square-foot propagation building is to remain.

The purpose of this evaluation is to review the existing roadways serving the center, determine the trip generation characteristics of the expanded center, examine the adequacy of the proposed access system, and evaluate if the parking to be provided is sufficient to meet the center's peak parking demand.

Existing Traffic Conditions

The following provides a description of the physical characteristics of the roadways including geometry and traffic control and average daily traffic volumes along the adjacent area roadways.

Park Boulevard (DuPage County Road 5) is a north-south, major collector roadway that in the vicinity of the site provides two travel lanes in each direction. At its signalized intersection with Fawell Boulevard and the center's access drive, Park Boulevard provides an exclusive left-turn lane, an exclusive through lane, and a combined through/right-turn lane on both approaches. The northbound approach provides a high-visibility crosswalk and pedestrian countdown timers. Park Boulevard is under the jurisdiction of DuPage County, carries an annual average daily traffic (AADT) volume of 13,200 vehicles (IDOT 2016), and has a posted speed limit of 35 miles per hour north of Fawell Boulevard and a posted speed limit of 40 miles per hour south of Fawell Boulevard.

Fawell Boulevard is an east-west, major collector roadway that provides two lanes in each direction within the vicinity of the site and is aligned opposite the center's access drive at its intersection with Park Boulevard. At its signalized intersection with Park Boulevard, Fawell Boulevard (eastbound approach) provides a combined left-turn/through lane, a combined through/right-turn lane, and a standard crosswalk. The center's access drive (westbound approach) provides a combined left-turn/through/right-turn lane and a standard crosswalk. Fawell Boulevard is under the jurisdiction of the Village of Glen Ellyn west of Park Boulevard, carries an AADT volume of 4,250 vehicles (IDOT 2016), and has a posted speed limit of 30 miles per hour.

Traffic Characteristics of the Proposed Expansion

The plans call for replacing the single-story 5,840 square-foot south building with a multi-story 28,088 (gross) square-foot building. Existing animal enclosures on the south side of the current building will be removed for the proposed building and new cages are proposed to the north of the buildings. Access to the center will continue to be provided via the existing access drive that forms the east leg of the intersection of Park Boulevard with Fawell Boulevard. A total of 102 parking spaces and three bus spaces are proposed to serve the center, an increase of four spaces over existing conditions.

According Willowbrook Wildlife Center officials, the overall purpose for the project is to right-size the center for its current operations and not to expand operations. The following summarizes the anticipated use of the proposed expanded center:

- Forty percent will be dedicated to animal care, including an animal intake area, triage area, exam room, surgery room, and indoor recovery areas.
- Thirteen percent will house offices for staff and volunteers who treat and care for the wildlife and provide interpretation services for the public. Office areas will include a conference room and library for research and classroom for training and programs.
- Sixteen percent will be used for public engagement and interpretation of wildlife rehabilitation and human impacts to wildlife including climate change.

- Thirty-one percent will be used for circulation, bathrooms, a break room, mechanical equipment and storage.

As such, the majority of the proposed expanded center will be used for animal care and recovery. A copy of the site plan, a summary of the center's operation and how the new space will be utilized, and floor plans are included in the Appendix.

Expansion-Generated Traffic

The estimate of the additional traffic to be generated by the proposed expansion was estimated based on the projected increase in the number of employees and visitors generated by the expansion as provided by the operator and discussed below:

- Based on information provided by Willowbrook Wildlife Center officials, approximately 22 people work at the center at any one time on a typical day and approximately 47 people work at the center at any one time on a peak day, which consists of full-time and part-time employees, volunteers, and seasonal employees. With the expansion, the center anticipates that the number of employees will remain the same with a maximum increase of approximately five volunteers. As such, the increase in the total number of employees/volunteers working at any one time is projected to be limited. In addition, the shift times for the employees/volunteers will vary and, as such, not all the employees/volunteers will arrive and depart at the same time.
- Further, Willowbrook Wildlife Center officials have indicated that they anticipate a limited increase in the number of visitors at the center with the proposed expansion. In addition, it is important to note that the visitors to the center and the existing trails adjacent to the center generally arrive and depart throughout the day, limiting the volume of traffic generated at any one time.

Therefore, the proposed expansion is projected to generate a low volume of additional traffic, particularly during the critical weekday morning and evening peak periods.

Access Drive Review and Traffic Evaluation

Access to the center is provided via a single access drive located on the east side of Park Boulevard opposite its signalized intersection with Fawell Boulevard. The access drive has one inbound lane and one outbound lane with the outbound lane striped for a shared left-turn/through/right-turn lane. A separate southbound left-turn lane is located on Park Boulevard serving the access drive. The intersection is under traffic signal control.

As discussed previously, the expanded center is projected to generate a low volume of additional peak hour and daily traffic. When compared to the existing daily traffic traversing the Park Boulevard/Fawell Boulevard/access drive intersection, it can be seen that the expanded center will have a limited impact on the existing roadway system. Further, given the fact that the access drive is under traffic signal control and a separate left-turn lane is provided on Park Boulevard serving the access drive, the existing access drive will be sufficient to accommodate the low additional traffic to be generated by the expanded center.

Parking Evaluation

The site currently provides a total of 98 parking spaces. As part of the proposed expansion, the parking lot will be expanded to provide a total of 105 parking spaces. It should be noted that the Phase 1 improvements completed in 2014 expanded the parking lot from 55 spaces to the current 98 spaces (plus three bus parking) in anticipation of these future improvements. As discussed above, it is anticipated that the expansion will result in an increase in approximately five employees/volunteers. Further, the increase in the number of visitors is anticipated to be limited. The overall purpose for the project is to right-size the center for its current operations and not to expand operations.

Typical Days at the Center

To determine the existing parking demand, Willowbrook Wildlife Center staff conducted parking surveys every hour from 6:00 A.M. to 6:00 P.M. from Monday, October 3, 2022 through Sunday, October 9, 2022. **Table 1** summarizes the results of the parking surveys. It should be noted that the visitor center was closed due to construction when the parking surveys were performed. From the table it can be that the center had a peak parking demand of 29 parked vehicles that occurred at 11:00 AM on Thursday and an average peak demand of approximately 23 parked vehicles that occurred during the morning hours. With a total of 102 parking spaces to be provided as part of the expansion, the parking surveys show that a minimum of approximately 65 parking spaces will be available at any time. Given the center's average and maximum employment levels, the results of the existing parking surveys, the limited projected increase in parking associated with the expansion, and the random arrival of the users of the adjacent trails, the 102 total parking spaces to be provided by the expanded center will be sufficient to accommodate the peak parking demand on typical days at the expanded center.

Peak Days and Special Events at the Center

To accommodate the additional parking demand associated with peak days or special events at the center, the Willowbrook Wildlife Center has an understanding and a working relationship with St. James Catholic Church to use their parking lot for overflow parking, if necessary. The church is located in the northwest quadrant of the Park Boulevard/Fawell Boulevard intersection across Park Boulevard from the center. As proposed, the center will have its employees/volunteers park in the church lot during peak days/special events when overflow parking may be needed, which will free up significant parking for the additional patrons anticipated to be visiting the center. If necessary, the church lot can also be used for overflow patron parking. It is important to note that the following pedestrian infrastructure is provided between the center and the church, which is sufficient to accommodate the travel between the center and the church parking lot:

- A sidewalk is provided along the north side of Fawell Boulevard.
- A pedestrian crossing is provided along the north leg of Park Boulevard at its intersection with Fawell Boulevard/center's access drive that includes a high visibility, ladder style crosswalk and pedestrian traffic signals.

Table 1
WILLOWBROOK WILDLIFE CENTER PARKING SURVEYS
OCTOBER 3RD TO 9TH, 2022

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6 A.M.	7	8	11	16	4	2	2
7 A.M.	23	15	21	26	12	17	9
8 A.M.	1	4	16	5	14	7	0
9 A.M.	9	17	15	15	9	8	3
10 A.M.	6	24	12	11	8	6	8
11 A.M.	13	20	22	29	20	13	14
12 P.M.	9	15	16	14	24	9	8
1 P.M.	10	6	4	10	15	10	13
2 P.M.	2	14	24	6	9	7	15
3 P.M.	2	12	n.a.	8	7	4	4
4 P.M.	2	5	9	10	4	4	4
5 P.M.	0	1	2	2	2	0	1
Notes: - The parking surveys were performed by Willowbrook Wildlife Center staff. - The visitor center was closed due to construction when the surveys were performed.							

Appendix



Aerial View of Site

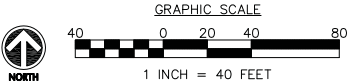
Figure 1

\\wightco.com\IntServ\Darien\Forest Preserve\210107_WWC Phase II\01\11 Drawings\02 CD\EXHIBITS\210107 Parking Exhibit.dwg nkherero Nov 01, 2022 4:15:35 pm
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- LEGEND**
- # EXISTING PARKING STALL COUNT
 - # EXISTING ADA PARKING STALL COUNT

Existing Parking Stalls	
Regular	93
Regular Stall Breakdown = 8+6+13+25+21+8+10+2	
ADA	5
Bus Parking	3
TOTAL	101



Wight & Company
wightco.com

2500 North Frontage Road
Darien, IL 60561

P 630.969.7000
F 630.969.7979

80% CONSTRUCTION DOCUMENTS 10/28/2022

50% CONSTRUCTION DOCUMENTS 07/29/2022

REV	DESCRIPTION	DATE
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WILLOWBROOK WILDLIFE CENTER

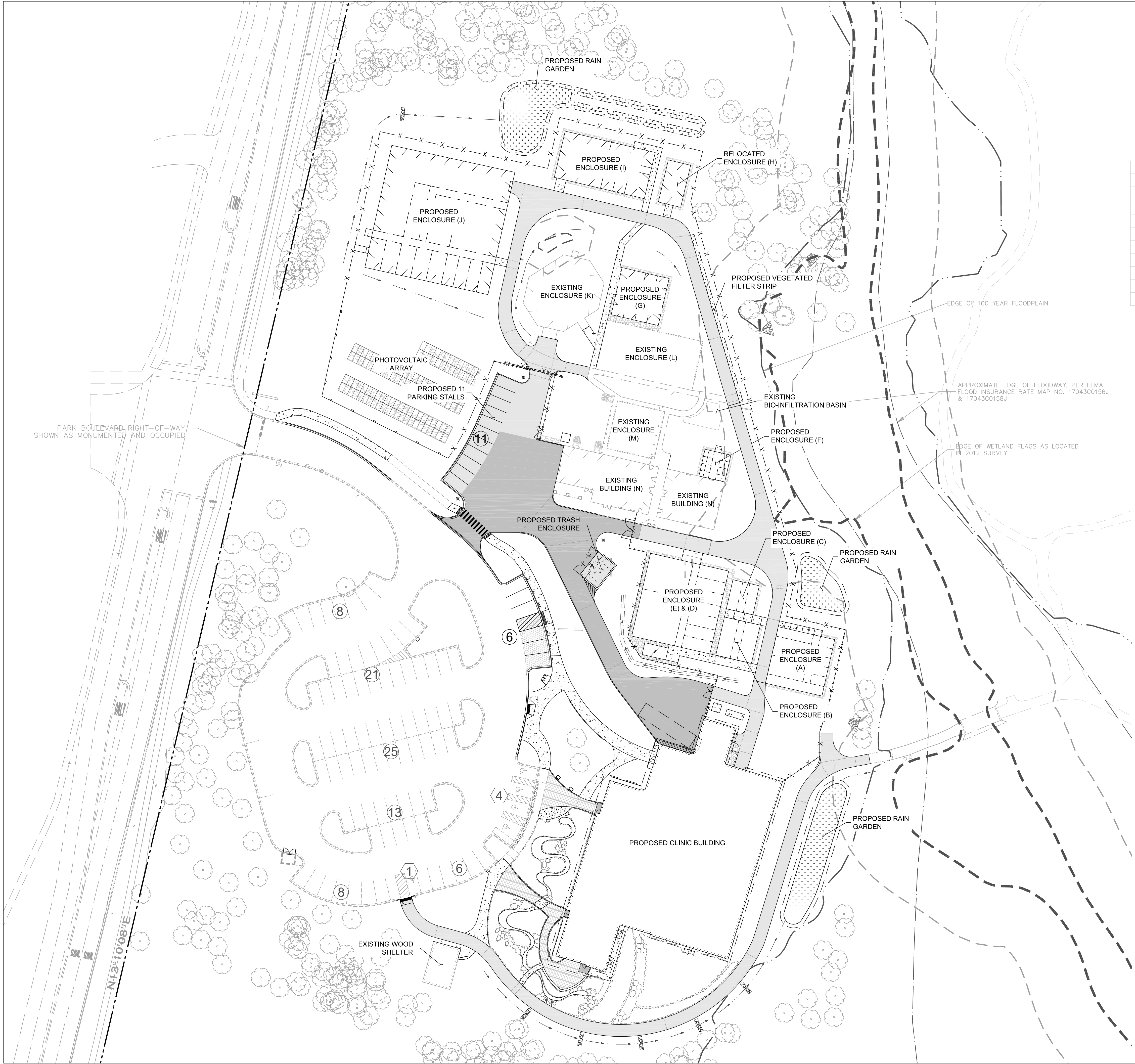
525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

EXISTING PARKING EXHIBIT

Project Number:
210107
Drawn By:
NKH
Sheet:

S:\Darien\DuPage Forest Preserve\210107_WWC Phase II\01\11 Drawings\02 CD\EXHIBITS\210107 Parking Exhibit.dwg k buck Mar 09, 2023 3:05:30 pm

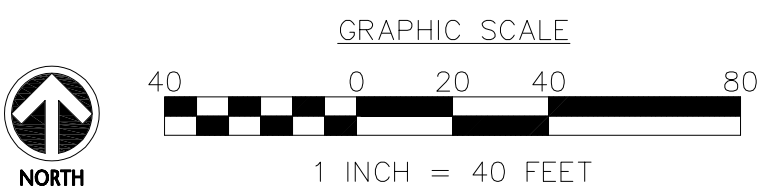
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LEGEND

- # PROPOSED PARKING STALL COUNT
- # EXISTING PARKING STALL COUNT
- # EXISTING ADA PARKING STALL COUNT

Existing Parking Stalls		Proposed Parking Stalls	
Regular	93	Regular	98
Regular Stall Breakdown = 8+6+13+25+21+8+10+2		Regular Stall Breakdown = 8+6+13+25+21+8+11+6	
ADA	5	ADA	5
Bus Parking	3	Bus Parking	3
TOTAL	101	TOTAL	106



Wight & Company
wightco.com

2500 North Frontage Road
Darien, IL 60561

P 630.969.7000
F 630.969.7979

VILLAGE COMMENT RESPONSE	03/09/2023	
ADDENDUM 1	03/06/2023	
VILLAGE COMMENT RESPONSE	02/13/2023	
ISSUE FOR BID GROUP 3	01/19/2023	
PERMIT RESPONSE #1	01/13/2023	
80% CONSTRUCTION DOCUMENTS	10/28/2022	
50% CONSTRUCTION DOCUMENTS	07/29/2022	
REV	DESCRIPTION	DATE

WILLOWBROOK
WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

PROPOSED PARKING
EXHIBIT

Project Number:
210107
Drawn By:
NKH
Sheet:



WILLOWBROOK WILDLIFE CENTER
Phase 2 Master Plan Improvements
Willowbrook Forest Preserve
525 S. Park Blvd.
Glen Ellyn, Illinois 60137

November 2, 2022
Project No. M-340-000

Summary of Operations



Prepared by:
Forest Preserve District of DuPage County
Office of Planning
3 S. 580 Naperville Road
P.O. Box 5000
Wheaton, Illinois 60189
630-933-7200 tel | 630-933-7686 fax



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INTRODUCTION

In 2021, the District hired Wight & Company to revise the Phase 2 Master Plan for Willowbrook Wildlife Center, based on recent changes to the programming and vision for the center, as well as updated guidelines provided by National Wildlife Rehabilitators Association (NWRA) and International Wildlife Rehabilitation Council (IWRC) Minimum standards for Wildlife Rehabilitation. Phase 1 Master Plan improvements were constructed in 2013 and complete in 2014. With these changes to programming and guidelines, the Phase 2 Master Plan required an update.

HISTORY

Willowbrook Forest Preserve is located near the center of the county on approximately 50 acres of land within the incorporated village limits of Glen Ellyn, Illinois. The Willowbrook Wildlife Center functions primarily as a wildlife rehabilitation and environmental education center. The facility has been in operation for over 50 years and attracts an estimated 120,000 visitors annually, which includes vehicular and pedestrian guests, who come to enjoy the exhibits at the center as well as the walking trails and interpretive experiences offered throughout the preserve. The staff there provides medical treatment to more than 10,000 sick or injured native wildlife that are brought to the center each year. Once restored to health, they are released back into their native habitat. The Center also provides learning experiences for citizens to help them live in closer harmony with native Northeastern Illinois wildlife and to better understand the natural world. The District wants to transform the Willowbrook Wildlife Center to be more closely aligned with its Mission and has established a new vision and program for the facility.

SUMMARY OF PROPOSED OPERATIONS

Willowbrook Wildlife Center at Willowbrook Forest Preserve in Glen Ellyn is a native wildlife rehabilitation facility that provides care and medical treatment to injured and orphaned wild animals. It also serves as a resource to teach DuPage County's residents about living in harmony with local wildlife. Willowbrook partners with organizations and individuals, including the Lincoln Park Zoo, Illinois Department of Natural Resources, Chicago Area Bird Collision Monitors, county and local municipal animal control agencies, and private wildlife rehabilitators. In 2021, Willowbrook rehabilitated 219 unique species.

With the proposed Phase 2 improvements, a brand new clinic and rehabilitation building with visitor center will be constructed. Forty percent of the building is dedicated to animal care – including an animal intake area, triage area, exam room, surgery room, and indoor recovery areas. Thirteen percent of the building will house offices for staff and volunteers who treat and care for the wildlife and provide interpretation services for the public. Office areas will include a conference room and library for research and classroom for training and programs. Sixteen percent of the building will be used for public engagement and interpretation of wildlife rehabilitation and human impacts to wildlife including climate change. The remaining portions of the building is for the bathrooms, circulation, mechanical equipment and storage.



VISION PROGRAM

Outreach

Willowbrook aims to be inclusive in our outreach to audiences of different ages, experiences, and socioeconomic backgrounds and provide a shared experience where all members of the community can feel closer to their environment and native wildlife.

Willowbrook Mission

Willowbrook Wildlife Center at Willowbrook Forest Preserve in Glen Ellyn is a native wildlife rehabilitation facility that provides care and medical treatment to injured, sick and orphaned wild animals. It also serves as a resource to teach DuPage residents about living in harmony with local wildlife.

Willowbrook Vision

Willowbrook Wildlife Center is state of the art wildlife rehabilitation facility that is a national leader in engaging visitors in veterinary science, medical care and wildlife rehabilitation in action while championing healthy interconnected ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in DuPage County and beyond.

Goals: (Critical success factors / key performance indicators, mandates)

1. Over the next 10 years, Willowbrook will transition away from having a collection of 54 non-releasable animals to focusing on 100% rehabilitation and reintroduction into the wild by 2031.
2. To improve the safety and conditions of the facilities for the rehabilitation and restoration of animals and animal species.
3. To improve safety and efficiency of facilities and work environment for Willowbrook staff and volunteers
4. To improve the ability of the facilities to engage and immerse the public in the wildlife rehabilitation processes and ecosystem environments that make up of 26,000 acres of DuPage County open space consisting of restored savannahs, woodlands, wetlands, and prairie environments to foster a greater appreciation for the native species, animal habitats, ecosystem functions and the interconnectivity of natural systems
5. To make the facility more sustainable utilizing the latest in energy efficient, LEED, and green infrastructure design principles.
6. To support the captive propagation of at-risk species and research projects that will advance wildlife medicine and wildlife rehabilitation.



WILLOWBROOK WILDLIFE CENTER
Phase 2 Master Plan Improvements
 Willowbrook Forest Preserve
 525 S. Park Blvd.
 Glen Ellyn, Illinois 60137

October 26, 2022
 Project No. M-340-000

Comparison of Existing and Proposed Uses

	Existing	Proposed
Visitor Experience	2,022 SF	3,140 SF
Classroom	325 SF	802 SF
Office	1,235 SF *	3,199 SF ^
Clinic ¥	1,090 SF	3,569 SF
Rehab	420 SF	6,417 SF

Notes:

* Includes 922 s.f. of office space in separate propagation building.

^ Includes open office, private offices, conference room, and library.

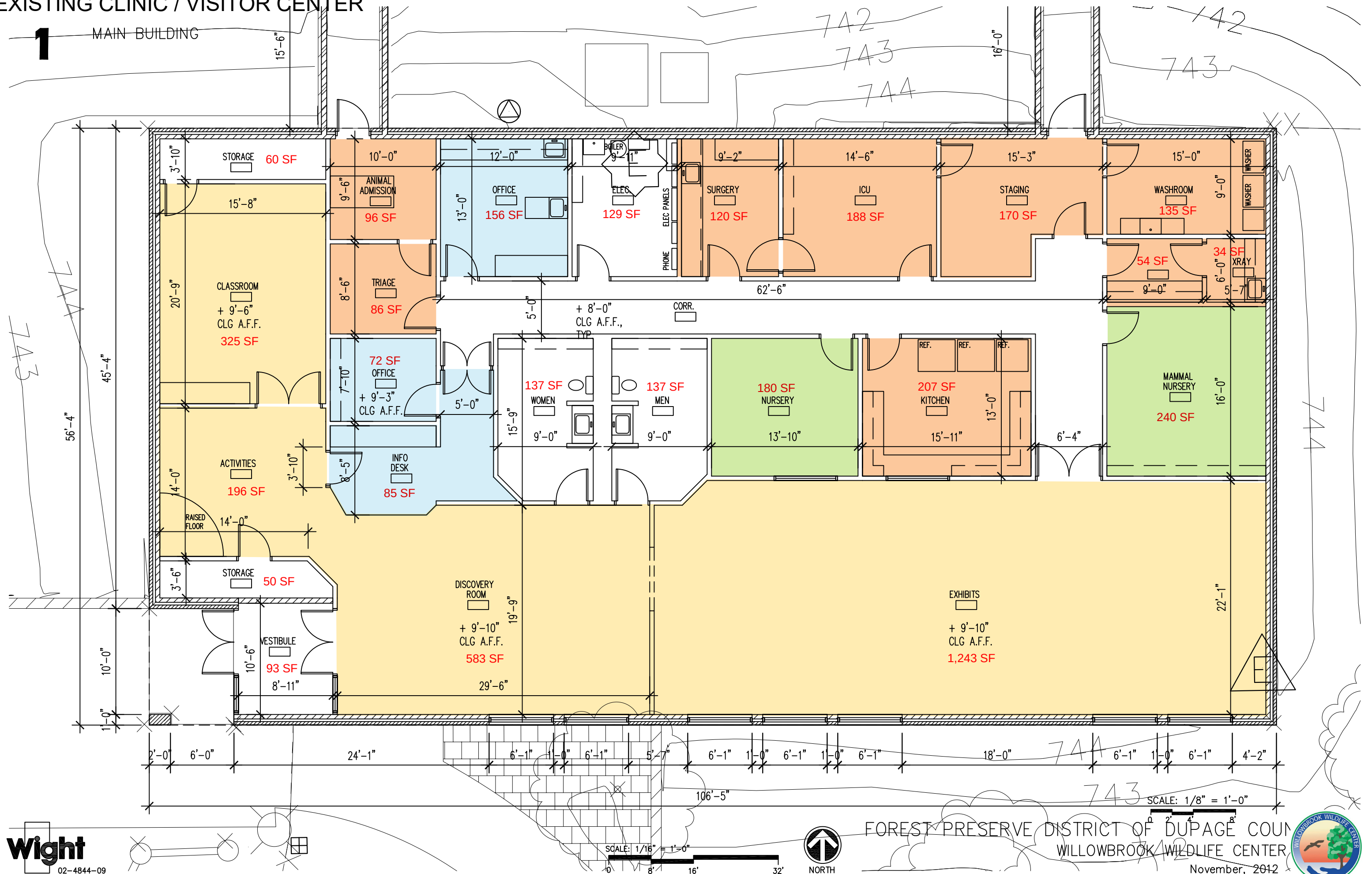
¥ Clinic areas do not include exterior enclosures or existing propagation building to remain.

See attached floor plans of the Existing Clinic/Visitor Center and Proposed Clinic/Visitor Center.



1

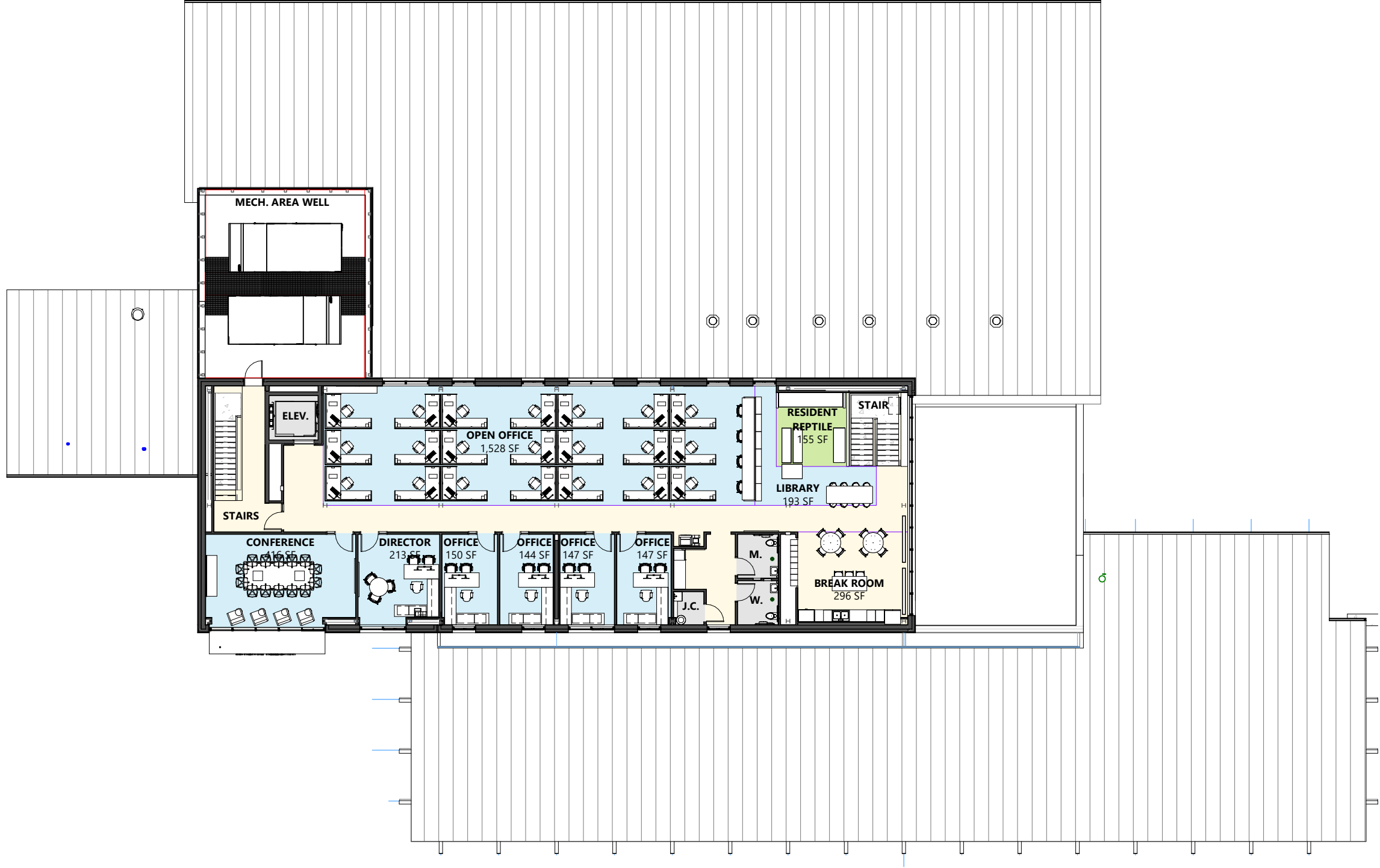
~~MAIN BUILDING~~





1 FIRST FLOOR PLAN
SCALE: 1" = 20'-0"





1 SECOND FLOOR PLAN
SCALE: 1" = 20'-0"





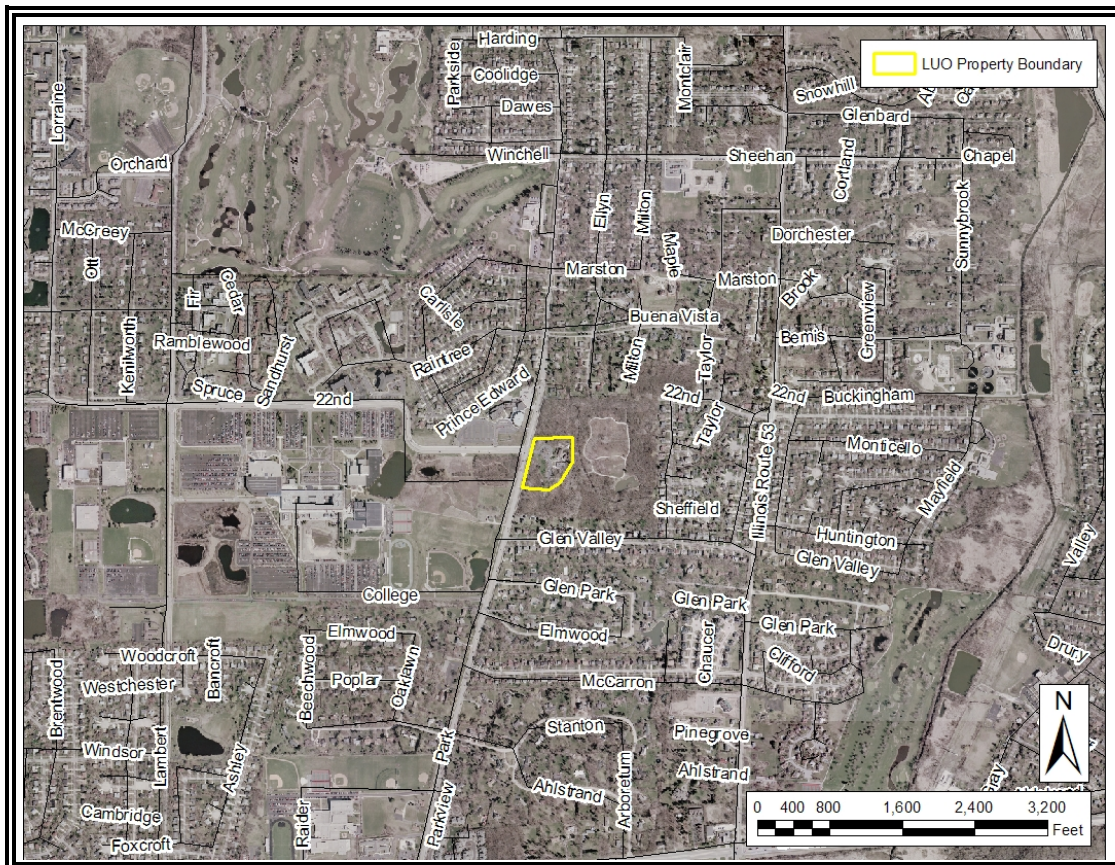
For the phase 1 2013 construction of the parking lots and a building, a 2013 KDSWCD LUO was generated with statements on soils, wetlands, floodplain, stormwater, sediment, and erosion control, NPDES permit, and aquifers. Wight & Company believes this 2013 LUO still applies for all the above have not changed.

- For soils – the soil type has not changed, and a soils survey map is included within the stormwater report. Many soil borings were performed on this site and a Soils report was generated and signed by a Geotechnical Engineer. This information on the soils was utilized in the design of the site's proposed hardscape, buildings, enclosures, and PCBMP features.
- For wetlands – these existed in 2013 and still exist today along Glen Crest Creek. A wetland delineation was performed in 2011 and utilized in the 2013 Phase 1 design. A updated wetland delineation was performed in 2018 and re-verified in 2021 for these Phase A and B improvements. The wetland information is included within the stormwater report.
- For floodplain – again floodplain existed in 2013 and still exist today along Glen Crest Creek. The 2004 FIRM was utilized in the 2013 Phase 1 design. The updated 2019 FIRM is incorporated for these Phase A and B improvements. This updated FIRM is included within the stormwater report.
- Stormwater – The phase A and B designs are following the current DuPage County Stormwater Ordinance in PCBMP's. Per this Ordinance, stormwater detention is not required.
- Sediment and Erosion Control – A SWPP plan, notes and details have been designed and are included within the plan set.
- NPDES permit has been obtained
- Aquifers – There were none in 2013 so there are none today.

We believe a new LUO would generate roughly the same information which has already been studied and incorporated into the design of this project.

LAND USE OPINION

13-09



April 19, 2013

**Prepared for:
Village of Glen Ellyn**

Petitioner:
Shawn M. Benson
2500 North Frontage Road
Darien, IL 60561

Petitioner: Shawn M. Benson, 2500 North Frontage Road, Darien, IL 60561

Contact Person: Shawn M. Benson, 630-442-2887

Unit of Government Responsible for Permits: Village of Glen Ellyn

Acreage: 5.63

Location of Parcel: Section 26, Township 39 N, Range 10 E

Property Address/PIN#: 525 South Park Boulevard

Existing Land Use: Recreational

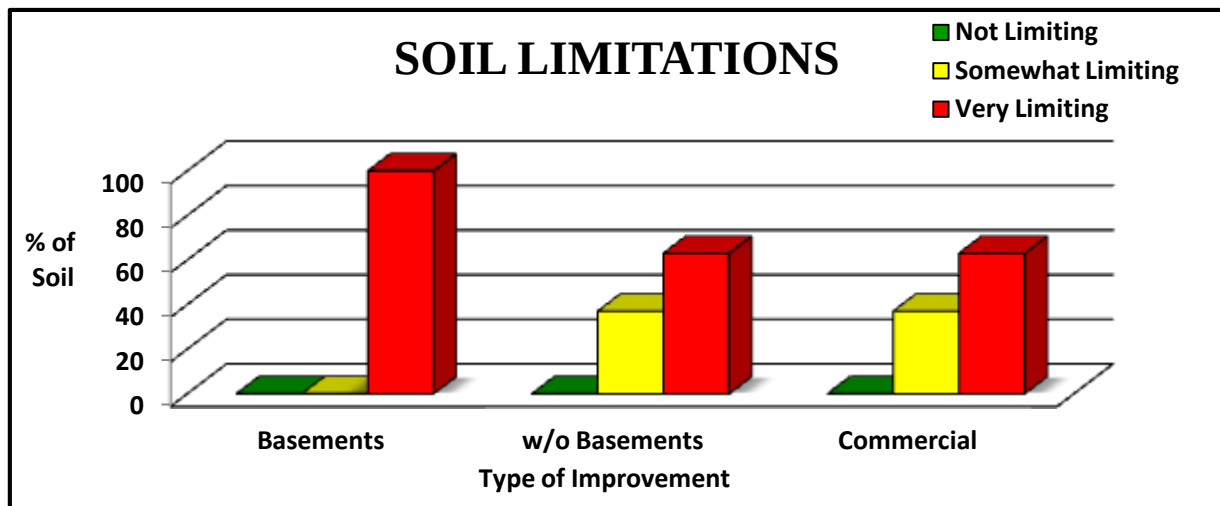
Surrounding Land Use: Residential and Institutional

Proposed Land Use: Recreational Improvements/Special Use

DuPage County Land Use Plan Map: Single Family Residential

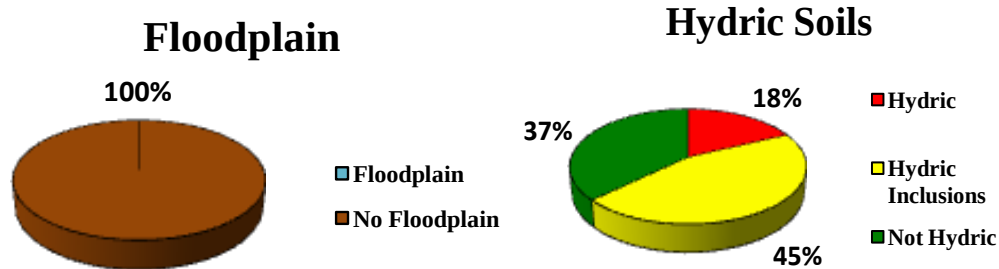
Natural Resource Concerns

Soils Limitations: Soils at this site contain limitations for dwellings with basements, dwellings without basements, and small commercial buildings. See soils information pages, and attached soils tables. All information is from the Soil Survey of DuPage County, Illinois.



Wetlands: The National Wetland Inventory map identifies wetland areas on this site. 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 5 for more wetland information.)

Floodplain: There are no floodplain areas identified on this site. However, there are hydric soils, and soils with hydric inclusions, which may be prone to ponding. (See page 7)



Stormwater: The District encourages the use of on-site detention for stormwater runoff, and recommends the use of a 0.10cfs/acre release rate for on-site detention ponds. (See page 8 for more information concerning stormwater planning on this site.)

Sediment and Erosion Control: Development on this site should include a sedimentation and erosion control plan. (See page 10)

NPDES Permits: An NPDES (National Pollution Discharge Elimination System) permit is required by the EPA for all construction sites over 1 acre. (See page 11)

Aquifer Sensitivity: According to Illinois State Geological Survey, Environmental Geology Report, published 1995, there are no aquifers that may be adversely impacted by this project. (See page 4 and Appendix A)

Soil Data: The soil data from SSURGO (or NASIS) is part of a national dataset. The hydric rating used in this report has been modified to reflect local interpretations with guidance from the Area Soil Scientist.

LAND USE OPINION

Land Use Opinion: This site contains the following concerns: **Wetlands, Adjacent Stream, Soil Limitations, Woodlands, 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 **is not suited** for the proposed use **unless** the previously mentioned concerns are addressed.

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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 SWCD 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 inter-relate 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) 584-7961

SOILS INFORMATION

IMPORTANCE OF SOILS INFORMATION

Soils information is taken from the Soil Survey of DuPage 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. **Each soil polygon has a number. That number is a symbol for a map unit that will be described in detail in the Soils Interpretations section of this report found on page 11.**

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 DuPage 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
1107A-Sawmill	18%	1.01
146A- Elliott	45%	2.52
531C2-Markham	37%	2.07
Table 1: Soil Map Units Total		5.60

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.

SOILS INFORMATION

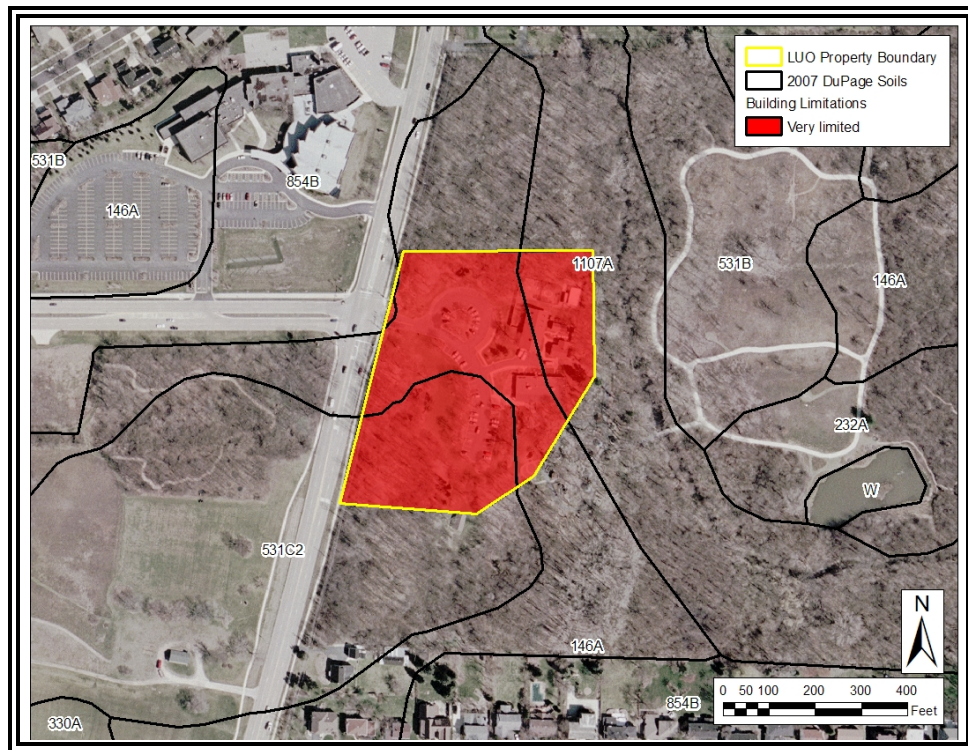


Figure 1: Soil Survey Map

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2000 and DuPage County SSURGO soil layer certified in 1999. Areas shaded red represent VERY LIMITING limitations for building site development, and areas shaded yellow represent SOMEWHAT LIMITING limitations for building site development.

AQUIFER IMPACT

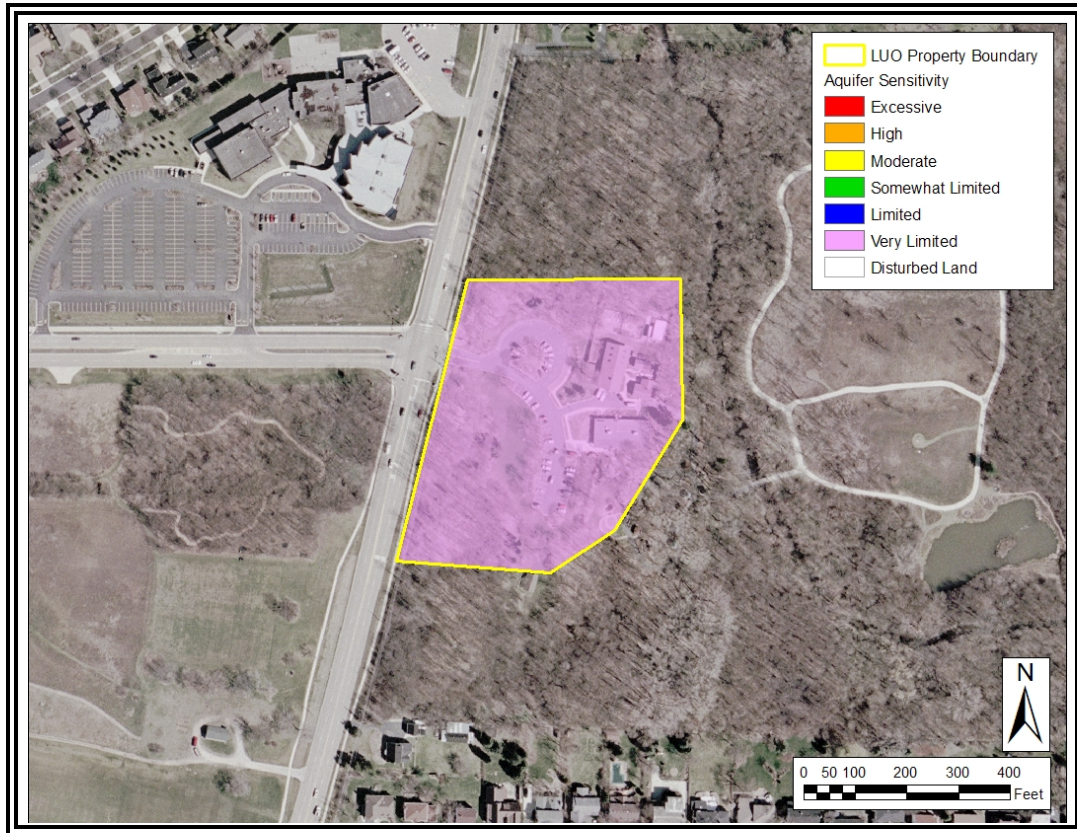


Figure 2: Aquifer Sensitivity Map

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.

SEPTIC ABSORPTION SYSTEMS

There are no septic absorption systems proposed for this site.

WETLANDS

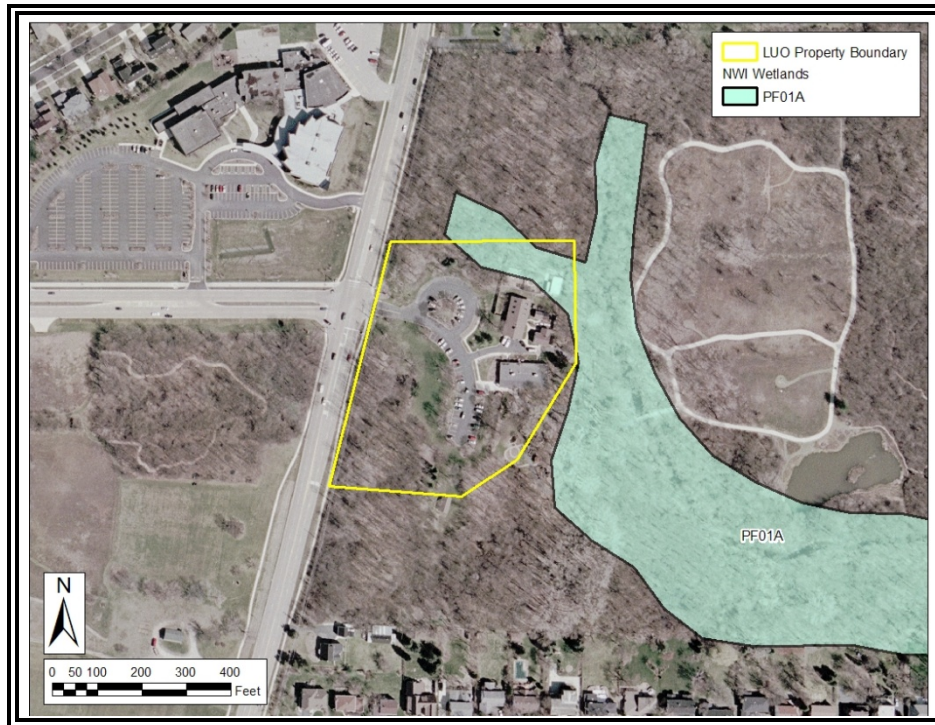


Figure 3: National Wetland Inventory Map

United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory, Photo Year 1983-1984, Digitized 1985-1986.

There are wetlands within the boundaries of this site. This has been determined through the use of the National Wetlands Inventory map. The types of wetlands identified on this site include: **(PF01A-Paulstrine Forested Broad-Leaved Deciduous Temporarily Flooded)**. An on-site inspection confirmed the existence of the wetlands. **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.**

Wetlands function in many ways to benefit mankind. They control flooding by offering a slow release of excess water downstream or through the soil. They cleanse water by filtering out sediment and some pollutants. In addition, they may function as rechargers of our valuable groundwater. They are also essential breeding, rearing, and feeding grounds for many species of wildlife. This organization believes that such valuable resources should remain in a natural state.

Wetlands often need to receive some runoff in order to sustain vegetation and wetland conditions. In fact, low value wetlands may actually be enhanced by receiving more storm water and with selective plantings. Diversion of storm water away from wetlands may dry the wetland. However, there is a problem with using high value wetlands as a significant storm water control device. Urban storm water runoff can carry high volumes of sediment and pollutants, which do not benefit wetlands and water quality. Management of storm water and plant diversity could greatly enhance the value of the wetlands on this property.

The U.S. Army Corps of Engineers has been given jurisdiction over the utilization of our wetland resources. The responsibilities and regulatory authorities of the Corps of Engineers are based on Section 404 of the Clean Water Act (33 U.S.C. 1344). Section 301 of the Act prohibits the discharge of dredged or fill material into waters or other wetland areas without a permit from the Corps.

Figure 4: Wetland Photograph Location Map



Figure 5: Photograph of Wetland
Photograph 1 taken facing north.



FLOODPLAINS



Figure 6: Floodplain Map

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, September 1998.

According to the Flood Insurance Rate Map, this site is **not** within the boundaries of a 100-year floodplain.

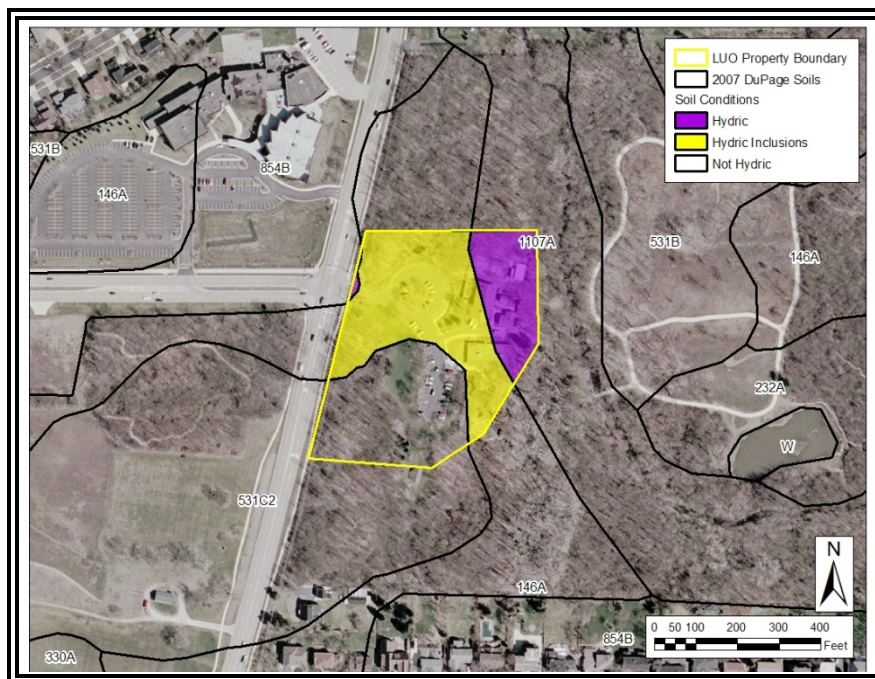
This development should not impede the beneficial functions of the floodplain. These functions include the temporary storage and the slow release of floodwaters. This disturbance could adversely affect other properties in the watershed.

Another indication of flooding potential can be found in the soils information. Figure 7 indicates the hydric soils mapped for the site. Hydric soils by definition have potential ponding problems.

Development in floodplains/floodways is regulated by the Department of Natural Resources, Office of Water Resources.

Figure 7: Hydric Soils

Hydric soils are shaded purple and soils with hydric inclusions are shaded yellow.



WETLAND AND FLOODPLAIN REGULATIONS

PLEASE READ THE FOLLOWING IF YOU ARE PLANNING TO DO ANY WORK NEAR A STREAM (THIS INCLUDES SMALL UNNAMED STREAMS, LAKES, WETLANDS, AND FLOODWAYS).

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.

Who Must Apply:

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.

REGULATORY AGENCIES:

- **Wetland/U.S. Waters:** U.S. Army Corps of Engineers, Chicago District, 111 North Canal Street, Chicago, IL 60606-7206. Phone: (312) 353-4117.
- **Floodplains: Illinois Department of Natural Resources\Office of Water Resources,** 2050 W. Sterns Road, Bartlett, IL 60103. Phone: (847) 608-3100

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.

CAUTION: Contact with the United States Army Corps of Engineers is strongly advised before commencement of any work in or near a water of the United States. This could save considerable time and expense. Persons responsible for willful and direct violation of Section 10 of the River And Harbor Act of 1899 or Section 404 of the Federal Water Pollution Control Act are subject to fines ranging up to \$25,000 per day of violation and imprisonment for up to one year or both.

STORMWATER

The proposed removal of vegetation, compaction of soil, and addition of impervious surfaces (rooftops, roadways, etc.) will greatly increase the amount of storm water runoff generated on this site. We strongly recommend the use of on-site storm water management. All additional runoff should be retained in on-site detention ponds and released at a rate that approximates natural, undisturbed runoff conditions. The S.W.C.D. encourages the use of a .10 cfs/acre release rate. Insufficient storm water management on this site will threaten the storm water capacity of the floodplain. This has the potential to cause or aggravate flooding conditions on surrounding properties or elsewhere in the watershed.

If detention ponds are constructed, the S.W.C.D. strongly encourages incorporating as many of the natural attributes of the existing wetlands as possible. Natural waterway features provide many benefits that sterile detention ponds do not. These include: 1)

flood control by slow release of excess water through the soil, 2) water purification by vegetation, 3) groundwater recharge, and 4) habitat for wildlife. However, there are concerns associated with allowing urban storm water flow to enter natural wetland features. If the runoff generated by impervious surfaces, such as rooftops and roadways, is loaded into these natural features, their flood control capabilities could be overburdened and flooding damage could result. Therefore, care must be used to insure that the natural features are not damaged or destroyed when used as part of a storm water detention plan.

In addition, storm water release needs to be regulated to insure that the creek flowing adjacent to the site is not adversely impacted, nor are downstream properties in the watershed.

Topography and Drainage

TOPOGRAPHY refers to the general shape of the land surface, and the position of its natural and manmade features. It includes the presence or absence of hills, and the slopes or difference in elevation between hilltops and valleys of a given region. Topography influences natural drainage. The force of gravity causes water to move down slopes towards depressions or streams, and pulls free or standing water downward through the soil. Soils on hills tend to be dry and soils in depressions and valleys often are wet or saturated.

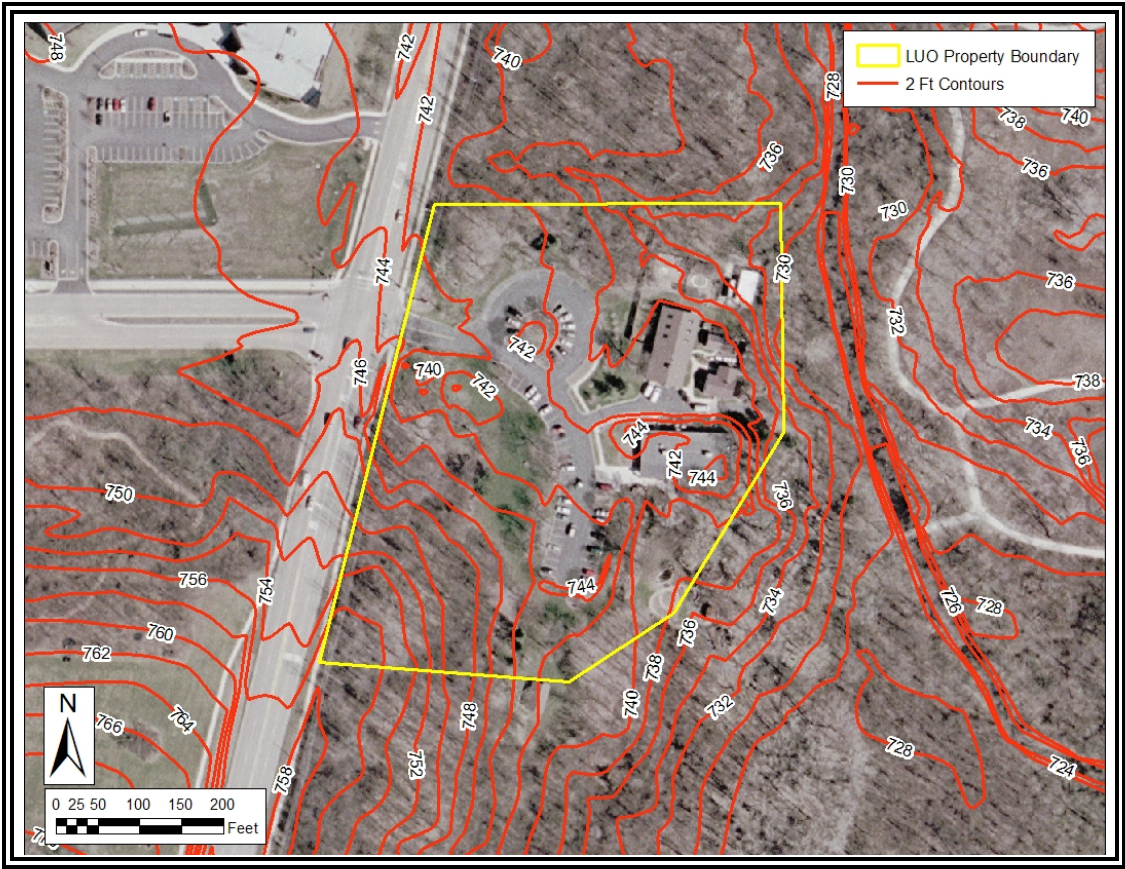
The amount of moisture in the soil while it is developing, affects the rate of weathering and the development of soil colors. Soil colors are a reflection of the saturation status of the soil during development. Well-drained soils have uniformly brownish or yellowish brown subsoils; poorly drained soils have grayish subsoils; somewhat poorly drained soils have mottled brownish yellowish and

grayish subsoils. Differences in natural soil drainage are typically associated with topography.

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.

The high point of this property is located in the southwestern portion of the site at an elevation of 757 feet above mean sea level. The property generally drains to the west via overland at the lowest elevation on the property at 730 feet above sea level.

Figure 8: Municipalities 2 ft Contours



EROSION

Development on this site should include the use of a soil erosion and sedimentation control plan. Due to the soil type and slope of the site, the S.W.C.D. believes that the potential for soil erosion during and after this proposed construction could be **large**. Furthermore, the erosion and sedimentation may become a primary non-point 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. Wise placement and protection of soil stockpiles is also helpful. Siltation fences are useful controls only if they are properly installed and maintained. Soil erosion and

sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Debris basins and siltation ponds can also be used to prevent suspended sediment from leaving the property or damaging the wetland areas. On this property special care must be taken to protect any wetland features from sedimentation damage.

Detailed information on the most appropriate methods of controlling erosion and sedimentation in urbanizing areas can be found in the publication "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" (The Green Book) and the "Illinois Urban Manual". These manuals and additional technical assistance may be obtained by contacting this office. A copy of the Illinois Environmental Protection Agency "Standards and Specifications for Soil Erosion and Sediment Control" can be obtained by contacting the National Technical Information Service, 5285 Port Royal Rd, Spring, VA, 22161, (703) 487-4650.

WOODLANDS

The S.W.C.D. encourages preserving as much of the wooded character of this site as possible. Long-term preservation of the trees will require taking certain precautions during and after construction. The ground around each tree to be saved should be flagged or fenced off. Also, it should be protected from heavy machinery. This area should be at least as wide as the area covered by the spread of the tree branches. Soil compaction around the roots of the trees can permanently interfere with the uptake of oxygen, nutrients, and water. This may cause the premature death of the trees. The placement of fill material around the trunks of trees can have the same

adverse effects. Other construction practices to avoid near the trees are: cutting and filling, raising the soil level, and removing neighboring trees. Contractors and construction crews should be informed of all tree preservation efforts.

Careful protection of this area around the trees may also preserve some of the natural woodland groundcover. In general, native plants are hardy, and islands of such vegetation around the bases of trees could prove to be an attractive, inexpensive, and low maintenance form of landscaping.

NATIONAL POLLUTANT DISCHARGE ELIMINATION

Discharges of storm water from construction sites, which disturb 1 or more acres of land, must be covered by an NPDES permit. Under the NPDES General Permits for Storm Water Discharges from Construction Sites, the EPA requires the development and implementation of a pollution prevention plan. A pollution prevention plan for construction is designed to reduce pollution at the construction site before it can cause environmental problems. Many of the practices and measures required for the pollution

prevention plan represent the standard operating procedure at many construction sites. Storm water management controls, erosion and sediment controls, inspection and maintenance have all been used at a number of construction projects. The General NPDES permit can be obtained through the Illinois Environmental Protection Agency, Division of Water Pollution Control, 2200 Churchill Road, P.O. Box 19276, Springfield, Illinois 62794-9276.

SOILS INTERPRETATIONS

The soil interpretation information and a summary of the soil limitations for this site are derived from the SSURGO certified soil layers for Kane and DuPage Counties, IL.

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.

SOIL LIMITATION INTERPRETATIONS

Flooding is the temporary covering of soil surface by flowing water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or any combination of sources.

Ponding is standing water in a closed depression. The water is removed only by percolation, transpiration, or evaporation.

Frost heave potential and **shrink-swell actions** are concerns when constructing paved surfaces, such as foundations and roadways.

Frost heave is the result of moisture freezing in the soil and forming ice lenses. The ice lenses cause the soil to expand, leading to the premature deterioration of paved surfaces.

Shrink-swell action is related to the type and percentage of clay present. Clays are capable of absorbing large quantities of soil moisture because of their greater surface area. Absorption of soil moisture results in the swelling of the clay horizons. Upon drying, the soil tends to shrink. The expansion and contraction exerts stress on foundations, footings, and paved surfaces due to the changes in soil moisture conditions.

Soils limited by **wetness** indicates the presence of a seasonally high water table. A seasonally **high water table** is a zone of saturation at the highest average depth during the wettest season. It is at least 6 inches thick, persists in the soil for more than a few weeks, and is within 6 feet of the soil surface.

Our opinion is based on information from the following sources:

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County, IL SSURGO soil layer certified in 2000, and DuPage County, IL SSURGO soil layer certified in 1999 and accompanying interpretations.

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, September 1998.

United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory, Photo Year 1983-1984, Digitized 1985-1986.

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.

U.S. Geological Survey, Illinois Digital Orthophoto Quadrangles, 1998/1999 photos, Published: Champaign, Illinois State Geological Survey, 2000.

U.S. Geological Survey, National Elevation Dataset, Published: Sioux Falls, SD, 1999.

An on-site investigation was conducted by the SWCD Resource Analyst, Ashley Jennings on April 9, 2013.

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. Ashley Jennings, Resource Analyst, prepared this report.

cc: Shawn M. Benson
2500 Frontage Road
Darien, IL 60561

ecc: Wayne Gorski, USEPA

APPENDIX A

Soil Tables

SOIL REPORT

LUO 13-09

Dwellings With Basements

Aggregation Method: Dominant Condition
Tie-break Rule: Higher

DuPage County, Illinois
Survey Area Version and Date: 8 - 01/20/2012

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
146A	Elliott silt loam, 0 to 2 percent slopes	Very limited	Elliott 90% Depth to saturated zone Shrink-swell
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Very limited	Markham, eroded 96% Depth to saturated zone
1107A	Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded	Very limited	Sawmill, undrained, frequently flooded 95% Flooding Depth to saturated zone Shrink-swell

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.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Dwellings Without Basements

Aggregation Method: Dominant Condition
Tie-break Rule: Higher

DuPage County, Illinois
Survey Area Version and Date: 8 - 01/20/2012

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
146A	Elliott silt loam, 0 to 2 percent slopes	Very limited	Elliott 90% Depth to saturated zone Shrink-swell
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Markham, eroded 96% Shrink-swell Depth to saturated zone
1107A	Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded	Very limited	Sawmill, undrained, frequently flooded 95% Flooding Depth to saturated zone Shrink-swell

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.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Small Commercial Buildings

Aggregation Method: Dominant Condition
Tie-break Rule: Higher

DuPage County, Illinois
Survey Area Version and Date: 8 - 01/20/2012

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
146A	Elliott silt loam, 0 to 2 percent slopes	Very limited	Elliott 90% Depth to saturated zone Shrink-swell
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Markham, eroded 96% Shrink-swell Slope Depth to saturated zone
1107A	Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded	Very limited	Sawmill, undrained, frequently flooded 95% Flooding 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.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

APPENDIX B

Contact List

CONTACT LIST

Federal Agencies

U. S. Army Corps of Engineers
Regulatory Branch
111 North Canal Street, Suite 600
Chicago, Illinois 60606
(312) 846-6400
<http://www.usace.army.mil>

**U. S. D. A. Natural Resources
Conservation Service**
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7961 ext. 3
<http://www.il.nrcs.usda.gov/>

U. S. Fish & Wildlife Service
Chicago Illinois Field Office
1250 South Grove Street Suite 103
Barrington, Illinois 60010
(847) 381-2253
<http://www.fws.gov/>

U. S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604
(312) 353-2000
<http://www.epa.gov/region5/>

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 West Dirksen Parkway
Springfield, Illinois 62764-0001
<http://www.dot.state.il.us/>

Illinois Natural History Survey
1816 South Oak Street
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
<http://www.co.dupage.il.us/>
630-407-6500

Development Department
(630) 407-6700

**Environmental Concerns Department
Stormwater Management Division**
(630) 407-6700

Solid Waste Department
(630) 407-6700

Health Department
111 North County Farm Road
Wheaton, Illinois 60187
(630) 682-7400

Forest Preserve District
3 S 580 Naperville Road,
Wheaton, Illinois 60189
(630) 933-7200

Kane County

Government Center
719 S. Batavia Ave.
Geneva, IL 60134
<http://www.co.kane.il.us/>
630-232-3400

Development Department
(630) 232-3492

Department of Environmental Management
630-208-5118

Forest Preserve District
(630) 232-5980

Health Department
1240 North Highland Avenue
Aurora, IL 60506
(630) 897-1124

Applicant: Wight & Company
Contact: Kyle Buck
Address: 2500 N Frontage Road
Darien, IL 60561

IDNR Project Number: 2210264
Date: 03/06/2022

Project: Willowbrook Wildlife Center – New building and Site work
Address: 525 S. Park Boulevard, Glen Ellyn

Description: This project new exterior animal enclosures to rehab injured animals, a main building for staff and for care of injured animals, removal of the existing center building for construction of new exterior animal enclosures. The main building and exterior enclosures will be connected via a asphalt and concrete walks. The east part of the site will see upgrades to the aggregate paths The project disturbance area is approximately 6acres.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Northern Long-Eared Myotis (*Myotis septentrionalis*)
Rusty Patched Bumble Bee (*Bombus affinis*)

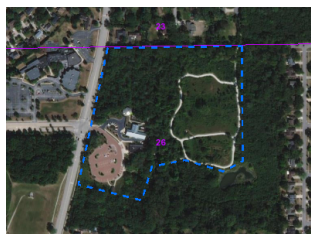
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage

Township, Range, Section:
39N, 10E, 26



IL Department of Natural Resources Contact

Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction

IL Environmental Protection Agency
Bureau of Water Pollution Control
1021 N Grand Ave East
Springfield, Illinois 62794

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.

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Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

March 7, 2022

Wright & Company
Attn: Mr. Kyle Buck
2500 N Frontage Road
Darien, IL 60561

**RE: Willowbrook Wildlife Center – New Building and Site Work
Consultation Program
EcoCAT Review 2210264
DuPage County**

Dear Mr. Buck,

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed project submitted to EcoCAT is described as “new exterior animal enclosures to rehab injured animals, a main building for staff and for care of injured animals, removal of the existing center building for construction of new exterior animal enclosures. The main building and exterior enclosures will be connected via a asphalt and concrete walks. The east part of the site will see upgrades to the aggregate paths. The project disturbance area is approximately 6acres.”. The project area is located at 525 South Park Boulevard, Glen Ellyn, IL.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

State Threatened or Endangered Species
Northern Long-eared Bat (*Myotis septentrionalis*)
Rusty Patched Bumble Bee (*Bombus affinis*)

Due to the project scope and proximity to protected resources, the Department recommends the following actions be taken to avoid adversely impacting listed species in the vicinity of the project:

Northern Long-eared Bat

This project is in the vicinity of records for the state and federally listed northern long-eared bat. Due to the potential presence of the bat on the project site, the Department recommends tree removal occur between November 1st and March 31st when the bat is likely hibernating off site. If these dates cannot be accommodated, a field visit should be performed by a qualified individual (biologist, forester, or others who have been trained accordingly) to determine if suitable trees are present to provide bat habitat. If suitable habitat trees are found within the project area, they should be clearly flagged and/or marked and shall not be cut between April 1st – October 31st when the bats are most likely to be present. Suitable

habitat trees are defined as trees ≥ 5 inches diameter breast height (dbh), with exfoliating bark and other features potentially utilized by roosting bats. All non-suitable trees may be cut at any time.

Rusty-patched Bumble Bee

This project falls within a Federal High Potential Zone for the state and federally listed rusty-patched bumble bee. Given the likelihood of the bee in this area, the Department recommends any area to be disturbed be surveyed for potential habitat by a qualified individual. If potential rusty-patched bumble bee habitat is found, the Department should be contacted for further guidance.

Given the above recommendations are adopted, the Department has determined impacts to the northern long-eared bat and rusty-patched bumble bee are unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

Consultation on the part of the Department is closed unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action 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.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

Please contact me with any questions about this review.

Sincerely,

Adam Rawe

Adam Rawe
Resource Planner
Office of Realty & Capital Planning
Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
Adam.Rawe@Illinois.gov
Phone: (217) 785-4991

Karen Gray

From: Kevin Horsfall
Sent: Wednesday, July 6, 2022 3:25 PM
To: Buck, Kyle; Karen Gray; Gardner, George
Cc: Tom Velat; Steffes, Scott
Subject: FW: ECOCAT Review 2210264 / Willowbrook Masterplan Improvements Phase II

Kyle, just an FYI, additional correspondence from IDNR regarding what must be done before tree removals can occur for the trees with exfoliating bark.

Kevin Horsfall, PLA, ASLA
Assistant Director of Resource Management and Development
Forest Preserve District of DuPage County
630-933-7200
630-933-7242 direct
khorsfall@dupageforest.org
www.dupageforest.org



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From: Rawe, Adam <Adam.Rawe@illinois.gov>
Sent: Wednesday, July 6, 2022 3:20 PM
To: Kevin Horsfall <Khorsfall@dupageforest.org>
Subject: Re: ECOCAT Review 2210264 / Willowbrook Masterplan Improvements Phase II

Caution: External Email

Kevin,

Thanks for contacting me. We simply specify qualified individual and I am sure the FPD has an individual on staff with a sufficient background in biology to determine whether or not bats are leaving trees. Since this will not involve handling bats, no further permitting or specific experience handling bats would be necessary.

If bats are present and species cannot be determined, additional studies could be necessary. Since this could involve handling bats, permits from IDNR could be needed. We can discuss this more if you identify bats are active in the project area but cannot determine what species. Acoustic survey or mist netting could be needed.

The Feds have the 4d rule for the northern long-eared bat, however there is not a state level equivalent to this rule so we must treat this bat as any other listed species.

Hope this helps! Start with a basic presence/absence survey and elevate from there if required.

Adam

From: Kevin Horsfall <Khorsfall@dupageforest.org>
Sent: Wednesday, July 6, 2022 2:55 PM
To: Rawe, Adam <Adam.Rawe@illinois.gov>
Cc: Karen Gray <kgray@dupageforest.org>
Subject: [External] RE: ECOCAT Review 2210264 / Willowbrook Masterplan Improvements Phase II

Hi Adam, I know it has been a while but wanted to forward the additional findings by our staff and USFWS as you requested. We are planning on doing the emergent bat survey and just wanted to confirm any special requirements or qualifications for person performing the survey. Thanks,

Kevin Horsfall, PLA, ASLA
Assistant Director of Resource Management and Development
Forest Preserve District of DuPage County
630-933-7200
630-933-7242 direct
khorsfall@dupageforest.org
www.dupageforest.org



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From: Rawe, Adam <Adam.Rawe@illinois.gov>
Sent: Thursday, March 17, 2022 11:09 AM
To: Kevin Horsfall <Khorsfall@dupageforest.org>
Subject: Re: ECOCAT Review 2210264

Caution: External Email

Kevin,

I am sending this email as a followup to our phone conversation. I will note the recommendations are being adopted given you are incorporating them into facility development where applicable.

1. Bat Recommendations. For areas where the date restrictions are not possible, it is recommended a tree survey be conducted to identify potential habitat trees. All potential habitat trees should be observed to determine if bats are using them by visual emergence survey. If no bats are observed, the tree should be felled as soon as possible.
- 2.
3. Rusty patched bumble bee - perform a habitat assessment for the bee. If no habitat is found, no further action is necessary. If nesting habitat is located, the need for an ITA should be considered. Please note, the ITA process can take 4 months or longer to complete.

Also keep in mind both species are also Federally listed.

Thanks
Adam

From: Kevin Horsfall <Khorsfall@dupageforest.org>

Sent: Friday, March 11, 2022 12:26 PM

To: Rawe, Adam <Adam.Rawe@illinois.gov>

Cc: Erik Neidy <eneidy@dupageforest.org>; Tom Velat <tvelat@dupageforest.org>; Scott Meister <smeister@dupageforest.org>; Karen Gray <kgray@dupageforest.org>; Buck, Kyle <kbuck@wightco.com>

Subject: [External] ECOCAT Review 2210264

Hi Adam,

Per my voicemail, I wanted to follow up with this assessment as I have a few questions. This project will involve the expansion of our existing Willowbrook Wildlife Center in Glen Ellyn as a multi-year project and will be the most expensive project that we have undertaken at one time (about 28.2 million dollars – see attached SD presentation for more info) The District has already issued the Bond funds for the project and they have to be spent within a certain amount of time. Our schedule had us projected to start working on Phase A improvements late summer into fall (See attached exhibit) with the main clinic and visitor center construction anticipated to be under construction from spring of 2023 to summer of 2024. The project has to be completed by February 2025 per the debt issuance. Because the new clinic is going where our existing resident non-releasable animals are housed, we have to build the new resident animal enclosures in advance. We have to construct by November of this year so resident animals can be relocated before winter.

We are familiar with the process for both the Bats and the Bees and will take actions to address but need clarification on the following items:

1. For the bats it will be difficult to accommodate the recommended timing for tree removals for Phase A work as most likely this work has to be done in August/September for us to complete work on the enclosures by November. We will need to contact a professional to evaluate the trees. Knowing how busy our staff is I will most likely have to contract this assessment out.
2. For the bees you are just asking us to have someone look for potential habitat, correct? If no habitat is identified then we are clear to proceed pending whatever assessment occurs with the bats. And If suitable habitat is found or determined to be present then that would trigger a need to survey to confirm presence for the bee. In the past, I understand that has taken a full growing season. Would our NR staff qualify to perform the habitat assessment for the bee? Much of the area is degraded or has already been disturbed. In fact there is a significant infestation of emerald ash borer and dead trees where the PHASE A work is to occur.
3. Alternatively, for Phase A work to proceed this fall are incidental take permits even allowed for these species if surveys indicate habitat is present.

I think our Phase B,C, and D work can easily be accommodated within the recommended tree clearing dates, however.

Please advise, Thanks

Kevin Horsfall, PLA, ASLA
Assistant Director of Resource Management and Development
Forest Preserve District of DuPage County
630-933-7200
630-933-7242 direct
khorsfall@dupageforest.org
www.dupageforest.org



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From: Tom Velat
Sent: Monday, May 2, 2022 3:05 PM
To: Cathy Pollack; Cann, Armand A
Subject: IPAC Review Species Determinations - FPDDC 4/26/22
Attachments: Willowbrook20220429_Verification Letter_ Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule.pdf; Willowbrook20220429_Species List_ Chicago Ecological Service Field Office.pdf; 2210264 Willowbrook Wildlife Center - New Building and Site Work.pdf; FW: ECOCAT Review 2210264

Greetings!

The Forest Preserve District of DuPage County (FPDDC) recently submitted one (1) building construction project to be reviewed through the IPAC system. This project will commence in July of 2022, with construction activities beginning shortly thereafter at the following site – Willowbrook Wildlife Center in Glen Ellyn, Illinois. The project involves modifications and improvements to the wildlife center building, adding resident and rehabilitation enclosures for wildlife, as well as adding a new 27,000 square foot building for the rehab clinic and visitor center and modifications to some of the remaining structures. I have attached the IPAC Official Species List from this project for your reference (accessed IPAC on 4/29/2022). I have also listed the species which require additional review that were not provided with determinations during the IPAC-assisted review (below). In addition, I have attached a previous ECOCAT for the project (#2210264) supplied by IDNR and a corresponding email from the agency regarding mitigation strategies for tree-clearing during NLEB pup-rearing season. We seek concurrence from regulators on the affects determinations made by FPDDC listed below. Please feel free to contact me with questions regarding the determinations.

WILLOWBROOK WILDLIFE CENTER

1. Northern Long-Eared Bat (NLEB) Threatened, FPDDC Determination – This species has not been recorded at Willowbrook Wildlife Center, but has been detected in the past at nearby DuPage forest preserves (Herrick Lake, Danada) during a 2014 wildlife survey performed by FPDDC Ecologists. This project is not within a ¼ mile of any known roost tree or known hibernaculum. The project is expected to start in summer of 2022 and tree-clearing activities are proposed to start in July of the same year. This is not ordinarily done by the FPDDC, but the District's Planning Department has requested a variance in their ECOCAT to IDNR and were seeking approval for Phase A tree removals during the summer 2022 season (ECOCAT # 2210264). IDNR has determined that the District may remove trees during this time period as long as the Planning Department can provide the following items: 1) For areas where date restrictions on tree removal are not possible, it is recommended a tree survey be completed to identify potential habitat trees and 2) all potential habitat trees should be observed to determine if bats are using them by visual emergence survey and 3) if no bats are observed then trees should be felled as soon as possible. The District's Plant Ecologist has completed a tree survey of the Phase A area and determined that there are approximately 20 trees with exfoliating bark and may be potential NLEB habitat trees. The District's Planning Department intends to hire an experienced contractor to perform visual inspection surveys of the trees in Phase A. They have pledged to remove the trees once the contractor has determined they are not being used by bats. All remaining Phases of the project that require tree removal will be completed between October 31st and April 1st for the

duration of the project. As a result, this project may affect but is not likely to adversely affect the species. We seek concurrence from regulators based on the habitat assessment results and conservation measures provided above.

2. Hine's Emerald Dragonfly (HED) – Endangered, FPDDC Determination – This species has not been observed at Willowbrook Wildlife Center either from staff or volunteer dragonfly surveys. No breeding habitat has been observed in the project area as a result of surveys conducted by FPDDC Ecologists. As a result, adverse impacts to this species are unlikely to occur as a result of the project.
3. Monarch Butterfly “Candidate only” (MB), FPDDC Determination – This species is not listed as E&T but is a candidate for federal listing. The species has been observed at Willowbrook Wildlife Center multiple times – specifically with breeding evidence in the form of caterpillars present (2014). A diversity of native flora exist at the preserve that already provide both nectar and serve as host plants for this species. Most of the areas slated for development in this project are either previously developed areas or significantly degraded woods (Total Project Area 6.11 acres minus 4.63 acres developed area = total impact 1.48 acres). The degraded woods has very few blooming plants. The woods were recently surveyed by the District's Plant Ecologist and also found to have no spring ephemeral plants of significance. As a result, no significant impact is expected to this species as a result of the project.
4. Rusty Patched Bumble Bee (RPBB) – Endangered, FPDDC Determination – This species has not been recorded in the preserve at Willowbrook Wildlife Center, but the project location falls within the High Potential Zone (HPZ) for RPBB. Even though the site is within the HPZ, the District's Invertebrate Ecologist has visited the site and performed a RPBB Habitat Assessment of the project location and determined that the site is not likely to provide suitable habitat. Developed areas within the project site are primarily paved parking and walking areas, mowed turf grass, and various human dominated structures / landscapes (Total Project Area 6.11 acres minus 4.63 acres developed area = total impact 1.48 acres). The remaining habitat at the site (1.48 acres) is forest dominated by invasive shrubs such as Eurasian honeysuckle and the District's Plant Ecologist describes the site as vegetatively depauperate - specifically lacking in spring ephemeral wildflowers. In addition, any flowering herbaceous plant species occurring within the project area are part of a planted flower garden (smaller than 0.15 acres) and are expected to be replaced in an adjacent area after project completion. As a result, the project may affect but is not likely to adversely affect the species. We seek concurrence from regulators based on the habitat assessment results and conservation measures provided above.
5. Eastern Prairie Fringed Orchid (EPFO) – Threatened, FPDDC Determination - this species has not been observed at Willowbrook Wildlife Center based on routine county plant surveys completed by the District's Plant Ecologist. As a result, this project is not likely to affect this species.
6. Leafy Prairie-clover (LPC) – Endangered, FPDDC Determination – this species has not been observed at Willowbrook Wildlife Center based on routine county plant surveys completed by the District's Plant Ecologist. As a result, this project is not likely to affect this species.

Sincerely,

Tom Velat
Ecology Coordinator
Forest Preserve District of DuPage County
(630) 871-6426
tvelat@dupageforest.org
www.dupageforest.org



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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chicago Ecological Service Field Office

U.s. Fish And Wildlife Service Chicago Ecological Services Office

230 South Dearborn St., Suite 2938

Chicago, IL 60604-1507

Phone: (312) 485-9337 Fax:

<http://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html>

In Reply Refer To:

April 29, 2022

Project code: 2022-0037385

Project Name: Willowbrook Wildlife Center - Phase 2 Improvements

Subject: Consistency letter for the 'Willowbrook Wildlife Center - Phase 2 Improvements' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Tom Velat:

The U.S. Fish and Wildlife Service (Service) received on April 29, 2022 your effects determination for the 'Willowbrook Wildlife Center - Phase 2 Improvements' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”^[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Eastern Prairie Fringed Orchid *Platanthera leucophaea* Threatened
- Hine's Emerald Dragonfly *Somatochlora hineana* Endangered
- Leafy Prairie-clover *Dalea foliosa* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Rusty Patched Bumble Bee *Bombus affinis* Endangered

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Willowbrook Wildlife Center - Phase 2 Improvements

2. Description

The following description was provided for the project 'Willowbrook Wildlife Center - Phase 2 Improvements':

This project involves modifications and improvements to Willowbrook Wildlife Center, adding resident and rehabilitation enclosures for wildlife, as well as adding a new 27,000 square foot building for the rehab clinic and visitor center and modifications to some of the existing structures. Phase A will involve construction of a flight barn for raptor rehabilitation, which includes enclosures for resident raptor species, as well as areas for wildlife undergoing rehab; a large carnivore enclosure for rehabilitation of fox, coyotes and other carnivores; a concrete pad for future carnivore enclosures; and modifications to the staff parking area to better accommodate staff and allow space for photovoltaic panels. Phase B work is the centerpiece of the project, the clinic and visitor center that will allow visitors to view animals through one-way windows and video monitors as they are examined, treated, in surgery, being fed, and rehabilitated. This phase will also include site utilities necessary for the building operations, an outdoor classroom, an interpretive trail with wildlife observation areas, and outdoor activity spaces that demonstrate how to attract and live in harmony with native wildlife.

Phase C work includes demolition of the existing clinic building, once operations have moved to the new building, and new enclosures for waterfowl and aquatic mammals, turtles, and songbirds, which will be built at the location of the original clinic and the area to the east of it.

Phase D will involve improvements to the existing building north of the clinic, to create more useful spaces for the rehab process and species recovery programs.

Tree Removal Schedule:

- a. Phase A tree removals would begin in July 2022 to allow for summer/fall construction.
- b. Phase B tree removals would begin after resident animals can move into the phase A enclosures. These could occur in February 2023.
- c. Phase C tree removals could occur with phase B removals or during winter prior to April 1, 2024.
- d. Phase D will not require any tree removals.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.84285465,-88.06168177005208,14z>



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

1.47

2. If known, estimated acres of forest conversion from April 1 to October 31

1.2

3. If known, estimated acres of forest conversion from June 1 to July 31

1.2

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

1.47

5. If known, estimated acres of timber harvest from April 1 to October 31

1.2

6. If known, estimated acres of timber harvest from June 1 to July 31

1.2

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

Agency: DuPage County

Name: Tom Velat

Address: 3 S. 580 Naperville Road

City: Wheaton

State: IL

Zip: 60189-5000

Email: tvelat@dupageforest.org

Phone: 6308716426



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chicago Ecological Service Field Office

U.S. Fish And Wildlife Service Chicago Ecological Services Office

230 South Dearborn St., Suite 2938

Chicago, IL 60604-1507

Phone: (312) 485-9337 Fax:

<http://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html>



In Reply Refer To:

April 29, 2022

Project Code: 2022-0037385

Project Name: Willowbrook Wildlife Center - Phase 2 Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S.

District Court for the District of Columbia has ordered the Service to complete a new final listing determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and

recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chicago Ecological Service Field Office

U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
(312) 485-9337

Project Summary

Project Code: 2022-0037385

Event Code: None

Project Name: Willowbrook Wildlife Center - Phase 2 Improvements

Project Type: Government / Municipal (Non-Military) Construction

Project Description: This project involves modifications and improvements to Willowbrook Wildlife Center, adding resident and rehabilitation enclosures for wildlife, as well as adding a new 27,000 square foot building for the rehab clinic and visitor center and modifications to some of the existing structures. Phase A will involve construction of a flight barn for raptor rehabilitation, which includes enclosures for resident raptor species, as well as areas for wildlife undergoing rehab; a large carnivore enclosure for rehabilitation of fox, coyotes and other carnivores; a concrete pad for future carnivore enclosures; and modifications to the staff parking area to better accommodate staff and allow space for photovoltaic panels. Phase B work is the centerpiece of the project, the clinic and visitor center that will allow visitors to view animals through one-way windows and video monitors as they are examined, treated, in surgery, being fed, and rehabilitated. This phase will also include site utilities necessary for the building operations, an outdoor classroom, an interpretive trail with wildlife observation areas, and outdoor activity spaces that demonstrate how to attract and live in harmony with native wildlife. Phase C work includes demolition of the existing clinic building, once operations have moved to the new building, and new enclosures for waterfowl and aquatic mammals, turtles, and songbirds, which will be built at the location of the original clinic and the area to the east of it. Phase D will involve improvements to the existing building north of the clinic, to create more useful spaces for the rehab process and species recovery programs.

Tree Removal Schedule:

- a. Phase A tree removals would begin in July 2022 to allow for summer/fall construction.
- b. Phase B tree removals would begin after resident animals can move into the phase A enclosures. These could occur in February 2023.
- c. Phase C tree removals could occur with phase B removals or during winter prior to April 1, 2024.
- d. Phase D will not require any tree removals.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.84285465,-88.06168177005208,14z>



Counties: DuPage County, Illinois

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Hine's Emerald Dragonfly <i>Somatochlora hineana</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7877	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Rusty Patched Bumble Bee <i>Bombus affinis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9383	Endangered

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: Follow the guidance provided at https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html Species profile: https://ecos.fws.gov/ecp/species/601	Threatened
Leafy Prairie-clover <i>Dalea foliosa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5498	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: DuPage County

Name: Tom Velat

Address: 3 S. 580 Naperville Road

City: Wheaton

State: IL

Zip: 60189-5000

Email: tvelat@dupageforest.org

Phone: 6308716426



United States Department of the Interior

US FISH AND WILDLIFE SERVICE REGION 3

Chicago Ecological Services Field Office
230 South Dearborn Street, Suite 2938
Chicago, IL 60604



IN REPLY REFER TO:
FWS/AES-CIFO/2022-0037385

May 5, 2022

Mr. Tom Velat
Forest Preserve District of DuPage County
3S580 Naperville Road
P.O. Box 5000
Wheaton, IL 60189

Dear Mr. Velat:

This responds to your email dated May 2, 2022, regarding the proposed construction modifications and improvements to the Willowbrook Wildlife Center in Glen Ellyn, DuPage County, Illinois.

This proposed project includes modifying and improving the Wildlife Center building, which includes the construction of resident and rehabilitation enclosures for wildlife as well as adding a new 27,000 square foot building for the rehabilitation clinic and visitor center with additional modifications to remaining structures.

You have accessed IPAC on April 29, 2022, to obtain an official species list for this proposed project. There are five Federal listed species and one candidate species that may occur at the project's location.

The five Federal listed species include:

Northern long eared bat (*Myotis septentrionalis*), Hine's emerald dragonfly (*Somatochlora hineana*), rusty patched bumble bee (*Bombus affinis*), eastern prairie fringed orchid (*Platanthera leucophaea*), leafy prairie clover (*Dalia foliosa*). The one candidate species is the monarch butterfly (*Danaus plexippus*).

Correspondence from you dated May 2, 2022, includes your no effect determination for the Hines' emerald dragonfly, the eastern prairie fringed orchid, and the leafy prairie clover due to no habitat present to support these three species. This rationale is appropriate.

The location of this proposed project is in the high potential zone of the rusty patched bumble bee although the species has not been recorded in the preserve at Willowbrook Wildlife Center.

You indicate that the District's invertebrate ecologist has visited the site and performed a rusty patched bumble bee habitat assessment and determined that the site is not likely to provide suitable habitat. Developed areas within the project site are primarily paved parking and walking areas, mowed turf grass, and various human dominated structures. Only 1.48 acres of the total project area of 6.11 acres is forest, and is dominated by invasive shrubs. This area is described as being vegetatively depauperate, specifically lacking in spring ephemeral wildflowers. For this reason, you believe the project may affect but is not likely to adversely affect the rusty patched bumble bee and we would agree.

The northern long eared bat (NLEB) has not been recorded at Willowbrook Wildlife Center, but has been detected (in 2014) at two nearby DuPage County Forest Preserves (Herrick Lake, Danada). This project is not within ¼ mile of any known roost trees or known hibernaculum. Phase 1 of this project requires a portion of trees to be felled in July 2022. By signing the streamlined consultation form you have determined that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule. All remaining phases of the project that require tree removal would be completed between October 31 and April 1 for the duration of the project which would result in a no effect determination for NLEB for those actions.

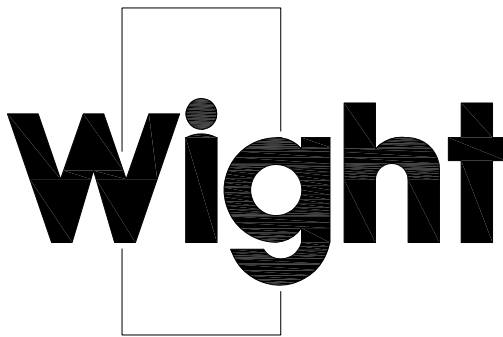
At this time the monarch is a candidate species for listing. Monarch butterflies have been observed at Willowbrook Wildlife Center. Native flora exists at this location that provides both nectar and host plants for this species, however most of the areas slated for development in this project are either previously developed areas or are significantly degraded woods with few blooming plants. For these reasons you have determined that there would be no significant impact to the monarch as a result of this project and we would agree.

If you have any questions, please contact Ms. Cathy Pollack at 847-608-3101.

Sincerely,

A handwritten signature in cursive script that reads "Louise Clemency".

Louise Clemency
Field Supervisor



Wight & Company
wightco.com

2500 North Frontage Road
Darien, IL 60561

P 630.969.7000
F 630.969.7979

WILLOWBROOK WILDLIFE CENTER - PHASE B / C

FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

525 S PARK BLVD.
GLEN ELLYN, IL 60137

PROJECT TEAM

CLIENT:

FOREST PRESERVE DISTRICT
OF DUPAGE COUNTY
35580 NAPERVILLE ROAD,
WHEATON, IL 60189

CIVIL ENGINEER:

WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN, IL 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT: KYLE BUCK
Design Firm Registration #184-000451

LANDSCAPE ARCHITECT:

FOREST PRESERVE DISTRICT
OF DUPAGE COUNTY
35580 NAPERVILLE ROAD,
WHEATON, IL 60189

ARCHITECT:

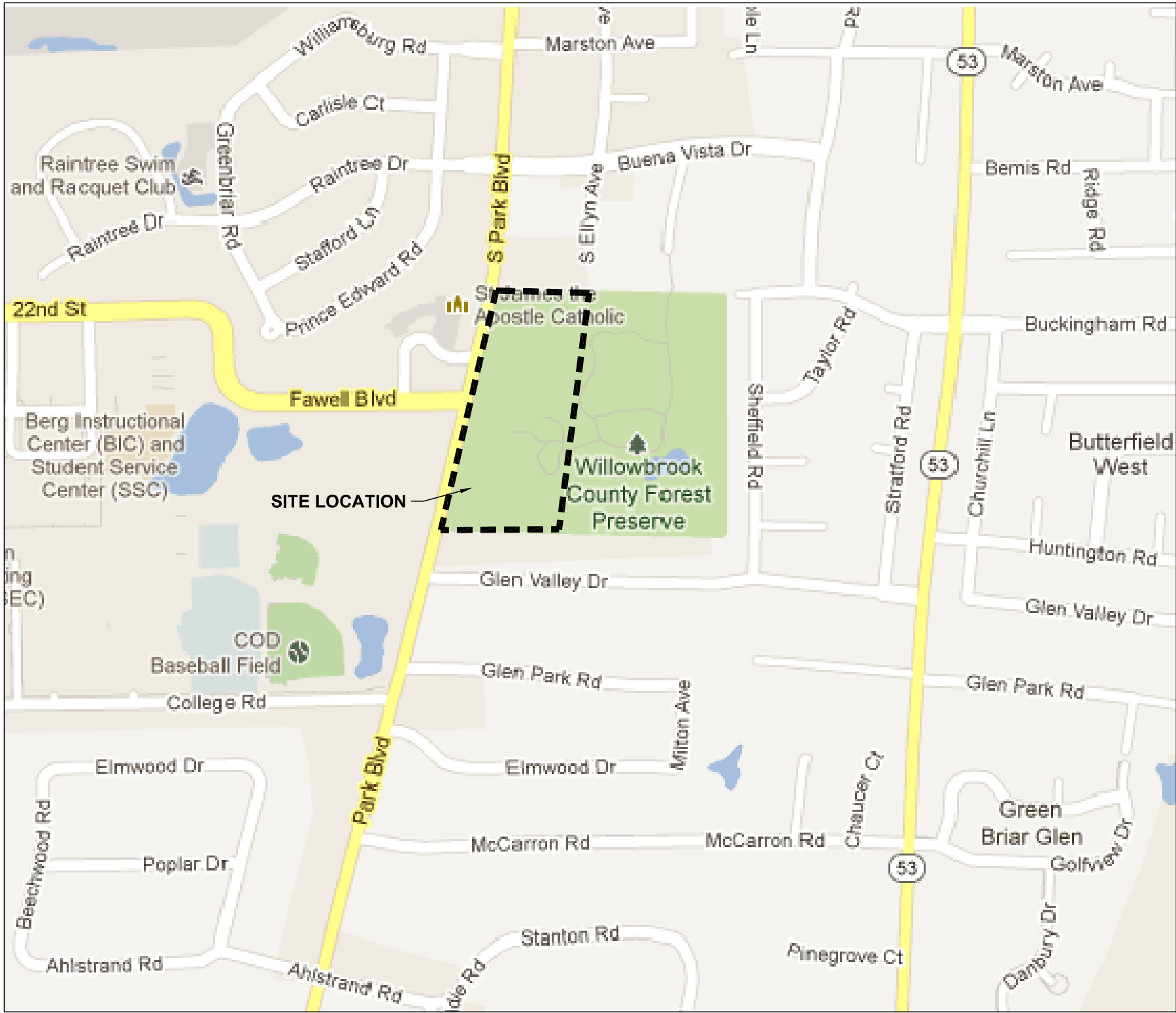
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN, IL 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT: SCOTT STEFFES
Design Firm Registration #184-000451

MEP ENGINEER:

WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN, IL 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT: SUDESH SARAF
Design Firm Registration #184-000451

STRUCTURAL ENGINEER:

WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN, IL 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT: JOVICA GRBIC
Design Firm Registration #184-000451



LOCATION MAP

525 S PARK BOULEVARD, GLEN ELLYN, IL 60137

DuPAGE COUNTY
MILTON TOWNSHIP
T:39N R:10E SEC:26

FOR UNDERGROUND UTILITY LOCATIONS,
CALL J.U.L.I.E.
TOLL FREE TEL. 1-800-892-0123

JULIE SUBURBS & DIGG CHICAGO

- YELLOW _____ GAS
- RED _____ ELECTRICAL
- ORANGE _____ PHONE / TV COMMUNICATION
- BLUE _____ WATER
- GREEN _____ SEWERS
- WHITE _____ SAFE TO DIG

INDEX OF DRAWINGS

C0.00	COVER SHEET
C0.01	GENERAL NOTES
C1.00	ENLARGED EXISTING CONDITIONS PLAN
C1.01B-C	DEMOLITION PLAN PHASE
C2.00	OVERALL SITE PLAN
C2.01-C2.02	SITE PLAN PHASE
C3.00	OVERALL GRADING PLAN
C3.00B	GRADING PLAN PHASE B
C3.01B	EROSION & SEDIMENT CONTROL PLAN PHASE B
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C3.04	EROSION CONTROL DETAILS
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C4.02B	UTILITY PROFILES PHASE B
C4.00C	UTILITY PLAN PHASE C
C4.02C	UTILITY PROFILES PHASE C
C5.05-C5.10	CIVIL DETAILS

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION.

DATED AT DARIEN, ILLINOIS,

THIS 9TH DAY OF MARCH, 2023



WILLOWBROOK WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

COVER SHEET

Project Number:
210107
Drawn By:
NKH
Sheet:

C0.00

GENERAL

- EXISTING SITE TOPOGRAPHY, UTILITIES, AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE FIELD MEASURED BY WEBSTER, MCGRATH & AHLBERG LTD, DATED 12/22/2021. UNDERGROUND UTILITY LOCATIONS ARE BASED ON BEST AVAILABLE INFORMATION. TRADE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS, DEPTHS, RIMS, PIPE SIZE, MATERIAL TYPE, ETC. PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- ELEVATIONS ARE BASED ON NAVD 88 ILLINOIS STATE PLANE, EAST ZONE.
- THE TRADE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL ABIDE BY THE REQUIREMENTS OF ALL APPLICABLE PERMITS.
- ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT ARE HEREIN INCORPORATED BY REFERENCE.
- NO BURNING OR INCINERATION OF RUBBISH IS PERMITTED ON THE SITE.
- STREET AND DRIVEWAY PAVEMENT SHALL BE PROTECTED FROM DAMAGE. ANY DAMAGE SHALL BE REPAIRED PER THE VILLAGE OF GLEN ELLYN REQUIREMENTS. MATERIALS AND WORKMANSHIP OF REPAIRS SHALL CONFORM TO THE "DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS (LATEST EDITION)", THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS (LATEST EDITION), HEREIN AFTER REFERRED TO AS "STANDARD SPECIFICATIONS", DUPAGE COUNTY, AND THE VILLAGE OF GLEN ELLYN REQUIREMENTS.
- THE "DEVELOPMENT REGULATIONS", LATEST EDITION, AS ADOPTED BY THE VILLAGE OF GLEN ELLYN, ILLINOIS, HEREIN AFTER REFERRED TO AS THE "DEVELOPMENT REGULATIONS", INCLUDING ALL VILLAGE STANDARD DETAILS AND SPECIFICATIONS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION)" AND THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS (LATEST EDITION)" PREPARED BY ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT), HEREIN AFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS", AND ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ILLINOIS URBAN MANUAL, LATEST EDITION, AND "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", HEREIN AFTER REFERRED TO AS "STANDARD SPECIFICATIONS", SHALL GOVERN THE CONSTRUCTION OF THESE IMPROVEMENTS EXCEPT AS MODIFIED BY THE CONTRACT DOCUMENTS.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS OF THE VILLAGE OF GLEN ELLYN, ILLINOIS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, HEREIN AFTER REFERRED TO AS ISPE STANDARDS.
- ALL FACILITIES OR LANDSCAPING DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION BY THE RESPONSIBLE TRADE CONTRACTOR.
- PROPOSED ELEVATIONS INDICATE FINISHED GRADES. FOR SUBGRADE ELEVATIONS, ALLOW FOR THICKNESS OF PROPOSED PAVING OR TOPSOIL THICKNESS.
- THE TRADE CONTRACTOR SHALL NOTIFY THE VILLAGE OF GLEN ELLYN, ILLINOIS 48 HOURS BEFORE THE COMMENCEMENT OF CONSTRUCTION.
- SHOULD THE TRADE CONTRACTOR ENCOUNTER FIELD DRAINAGE TILE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER AND THE VILLAGE OF GLEN ELLYN INSTRUCTIONS. SHOULD THE ENGINEER OR VILLAGE OF GLEN ELLYN INSTRUCT THAT DAMAGED FIELD TILES BE RESTORED TO THEIR ORIGINAL CONDITION, THAT REPAIR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE LOCATION OF FOUND DRAINAGE TILE SHALL BE INDICATED ON THE RECORD DRAWINGS.
- ALL TRENCHES SHOULD FOLLOW THE VILLAGE OF GLEN ELLYN STANDARD DETAILS INCLUDED IN THE CIVIL DETAILS. TRENCHES ARE TO BE BACKFILLED WITH TRENCH BACKFILL AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY, AS REQUIRED BY THE VILLAGE OF GLEN ELLYN AND THE ISPE STANDARDS.
- TRADE CONTRACTOR IS RESPONSIBLE FOR CALLING J.U.L.I.E. AT 1-800-892-0123 OR 811 AND NOTIFYING THE CONSTRUCTION MANAGER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING UTILITY MARKINGS THROUGHOUT CONSTRUCTION.
- ALL DIMENSIONS, CURB RADI AND ELEVATIONS REFER TO THE BACK OF CURB WHERE CURB IS SHOWN. COORDINATES ARE TO BACK OF CURB, CENTER OF STRUCTURES OR AS SHOWN.
- WHERE PAVEMENT, CURB OR SIDEWALK REMOVAL IS REQUIRED, THE TRADE CONTRACTOR SHALL SAW CUT THE BOUNDARIES OF THE AREA TO BE REMOVED PRIOR TO DEMOLITION.
- TRADE CONTRACTOR IS RESPONSIBLE FOR LAYOUT, LINE AND GRADE FOR ITEMS INCLUDED IN THE CONTRACT SCOPE OF WORK. CONTRACTOR TO USE CAD FILES AS PROVIDED BY THE ENGINEER FOR GEOMETRIC LAYOUT.
- TRADE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE PUBLIC STREET CLEAN OF DEBRIS.
- "BAND SEAL" JOINTS WITH STAINLESS STEEL STRAPS AND BOLTS SHALL BE USED WHEN CONNECTING DISSIMILAR MATERIALS.
- ALL EXISTING UTILITY STRUCTURES SHALL BE ADJUSTED AS NECESSARY TO MATCH FINISH GRADE. ALL EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED.
- IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION AND/OR ELEVATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT SURVEYS. ALL AS-BUILT SURVEYS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR AND BE SIGNED AND SEALED. THE CONTRACTOR SHALL SUBMIT TWO SETS OF THE "AS-BUILT" FINAL ENGINEERING DRAWINGS (I.E. RECORD DRAWINGS) AND STORMWATER MANAGEMENT CALCULATIONS UPON COMPLETION OF IMPROVEMENTS AND INCLUDE ELECTRONIC (CAD FILES) AND PAPER (24" X 36" DRAWINGS) AT LEAST INCLUDE THE FOLLOWING INFORMATION: AS-BUILT DETENTION CONTOURS, ELEVATIONS (INCLUDING DETENTION BASIN TOP OF BERM AND OVERFLOW WEIR GRADES) AND VOLUME (VERIFIED), SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR (PE) OR PROFESSIONAL SURVEYOR (PLS); ELEVATION, AND LOCATION (TIES TO TWO POINTS) OF ALL NEW STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINES, LESTOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS, BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE), ALL STORM/SANITARY SEWER STRUCTURES (INCLUDING INVERTS AND PIPE SIZES), ALL PIPES (LOCATIONS, SLOPES, LENGTHS, ETC.), OUTLET CONTROL STRUCTURES (INCLUDING RESTRICTOR SIZES AND ELEVATIONS PLUS TOP OF WALL), AND REMOVED OR SANITARY SERVICE LINES. DETAILED TOPOGRAPHIC SURVEY OF ALL HIGH POINTS, LOW POINTS, CHANGE OF SLOPE INCLUDING GUTTER GRADIES, TOP OF CURB GRADIES, PAVEMENT GRADES, SIDEWALK GRADES, RAMP GRADES, ETC. TO VERIFY PROPOSED DRAINAGE. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS. WITHIN DETENTION/BMP AREAS, FOR VERIFICATION OF DETENTION VOLUME AND SUBBASE GRADES, PRIOR TO BACK FILLING WITH CA-7, THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A CERTIFIED TOPO SURVEY OF AS-BUILT SUBBASE GRADES FOR ENGINEER APPROVAL AND ALSO A COPY OF RECEIPT OF THE CA-7 AGGREGATE.
- EMERGENCY VEHICLE ACCESS IS TO BE MAINTAINED THROUGHOUT DURATION OF PROJECT. VEHICLE ACCESS IS TO BE CLEARLY MARKED. ANY ALTERATION OF EMERGENCY VEHICLE ROUTE OR ACCESS IS TO BE APPROVED BY THE VILLAGE OF GLEN ELLYN, ILLINOIS.

VILLAGE CONTACT INFORMATION:
PUBLIC WORKS DEPARTMENT
TEL: (630) 469-6756

HOT MIX ASPHALT PAVING

- SUBGRADE PREPARATION, BASE COURSE PLACEMENT, AND HMA PAVEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
- DEPRESSIONS OF FINAL HMA SURFACES SHALL NOT EXCEED 1/4 INCH FROM PROPOSED CORRECTIONS TO NON-COMPLIANT AREAS ORDERED BY THE CONSTRUCTION MANAGER SHALL BE MADE AT NO ADDITIONAL CHARGE.
- ALL SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

TRAFFIC CONTROL

- THE TRADE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL (IDOT STANDARD 701006) AT ALL TIMES WHEN ANY VEHICLES, EQUIPMENT, WORKER, OR ACTIVITY ENCRGACH ADJACENT ROADWAYS FROM 15 FEET TO THE EDGE OF PAVEMENT. THE TRADE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL (IDOT STANDARD 701001) WHEN ACTIVITY ENCRGACHES THE EDGE OF PAVEMENT FOR THESE ROADS.
- IF THE OPERATION IS 15 FEET OR MORE, OFF THE EDGE OF PAVEMENT, NO SIGNING WILL BE REQUIRED UNLESS TWO OR MORE VEHICLES CROSS THE 15 FOOT CLEAR ZONE IN ONE HOUR
- WHEN WORKING WITHIN 2 FEET OF THE PAVEMENT EDGE, CONES, DRUMS, OR BARRICADES SHALL BE PLACED ACCORDING TO THE STANDARD 701011 REQUIREMENTS.
- CONTRACTOR MUST FOLLOW ALL VILLAGE OF GLEN ELLYN AND DUPAGE COUNTY REQUIREMENTS FOR TRAFFIC CONTROL.

EARTHWORK

- ALL AREAS SHALL BE CLEARED AND TILLED IN PREPARATION TO RECEIVE SEED. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- THE TRADE CONTRACTOR SHALL APPLY FERTILIZER AND SEED TO ALL DISTURBED AREAS, AS NOTED ON THE CONSTRUCTION DRAWINGS. TRADE CONTRACTOR SHALL APPLY FERTILIZER AND SEED USING THE HYDROSEED METHOD. FERTILIZER AND SEED QUANTITIES AND SEEDING PROCEDURES SHALL CONFORM TO THE SPECIFICATIONS.
- THE TRADE CONTRACTOR WILL INSPECT THE SEEDING AREAS AFTER SEEDING, TO RECEIVE FINAL ACCEPTANCE. SEEDING AREAS MUST SUPPORT DENSE, THRIVING GRASSES SUFFICIENT TO PROTECT THE SOIL FROM EROSION IN A MODERATE RAINFALL. AREAS THAT, IN THE OPINION OF THE OWNER & ENGINEER, DO NOT MEET THIS REQUIREMENT, MUST BE IMMEDIATELY RESEED. REFER TO SPECIFICATIONS FOR ALL REQUIREMENTS.
- TOPSOIL FOR RESTORATION AREAS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS. TOPSOIL MAY BE SALVAGED FROM THE SITE AND STOCKPILED FOR REUSE WHEN ALL WORK IS COMPLETED. ADDITIONAL TOPSOIL REQUIRED TO COMPLETE THE JOB SHALL BE OBTAINED FROM OFF-SITE SOURCES AT THE TRADE CONTRACTOR'S EXPENSE. SALVAGED TOPSOIL SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL AND WILL BE REJECTED IF NOT CLEAN, UNCONTAMINATED MATERIAL.
- THE CROWNS AND ROOT OF TREES WHICH ARE TO BE PRESERVED IN THE PROJECT AREA, BUT WHICH COULD BE NEGATIVELY AFFECTED DURING THE CONSTRUCTION PROCESS, SHALL BE PRUNED BY A QUALIFIED ARBORIST ACCORDING TO THE TREE PRUNING STANDARDS SET BY ANSI 2100 CODE.
- POROUS GRANULAR EMBANKMENT, SUBGRADE
THIS WORK CONSISTS OF FURNISHING, PLACING, AND COMPACTING POROUS GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. POROUS GRANULAR EMBANKMENT SHALL CONSIST OF CA-1 AGGREGATE CAPPED WITH 3 INCHES NOMINAL THICKNESS TOP LIFT OF CA-6 CAPPING AGGREGATE. THE MATERIAL SHALL BE USED AS A BRIDGING LAYER OVER SOFT, PUMPY, AND LOOSE SOIL AND SHALL CONFORM.

THE POROUS GRANULAR MATERIAL SHALL BE PLACED IN ONE LIFT WHEN THE TOTAL THICKNESS TO BE PLACED IS 2 FEET 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 THE STANDARD SPECIFICATIONS TO OBTAIN THE DESIRED KEYING OR INTERLOCK AND COMPACTION. THE ENGINEER SHALL VERIFY THAT ADEQUATE KEYING HAS BEEN OBTAINED.

CONSTRUCTION EQUIPMENT NOT NECESSARY FOR THE COMPLETION OF THE REPLACEMENT MATERIAL WILL NOT BE ALLOWED ON THE UNDERCUT AREAS UNTIL COMPLETION OF THE RECOMMENDED THICKNESS OF THE POROUS GRANULAR EMBANKMENT SUBGRADE.

FULL DEPTH SUBGRADE 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 SUBGRADE OR BOTTOM OF THE PROPOSED AGGREGATE SUBGRADE WHEN INCLUDED IN THE CONTRACT.

THIS WORK WILL BE MEASURED FOR PAYMENT IN ACCORDANCE THE STANDARD SPECIFICATIONS, WHEN SPECIFIED ON THE CONTRACT. THE THEORETICAL ELEVATION OF THE BOTTOM OF THE AGGREGATE SUBGRADE SHALL BE USED TO DETERMINE THE UPPER LIMIT OF POROUS GRANULAR EMBANKMENT, SUBGRADE. THE VOLUME WILL BE COMPUTED BY THE METHOD OF AVERAGE END AREAS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT, SUBGRADE WHICH PRICE SHALL INCLUDE THE CAPPING AGGREGATE, WHEN REQUIRED.

THE POROUS GRANULAR EMBANKMENT, SUBGRADE SHALL BE USED AS FIELD CONDITIONS WARRANT AT THE TIME OF CONSTRUCTION.

SPECIAL EXCAVATION

WORK UNDER THIS ITEM SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT AS HEREIN MODIFIED.

SPECIAL EXCAVATION SHALL INCLUDE THE SATISFACTORY REMOVAL AND OFF-SITE DISPOSAL OF ALL UNSUITABLE MATERIAL BELOW THE SUBGRADE ELEVATION.

AFTER EXCAVATING TO THE REQUIRED SUBGRADE LEVEL, THE ENGINEER & GEOTECH ENGINEER SHALL INSPECT THE SUBGRADE. PRIOR TO PLACING ANY PAVEMENT SECTION MATERIAL THE EXCAVATION LEVEL OR SUBGRADE LEVEL SHALL BE COMPACTED AND, WHERE POSSIBLE, PROOF ROLLED WITH A 40,000 LB TANDEM AXLE TRUCK BY MAKING AT LEAST 4 PASSES. THE COMPACTING AND PROOF ROLLING WILL DETECT SOFT OR UNSTABLE PORTIONS OF MATERIAL WHICH SHALL BE REMOVED AND REPLACED AS HEREIN SPECIFIED. THE COMPACTING AND PROOF ROLLING SHALL BE INCIDENTAL TO THE WORK AND NO ADDITIONAL COMPENSATION WILL BE PAID.

IF THE EXISTING SUBGRADE SOIL IS NOT SUITABLE FOR PROVIDING AN IBB SOIL SUPPORT VALUE OF 2, THE TRADE CONTRACTOR SHALL REMOVE THE UNSUITABLE SUBGRADE SOIL BELOW THE PROPOSED SUBGRADE LEVEL TO A DEPTH AS DIRECTED BY THE ENGINEER, COMPACT AND PROOF ROLL THE EXCAVATED AREA. IF UPON PROOF ROLLING THE SUBGRADE IS STILL UNSUITABLE, ADDITIONAL EXCAVATION MAY BE REQUIRED. NO ADDITIONAL COMPENSATION WILL BE MADE REGARDLESS OF THE NUMBER OF TIMES THE AREA IS COMPACTED AND PROOF ROLLED.

CA-1 SHALL BE USED TO BRING THE SUBGRADE TO THE PROPOSED ELEVATION AS INDICATED UNDER THE ITEM. POROUS GRANULAR EMBANKMENT, SUBGRADE. POROUS GRANULAR EMBANKMENT, SUBGRADE IS NOT CONSIDERED PART OF THIS ITEM.

THOSE AREAS OF SUBGRADE WHICH ARE NOT OVER EXCAVATED SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

SPECIAL EXCAVATION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER WILL BE MEASURED FOR PAYMENT IN PLACE AND THE VOLUME IN CUBIC YARDS COMPUTED BY THE METHOD OF AVERAGE END AREAS. EXCAVATION IN EXCESS OF THAT AUTHORIZED SHALL NOT BE MEASURED FOR PAYMENT.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT CUBIC YARD FOR SPECIAL EXCAVATION, WHICH PRICE SHALL INCLUDE THE SATISFACTORY REMOVAL AND LEGAL DISPOSAL, GRADING, COMPACTING AND PROOF ROLLING OF SUBGRADE.

THE OWNER IS REQUIRED TO HAVE A GEOTECHNICAL ENGINEER ON-SITE TO MONITOR EARTHWORK, AND THE GRADING ACTIVITY, IN ORDER TO IDENTIFY UNSUITABLE SOILS FOR REMOVAL FROM THE SITE. CONTRACTOR TO ENSURE REQUIREMENTS ARE MET.

STORM SEWER

- CONTRACTOR TO FOLLOW ALL VILLAGE OF GLEN ELLYN AND DUPAGE COUNTY REQUIREMENTS.
- ALL STORM STRUCTURES AND SEWERS ARE TO BE CLEANED PRIOR TO FINAL ACCEPTANCE. THE TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING SEDIMENT FROM THE STORM SEWER STRUCTURES AND PIPES DURING CONSTRUCTION AND UNTIL 90% OF VEGETATION IS ESTABLISHED.
- MANHOLES, CATCH BASINS, INLETS, BEDDING AND TRENCH BACKFILL SHALL CONFORM TO THE CONSTRUCTION DETAILS, STANDARD SPECIFICATIONS AND ISPE SPECIFICATIONS.
 - REFERENCED SPECIFICATIONS
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
 - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (DOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION.
 - STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 - VILLAGE OF GLEN ELLYN MUNICIPAL CODE.
 - DUPAGE COUNTY STORMWATER MANAGEMENT ORDINANCE AND WATER QUALITY BEST MANAGEMENT PRACTICES TECHNICAL GUIDANCE MANUAL.
 - IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.
- NOTIFICATIONS
 - THE VILLAGE OF GLEN ELLYN ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
 - THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.
- GENERAL NOTES
 - ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 - THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
 - THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
 - THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY THE MUNICIPALITY OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
 - THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
 - ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
 - MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY AND OWNER.
 - THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
 - ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
 - RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS 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.
 - ALL STORM SEWER PIPE MATERIALS AND JOINTS SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)		
4-INCH TO 36-INCH	ASTM D-3350	ASTM D-3261,F-2620 (HEAT FUSION)
4-INCH TO 12-INCH	ASTM D-3035	ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

SANITARY SEWER

- THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)		
4-INCH TO 36-INCH	ASTM D-3350	ASTM D-3261,F-2620 (HEAT FUSION)
4-INCH TO 12-INCH	ASTM D-3035	ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477
8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¾" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.		
9. NON-SHEDDING FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.		
10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PROHIBIT HOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.		
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED: A) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE. B) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. C) WITH 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.		

- WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRE-CAST RUBBER BOOTHS TO CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRE-CAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG

- EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES
- DUPAGE COUNTY STORMWATER MANAGEMENT ORDINANCE AND WATER QUALITY BEST MANAGEMENT PRACTICES TECHNICAL GUIDANCE MANUAL.
- IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.
- BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTION. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

WATER MAIN

- ALL WATERMAINS SHALL BE INSTALLED IN A MANNER MEETING OR EXCEEDING THE REQUIRED STANDARD SPECIFICATIONS CONTAINED IN THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", THE CURRENT EDITION.
- WATERMAIN SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE (PVC) PIPE AWWA C900 CONFORMING TO NSF STANDAROD 14. THE JOINTS SHALL BE RUBBER GASKET PUSH-ON OR MECHANICAL CONFORMING TO ASTM D-3139/ASTM F-477. WATERMAIN FITTINGS SHALL BE PVC CONFORMING TO AWWA C900. TRACE WIRE SHALL BE USED FOR ALL PVC PIPING.
- ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES.
- THE WATERMAIN SHALL BE TAPPED, TESTED, AND DISINFECTED WITH MUNICIPAL REPRESENTATIVES PRESENT. HYDROSTATIC TESTING WILL BE DONE IN ACCORDANCE W/AWWA STANDARD: ANSI/AWWA C600-99 SEC.5.2. CHLORINATION/STERILIZATION TESTING SHALL BE IN ACCORDANCE WITH AWWA STANDARD: ANSI/AWWA C 651, LATEST EDITION
- MINIMUM COVER ON ALL WATER MAIN AND SERVICES SHALL BE 5.5 FEET.
- WATER MAIN HORIZONTAL SEPARATION:
A. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, OR SEWER SERVICE.
B. WATER MAINS MAY BE LAID CLOSER THAN 10 FEET FROM A SEWER WHEN:
 - LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET.
 - THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER; AND
 - THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED SHELFLY LOCATED TO ONE SIDE OF THE SEWER.
- BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLP-ON (ANSI A21.11) JOINT DUCTILE IRON PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 40-2 OF THE ISPE STANDARDS IN ILLINOIS WHEN IT IS IMPOSSIBLE TO MEET (A) OR (B) ABOVE, THE DRAIN OR SEWER SHALL BE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.
- WATER MAIN VERTICAL SEPARATION:
A. WHERE WATER MAINS CROSS ABOVE A SEWER/DRAIN WITH GREATER THAN 18 INCHES VERTICAL SEPARATION, A FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED, WITH JOINTS EQUIDISTANT FROM THE SEWER.
B. WHERE WATER MAINS CROSS BELOW A SEWER/DRAIN (WITH 18 INCHES SEPARATION), OR CROSS ABOVE A SEWER/DRAIN WITH LESS THAN 18 INCHES SEPARATION), ONE OF THE FOLLOWING METHODS TO PROTECT THE WATER MAIN SHALL BE USED:
 - CONSTRUCT SEWER/DRAIN OF DUCTILE IRON PIPE (ANSI A21.11 JOINTS), PVC (ASTM D-2241, SDR 26), OR ROP WITH O-RING (ASTM D-443) JOINTS (FOR STORM SEWER ONLY).
 - ENCASE THE SEWER IN PVC (ASTM D-2241, SDR 26).
 - ENCASE THE WATER MAIN IN PVC (ASTM D-2241, SDR 26).
- C. WATERMAINS SHALL NOT CROSS BELOW A SEWER/DRAIN WITH LESS THEN 18" VERTICAL SEPARATION.
- D. THE PORTION OF THE TRENCH ABOVE THE INITIAL BACKFILL OF THE LOWER UTILITY AND THE INVERT OF THE HIGHER UTILITY SHALL BE FILLED WITH COMPACTED SECT 207-BER MATERIAL (ASTM D-2221, CLASS IV).
- VALVES, PRESSURE CONNECTIONS, AND TRENCH BACKFILL SHALL CONFORM TO THE CONSTRUCTION DETAILS.

ABBREVIATIONS

A	ARC LENGTH	MH	MANHOLE
B/C	BACK OF CURB	N.D.L	NO DISTURB LINE
B-B	BACK-TO-BACK OF CURB	N.I.C	NOT IN CONTRACT
B/W	BITUMINOUS PAVEMENT	N.W.E.	NORMAL WATER ELEVATION
B.L	BUILDING LINE	P.I.	POINT OF INTERSECTION
B.M	BENCH MARK	P.R.C.	POINT OF REVERSE CURVATURE
B.R.W	BOTTOM OF RETAINING WALL	PVC	POLYVINYL CHLORIDE
B/W	BACK OF SIDEWALK	P.T.	POINT OF TANGENCY
CH	CORRUGATED HIGH DENSITY POLYETHYLENE PIPE	P.P.T	PROPERTY LINE
CHO	CLEAN OUT	P.C.	POINT OF CURVATURE
C & G	CURB AND GUTTER	PVI	POINT OF VERTICAL INTERSECTION
C.B.	CATCH BASIN	P.G.	PROFILE GRADE
CP	CONTROL POINT	R	RADIUS
DWG.	DRAWING	RCP	REINFORCED CONCRETE PIPE
D.I.P.	DUCTILE IRON PIPE	REC.	RECORD DIMENSION
DIA.	DIAMETER	R.O.W.	RIGHT-OF-WAY
D.	DISTANCE	RT	RIGHT
DC	DEPRESSED CURB	SHT	SHEET
D.E.	DRAINAGE EASEMENT	S	SLOPE
D.V.	DETENTION VOLUME	ST	STATION
DS	DOWNSPOUT	STMH	STORM MANHOLE
ELEV./ EL.	ELEVATION	SNH	SANITARY
E/P	EDGE OF PAVEMENT	SMH	SANITARY MANHOLE
E.J.	EXPANSION JOINT	SAN	SANITARY
EX.	EXISTING	SAN	SANITARY MANHOLE
F.G.	FINISH GRADE	S.E.	TOP ELEVATION
F-F	FACE-TO-FACE OF CURB OR STALL	T/C	TOP OF CURB
F/L	FLOW LINE	T.O.P.	TOP OF PIPE
F.H.	FIRE HYDRANT	TRW	TELEPHONE
F.P.S.	FLARED END SECTION	TRW	TOP OF RETAINING WALL
FIP	FOUND IRON PIPE	TY	TYPICAL
F/F	FINISHED FLOOR	U.E.	UTILITY EASEMENT
GA	GAS VALVE	V.C.	VERTICAL CURVE
GV	GATE VALVE	V.I.F.	VERTIFY IN FIELD
GV/VV	GATE VALVE IN VALVE VAULT	V.I.T	VITRIFIED TILE
GV/VB	GATE VALVE IN VALVE BOX	V.B.	VALVE BOX
GR	GRASS	V.V.	VALVE VAULT
GL	GUTTER LINE	V.C.P.	VITRIFIED CLAY PIPE
HDW	HEADWALL	VER	VERTICAL
HOR.	HORIZONTAL	W	WATER
I.E.	INVERT ELEVATION	WM	WATER MAIN
I.N.	INLET		
INL	IRRIGATION		
LEN	LENGTH		
L.P.	LIGHT POLE		
LT	LEFT		
(M)	MEASURED BEARING OR DISTANCE		
M/E	MATCH EXISTING		
M.O.	MID ORDNATE		



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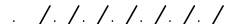
OVERALL EXISTING CONDITIONS PLAN

Project Number:
210107
Drawn By:
NKH
Sheet:

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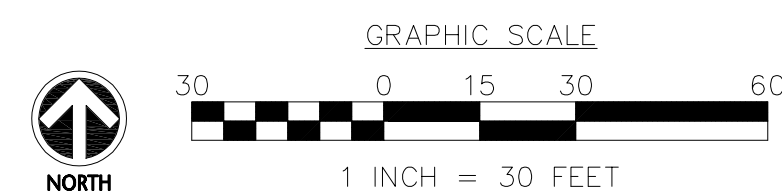
- | | |
|---|--------------------------------|
|  | 100-YR FLOODPLAIN |
|  | FLOOD WAY |
|  | WETLAND |
|  | WETLAND SETBACK |
|  | ITEM REMOVAL |
|  | LINEAR ITEM REMOVAL |
|  | TREE PROTECTION FENCE |
|  | REMOVE CONCRETE AND STONE BASE |

DEMO KEY NOTES

- 1 SAWCUT
- 2 REMOVE RETAINING WALL. CONTRACTOR TO ENSURE NO DAMAGE TO EXISTING BUILDING FOUNDATION.
- 3 CAREFULLY REMOVE LIGHT BOLLARD. LIGHT BOLLARD TO BE SALVAGED AND RETURNED TO OWNER. REMOVE LIGHT BOLLARD FOUNDATIONS AND ASSOCIATED ELECTRICAL SERVICE.
- 4 REMOVE CURB AND GUTTER
- 5 REMOVE AND SALVAGE SIGN AND POST FOR REUSE. REMOVE FOUNDATION.
- 6 CAREFULLY REMOVE BIKE RACK AND RETURN TO OWNER FOR REUSE
- 7 REMOVE FLAG POLE AND RETURN TO OWNER FOR REUSE. REMOVE FLAG POLE FOUNDATION.
- 8 REMOVE SIGNAGE AND RETURN TO OWNER FOR REUSE. REMOVE SIGNAGE FOUNDATION.

DEMOLITION NOTES

1. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES DURING DEMOLITION & CONSTRUCTION ACTIVITIES, WHETHER SHOWN ON THE PLANS OR NOT, UNLESS OTHERWISE SPECIFIED. ANY RELOCATION, ADJUSTMENTS, CONFLICTS, ETC. SHALL BE AT THE RIGHT TO THE CONTRACTOR. RELOCATION IMMEDIATELY. CONTRACTOR TO LOCATE ALL PUBLIC & PRIVATE UTILITIES IN THE RIGHT-OF-WAY AND SITE PRIOR TO CONSTRUCTION.
2. ALL EXISTING CURB TO REMAIN UNLESS OTHERWISE SPECIFIED. ANY CURB DAMAGED DURING DEMOLITION SHALL BE REPLACED IN KIND.
3. ALL EXISTING SIGNS & LIGHT POLES TO REMAIN AND BE PROTECTED UNLESS OTHERWISE SPECIFIED. ANY SIGNS REMOVED SHALL BE SALVAGED AND RELATIONSHIP RETURNED TO OWNER. ANY CONFLICTS, CONFLICTS, RELOCATIONS, ETC. REQUIRED SHALL BE COORDINATED WITH ENGINEER AND UTILITY OWNER/PROVIDER.
4. ALL EXISTING TREES TO REMAIN AND TO BE PROTECTED UNLESS OTHERWISE SPECIFIED.
5. ALL DEMOLITION AND CONSTRUCTION IN THE RIGHT-OF-WAY SHALL BE COORDINATED AND APPROVED BY THE JURISDICTIONAL AGENCY. THE CONTRACTOR IS TO CONTACT THE INSPECTORS AT THE JURISDICTIONAL AGENCY PRIOR TO CONSTRUCTION.
6. COORDINATE ALL ELECTRICAL, CABLE FIBER, ETC. REMOVAL/RELOCATION WITH MEP PLANS. CONTRACTOR SHALL PROTECT ALL EXISTING ELECTRIC SERVICES DURING CONSTRUCTION AND NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS.
7. ALL EXISTING SHRUBS AND LANDSCAPING IN CONFLICT WITH SITE IMPROVEMENTS SHALL BE REMOVED.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF DAMAGED EXISTING LANDSCAPING PRIOR TO LEAVING AS A RESULT OF CONSTRUCTION ON THIS SITE. THE RIGHT-OF-WAY MUST BE RESTORED TO EXISTING OR BETTER CONDITION.



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WILLOWBROOK
WILDLIFE CENTER

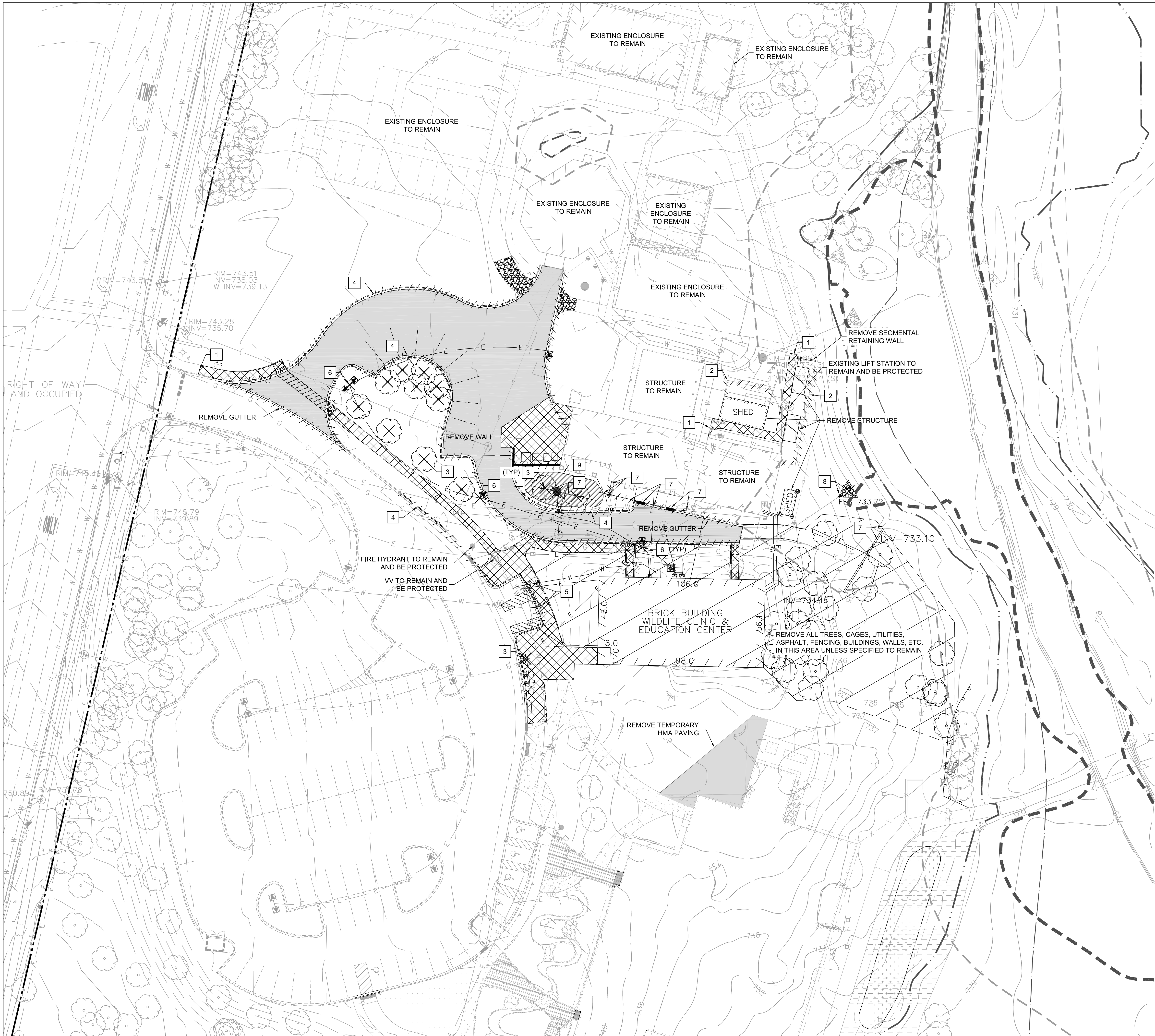
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DEMOLITION PLAN PHASE B

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100-YR FLOODPLAIN

FLOOD WAY

WETLAND

WETLAND SETBACK

ITEM REMOVAL

LINEAR ITEM REMOVAL

TREE PROTECTION FENCE

REMOVE CONCRETE AND STONE BASE

REMOVE HMA AND STONE BASE

REMOVE BMP, ASSOCIATED PIPING AND STRUCTURES, VEGETATION, AND STONE BASE

REMOVE TEMPORARY AGGREGATE SURFACE. EXISTING BOTTOM12" OF AGGREGATE TO REMAIN FOR FINAL HMA SURFACE BASE. REFER TO HMA PAVEMENT - FULL DEPTH DETAIL.

100-YR FLOODPLAIN

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1 SAWCUT

2 REMOVE FENCE, POSTS, AND FOUNDATIONS

3 CAREFULLY REMOVE LIGHT BOLLARD. LIGHT BOLLARD TO BE SALVAGED AND RETURNED TO OWNER. REMOVE LIGHT BOLLARD FOUNDATIONS AND ASSOCIATED ELECTRICAL SERVICE.

4 REMOVE CURB AND GUTTER

5 REMOVE AND SALVAGE SIGN AND POST FOR REUSE. REMOVE FOUNDATION.

6 CAREFULLY REMOVE LIGHT POLE AND FIXTURES FOR RELOCATION. REMOVE FOUNDATION AND ELECTRICAL SERVICE

7 REMOVE STORM SEWER STRUCTURE AND ASSOCIATED PIPING AS SHOWN ON PLANS.

8 REMOVE AND SALVAGE FLARED END SECTION AND RIPRAP OUTFALL FOR REUSE.

9 REMOVE INFILTRATION BASIN, PLANTINGS, SOIL MIX LAYER, STRUCTURE AND ASSOCIATED PIPING, AND STONE BASE

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9. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY DAMAGED PUBLIC/PRIVATE PROPERTY OR ROADWAY AS A RESULT OF CONSTRUCTION ON THIS SITE. THE RIGHT-OF-WAY MUST BE RESTORED TO EXISTING OR BETTER CONDITION.

GRAPHIC SCALE

30 0 15 30 60

1 INCH = 30 FEET

NORTH

Forest Preserve District of DuPage County

Wight

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DEMO KEY NOTES

DEMONITION NOTES

VILLAGE COMMENT RESPONSE	03/09/2023	
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WILLOWBROOK WILDLIFE CENTER

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DEMOLITION PLAN
PHASE C

Project Number:
210107
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Sheet:

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LEGEND

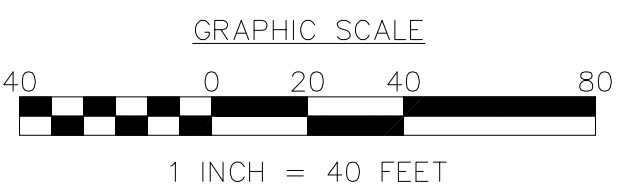
- HMA PAVEMENT AND STONE BASE
- HEAVY DUTY HMA PAVEMENT AND STONE BASE
- PCC SIDEWALK AND STONE BASE
- PERMEABLE PAVERS
- RAIN GARDEN NATIVE SEED PLANTING AREA (REFER TO LANDSCAPE PLANS)
- VEGETATED FILTER STRIP PLANTING AREA (REFER TO LANDSCAPE PLANS)
- AGGREGATE STRIP
- PROPOSED LIGHT POLE
- PROPOSED SIGN
- PARKING COUNT
- FLOW LINE
- PROPERTY LINE
- 100-YR FLOODPLAIN
- FLOOD WAY
- WETLAND
- WETLAND SETBACK

SITE PLAN NOTES

- ALL EXISTING CURB TO REMAIN UNLESS OTHERWISE SPECIFIED. ANY CURB DAMAGED DURING DEMOLITION SHALL BE REPLACED IN KIND.
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- CONTRACTOR TO COORDINATE WITH CLIENT/OWNER ON FINAL LOCATIONS OF SIGNS.

LAYOUT NOTE:

- ALL LAYOUT FOR SITE IMPROVEMENTS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR HIRED BY THE CONTRACTOR. LAYOUT SHALL BE COMPLETED USING THE ELECTRONIC CAD FILES PROVIDED BY THE ENGINEER.



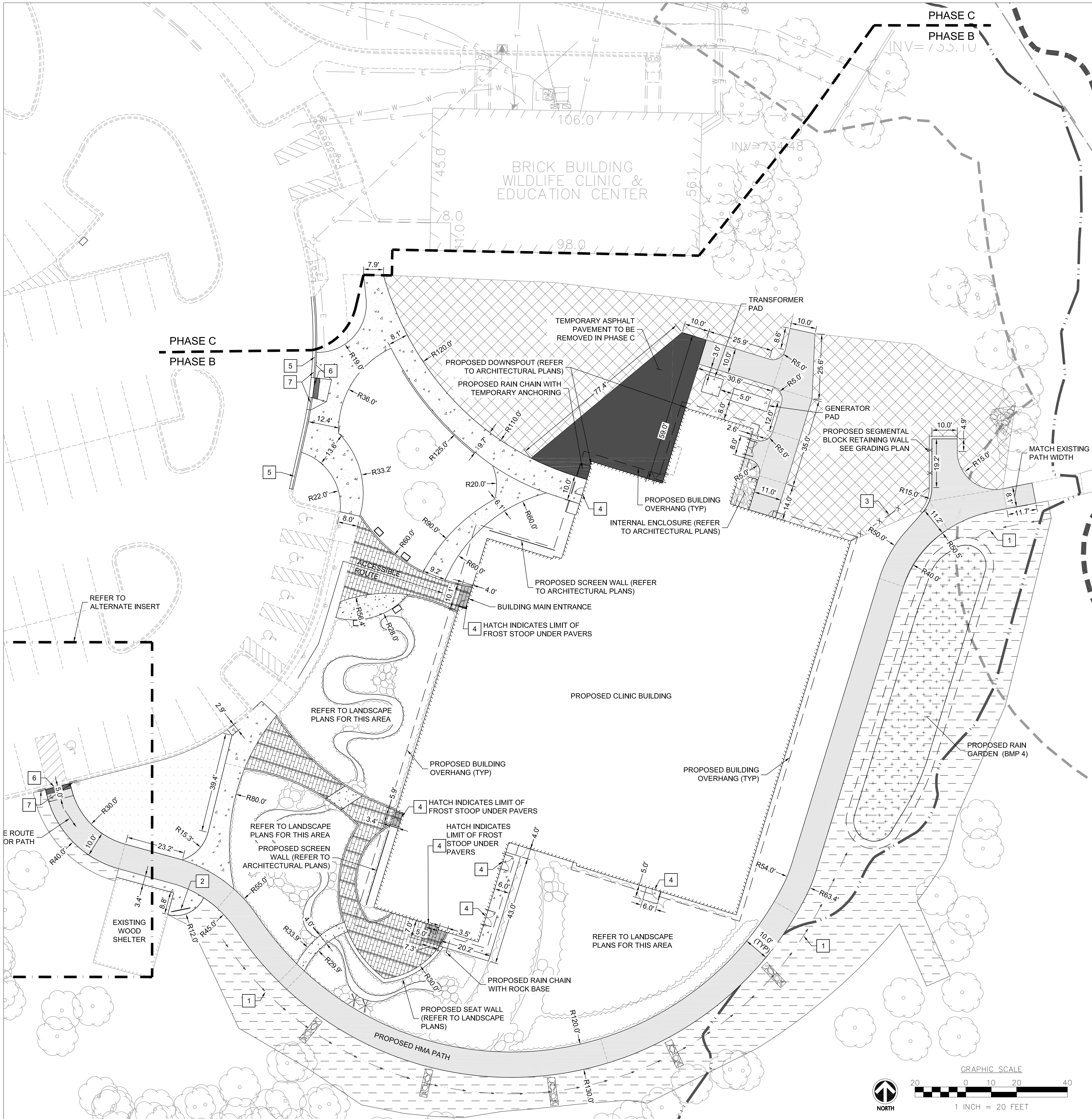
WILLOWBROOK
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OVERALL
SITE PLAN

Project Number:
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HEAVY DUTY HMA PAVEMENT AND STONE BASE

HMA PAVEMENT AND STONE BASE

TEMPORARY HMA PAVEMENT AND STONE BASE

HEAVY DUTY CONCRETE AND STONE BASE

CONCRETE SIDEWALK AND STONE BASE

PERMEABLE PAVERS (REFER TO LANDSCAPE PLANS FOR LAYOUT AND DETAILS)

PROPOSED LIGHT POLE

PROPOSED BUILDING LIGHTING

PROPOSED SIGN

PARKING COUNT

FLOW LINE

RAIN GARDEN NATIVE SEED PLANTING (REFER TO LANDSCAPE PLANS)

GRASS TURF RESTORATION (REFER TO LANDSCAPE PLANS)

NATIVE SEED RESTORATION (REFER TO LANDSCAPE PLANS)

TEMPORARY SEEDING (REFER TO LANDSCAPE PLANS)

GRAVEL

PROPERTY LINE

100-YR FLOODPLAIN

FLOOD WAY

WETLAND

WETLAND SETBACK

1

DRAINAGE SWALE

2

RELOCATED BIKE RACK

3

8' HIGH CHAINLINK FENCE

4

CONCRETE FROST STOOP (SEE STRUCTURAL PLANS FOR DETAIL)

5

B6.12 CURB & GUTTER

6

DEPRESSED CURB WITH DETECTABLE WARNING PLATES

7

3' TRANSITION FROM 6" CURB TO MATCH GRADE

1

DRAINAGE SWALE

2

RELOCATED BIKE RACK

3

8' HIGH CHAINLINK FENCE

4

CONCRETE FROST STOOP (SEE STRUCTURAL PLANS FOR DETAIL)

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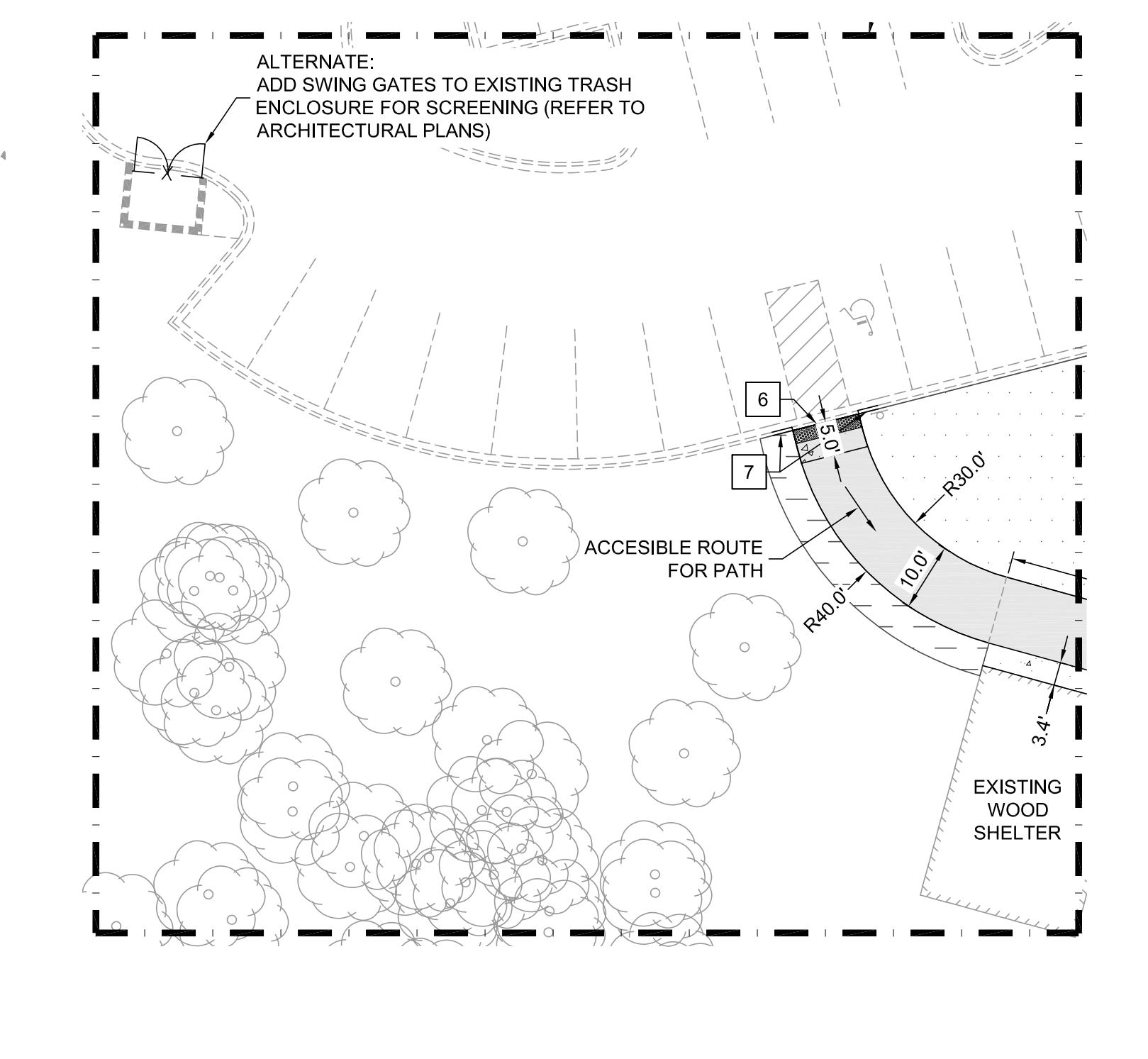
3' TRANSITION FROM 6" CURB TO MATCH GRADE

- ### KEY NOTES
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ALTERNATE: EXISTING TRASH ENCLOSURE SCREENING

SCALE: 1" = 20'



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SITE PLAN PHASE B

Project Number:
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HMA PAVEMENT AND STONE BASE

HEAVY DUTY HMA PAVEMENT AND STONE BASE

HEAVY DUTY CONCRETE AND STONE BASE

CONCRETE SIDEWALK AND STONE BASE

VEHICULAR PERMEABLE PAVERS

RAIN GARDEN NATIVE SEED PLANTING (REFER TO LANDSCAPE PLANS)

GRASS TURF RESTORATION (REFER TO LANDSCAPE PLANS)

NATIVE SEED RESTORATION (REFER TO LANDSCAPE PLANS)

PEA GRAVEL STRIP

PROPERTY LINE

100-YR FLOODPLAIN

FLOOD WAY

WETLAND

WETLAND SETBACK

PROPOSED LIGHT POLE

PROPOSED SIGN

PARKING COUNT

FLOW LINE

FENCE WITH SHADED CLOTH

KEY NOTES

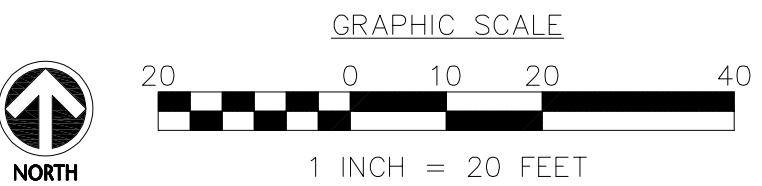
- 1 DRAINAGE SWALE
- 2 BIKE LOOP (REFER TO LANDSCAPE PLANS FOR DETAIL)
- 3 8' HIGH CHAINLINK FENCE
- 4 ALTERNATE: 8'H ORNAMENTAL FENCE
- 5 B6.12 CURB & GUTTER
- 6 DEPRESSED CURB WITH TRUNCATED DOMES
- 7 TRANSITION FROM 6" CURB TO MATCH GRADE
- 8 22' WIDE, 8' HIGH SLIDING CHAINLINK GATE
- 9 12' WIDE, (2-6' LEAFS) 8' HIGH CHAINLINK DOUBLE SWING GATE
- 10 24' WIDE, (2-12' LEAFS) 8' HIGH CHAINLINK DOUBLE SWING GATE
- 11 6" BOLLARD
- 12 RESCUE STALL SIGNAGE
- 13 2' GRAVEL AREA WITH METAL EDGING (18" DEEP)
- 14 4" SOLID PARKING STRIPE, TRAFFIC WHITE PAINT
- 15 CROSSWALK MARKING, TRAFFIC WHITE PAINT

SITE PLAN NOTES

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5. CONTRACTOR TO COORDINATE WITH CLIENT/TOWNER ON FINAL LOCATIONS OF SIGNS.

LAYOUT NOTE:

1. ALL LAYOUT FOR SITE IMPROVEMENTS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR HIRED BY THE CONTRACTOR. LAYOUT SHALL BE COMPLETED USING THE ELECTRONIC CAD FILES PROVIDED BY THE ENGINEER.
2. DIMENSIONS OF ENCLOSURES ARE APPROXIMATE. FOR EXACT DIMENSIONS, REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS.



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VILLAGE COMMENT RESPONSE	03/09/2023	
ADDENDUM 1	03/06/2023	
VILLAGE COMMENT RESPONSE	02/13/2023	
ISSUE FOR BID GROUP 3	01/19/2023	
PERMIT RESPONSE #1	01/13/2023	
80% CONSTRUCTION DOCUMENTS	10/28/2022	
50% CONSTRUCTION DOCUMENTS	07/29/2022	
REV	DESCRIPTION	DATE

WILLOWBROOK WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

SITE PLAN
PHASE C

Project Number:
210107
Drawn By:
NKH
Sheet:

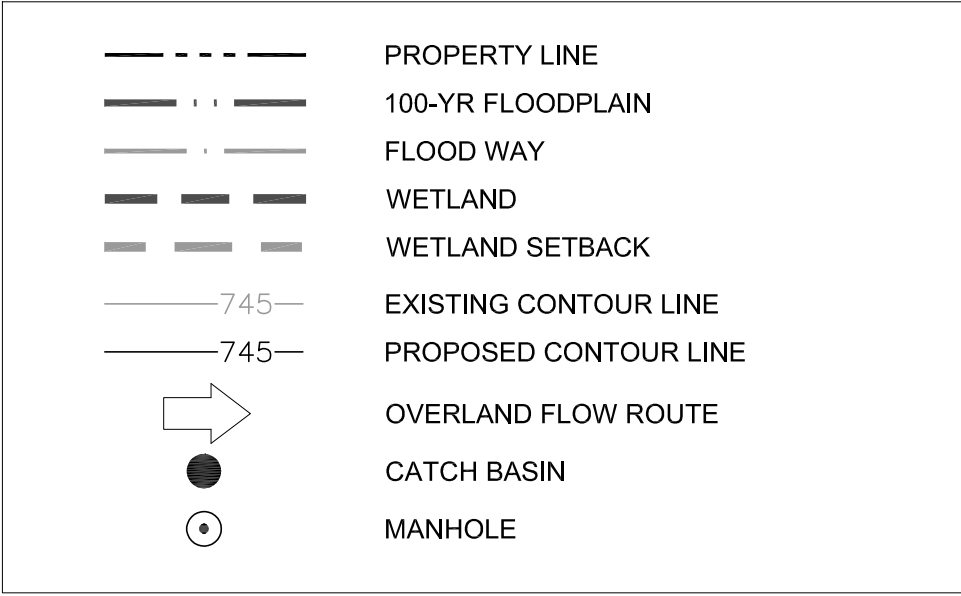
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LEGEND



NOTES:

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITY LOCATIONS, SIZES, SLOPES, INVERTS, ETC. AND CONTACT ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS/DISCREPANCIES.
2. CONTRACTOR TO COORDINATE LOCATIONS, SIZE AND INVERTS WITH MEP PLANS.
3. THE CONTRACTOR SHALL PROTECT ANY AND ALL TREES EITHER SHOWN OR NOT SHOWN ON THE PLANS UNLESS OTHERWISE SPECIFIED. MINIMUM PROTECTION FOR TREES SHALL BE 4' SNOW FENCE INSTALLED ALONG THE DRIP LINE OF TREES.
4. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.
5. ALL EXISTING UTILITY STRUCTURES SHALL BE ADJUSTED AS NECESSARY TO MATCH FINISH GRADE. ALL EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED.
6. ALL SITE WORK SHALL BE IN CONFORMANCE WITH THE ILLINOIS ACCESSIBILITY CODE AND WITH THE AMERICANS WITH DISABILITIES ACT.
7. RAMP SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).
8. MAXIMUM CROSS-SLOPE ON ANY WALK OR RAMPS SHALL BE 2%. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
9. SEE SWPPP PLAN FOR ALL EROSION AND SEDIMENT CONTROL NOTES, STANDARDS, INSPECTIONS, MAINTENANCE AND PRACTICES THAT NEED TO BE FOLLOWED.

GEOTECH NOTE:

FOLLOW ALL RECOMMENDATIONS, REQUIREMENTS, REMEDIATION, ETC. AS SPECIFIED IN THE "REPORT OF SOILS EXPLORATION" PROVIDED BY TESTING SERVICE CORPORATION, DATED MAY 26, 2022. CONTRACTOR TO INCLUDE CONTINGENCY FOR UNSUITABLE SUBGRADE CUTS FOR PAVEMENT AREAS AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ANY DISCREPANCIES BETWEEN THE REPORTS, NOTES AND SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY.

EARTHWORK NOTES:

CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT EARTHWORK REQUIREMENTS (CUT, FILL, HAUL, INVO, ETC.) TO BRING SITE TO FINISHED GRADE. ANY ON-SITE RE-USE OF ON-SITE DEMOLITION DEBRIS/MATERIALS MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER.

AS-BUILT NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT SURVEYS. ALL AS-BUILT SURVEYS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR AND BE SIGNED AND SEALED. THE CONTRACTOR SHALL SUBMIT TWO SETS OF THE "AS-BUILT" FINAL ENGINEERING DRAWINGS (I.E. RECORD DRAWINGS) AND STORMWATER MANAGEMENT CALCULATIONS UPON COMPLETION OF IMPROVEMENTS AND INCLUDE ELECTRONIC CAD FILES. THE RECORD DRAWINGS SHOULD AT LEAST INCLUDE THE FOLLOWING INFORMATION: AS-BUILT DETENTION CONTOURS, ELEVATIONS (INCLUDING DETENTION BASIN TOP OF BERM AND OVERFLOW WEIR GRADES) AND VOLUME (VERIFIED, SIGNED, & SEALED BY A PROFESSIONAL ENGINEER (PE) OR PROFESSIONAL LAND SURVEYOR (PLS)); ELEVATION, AND LOCATION (TIES TO TWO POINTS) OF ALL NEW STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VALVES, LINES/STOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS/BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE), ALL STORM/SANITARY SEWER STRUCTURES (INCLUDING INVERTS AND PIPE SIZES), ALL PIPES (LOCATIONS, SLOPES, LENGTHS, ETC.), OUTLET CONTROL STRUCTURES (INCLUDING RESTRICTOR SIZES AND ELEVATIONS PLUS TOP OF WALL) AND ABANDONED WATER OR SANITARY SERVICE LINES, DETAILED TOPOGRAPHIC SURVEY OF ALL HIGH POINTS, LOW POINTS, CHANGE OF SLOPE INCLUDING GUTTER GRADES, TOP OF CURB GRADES, PAVEMENT GRADES, SIDEWALK GRADES, RAMP GRADES, ETC. TO VERIFY POSITIVE DRAINAGE. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS. WITHIN DETENTION/BMP AREAS: FOR VERIFICATION OF DETENTION VOLUME AND SUBBASE GRADES, PRIOR TO BACK FILLING WITH CA-7, THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A CERTIFIED TOPO SURVEY OF AS-BUILT SUBBASE GRADES FOR ENGINEER APPROVAL AND ALSO A COPY OF RECEIPT OF THE CA-7 AGGREGATE.



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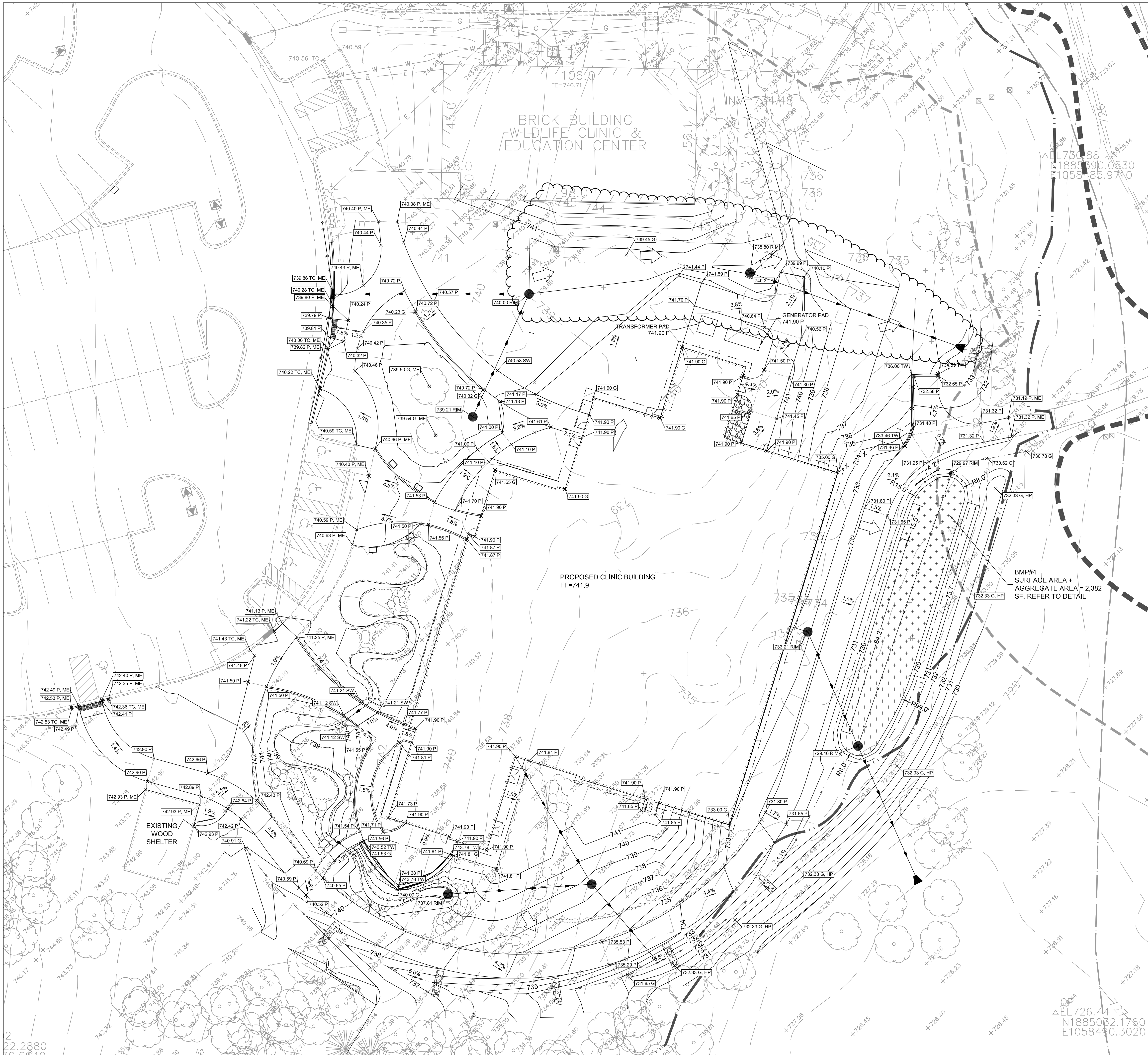
OVERALL GRADING PLAN

Project Number:
210107
Drawn By:
NKH
Sheet:

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F 630.969.7979



LEGEND

---	PROPERTY LINE
- - -	100-YR FLOODPLAIN
---	FLOOD WAY
---	WETLAND
---	WETLAND SETBACK
ME	MATCH EXISTING ELEVATION
HP	HIGH POINT
ADJ	ADJUST STRUCTURE TO PROPOSED GRADE
11.77 P	TOP OF PAVEMENT ELEVATION
11.77 G	GROUND ELEVATION
11.77 SW	TOP OF SIDEWALK ELEVATION
11.77 RIM	RIM ELEVATION
745	EXISTING CONTOUR LINE
745	PROPOSED CONTOUR LINE
2.0%	SLOPE/FLOW DIRECTION
→	OVERLAND FLOW ROUTE
●	CATCH BASIN
○	MANHOLE
○	CLEANOUT

NOTES:

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- RAMPS SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).
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REV	DESCRIPTION	DATE

WILLOWBROOK WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

GRADING PLAN PHASE B

Project Number:
210107
Drawn By:
NKH
Sheet:

C3.00B



LEGEND

- PROPERTY LINE
- - - 100-YR FLOODPLAIN
- - - FLOOD WAY
- - - WETLAND
- - - WETLAND SETBACK
- ME MATCH EXISTING ELEVATION
- HP HIGH POINT
- ADJ ADJUST STRUCTURE TO PROPOSED GRADE
- 11.77 P TOP OF PAVEMENT ELEVATION
- 11.77 G GROUND ELEVATION
- 11.77 SW TOP OF SIDEWALK ELEVATION
- 11.77 RIM RIM ELEVATION
- 745 EXISTING CONTOUR LINE
- 745 PROPOSED CONTOUR LINE
- 2.0% SLOPE/FLOW DIRECTION
- OVERLAND FLOW ROUTE
- CATCH BASIN
- MANHOLE
- CLEANOUT

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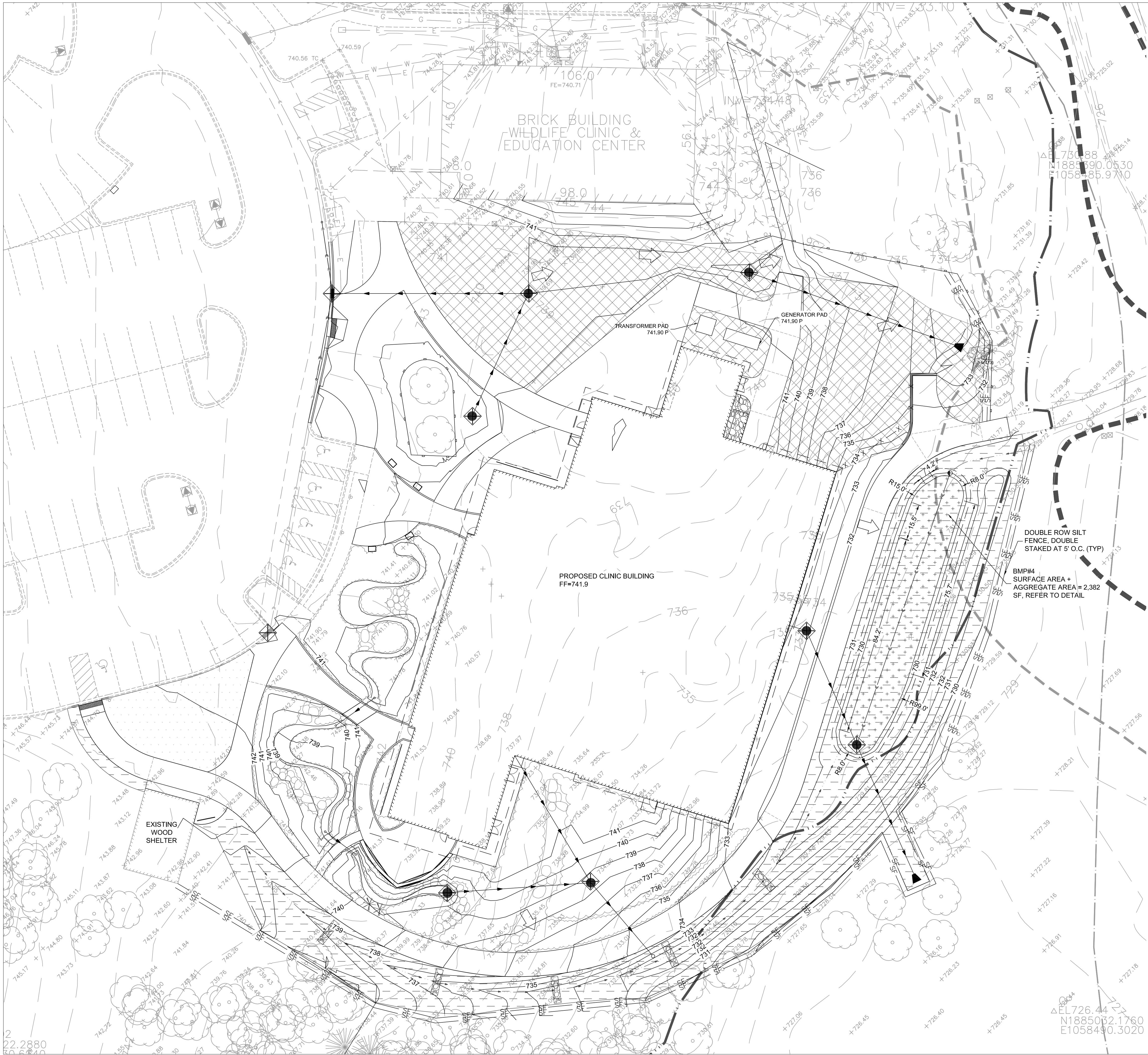
GRADING PLAN
PHASE C

Project Number:
210107
Drawn By:
NKH
Sheet:

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LEGEND

	PROPERTY LINE
	100-YR FLOODPLAIN
	FLOOD WAY
	WETLAND
	WETLAND SETBACK
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	CATCH BASIN
	MANHOLE
	CLEANOUT
	FLARED END SECTION
	STONE OUTFALL
	GRASS TURF RESTORATION AREA WITH EROSION CONTROL BLANKET, REFER TO LANDSCAPE PLANS
	SEED MIX RESTORATION WITH EROSION CONTROL BLANKET, REFER TO LANDSCAPE PLANS
	TEMPORARY SEED MIX WITH EROSION CONTROL BLANKET
	RAIN GARDEN NATIVE SEED PLANTING, REFER TO LANDSCAPE PLANS
	INLET PROTECTION
	SILT FENCE
	TREE PROTECTION FENCE
	OVERLAND FLOW ROUTE

NOTES:

- SEE SHEET C3.02, C3.04, AND C3.05 FOR ALL EROSION AND SEDIMENT CONTROL NOTES, STANDARDS, INSPECTIONS, AND MAINTENANCE PRACTICES THAT NEED TO BE FOLLOWED.
- CONTRACTOR TO PROVIDE FINAL LOCATION OF TEMPORARY FENCING, CONSTRUCTION ENTRANCE, CONCRETE WASHOUT, STOCK PILING, ETC.
- INSTALL EROSION CONTROL BLANKET IN ALL AREAS RECEIVING SEED.



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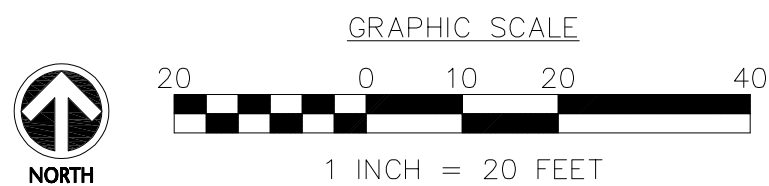
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EROSION & SEDIMENT CONTROL PLAN PHASE B

Project Number:
210107
Drawn By:
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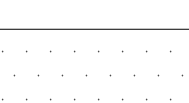
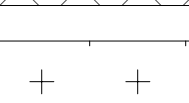
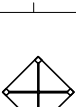
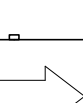
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LEGEND

- | | |
|---|--|
|  | PROPERTY LINE |
|  | 100-YR FLOODPLAIN |
|  | FLOOD WAY |
|  | WETLAND |
|  | WETLAND SETBACK |
|  | EXISTING CONTOUR LINE |
|  | PROPOSED CONTOUR LINE |
|  | CATCH BASIN |
|  | MANHOLE |
|  | CLEANOUT |
|  | FLARED END SECTION |
|  | STONE OUTFALL |
|  | GRASS TURF RESTORATION AREA
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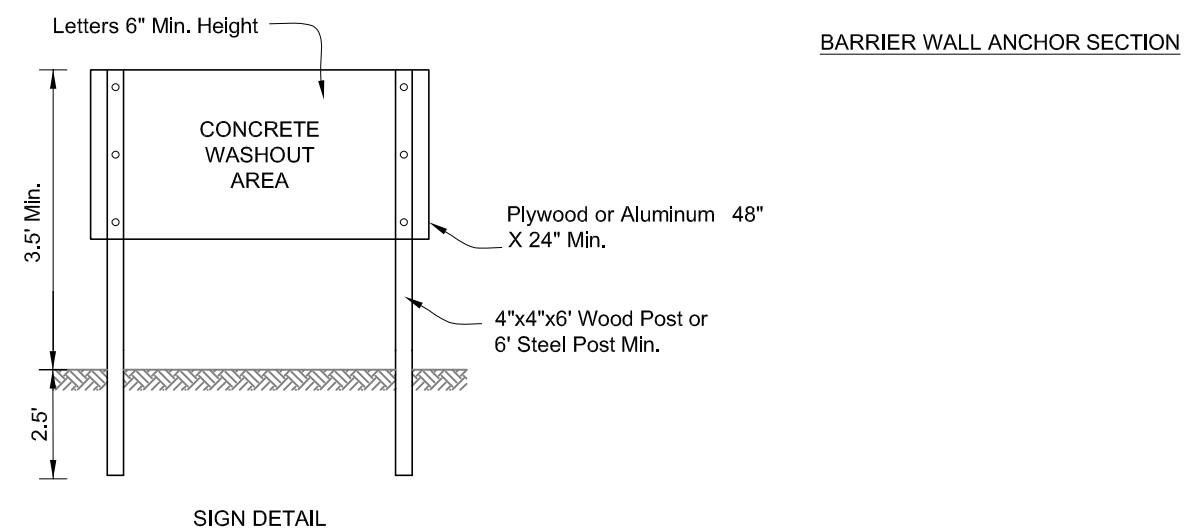
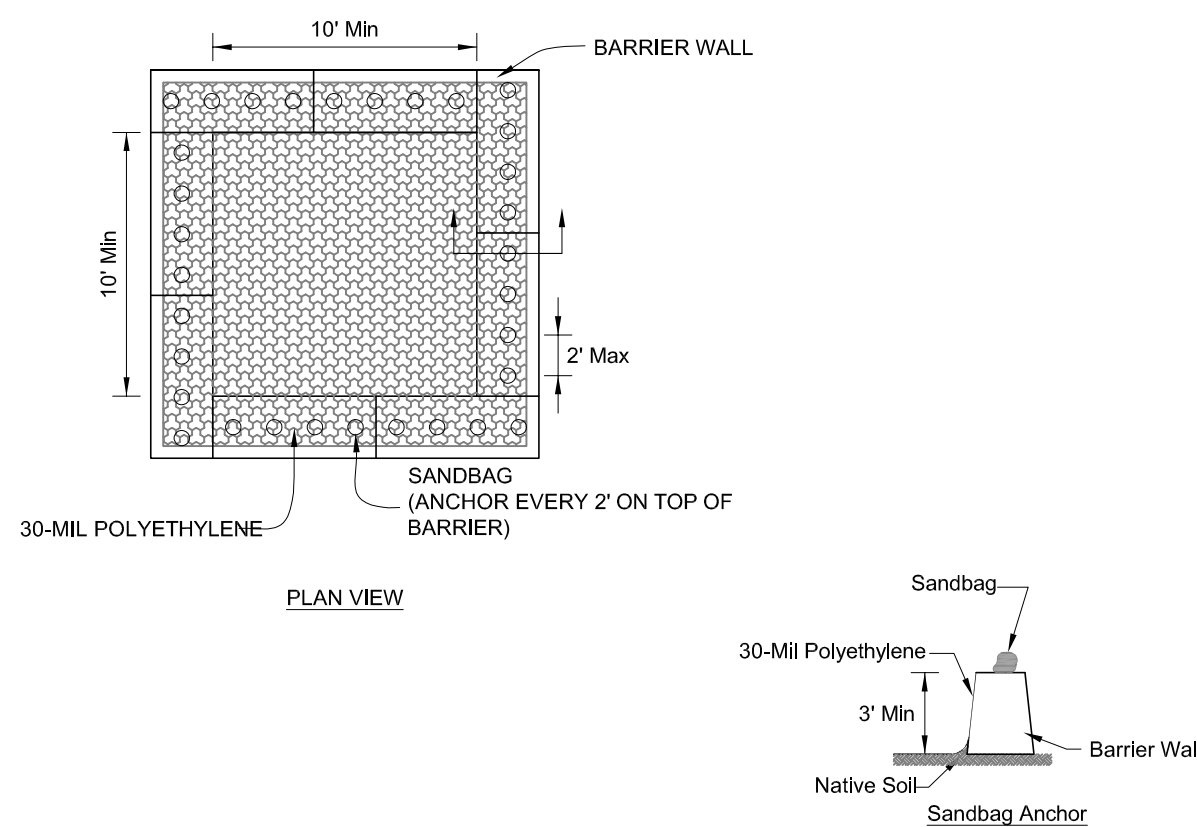
EROSION & SEDIMENT CONTROL PLAN PHASE C

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C3.01C

TEMPORARY CONCRETE WASHOUT FACILITY -
BARRIER WALL

SCALE: NTS



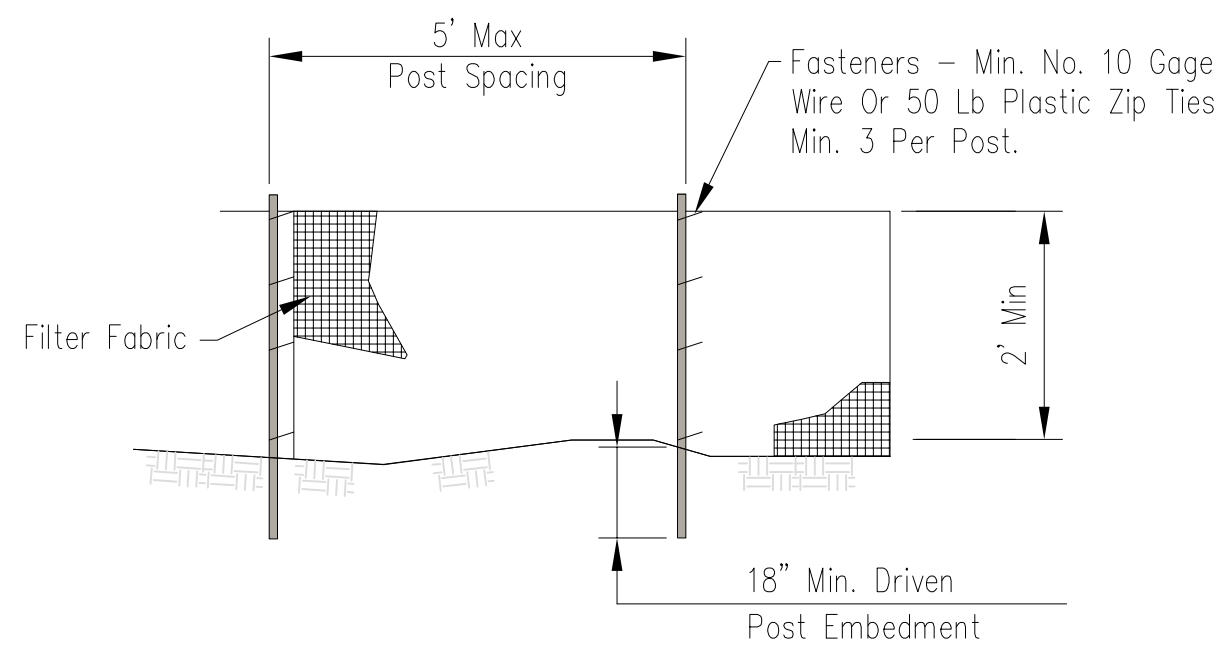
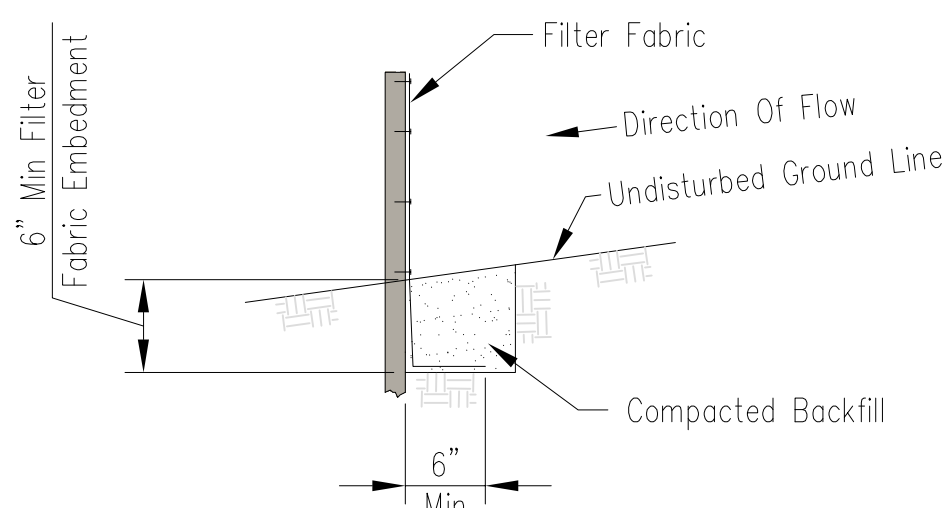
NOTES

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

F16 NO. BLM-0545W Drawing No. Sheet 3 of 3	TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL	Designed _____ Date _____
		Drawn _____ 8. JOHNSON _____ 6/08
		Checked _____
		Approved _____

2 SILT FENCE

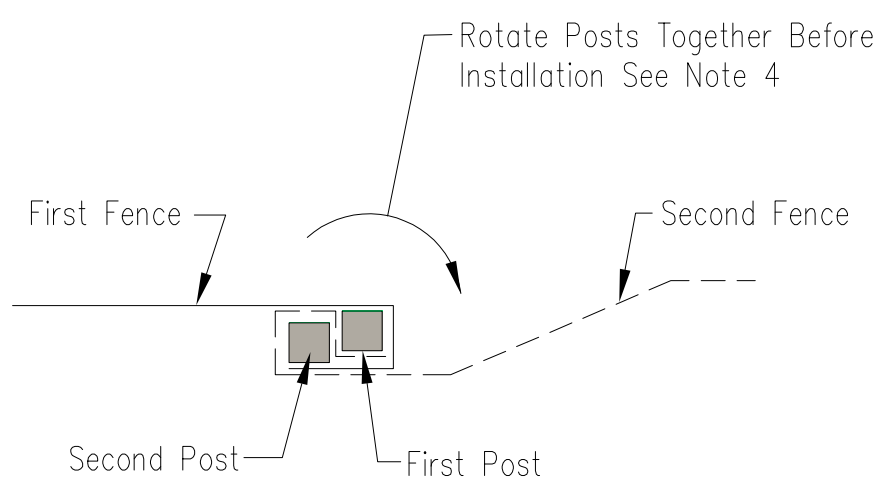
SCALE: NTS

ELEVATION

FABRIC ANCHOR DETAIL

NOTES:

1. Temporary silt fence shall be installed prior to any grading work in the area to be protected. Fence shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
3. Fence posts shall be either wood post with a minimum cross-sectional area of 1.5" X 1.5" or a standard steel post.
4. When splices are necessary make splice at post according to splice detail. Place the end post of the second fence inside the end post of the first fence. Rotate both posts together at least 180 degrees to create a tight seal with the fabric material. Cut the fabric near the bottom of the posts to accommodate the 6 inch flap. Then drive both posts and bury the flap. Compact backfill well.

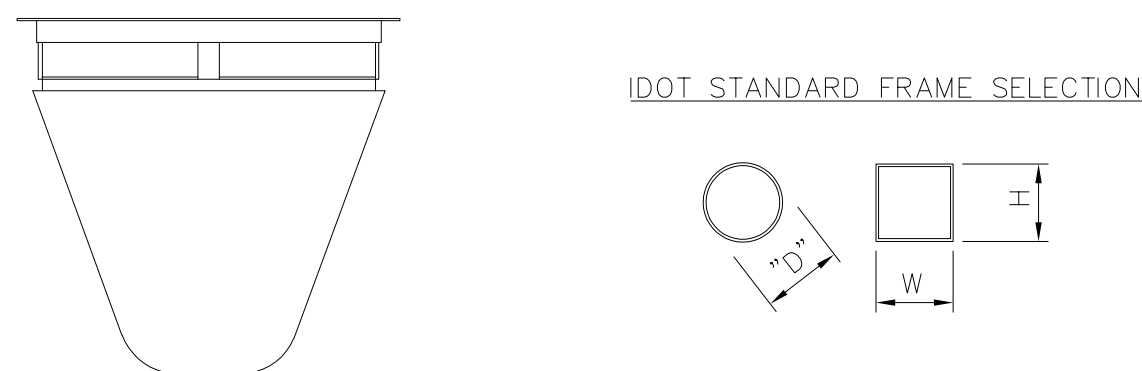
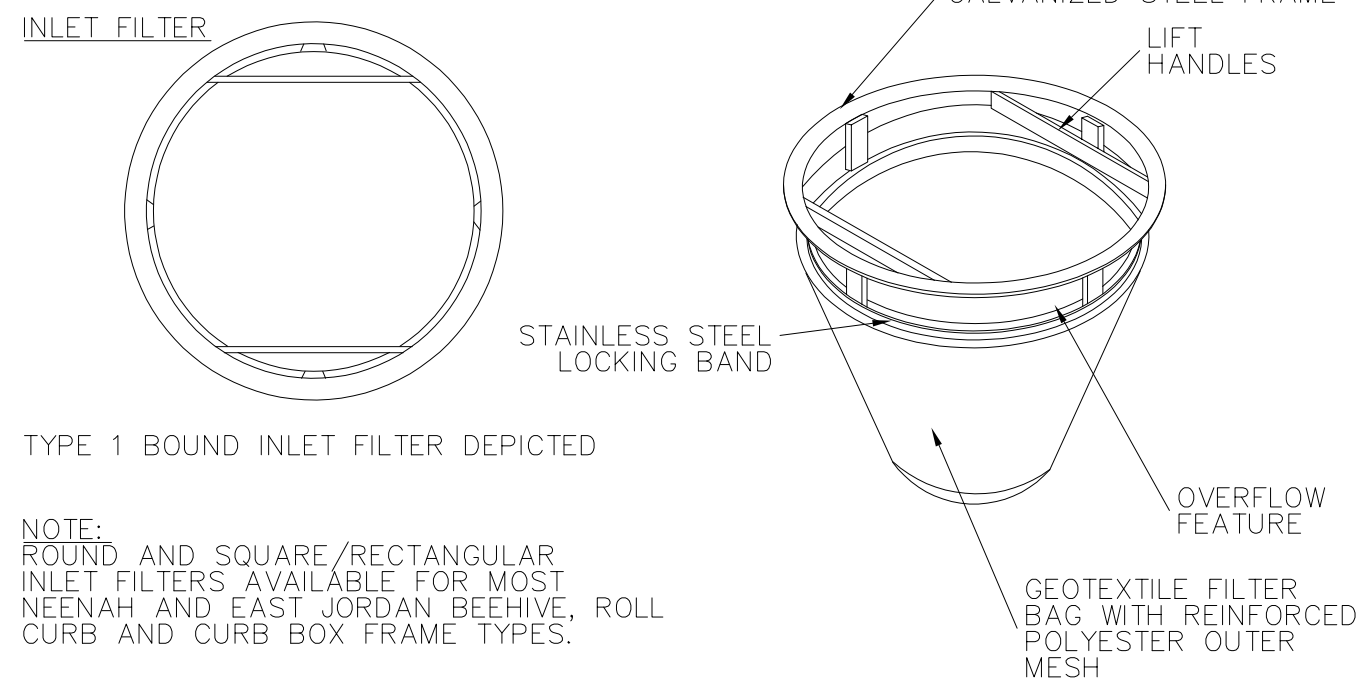


SPLICE DETAIL—PLAN VIEW

 United States Department of Agriculture Natural Resources Conservation Service	File No. IL-ENG-49		Date 8/1/14
	Drawing No.		
	Page 1 of 1		
	Sheet of		
SILT FENCE			Designed
			Drawn M. QUINONES
			Checked
			Approved

2 DROP INLET PROTECTION

SCALE: NTS

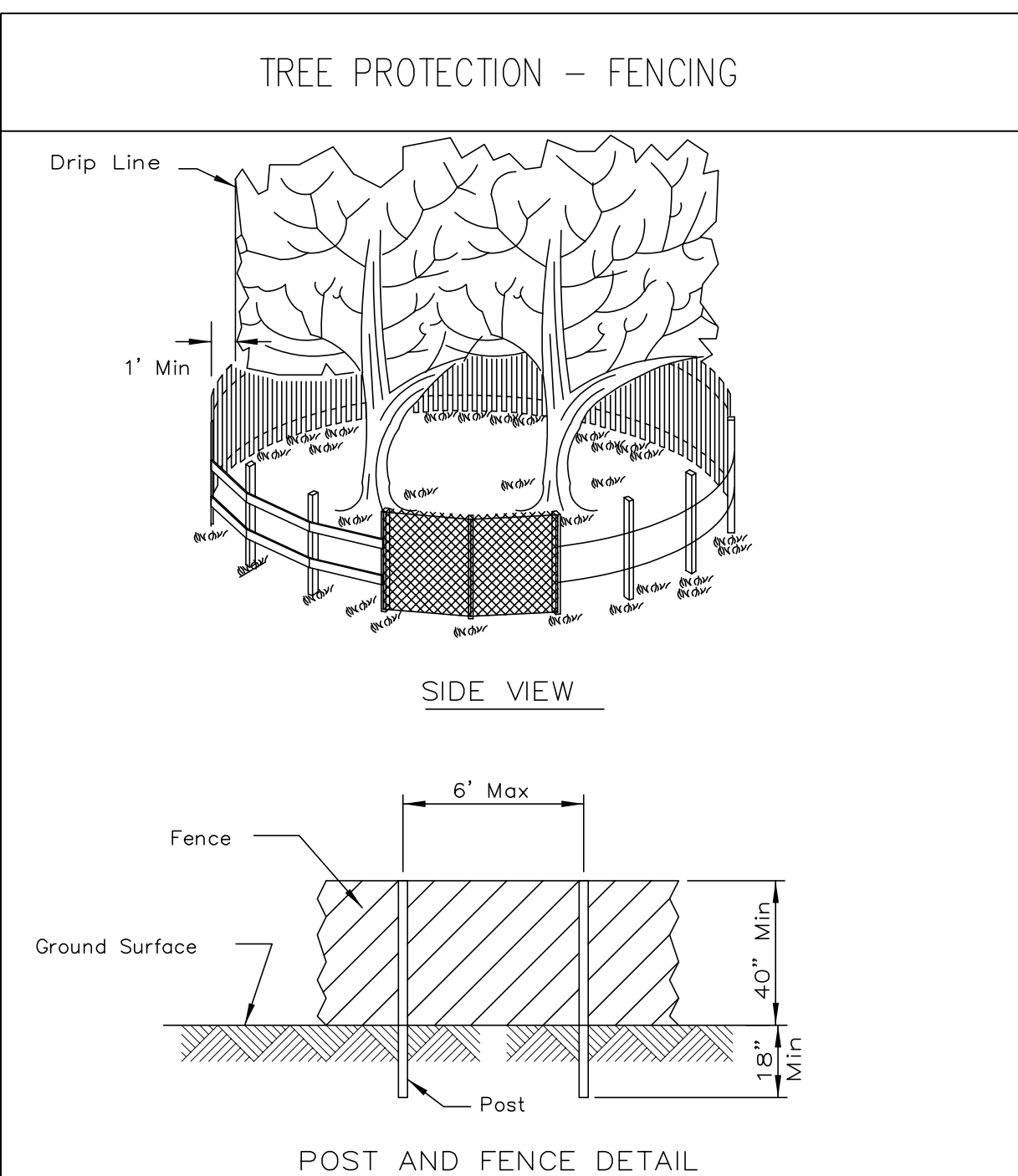


**CERTIFICATION: All IPP INLET FILTERS
CONFORM TO IDOT SPECIFICATIONS AS OUTLINED
IN ARTICLE 1081.15 OF IDOT'S STANDARDS
SPECIFICATIONS GUIDE

DOT	Std	Grote	Size	Opening	Filter	P/N	Aprox	Dim's	Notes
Type 1,5		22,75	dia	21	2200-1		D=22		Round
Type 8		33	dia	23 (mhole)	2600-8		D=26,5		Round
Type 8	3V	28,75	x 6,9	20	2122-4		W=21	H=11	Curb box, flap
Type 11	3V	28,75	x 11,38	27 x 9,875	2181-11CXB		W=28,	H=11	Curb box, flap
Type 6		22	x 22,75	20,25 x 23,4	2122-6		W=21,	H=22	Rolled curb
Type 4		22,75	x 17,25	20 x 16 + 20	2122-4		W=21,	H=12	Rect flact
Type 4		21,75	x 14,75	20 x 13	2112-4		W=21,	H=14	Rect flact
Type 20, 21, 22		22,5	x 22,5	20 x 20	2222-20		W=22,	H=22	Square flact
Type 20		22,5	x 22,5	20 x 20	2222-20		W=22,	H=22	Square flact
Type 24		24	x 22,5	20 x 14,5	2322-24		W=23,	H=22	Rect flact
Type 24		24	x 22,5	20 x 20,5	2322-24		W=23,	H=22	Rect flact

4 TREE PROTECTION - FENCING

SCALE: NTS



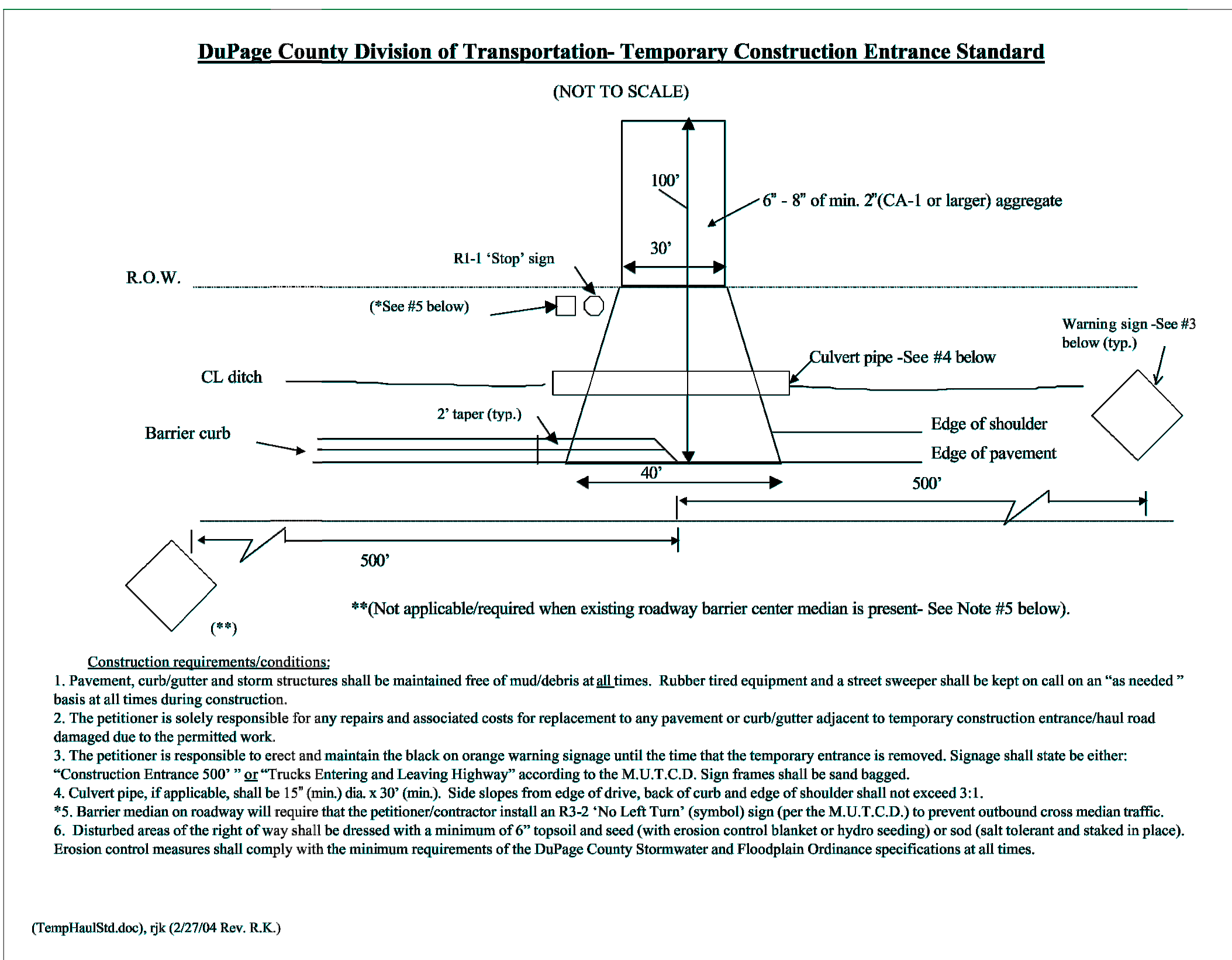
NOTES:

1. The fence shall be located a minimum of 1 foot outside the drip line of the tree to be saved and in no case closer than 5 feet to the trunk of any tree.
2. Fence posts shall be either standard steel posts or wood posts with a minimum cross sectional area of 3.0 sq. in.
3. The fence may be either 40" high snow fence, 40" plastic web fencing or any other material as approved by the engineer/inspector.

REFERENCE			STANDARD DWG. NO.
Project	_____		IL-690
Designed	_____ Date _____		SHEET 1 OF 1
Checked	_____ Date _____		DATE 4-7-94
Approved	_____ Date _____		

(F) STABILIZED CONSTRUCTION ENTRANCE PLAN

SCALE: NTS



wight

Wight & Company
wightco.com

2500 North Frontage Road
Darien, IL 60561

P 630.969.7000
F 630.969.7979

VILLAGE COMMENT RESPONSE	03/09/2023
ADDENDUM 1	03/06/2023
VILLAGE COMMENT RESPONSE	02/13/2023
ISSUE FOR BID GROUP 3	01/19/2023
PERMIT RESPONSE #1	01/13/2023
80% CONSTRUCTION DOCUMENTS	10/28/2022
50% CONSTRUCTION DOCUMENTS	07/29/2022
REV	DATE
DESCRIPTION	

WILLOWBROOK
WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

EROSION CONTROL DETAILS

Project Number:
210107

Drawn By:
NKH

Sheet:

C3.04

SEDIMENT AND EROSION CONTROL

- TRADE CONTRACTOR SHALL ABIDE BY EROSION CONTROL MEASURES OUTLINED IN THE "ILLINOIS URBAN MANUAL, LATEST EDITION" BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA).
- SILT FENCING AND OTHER EROSION CONTROL DEVICES SHALL BE INSTALLED BY THE TRADE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES TO THE LIMITS DELINEATED ON THE PLANS. NO DISTURBANCE OF LAND IS ALLOWED OUTSIDE THE SILT FENCE AND PROJECT LIMITS AS INDICATED ON THE PLANS.
- ALL REQUIRED EROSION CONTROL MEASURES INCLUDING DETENTION BASIN CONSTRUCTION SHALL BE IN PLACE PRIOR TO ANY OTHER SITE DISTURBANCE.
- ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES MUST BE INSPECTED WEEKLY AND MAINTAINED. INSPECTIONS SHALL ALSO BE MADE AFTER A RAINFALL EVENT OF 1/2 INCH OR GREATER OR EQUIVALENT SNOW FALL EVENT. IF NECESSARY, REPAIR OR REPLACEMENT MUST BE PERFORMED IMMEDIATELY TO ASSURE EFFECTIVE PERFORMANCE OF THEIR INTENDED FUNCTIONS.
- IF DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. ALL PUMPED DISCHARGES SHALL BE ROUTED THROUGH APPROPRIATELY DESIGNED SEDIMENT TRAPS, BASINS, SEDIMENT FILTER BAGS OR EQUIVALENT MEASURES.
- IF STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OR PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED WITH PERMANENT SOIL STABILIZATION MEASURES.
- MAJOR AMENDMENTS OF THE SITE DEVELOPMENT OR EROSION AND SEDIMENTATION CONTROL PLANS SHALL BE SUBMITTED TO THE MUNICIPALITY TO BE APPROVED IN THE SAME MANNER AS THE ORIGINAL PLANS.
- THE TRADE CONTRACTOR SHALL STABILIZE THE SIDE SLOPES GREATER THAN 10:1 OR WHERE SHOWN ON THE PLANS BY INSTALLING NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET, WITHIN 5 DAYS AFTER FINAL GRADE IS ACHIEVED AND FOLLOWING SEEDING WITH THE TEMPORARY SEED MATRIX. THE EROSION CONTROL BLANKET SHALL BE INSTALLED AS REQUIRED BY THE MANUFACTURER'S STANDARDS AND SPECIFICATIONS.
- TEMPORARY STOCKPILES SHALL HAVE A SILT FENCE ERECTED AROUND THE PERIMETER OF THE PILE. IF A PILE IS TO REMAIN IN PLACE FOR MORE THAN 14 DAYS, IT SHALL BE TEMPORARY SEEDED.
- IF AN EXISTING ON-SITE ASPHALT ACCESS IS NOT PRESENT THEN, THE TRADE CONTRACTOR SHALL PROVIDE A CONSTRUCTION ACCESS ROAD CONSTRUCTED OF IDOT CA-1 FOR 100 FEET IN LENGTH. THE TRADE CONTRACTOR SHALL MAINTAIN THE ADJACENT ROADS FREE OF MUD AND SEDIMENT AT ALL TIMES. REFER TO THE ILLINOIS URBAN MANUAL STANDARD DRAWING IL-630.
- ALL ACCESS TO AND FROM THE CONSTRUCTION SITE IS TO BE RESTRICTED TO THE CONSTRUCTION ENTRANCE.
- TRADE CONTRACTOR IS RESPONSIBLE FOR KEEPING PUBLIC STREETS CLEAR OF DIRT, DUST, DEBRIS AND MUD ON A DAILY BASIS FOR THE ENTIRE CONSTRUCTION PERIOD BY A MEANS ACCEPTABLE TO LOCAL AUTHORITIES.
- ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING (NOT FLUSHING) BEFORE THE END OF EACH WORKDAY AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL.
- CONTRACTOR IS TO SUBMIT ALL REPORTS, CORRESPONDENCE AND DOCUMENTATION REQUIRED BY THE SWPPP AND IEPA PERMIT TO THE CIVIL ENGINEER FOR REVIEW AND RECORD.

DUST CONTROL MEASURES

ACTIVITY	DESCRIPTION
STABILIZED CONSTRUCTION ENTRANCE	A STABILIZED PAD OF EXISTING ASPHALT OR NEW AGGREGATE LOCATED WHERE TRAFFIC IS ENTERING OR LEAVING THE CONSTRUCTION SITE. ALSO, USED AS A TEMPORARY PARKING FACILITY TO REDUCE TRAFFIC ON DISTURBED SOILS.
PERMANENT VEGETATION	ESTABLISHING PERMANENT VEGETATIVE COVER TO STABILIZE DISTURBED AREAS. APPROPRIATELY SELECTED PLANTS WILL BE ESTABLISHED TO REDUCE EROSION AND STABILIZE THE SITE IN A MANNER THAT ADOPTS TO SITE CONDITIONS.
WATERING TRUCK	A WATERING TRUCK SHALL BE PROVIDED BY THE CONTRACTOR. USAGE OF THE TRUCK WILL BE BASED ON THE REQUEST OF THE OWNER. OWNER'S REPRESENTATIVE, ENGINEER AND/OR MUNICIPALITY TO KEEP THE DUST DOWN.

SEEDING INFORMATION AND SCHEDULE

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.
PERMANENT SEEDING		A,B,C									
SODDING		E									
TEMPORARY SEEDING		D									
SEEDING SPECS											
A. (1A) GRASS TURF MIXTURE REFER TO L2.01 FOR MIXTURE COMPOSITION											
B. (4A) NATIVE SEED MIXTURE REFER TO L2.01 FOR MIXTURE COMPOSITION											
C. (4B) RAIN GARDEN PLANT MATERIAL REFER TO L2.01 FOR MIXTURE COMPOSITION											
D. (7) TEMPORARY EROSION CONTROL MIXTURE PLANTING IN SPRING: SEED OATS 40 LBS/ACRE IF PLANTING IN FALL, WINTER WHEAT 7 WHEATGRASS STERILE HYBRID 50 LBS/ACRE											
E. SOD											
*IRRIGATION NEEDED DURING JUNE AND JULY											
**IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD											
() IDOT STANDARD											
DO NOT SEED OF SOD IF GROUND IS FROZEN OR IF THERE IS FROST.											

STORM WATER POLLUTION PREVENTION NOTES

- THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) FOR STORMWATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.
- THE PERMITTEE MUST COMPLY WITH ALL CONDITIONS OF THE GENERAL PERMIT. ANY NON-COMPLIANCE CONSTITUTES A VIOLATION OF THE IEPA ACT AND THE CLEAN WATER ACT AND CAN BE GROUNDS FOR ENFORCEMENT ACTION, PERMIT REVOCATION, MODIFICATION, RE-ISSUANCE, TERMINATION, OR DENIAL OF A PERMIT RENEWAL.
- SITE DESCRIPTION
 - THE CONSTRUCTION ACTIVITY CONSISTS OF CLEARING AND GRUBBING, MASS GRADING, CONSTRUCTION OF UTILITIES, DRIVES AND SIDEWALKS, PROPOSED BUILDING/ENCLOSURES, AND SITE LANDSCAPING.
 - THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION IS: TOPSOIL STRIPPING, MASS GRADING, UTILITY CONSTRUCTION, PROPOSED BUILDING FOUNDATIONS, HARD SURFACE CONSTRUCTION, FINE GRADING, PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATION.
 - THE TOTAL AREA OF THE SITE IS 48.21 ACRES. 5.47 ACRES ARE EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES. THE PROPOSED CURVE NUMBER FOR THE DISTURBANCE AREA IS 59.
 - THE SOIL TYPES THAT ARE PREVALENT ON THE SITE ARE:ELLIOTT SILT LOAM, MARKHAM SILT LOAM, SANGHVI SILTY CLAY LOAM. THE PROJECT CONSISTS OF PREDOMINANTLY TYPE A SOILS ACCORDING TO THE NRCS SOIL SURVEY.
 - THIS PLAN INDICATES DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFFSITE SEDIMENT TRACKING, AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, AND THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR.
 - THE RECEIVING WATERS ARE THE WETLANDS LOCATED EAST OF THE SITE. THE ULTIMATE RECEIVING WATER IS GLEN CREST CREEK.
 - SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES
 - ESTABLISH THE STABILIZED CONSTRUCTION ENTRANCE.
 - INSTALL SILT FENCE.
 - INSTALL TREE PROTECTION AS NOTED.
 - INSTALL INLET/OUTLET PROTECTION MEASURES.
 - PERFORM SITE CLEARING AND DEMOLITION ACTIVITIES AS SHOWN ON PLANS.
 - PERFORM SITE GRADING AS SHOWN ON GRADING PLANS.
 - STOCKPILE TOP SOIL, PRESERVE SILT FENCE AROUND PILE.
 - INSTALL UTILITIES WITH APPROPRIATE TEMPORARY AND PERMANENT INLET AND OUTLET PROTECTION.
 - TEMPORARILY STABILIZE ANY BARREN AREAS.
 - CONSTRUCTION OF BUILDING/ENCLOSURE FOUNDATIONS, DRIVES, SIDEWALKS, PARKING LOTS, AND ENTRANCES.
 - INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY.
 - BMP INSTALLATION.
 - LANDSCAPE INSTALLATION & RESTORATION (SEED, BLANKET, SOD) INSTALLATION, INCLUDING SURFACE BMP
 - ACHIEVE FINAL SITE STABILIZATION.
 - PERMANENTLY STABILIZE ALL EROSION AND SEDIMENT CONTROL MEASURES UPON THE ESTABLISHMENT OF PERMANENT GROUND COVER.
 - CONTROLS
 - THIS PLAN ADDRESSES THE VARIOUS CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED ABOVE. FOR EACH MEASURE, THE CONTRACTOR(S) WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION.
 - EROSION AND SEDIMENT CONTROLS – THE PERMITTEE SHALL INSTALL AND MAINTAIN EFFECTIVE EROSION CONTROLS AND SEDIMENT CONTROLS TO MINIMIZE THE DISCHARGE POLLUTANTS. AT A MINIMUM, SUCH CONTROLS MUST BE INSTALLED AND MAINTAINED TO:
 - CONTROL STORM WATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION
 - CONTROL STORM WATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND TOTAL STORM WATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND TO MINIMIZE DOWNSTREAM CHANNEL AND STREAM BANK EROSION
 - MINIMIZE THE AMOUNT OF SOIL EXPOSED DURING CONSTRUCTION ACTIVITY
 - MINIMIZE THE DISTURBANCE OF STEEP SLOPES
 - MINIMIZE SEDIMENT DISCHARGES FROM THE SITE. THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS MUST ADDRESS FACTORS INCLUDING THE RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT ON THE SITE.
 - PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATER, DIRECT STORM WATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORM WATER INFILTRATION, UNLESS INFEASIBLE
 - MINIMIZE SOIL COMPACTED AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
 - STABILIZATION PRACTICES – STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATION OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OR PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. STABILIZATION PRACTICES MAY INCLUDE: TEMPORARILY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF NATIVE VEGETATION, STAGES OR STAGGERED DEVELOPMENT, AND OTHER APPROPRIATE MEASURES. A RECORD OF THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE INCLUDED IN THE PLAN. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED PROVIDED IN PARAGRAPHS (a) and (b) BELOW.
 - WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
 - ON AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD CAN BE USED.
 - STRUCTURAL PRACTICES – PRACTICES INSTALLED TO DIVERT FLOWS FROM EXPOSED SOILS, FLOW FLOWS OR RUNOFF AND OTHERWISE FILTER OR LIMIT THE DISCHARGE OF POLLUTANTS FROM THE SITE SUCH AS, BUT NOT LIMITED TO: SILT FENCES, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, CHECK DAMS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, ROCK OUTLET PROTECTION, REINFORCED EROSION CHANNELS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. STRUCTURAL PRACTICES SHOULD BE ON UPLAND SOILS TO THE DEGREE PRACTICABLE.
 - THE FOLLOWING REQUIREMENTS APPLY TO SEDIMENT BASINS IF SUCH STRUCTURAL PRACTICES WILL BE INSTALLED TO REDUCE STORM WATER DISCHARGES.
 - WHEN DISCHARGING FROM THE SEDIMENT BASIN, UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE IN ORDER TO MINIMIZE THE DISCHARGE. a.b. PREVENT EROSION OF THE SEDIMENT BASIN USING STABILIZATION CONTROLS (E.G., EROSION CONTROL BLANKETS), AT THE INLET AND OUTLET USING EROSION CONTROL AND VELOCITY DISSIPATION DEVICES. a.c. SEDIMENT BASINS SHALL BE DESIGNED TO FACILITATE MAINTENANCE, INCLUDING SEDIMENT REMOVAL FROM THE BASINS, AS NECESSARY.
 - USE OF TREATMENT CHEMICALS – THE USE OF ALL POLYMER FLOCCULANTS OR TREATMENT CHEMICALS AT THE SITE SHALL BE IDENTIFIED. DOSAGE OF TREATMENT CHEMICALS SHALL BE IDENTIFIED ALONG WITH ANY INFORMATION FROM ANY MATERIAL SAFETY DATA SHEET. STORAGE AREAS FOR CHEMICALS AND ANY INFORMATION FROM THE MANUFACTURER'S SPECIFICATIONS SHALL BE PROVIDED. TREATMENT CHEMICALS MUST BE STORED IN AREAS WHERE THEY WILL NOT BE EXPOSED TO PRECIPITATION.
 - BEST MANAGEMENT PRACTICES FOR IMPAIRED WATERS – THIS SITE DOES NOT DISCHARGE DIRECTLY TO AN IMPAIRED WATER IDENTIFIED ON THE AGENCY'S WEBSITE FOR 303(d) LISTING FOR SUSPENDED SOLIDS, TURBIDITY, OR SILTATION
 - POLLUTION PREVENTION – POLLUTION PREVENTION MEASURES SHALL BE DESIGNED, INSTALLED, IMPLEMENTED, AND MAINTAINED TO MINIMIZE THE DISCHARGE OF POLLUTANTS. AT A MINIMUM, SUCH MEASURES MUST BE DESIGNED, INSTALLED, IMPLEMENTED AND MAINTAINED TO:
 - MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WELL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
 - MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTER AND OTHER MATERIALS PRESENT ON THE SITE TO PRECIPITATION AND TO STORM WATER. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS AND IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND RESPONSE PROCEDURES.
 - OTHER CONTROLS
 - WASTE DISPOSAL THE SOLID WASTE MATERIALS INCLUDING TRASH, CONSTRUCTION DEBRIS, EXCESS CONSTRUCTION MATERIAL, MACHINERY, TOOLS AND OTHER SOLID ITEMS WILL BE COLLECTED AND DISPOSED OFF-SITE BY THE CONTRACTOR.
 - THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THE NECESSARY PERMITS FOR SUCH DISPOSAL.
 - BURNING ON THE SITE IS NOT ALLOWED.
 - NO SOLID MATERIALS SHALL BE SHALL BE DISCHARGED TO WATERS OF THE STATE.
 - THE CONTRACTOR SHALL BE IN COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL AND SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS. SANITARY SEWAGE SHALL BE DISCHARGED TO THE PROPOSED SANITARY SEWER CONSTRUCTED PER IEPA AND LOCAL STANDARDS.
 - APPROPRIATE CONTROLS AND MEASURES SHALL BE IN PLACE TO REDUCE OR ELIMINATE DISCHARGES FROM CONCRETE OR ASPHALT.
 - CONTRACTOR TO INCLUDES SPILL RESPONSE PROCEDURES AND PROVISIONS FOR REPORTING IF THERE ARE RELEASES IN EXCESS OF REPORTABLE QUANTITIES.
 - CONTRACTOR TO MINIMIZE THE DISCHARGE OF POLLUTANTS FORM ALL WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR OTHER CONTROL.
 - MINIMIZE THE EXPOSURE OF BUILDING MATERIAL, BUILDING PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS , SANITARY WASTE, AND OTHER MATERIALS PRESENT ONSITE TO PRECIPITATION EXPOSURE.
 - MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS AND IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND RESPONSE MEASURES.

- SPILL PREVENTION AND RESPONSE PROCEDURES – THE CONTRACTOR WILL TRAIN ALL PERSONNEL IN THE PROPER HANDLING AND CLEANUP OF SPILLED HAZARDOUS SUBSTANCES OR OIL. NO SPILLED HAZARDOUS SUBSTANCES OR OIL WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORM WATER WILL BE CONTAINED ON SITE BY MEASURES SUCH AS, BUT NOT LIMITED TO ABSORBENTS, BOOMS, STATIC RESISTANT PADS, SUMP BOOMS AND OTHER CLEAN UP EQUIPMENT UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORM WATER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S SUPERINTENDENT TO BE PROPERLY TRAINED, AND TO TRAIN ALL PERSONNEL IN SPILL PREVENTION AND CLEAN UP PROCEDURES.
 - IN ORDER TO PREVENT OR MINIMIZE THE POTENTIAL FOR A SPILL OF HAZARDOUS SUBSTANCES OR OIL TO COME INTO CONTACT WITH STORM WATER, THE FOLLOWING STEPS WILL BE IMPLEMENTED:
 - ALL HAZARDOUS SUBSTANCES OR OIL (SUCH AS PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, PANTS, PAINT SOLVENTS, CLEANING SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE CURING COMPOUNDS AND ADDITIVES, ETC.) WILL BE STORED IN A SECURE LOCATION, WITH THEIR LIDS ON, PREFERABLY UNDER COVER, WHEN NOT IN USE.
 - THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS WILL BE KEPT AT THE PROJECT.
 - A SPILL CONTROL AND CONTAINMENT KIT WILL BE PROVIDED AT THE STORAGE SITE.
 - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED INSIDE THE JOB TRAILER WASH AREA. THE CONTRACTOR WILL BE TRAINED REGARDING THESE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL HAZARDOUS WASTE DISCOVERED OR GENERATED AT THE PROJECT SITE IS DISPOSED OF PROPERLY BY A LICENSED HAZARDOUS MATERIAL DISPOSAL COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR NOT EXCEEDING HAZARDOUS WASTE STORAGE REQUIREMENTS MANDATED BY THE EPA OR STATE AND LOCAL AUTHORITY.
 - IN THE EVENT OF A SPILL OF HAZARDOUS SUBSTANCES OR OIL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
 - ALL MEASURES MUST BE TAKEN TO CONTAIN AND ABATE THE SPILL AND TO PREVENT THE DISCHARGE OF THE HAZARDOUS SUBSTANCE OR OIL TO STORM WATER OR OFF-SITE. (THE SPILL AREA MUST BE KEPT WELL VENTILATED AND PERSONNEL MUST WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INHALE OR CONTACT WITH THE MOST DANGEROUS SUBSTANCES.)
 - DETERMINE WHETHER THE SPILL IS REPORTABLE.
 - IF THE SPILL IS DETERMINED TO BE REPORTABLE THE EPA SHALL BE CONTACTED IMMEDIATELY.
 - IF THE RELEASE IS EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY, THE SWPPP MUST BE MODIFIED WITHIN SEVEN (7) CALENDAR DAYS OF KNOWLEDGE OF THE DISCHARGE TO PROVIDE A DESCRIPTION OF THE RELEASE, THE CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF THE RELEASE. THE SWPPP MUST IDENTIFY MEASURES TO PREVENT THE RECURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.
 - IF THE RELEASE IS DETERMINED TO NOT BE REPORTABLE (LESS THAN A REPORTABLE QUANTITY) IT SHALL BE NOTED ON AN INSPECTION REPORT AS AN UNSATISFACTORY ITEM AND THE CORRECTIVE ACTION ITEM SHALL BE NOTED AND DATED AS IMPLEMENTED.
 - THE CONTRACTOR'S SUPERINTENDENT WILL BE THE SPILL PREVENTION AND RESPONSE COORDINATOR. HE WILL DESIGNATE THE INDIVIDUALS WHO WILL RECEIVE SPILL PREVENTION AND RESPONSE TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND RESPONSE. THE NAMES OF THESE PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.
- BEST MANAGEMENT PRACTICES FOR POST-CONSTRUCTION STORM WATER MANAGEMENT – STRUCTURAL MEASURES SHOULD BE PLACED ON UPLAND SOILS TO THE DEGREE ATTAINABLE. THIS PERMIT ONLY ADDRESSES THE INSTALLATION OF POST-CONSTRUCTION STORM WATER MANAGEMENT MEASURES, AND NOT THE OPERATION AND MAINTENANCE OF SUCH STRUCTURES AFTER THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION. THE CONTRACTOR IS RESPONSIBLE FOR ONSITE THE INSTALLATION OF POST-CONSTRUCTION STORM WATER MANAGEMENT MEASURES TO FINAL STABILIZATION OF THE SITE, AND IS NOT RESPONSIBLE FOR MAINTENANCE AFTER STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY HAVE BEEN ELIMINATED FROM THE SITE.
 - POST-CONSTRUCTION STORM WATER MANAGEMENT PRACTICES HAVE BEEN DESIGNED AND INCLUDED TO RETAIN THE GREATEST AMOUNT OF POST-DEVELOPMENT STORM WATER RUN-OFF PRACTICABLE. GIVEN THE SITE AND PROJECT CONSTRAINTS, THREE INFILTRATION TRENCHES HAVE BEEN INCLUDED IN THE DESIGN. THE INFILTRATION TRENCHES WILL USED TO FILTER OUT POLLUTANTS BY INFILTRATION OF THE RUN-OFF THROUGH AGGREGATE AND FABRIC. POST-DEVELOPMENT FLOWS THAT EXCEED THE INFILTRATION TRENCH PRE-DEVELOPMENT FLOWS WILL BE CONTROLLED BY THE INFILTRATION TRENCHES. THE INFILTRATION TRENCH WILL CAPTURE AND RETAIN RUNOFF ON-SITE TO OFFSET THE ADDITIONAL POST DEVELOPMENT FLOW.
 - VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL AS NECESSARY TO PROVIDE A NON-EROSIVE VELOCITY FLOW FORM THE STRUCTURE TO A WATER COURSE THAT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED (E.G. MAINTAINING CHANNEL CONDITIONS, SUCH AS THE HYDROPERIOD AND HYDRODYNAMICS PRESENT PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES.
- MAINTENANCE
 - THE CONTRACTOR SHALL MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, THE SEDIMENT AND EROSION CONTROL MEASURES IDENTIFIED ON THIS PLAN UNTIL THE SITE IS STABILIZED. ITEMS IN NEED OF REPAIR SHALL BE ADDRESSED AS SOON AS PRACTICABLE.
 - SILT FENCE SHALL BE RESTORED TO MEET THE STANDARDS OR REMOVED AND REPLACED AS NEEDED. SEDIMENT SHALL BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS REACHED 1/3 THE HEIGHT OF THE FABRIC.
 - STABILIZED CONSTRUCTION ENTRANCE THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONT PUBLIC STREETS. THIS SHALL BE DONE BY TOP DRESSING WITH TOP SOIL, OR BY REMOVE AND REPLACED TOP LAYER OR WASHING THE ENTRANCE. THE SEDIMENT WASHED ON THE PUBLIC RIGHT OR WAY WILL BE REMOVED IMMEDIATELY.
 - SEDIMENTATION BASINS/TRAPS – THE SEDIMENTS SHALL BE REMOVED WHEN 50% OF THE TOTAL ORIGINAL CAPACITY IS OCCUPIED BY THE SEDIMENT. IN NO CASE SHALL THE SEDIMENT BE BUILT UP TO REMOVE THAT 1 FOOT BELOW THE CREST ELEVATION. AT THIS STAGE, THE BASIN SHALL BE CLEANED OUT TO RESTORE ITS ORIGINAL VOLUME.
 - INLET/OUTLET PROTECTION SEDIMENT SHALL BE REMOVED WHEN 50% OF THE TOTAL ORIGINAL CAPACITY IS OCCUPIED BY THE SEDIMENT. ALL SEDIMENT SHALL BE REMOVED PRIOR TO LARGE RAIN EVENTS. FILTER MATERIAL FOR BASKET TYPE INLET PROTECTION SHALL BE POWER WASHED.
 - ROCK DAMS/FILTERS– SEDIMENT SHALL BE REMOVED WHEN 50% OF THE TOTAL ORIGINAL CAPACITY IS OCCUPIED BY THE SEDIMENT. ADDITIONAL STONE SHALL BE ADDED OR DAM/FILTER STABILIZED AS NECESSARY.
 - SEDIMENT FILTER BAG– SEDIMENT SHALL BE REMOVED WHEN 50% OF THE TOTAL ORIGINAL CAPACITY IS OCCUPIED BY THE SEDIMENT. BAG SHALL BE REPLACED AND DISPOSED OF PROPERLY. BAG SHALL BE INSPECTED FOR HOLES, DAMAGED, AND REPLACED AS NECESSARY.
 - VEGETATIVE EROSION CONTROL MEASURES – THE VEGETATIVE GROWTH OF TEMPORARY AND PERMANENT SEEDING, SODDING, VEGETATIVE CHANNELS, VEGETATIVE FILTERS, ETC SHALL BE MAINTAINED FREQUENTLY AND SUPPLY ADEQUATE WATERING AND FERTILIZER. THE VEGETATIVE COVER SHALL BE RESEED AS NECESSARY.
 - STRAW WATTLES – STRAW WATTLES SHALL BE INSPECTED FREQUENTLY AND SHALL BE REPAIRED OR REMOVED AND REPLACED AS NEEDED.
 - RIP RAP – RIP RAP SHALL BE INSPECTED AFTER HIGH FLOWS FOR ANY SCOUR BENEATH THE RIP RAP OR FOR STONES THAT HAVE BEEN DISLOGGED. REPAIRS SHALL BE MADE IMMEDIATELY.
- INSPECTIONS
 - A QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OR BY THE END OF THE FOLLOWING BUSINESS OR WORK DAY THE DAY IS 0.5 INCHES OR GREATER. INSPECTIONS SHALL BE CONDUCTED WITHIN 24 HOURS OF THE END OF THE FOLLOWING BUSINESS OR WORK DAY. THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROLS MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER (P.E.), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORM WATER INSPECTOR (CESSW) OR OTHER KNOWLEDGEABLE PERSON WHO POSSESSES THE SKILL TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORM WATER QUALITY AND TO ASSESS THE EFFECTIVENESS OF ANY SEDIMENT AND EROSION CONTROL MEASURES SELECTED TO CONTROL THE QUALITY OF STORM WATER DISCHARGES FORM THE CONSTRUCTION ACTIVITIES.
 - INSPECTIONS MAY BE REDUCED TO ONCE PER MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS. WEEKLY INSPECTIONS WILL RECOMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS 0.5" OR GREATER RAIN EVENT, OR A DISCHARGE DUE TO SNOW MELT OCCURS.
 - DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY, WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICATION IMPACTS TO RECEIVING WATERS, LOCATIONS WHERE VEHICLES ENTER OR EXIST THE SITE SHALL BE INSPECTED FOR EVIDENCE OR OFFSITE SEDIMENT TRACKING.
 - BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN THE PLAN IN ACCORDANCE WITH PARAGRAPH 1 (SITE DESCRIPTION) OF THESE NOTES AND POLLUTION PREVENTION MEASURES IDENTIFIED IN THE PLAN IN ACCORDANCE WITH PARAGRAPH 2 (CONTROLS) OF THESE NOTES SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. SUCH MODIFICATIONS SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION.
 - A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH 5 ABOVE SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THE REPORT SHALL BE SIGNED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE BY EMAIL AT: EPA.SWNONCOM@ILLINOIS.GOV, TELEPHONE OR FAX WITHIN 24 HOURS OF AN INCIDENT OF NONCOMPLIANCE FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING ANY INSPECTION CONDUCTED, OR FOR VIOLATIONS OF ANY CONDITION OF THIS PERMIT. THE PERMITTEE SHALL COMPLETE AND SUBMIT WITHIN 5 DAYS "INCIDENCE OF NONCOMPLIANCE" REPORT FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING AN INSPECTION CONDUCTED, OR FOR VIOLATIONS OF ANY CONDITION OF THIS PERMIT. SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE.
 - ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY THE PERMITTEE.
 - AFTER THE INITIAL CONTACT HAS BEEN MADE WITH THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE, ALL REPORTS OF NONCOMPLIANCE SHALL BE MAILED TO THE AGENCY AT THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

- NON-STORM WATER DISCHARGES
THE FOLLOWING SOURCES OF NON-STORMWATER MAY BE COMBINED WITH STORMWATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY ADDRESSED IN THIS PLAN.
 - FIRE FIGHTING ACTIVITIES
 - WATER MAIN/ HYDRANT FLUSHING
 - WATERING FOR DUST CONTROL
 - IRRIGATION DRAINAGE FOR VEGETATIVE GROWTH
 - WASH WATER WHERE DETERGENTS ARE NOT USED UNCONTAMINATED GROUND WATERNON-FIRE FIGHTING DISCHARGES FROM WATER MAINS AND PUMPS SHALL NOT BE PERMITTED TO FLOW DIRECTLY ONTO THE SOIL WITHOUT ENERGY DISSIPATERS SUFFICIENT TO REDUCE VELOCITIES TO A NON-EROSIVE RATE. ALL SITE DE-WATERING, INCLUDING PUMP DISCHARGE SHALL PASS THROUGH SEDIMENT CONTROL DEVICES PRIOR TO LEAVING THE SITE. THE FOLLOWING SOURCES OF NON-STORMWATER ARE PROHIBITED FROM BEING COMBINED WITH STORM WATER DISCHARGES:
 - CONCRETE AND WASTEWATER FROM WASHOUT OF CONCRETE (UNLESS MANAGED BY AN APPROPRIATE CONTROL
 - DRYWALL COMPOUND
 - WASTEWATER FROM WASHOUT AND CLEANOUT FOR STUCCO AND PAINT
 - FORM RELEASE OILS
 - CURING COMPOUNDS
 - CONSTRUCTION MATERIALS, FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE
 - SOAPS, SOLVENTS, OR DETERGENTS
 - TOXIC OR HAZARDOUS SUBSTANCES FORM A SPILL OR OTHER RELEASE
 - OR ANY OTHER POLLUTANT THAT COULD CAUSE OR TEND TO CAUSE WATER POLLUTION
- RETENTION OF RECORDS
A. THE CONTRACTOR SHALL RETAIN COPIES OF STORM WATER POLLUTION PREVENTION PLANS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIODS OF AT LEAST THREE YEARS FROM THE DATE THAT THE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE AGENCY AT ANY TIME.
B. THE CONTRACTOR SHALL RETAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.
C. NOTICE OF TERMINATION UPON FINAL STABILIZATION OF THE SITE, THE PERMITTEE SHALL SUBMIT A \ COMPLETED NOTICE OF TERMINATION IN ACCORDANCE WITH NPDES PERMIT NO. ILR10.

STORM WATER POLLUTION PREVENTION PLAN

WILLOWBROOK WILDLIFE CENTER – PHASE B & C

LOCATION OF DEVELOPMENT	LEGAL DESCRIPTION
525 S. PARK BLVD	26 39N 10E
STREET ADDRESS	1/4 SECTION TOWNSHIP RANGE
VILLAGE OF GLEN ELLYN	
MUNICIPALITY	GLEN CREST CREEK NAME OF RECEIVING WATERS

OWNER/DEVELOPER CERTIFICATION

FOREST PRESERVE DISTRICT OF DUPAGE
35580 NAPERVILLE ROAD
WHEATON, IL
"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERTY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINES AND IMPRISONMENT FOR KNOWING VIOLATIONS."

SIGNED: _____ DATE: _____
OWNER/DEVELOPER

CONTRACTOR'S CERTIFICATION

WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN, IL 60561
"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."
I HAVE READ AND UNDERSTAND ALL OF THE INFORMATION AND REQUIREMENTS STATED IN THE STORM WATER POLLUTION PREVENTION PLANS FOR THE ABOVE REFERENCED PROJECT.

SIGNED: _____ DATE: _____
CONSTRUCTION MANAGER

NAME: _____ TITLE: _____

FIRM: _____

ADDRESS: _____ TELEPHONE: _____



Wight & Company
wightco.com

2500 North Frontage Road
Darien, IL 60561

P 630.969.7000
F 630.969.7979

VILLAGE COMMENT RESPONSE	03/09/2023
ADDENDUM 1	03/06/2023
VILLAGE COMMENT RESPONSE	02/13/2023
ISSUE FOR BID GROUP 3	01/19/2023
PERMIT RESPONSE #1	01/13/2023
80% CONSTRUCTION DOCUMENTS	10/28/2022
50% CONSTRUCTION DOCUMENTS	07/29/2022

REV	DESCRIPTION	DATE

WILLOWBROOK WILDLIFE CENTER

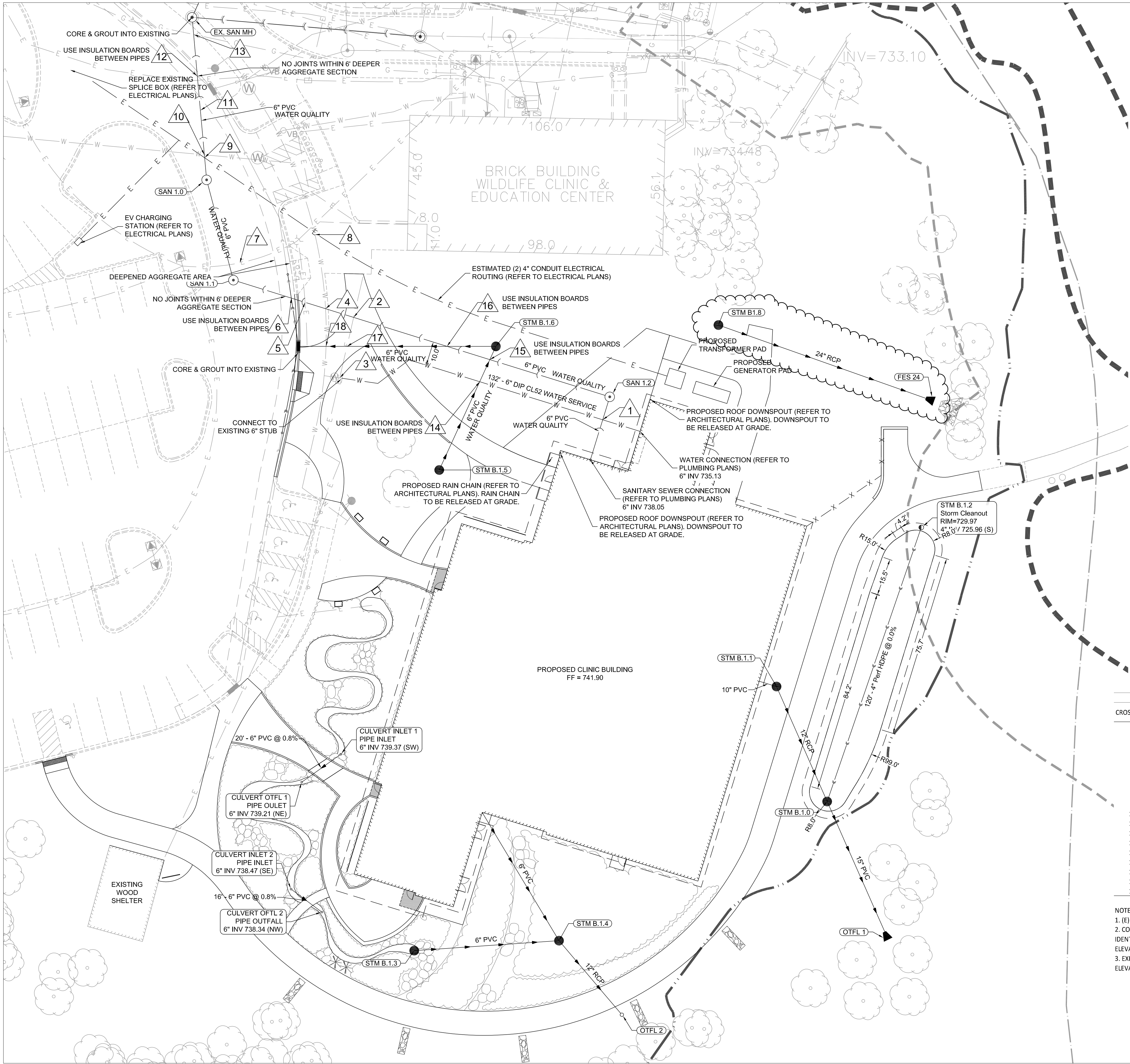
525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

STORMWATER POLLUTION PREVENTION PHASE B & C

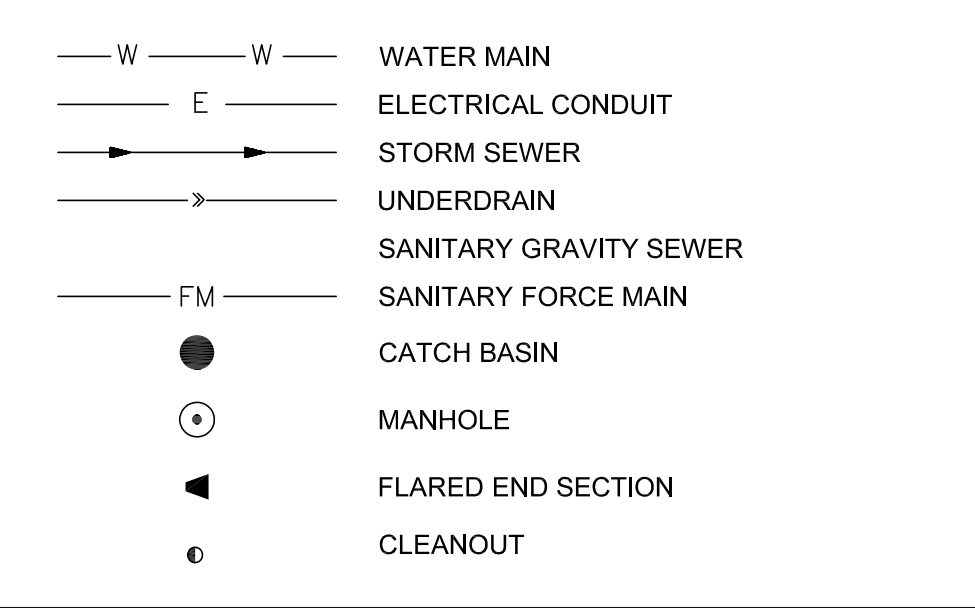
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Drawn By:
NKH
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\\wightco.com\ntServ\DuPage Forest Preserve\210107_WWC Phase II\01\11 Drawings\02 CD\210107 04.00 UTILITY PLAN - PH B.dwg kbuck Mar 09, 2023 11:55:30 am

Wight & Company
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LEGEND



UTILITY NOTES:

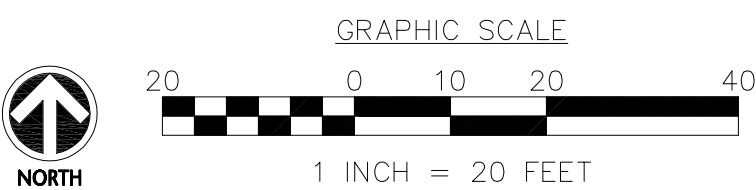
- CONTRACTOR TO VERIFY ALL EXISTING UTILITY LOCATIONS, SIZES, SLOPES, INVERTS, ETC. AND CONTACT ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS/DISCREPANCIES.
- CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.
- ALL EXISTING UTILITY STRUCTURES SHALL BE ADJUSTED AS NECESSARY TO MATCH FINISH GRADE. ALL EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED.
- CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS AT THE BUILDING WITH THE MEP TO VERIFY CONNECTION LOCATION, PIPE SIZE, AND INVERT.
- CONTRACTOR TO SEE MEP PLANS FOR ALL DETAILS, LOCATION, ROUTING, SIZE, ETC. REGARDING GAS, TELEPHONE, ELECTRIC, AND LIGHTING DESIGN. FOLLOW ALL REQUIREMENTS OF UTILITY PROVIDERS.

AS-BUILT NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT SURVEYS. ALL AS-BUILT SURVEYS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR AND BE SIGNED AND SEALED. THE CONTRACTOR SHALL SUBMIT TWO SETS OF THE "AS-BUILT" FINAL ENGINEERING DRAWINGS (I.E. RECORD DRAWINGS) AND STORMWATER MANAGEMENT CALCULATIONS UPON COMPLETION OF IMPROVEMENTS AND INCLUDE ELECTRONIC CAD FILES. THE RECORD DRAWINGS SHOULD AT LEAST INCLUDE THE FOLLOWING INFORMATION: AS-BUILT DETENTION CONTOURS, ELEVATIONS (INCLUDING DETENTION BASIN TOP OF BERM AND OVERFLOW WEIR GRADES) AND VOLUME (VERIFIED, SIGNED, & SEALED BY A PROFESSIONAL ENGINEER (PE) OR PROFESSIONAL LAND SURVEYOR (PLS)); ELEVATION, AND LOCATION (TIES TO TWO POINTS) OF ALL NEW STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINESSTOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS/BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE). ALL STORM/SANITARY SEWER STRUCTURES (INCLUDING INVERTS AND PIPE SIZES), ALL PIPES (LOCATIONS, SLOPES, LENGTHS, ETC.), OUTLET CONTROL STRUCTURES (INCLUDING RESTRICTOR SIZES AND ELEVATIONS PLUS TOP OF WALL) AND ABANDONED WATER OR SANITARY SERVICE LINES. DETAILED TOPOGRAPHIC SURVEY OF ALL HIGH POINTS, LOW POINTS, CHANGE OF SLOPE INCLUDING GUTTER GRADES, TOP OF CURB GRADES, PAVEMENT GRADES, SIDEWALK GRADES, RAMP GRADES, ETC. TO VERIFY POSITIVE DRAINAGE. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS. WITHIN DETENTION/BMP AREAS, FOR VERIFICATION OF DETENTION VOLUME AND SUBBASE GRADES, PRIOR TO BACK FILLING WITH CA-7, THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A CERTIFIED TOPO SURVEY OF AS-BUILT SUBBASE GRADES FOR ENGINEER APPROVAL AND ALSO A COPY OF RECEIPT OF THE CA-7 AGGREGATE.

UTILITY CROSSING TABLE							
CROSSING #	PROPOSED GRADE	UTILITY BELOW			UTILITY ABOVE		
		UTILITY	DIAMETER [IN]	CROWN ELEV	UTILITY	DIAMETER [IN]	BOTTOM OF PIPE [FT]
1	740.18	(P) WATR	6	735.63	(P) SS	6	738.11
2	740.52	(E) ELEC	-	-	(P) SS	6	737.40
3	740.53	(P) WATR	6	734.59	(P) ELEC	4	736.59
4	740.31	(E) WATR	8	734.59	(P) SS	6	737.34
5	740.23	(E) ELEC	-	-	(P) SS	6	737.31
6	740.01	(E) SD	12	736.64	(P) SS	6	737.27
7	740.48	(E) ELEC	-	-	(P) SS	6	737.03
8	740.21	(E) WATR	8	734.59	(P) ELEC	4	736.59
9	740.67	(P) ELEC	4	735.67	(P) SS	6	736.67
10	740.66	(E) WATR	-	-	(P) SS	6	736.66
11	740.72	(E) ELEC	-	-	(P) SS	6	736.51
12	740.84	(E) SD	8	735.87	(P) SS	6	736.40
13	740.78	(E) GAS	-	-	(P) SS	6	736.26
14	740.94	(P) WATR	6	735.00	(P) SD	6	736.51
15	740.95	(P) SD	6	736.96	(P) SS	6	737.70
16	740.79	(P) SD	6	736.73	(P) SS	6	737.61
17	740.55	(E) ELEC	-	-	(P) SD	6	736.03
18	740.39	(E) WATR	8	734.49	(P) SD	6	735.99

- NOTE:
- (E) = EXISTING, (P) = PROPOSED
 - CONTRACTOR TO CONFIRM ALL EXISTING ELEVATIONS IN THE FIELD AND SHOULD A CONFLICT BE IDENTIFIED, SUBMIT A RFI TO ENGINEER IDENTIFYING THE CONFLICTING UTILITY TYPE, SIZE, LOCATION, AND ELEVATION.
 - EXISTING ELEVATIONS MARKED WITH (-) ARE UNKNOWN. CONTRACTOR TO VERIFY LOCATION AND ELEVATION IN THE FIELD AND REPORT TO ENGINEER IN WRITING.



Wight

Wight & Company
wightco.com

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WILLOWBROOK
WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

UTILITY PLAN
PHASE B

Project Number:
210107
Drawn By:
NKH
Sheet:

C4.00B



LEGEND

— W — W —	WATER MAIN
— E —	ELECTRICAL CONDUIT
▶ — ▶	STORM SEWER
— » —	UNDERDRAIN
—) —	SANITARY GRAVITY SEWER
— FM —	SANITARY FORCE MAIN
●	CATCH BASIN
⊙	MANHOLE
◀	FLARED END SECTION
⓪	CLEANOUT

UTILITY NOTES:

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITY LOCATIONS, SIZES, SLOPES, INVERTS, ETC, AND CONTACT ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS/DISCREPANCIES.
2. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.
3. ALL EXISTING UTILITY LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO MATCH FINISH GRADE. ALL EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTION NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED.
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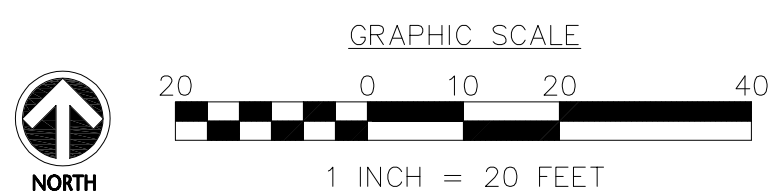
AS-BUILT NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT SURVEYS. ALL AS-BUILT SURVEYS SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR AND BE SIGNED AND SEALED. THE CONTRACTOR SHALL SUBMIT TWO SETS OF THE "AS-BUILT" FINAL ENGINEERING DRAWINGS (I.E. RECORD DRAWINGS) TO THE STORMWATER MANAGEMENT DIVISION WITHIN 30 DAYS OF COMPLETION. DRAWINGS SHALL INCLUDE ELECTRONIC CAD FILES, THE RECORD DRAWINGS SHOULD AT LEAST INCLUDE THE FOLLOWING INFORMATION: AS-BUILT DETENTION CONTOURS, ELEVATIONS INCLUDING DETENTION BASIN TOP OF BERM (AS-BUILT SURVEIL) ELEVATIONS, DETENTION BASIN ELEVATION (VERIFIED, SIGNED, & SEALED) BY A PROFESSIONAL ENGINEER (P.E.), DETENTION BASIN ELEVATION (P.L.S.), ELEVATION, AND LOCATION (TIES TO TWO POINTS) OF ALL NEW STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINES/STEEPLES, WATER SERVICE CORPORATION STATION MARKERS, MANHOLES, AND MANHOLE COVERS, SANITARY SERVICE LINES (MEASURED FROM DOWNSIDE TO MANHOLE), STORM/SANITARY SEWER STRUCTURES (INCLUDING INVERTS AND PIPE SIZES), ALL PIPES (LOCATIONS, SLOPES, LENGTHS, ETC.), OUTLET CONTROL STRUCTURES (INCLUDING RESTRICTOR SIZES AND LOCATIONS), AND ALL MANHOLES PLUS ALL DETENTION BASINS. ALL SANITARY SERVICE LINES, DETAILED TOPOGRAPHIC SURVEY OF ALL HIGH POINTS, LOW POINTS, CHANGE OF SLOPE INCLUDING GUTTER GRADES, TOP OF CURB GRADES, PAVEMENT GRADES, SIDEWALK GRADES, RAMP GRADES, ETC. TO VERIFY POSITIVE DRAINAGE. ALL DETENTION BASINS SHOULD BE VERIFIED TO THE EXISTING DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS. WITHIN DETENTION/BMP AREAS: FOR VERIFICATION OF DETENTION VOLUME AND SUBBASE GRADES, PRIOR TO BACK FILLING WITH CA-7 OR FILLER, THE CONTRACTOR SHALL SUBMIT A DETAIL TOPOGRAPHIC SURVEY OF AS-BUILT SUBBASE GRADES FOR ENGINEER APPROVAL AND ALSO A COPY OF RECEIPT OF THE CA-7 AGGREGATE.

		UTILITY CROSSING TABLE						
		UTILITY BELOW			UTILITY ABOVE			
CROSSING #	PROPOSED GRADE	UTILITY	DIAMETER [IN]	CROWN ELEV	UTILITY	DIAMETER [IN]	BOTTOM OF PIPE	CLEARANCE [FT]
1	739.87	(P) ELEC	4	735.76	(E) ELEC	4	736.59	0.50
2	739.98	(P) SD	12	734.27	(E) ELEC	4	736.09	1.82
3	739.95	(P) WATR	8	734.59	(P) SD	12	736.27	1.68
4	740.58	(E) ELEC	-	-	(P) ELEC	4	737.24	-
5	740.68	(E) SD	24	736.24	(P) ELEC	4	737.24	1.00
6	740.72	(E) GAS	-	-	(P) ELEC	4	737.24	-
7	740.18	(E) SS	8	736.62	(P) ELEC	4	737.62	1.00
8	740.18	(E) ELEC	-	-	(P) ELEC	4	737.62	-
9	739.87	(E) SS	8	735.83	(P) ELEC	4	737.62	1.79
10	739.07	(E) SS	6	736.56	(P) ELEC	4	737.56	1.00
11	739.05	(P) SD	12	734.76	(E) SS	6	735.56	0.80
12	739.16	(E) WATR	4	733.66	(P) SD	12	735.20	1.54
13	739.20	(E) ELECTRICAL CONDUITS TO BE RELOCATED AROUND (P) STORM SEWER						
14	739.27	(E) ELEC	-	-	(P) ELEC	4	737.56	-
15	739.20	(P) ELECTRICAL CONDUIT TO BE INSTALLED AROUND (E) SANITARY FORCE MAIN						
16	739.14	(P) SD	12	733.53	(E) SFFM	-	-	-
17	739.11	(P) SD	12	733.50	(P) ELEC	4	737.56	4.06
18	739.05	(P) SD	12	733.47	(E) SD	24	733.94	0.47
19	739.12	(P) SD	12	732.39	(E) GAS	-	-	-
20	738.99	(E) SD	24	735.95	(P) ELEC	4	737.56	1.61
21	739.06	(P) ELECTRICAL CONDUIT TO BE INSTALLED AROUND (E) SANITARY FORCE MAIN						
22	738.94	(E) SD	24	735.92	(P) ELEC	4	737.56	1.64
23	738.76	(P) SD	12	733.18	(P) ELEC	4	737.56	4.38
24	739.49	(P) SD	6	736.15	(E) ELEC	4	737.56	1.41
25	739.29	(E) SD	24	736.12	(P) ELEC	4	737.24	1.12
26	739.47	(E) GAS	-	-	(P) ELEC	4	737.24	-

NOTE:

1. [E] = EXISTING, [P] = PROPOSED
2. CONTRACTOR TO CONFIRM ALL EXISTING ELEVATIONS IN THE FIELD AND SHOULD A CONFLICT BE IDENTIFIED, SUBMIT A RFI TO ENGINEER IDENTIFYING THE CONFLICTING UTILITY TYPE, SIZE, LOCATION, AND ELEVATION.
3. EXISTING ELEVATIONS MARKED WITH (-) ARE UNKNOWN. CONTRACTOR TO VERIFY LOCATION AND ELEVATION IN THE FIELD AND REPORT TO ENGINEER IN WRITING.



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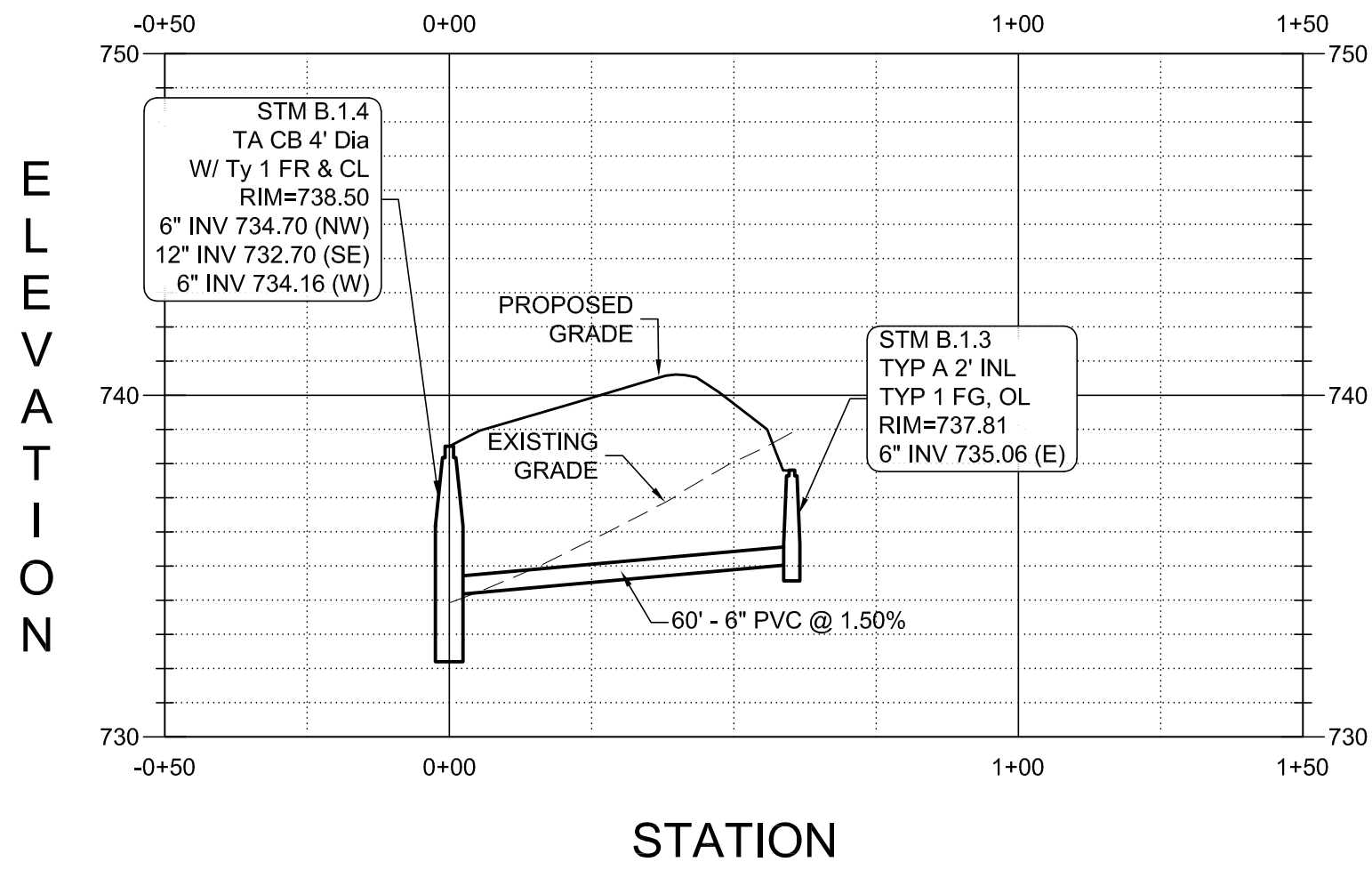
UTILITY PLAN PHASE C

Project Number:
210107
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NKH
Sheet:

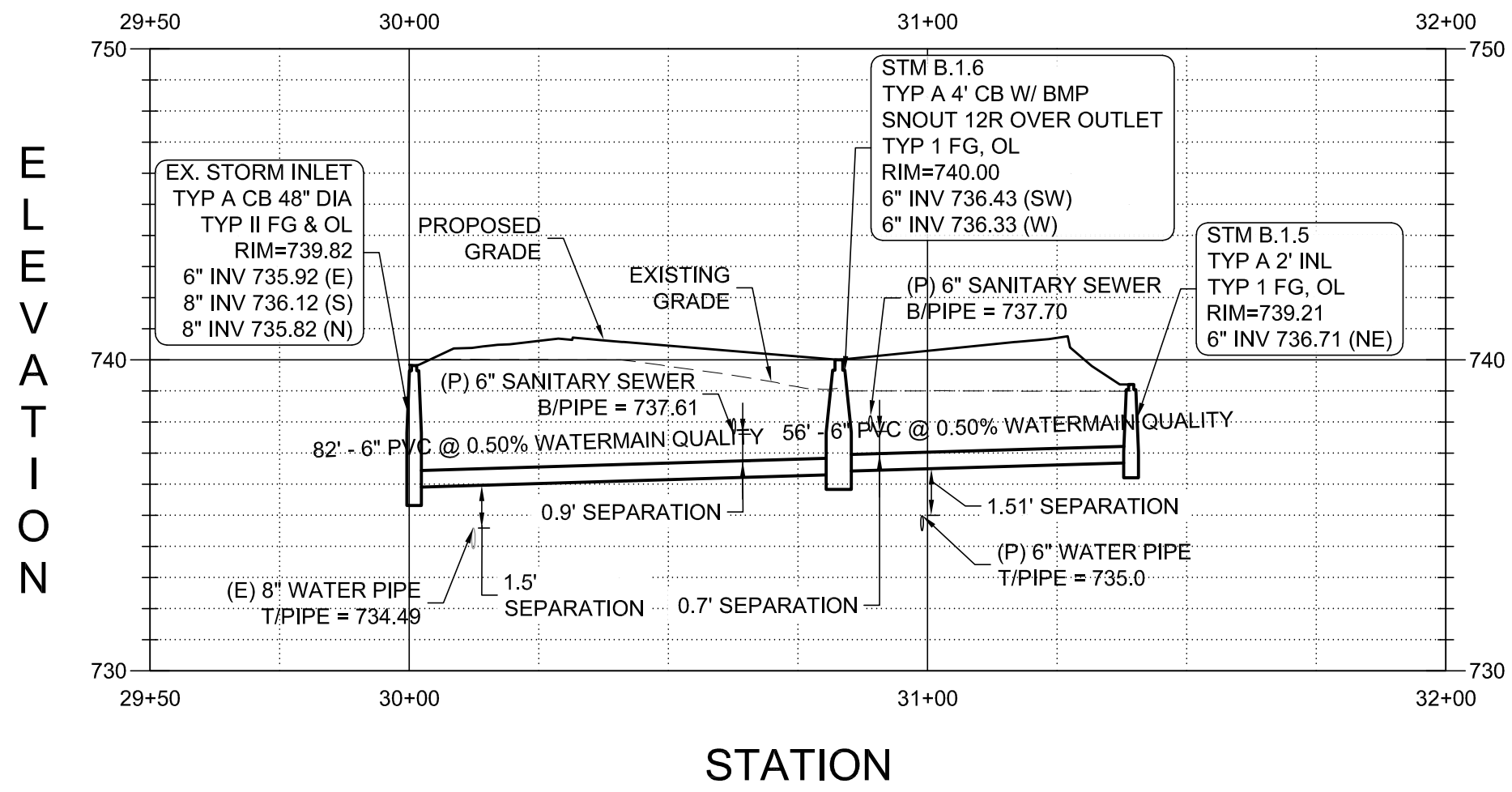
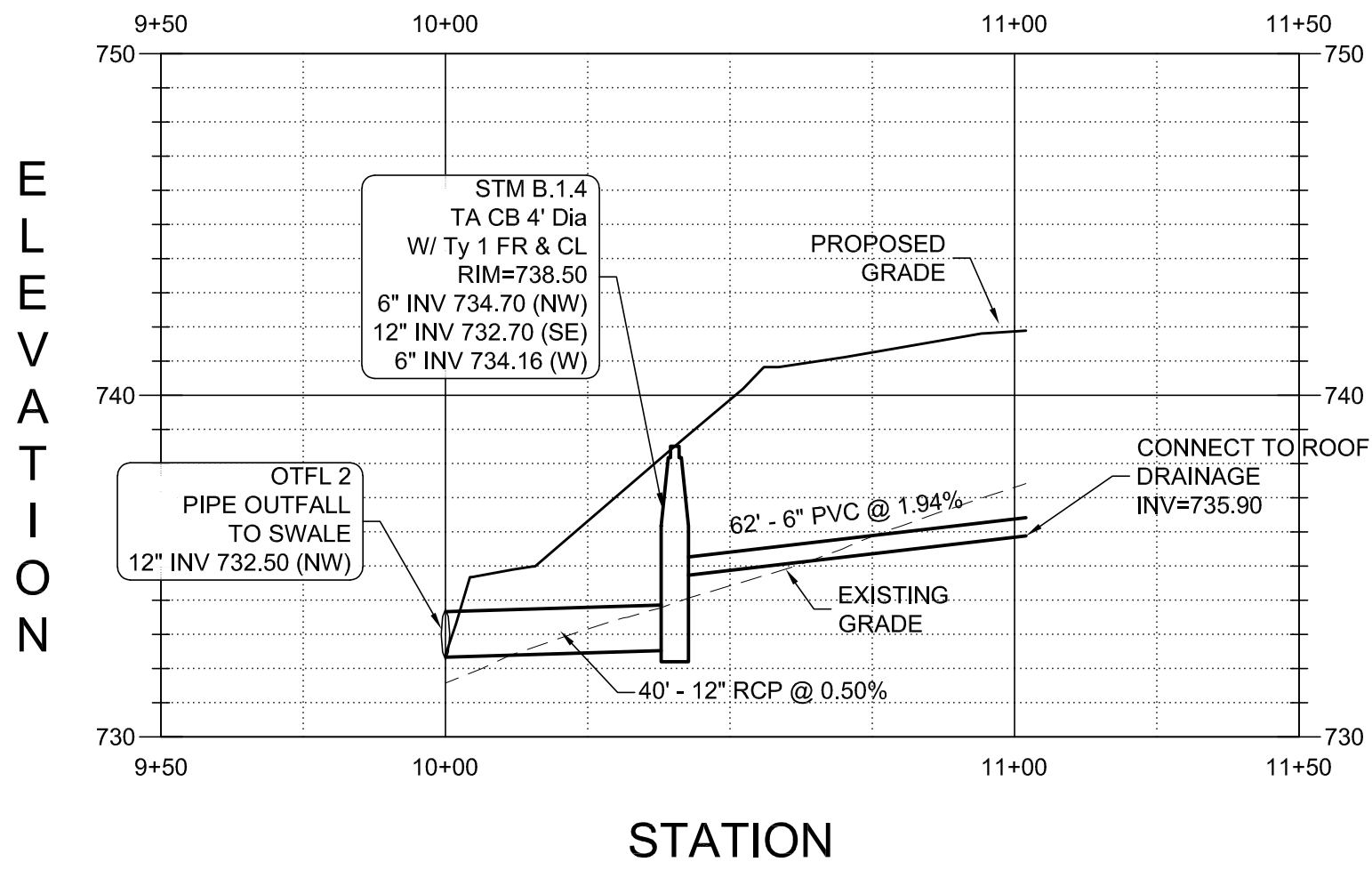
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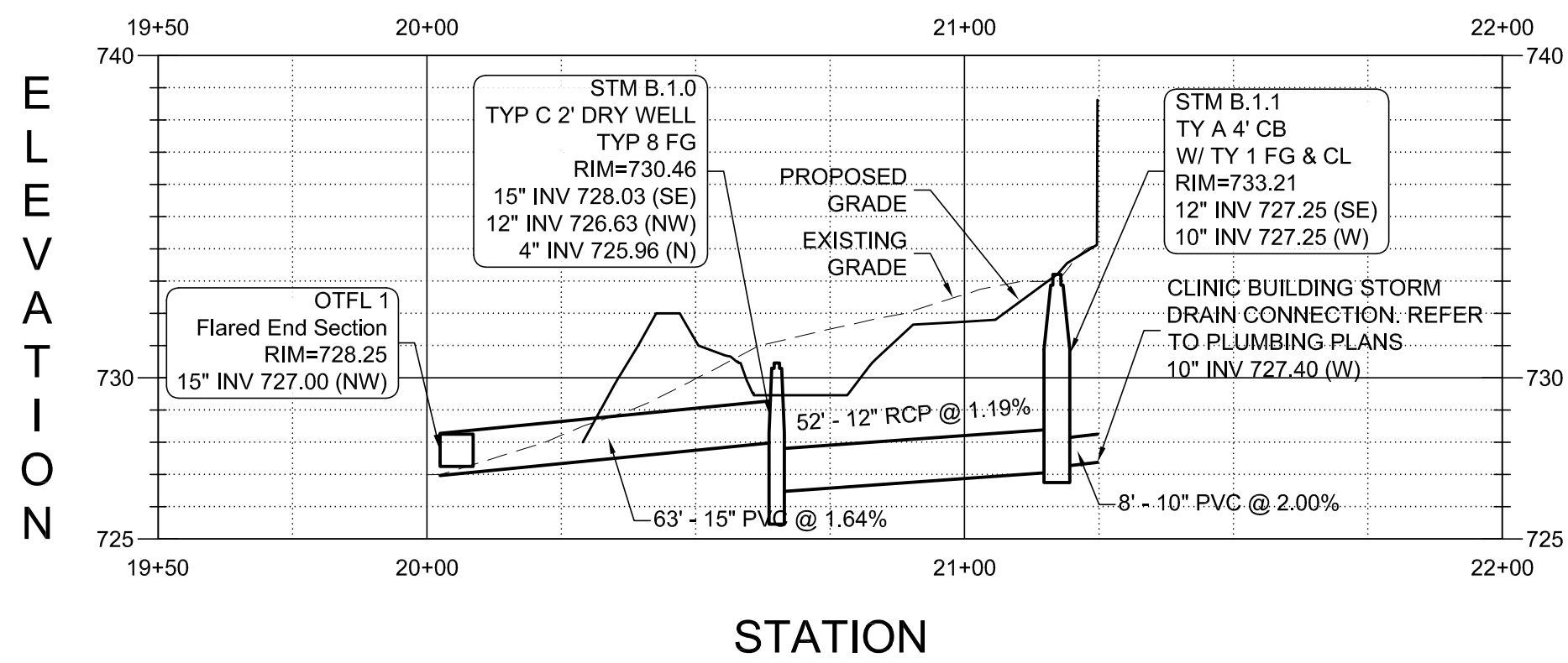
PROFILE VIEW OF RAIN CHAIN STORM SEWER



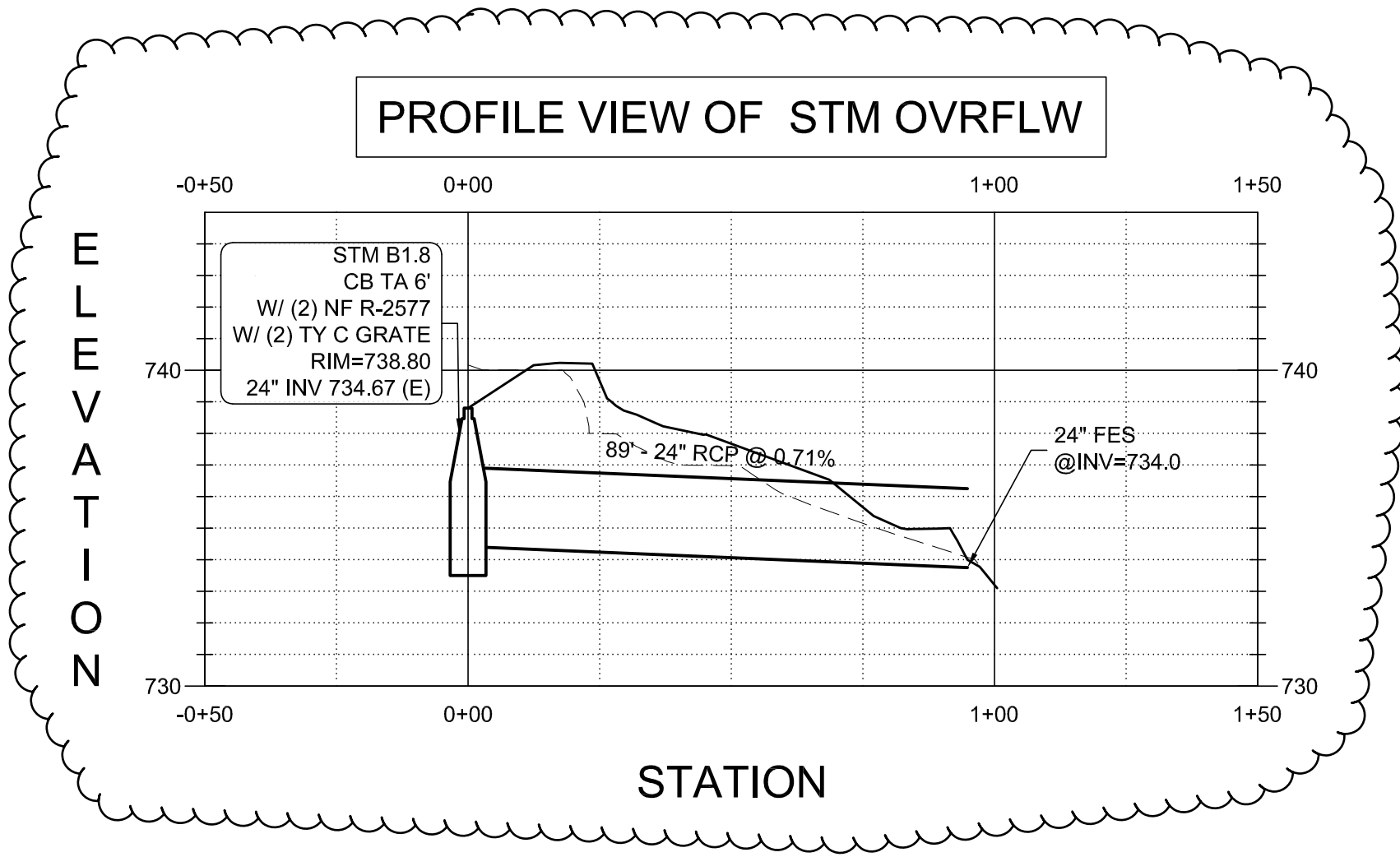
PROFILE VIEW OF ROOF DRAIN STORM SEWER



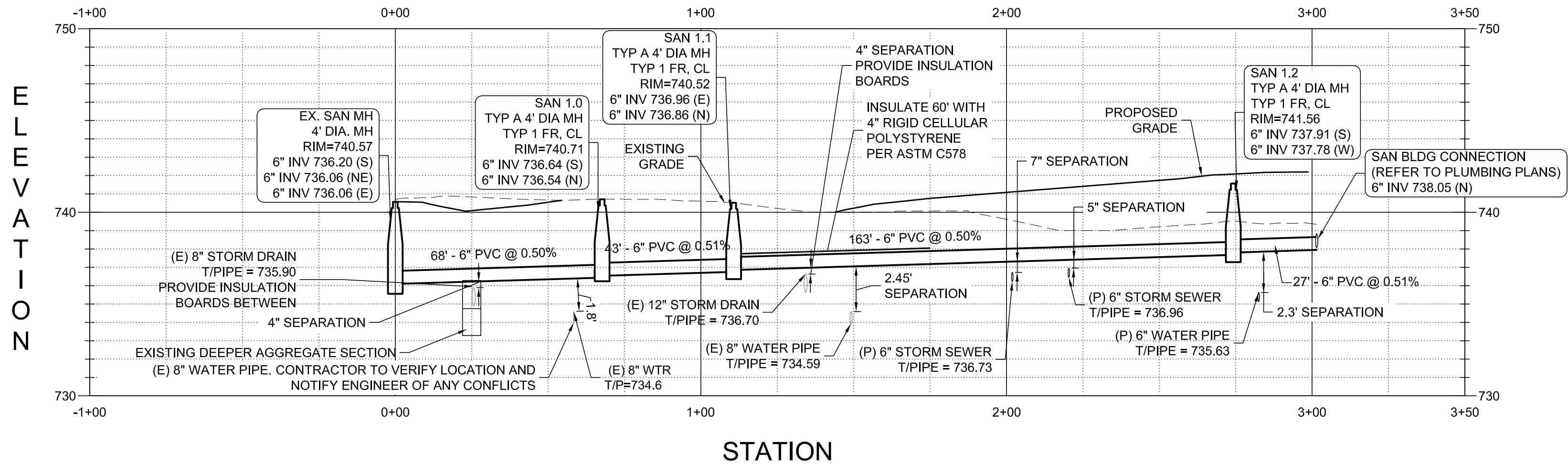
STORM SEWER PROFILE VIEW FROM RAIN DRAIN OTFL 1 TO OTFL 1



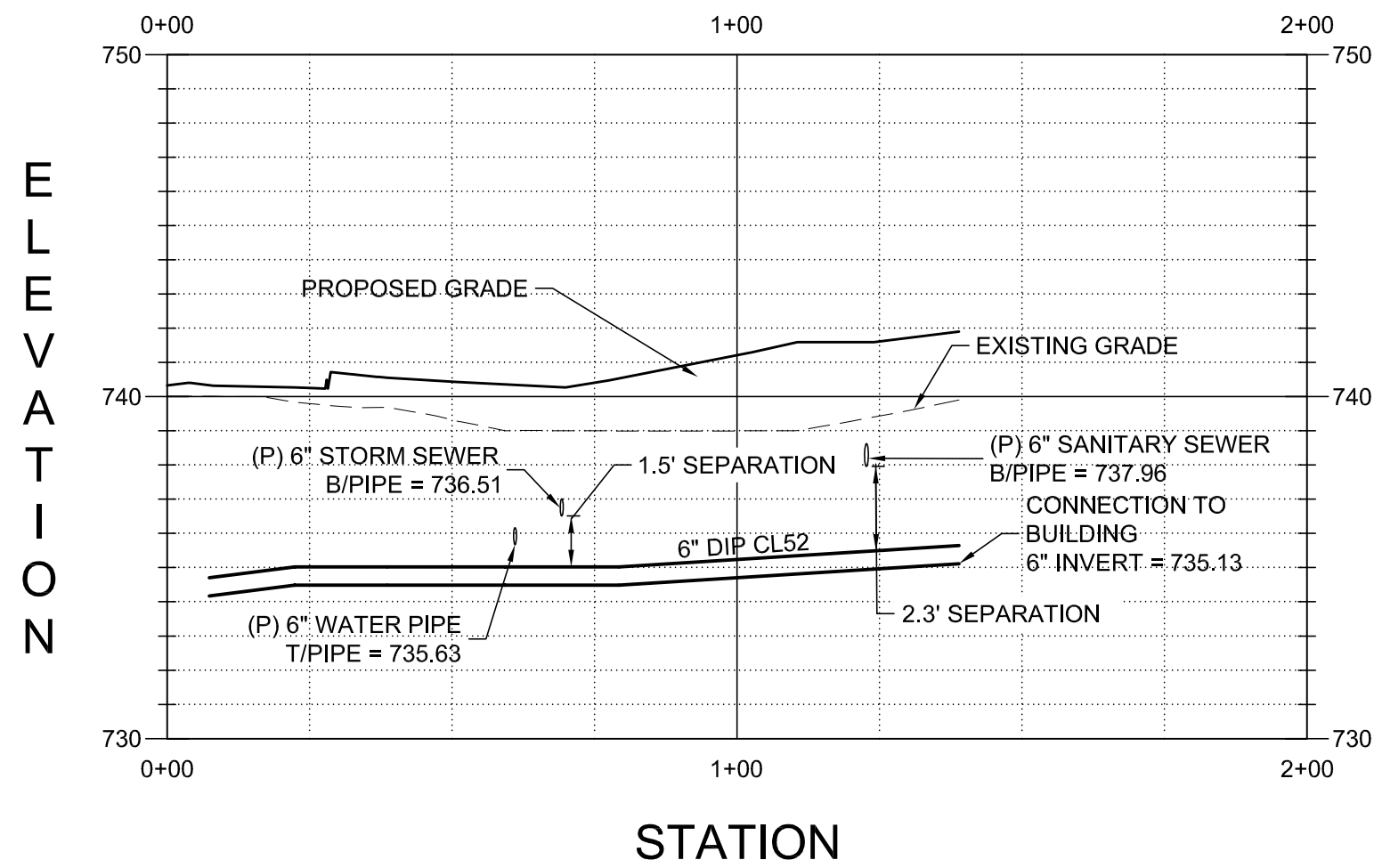
STORM SEWER PROFILE VIEW FROM EXISTING STORM INLET TO STM B.1.5



SANITARY SEWER PROFILE VIEW



WATER SERVICE PROFILE VIEW



- NOTES
- ALL EXISTING WATER, SEWER, ETC. SHOWN IS APPROXIMATE LOCATION AND BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR TO LOCATE IN THE FIELD PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE ALL RE-ROUTING, LOWERING AND OR NEW UTILITY SERVICES WITH MEP PLANS & UTILITY PROVIDER DUE TO CONFLICTS AS SHOWN ON THE PROFILES.
 - FOLLOW ALL WATER MAIN SEPARATION REQUIREMENTS FROM SHEET C0.01 GENERAL NOTES. ALL IEPA REQUIREMENTS AND STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS (LATEST EDITION) SHALL BE ADHERED TO.
 - ALL WATER MAIN AND WATER SERVICES SHALL HAVE A MINIMUM OF 5.5 FEET OF COVER.
 - ANY NEW DRY UTILITIES INSTALLED (TELE/ELEC/CABLE/GAS) SHALL AVOID PROPOSED SANITARY, STORM AND WATER UTILITIES DURING INSTALLATION. DRY UTILITIES SHALL BE SET ABOVE OR BELOW SAID UTILITIES.

HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=5'



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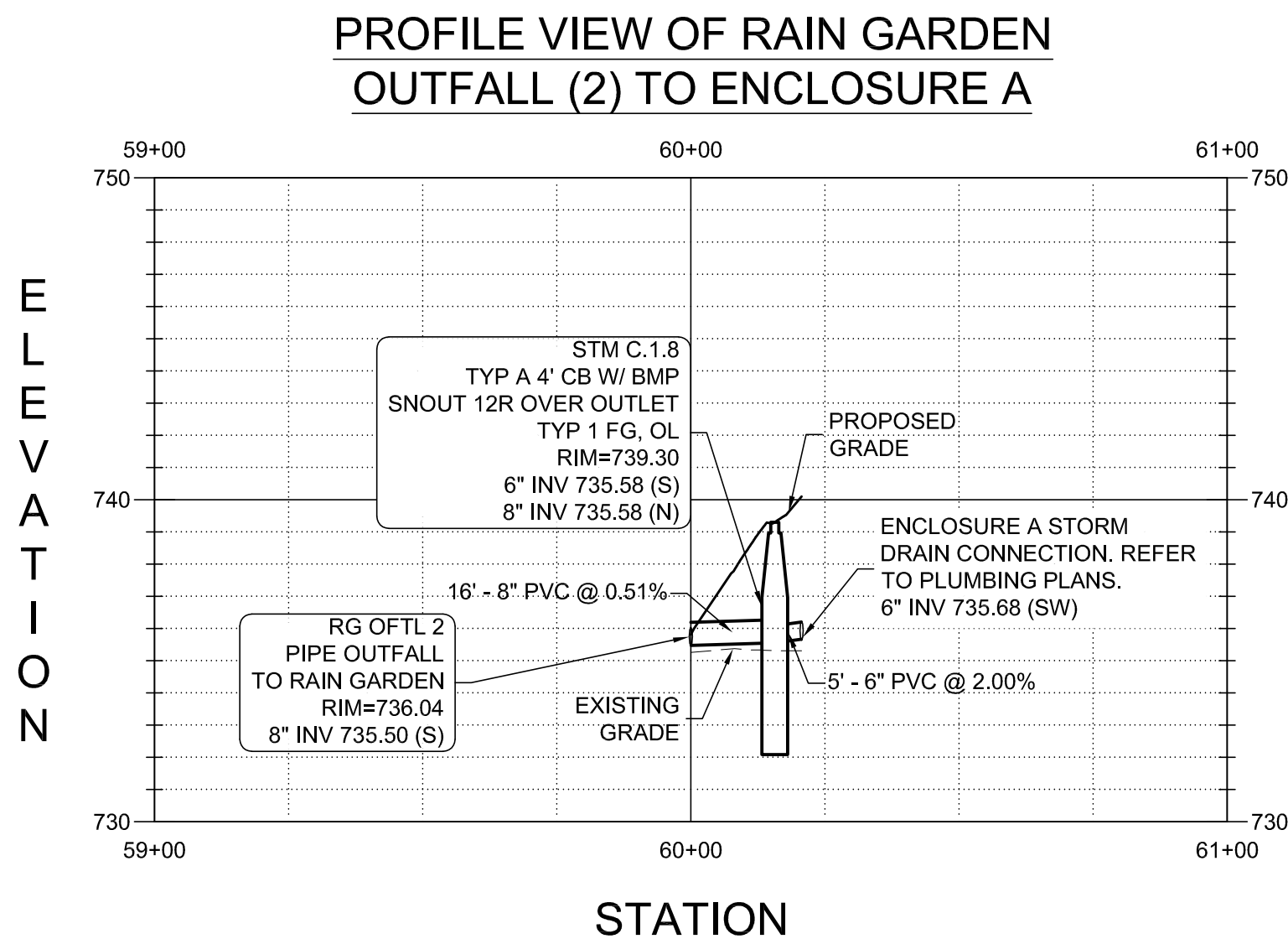
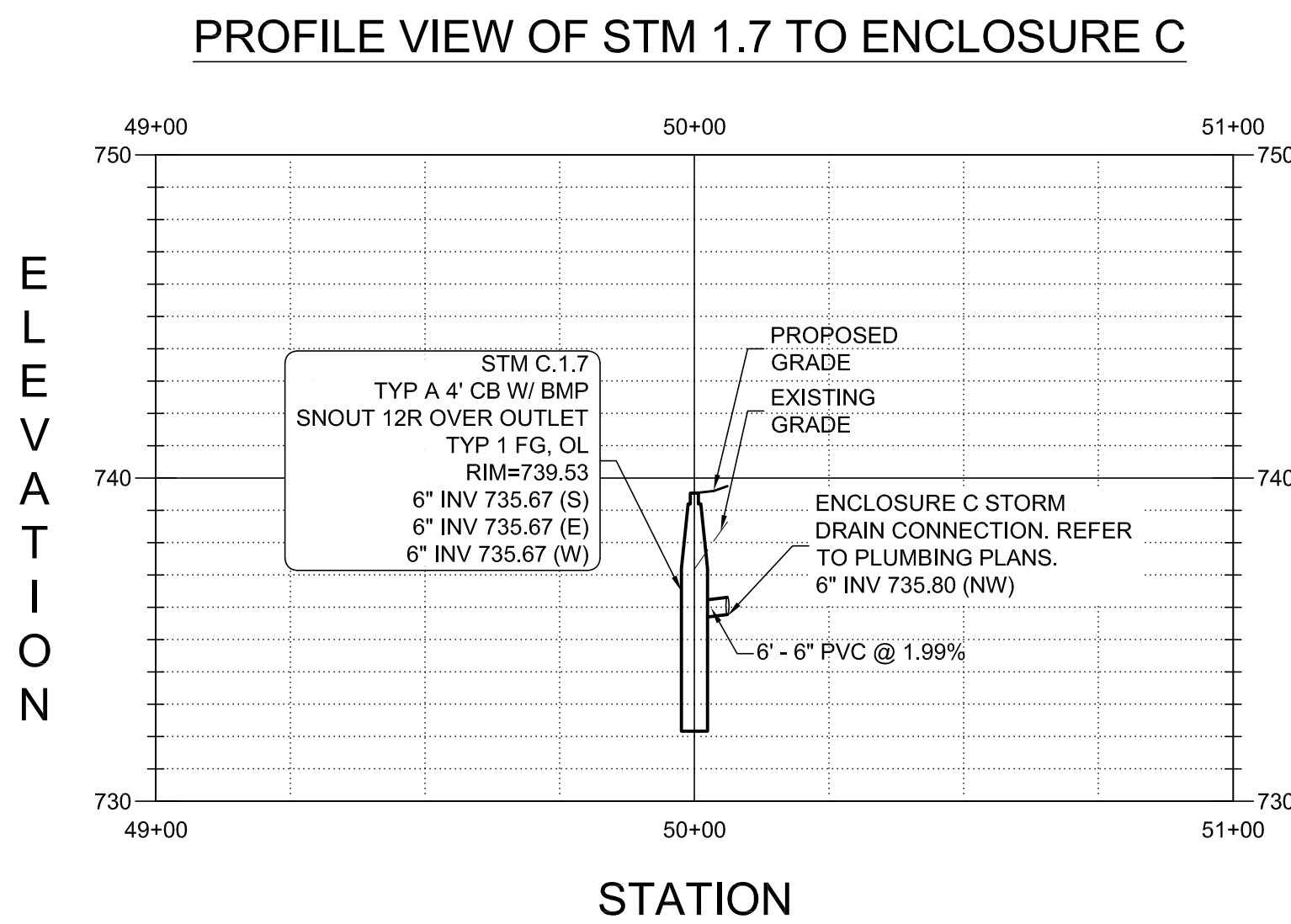
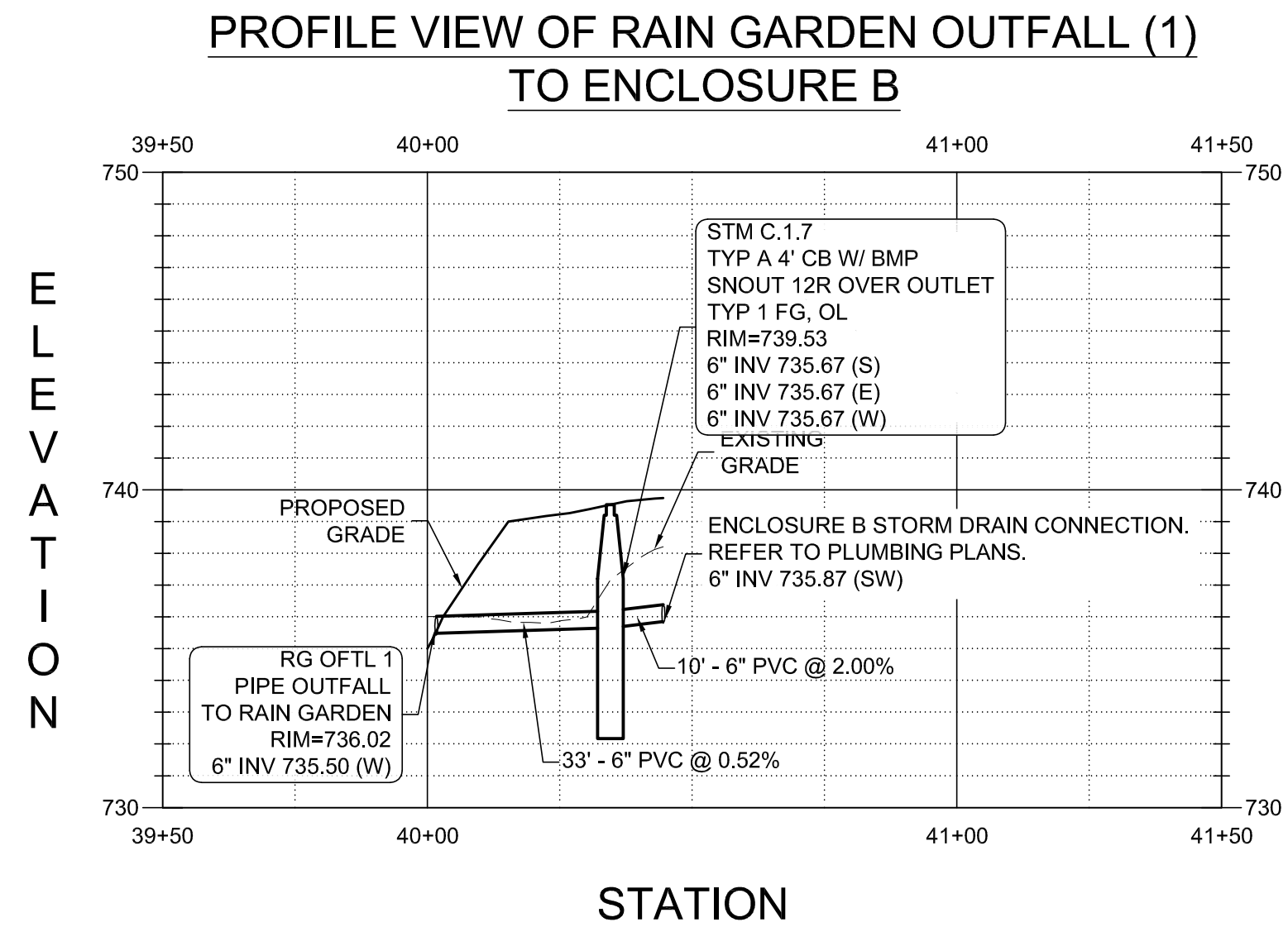
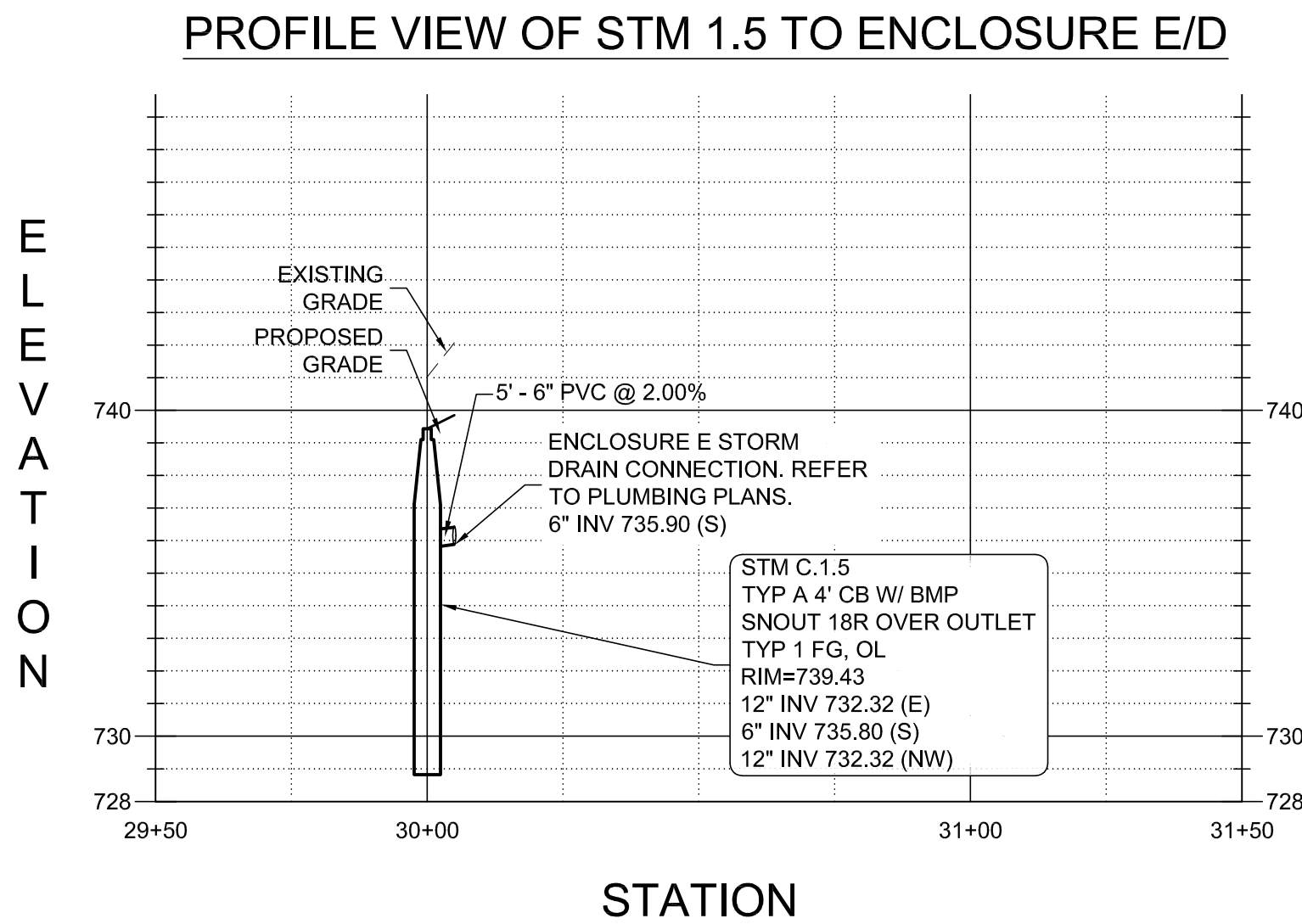
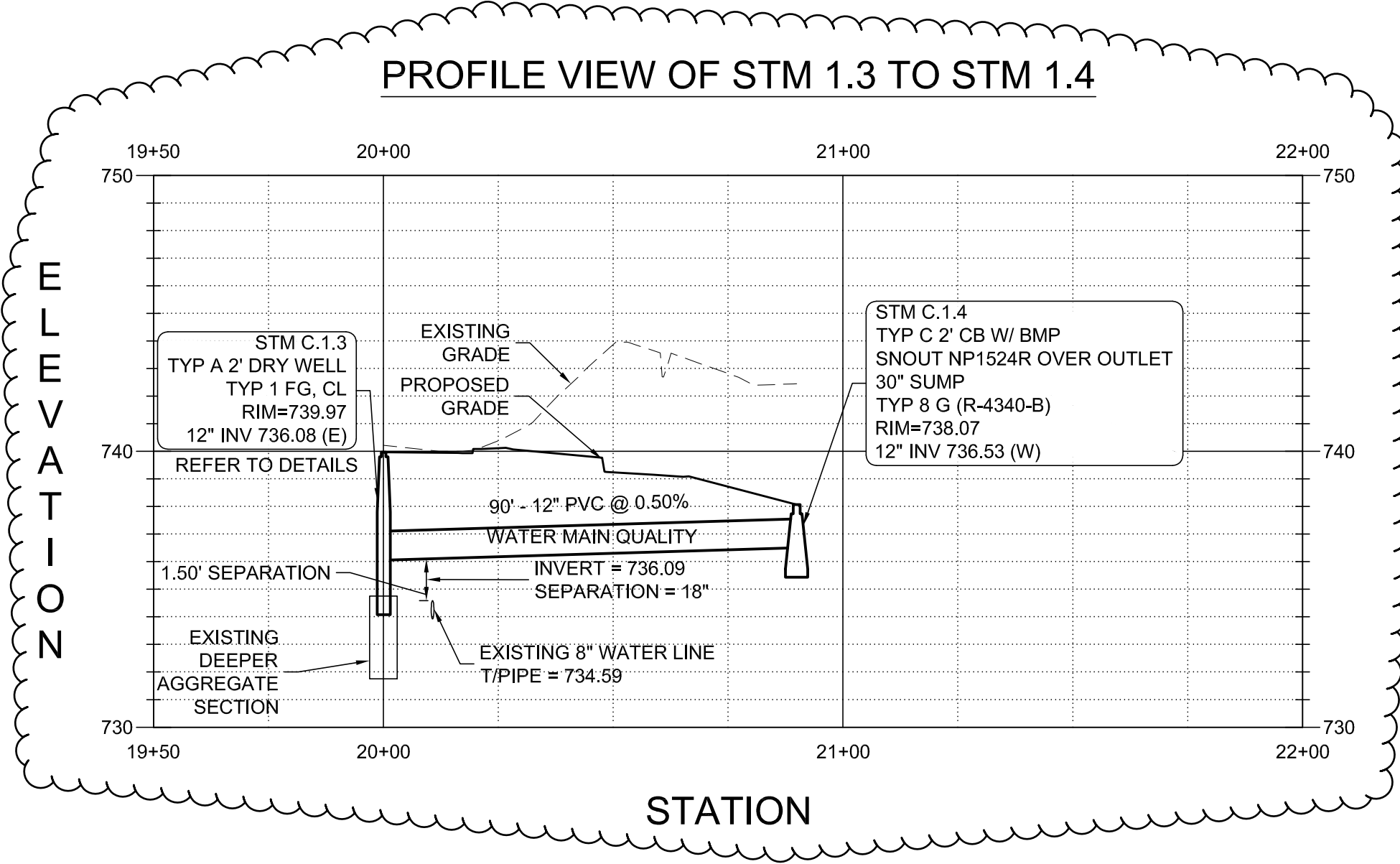
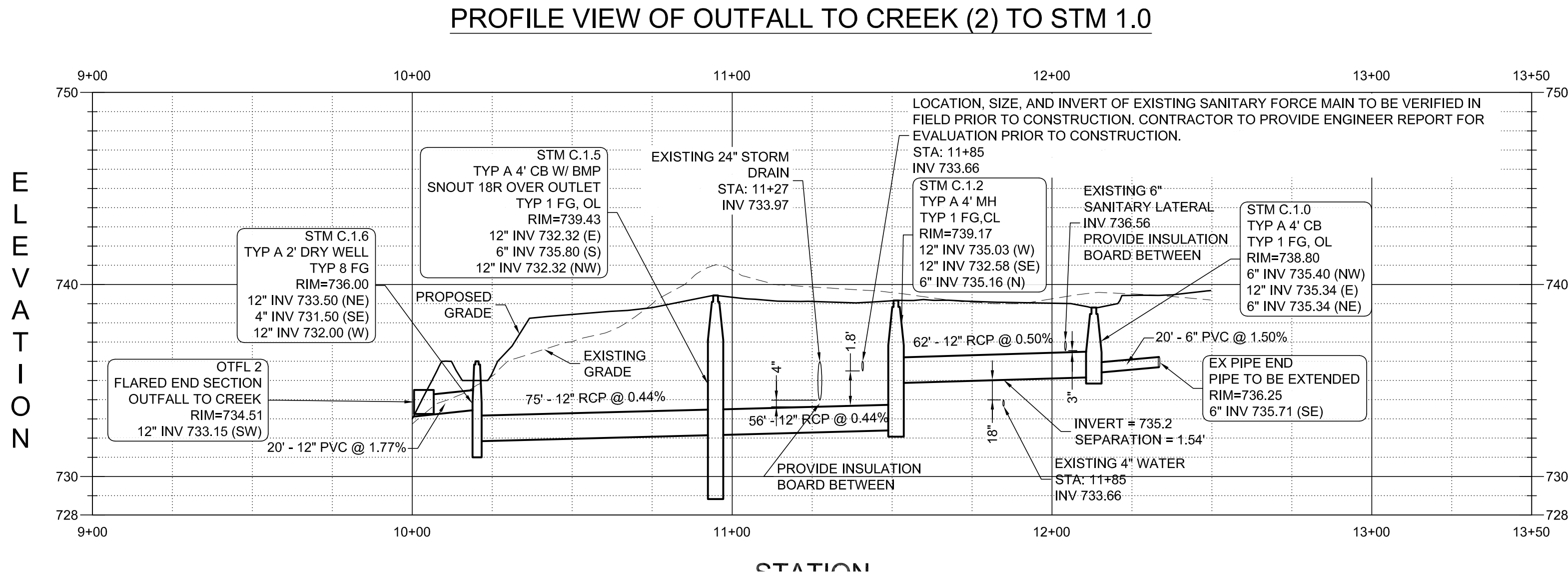
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UTILITY PROFILES
PHASE B

Project Number:
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HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=5'



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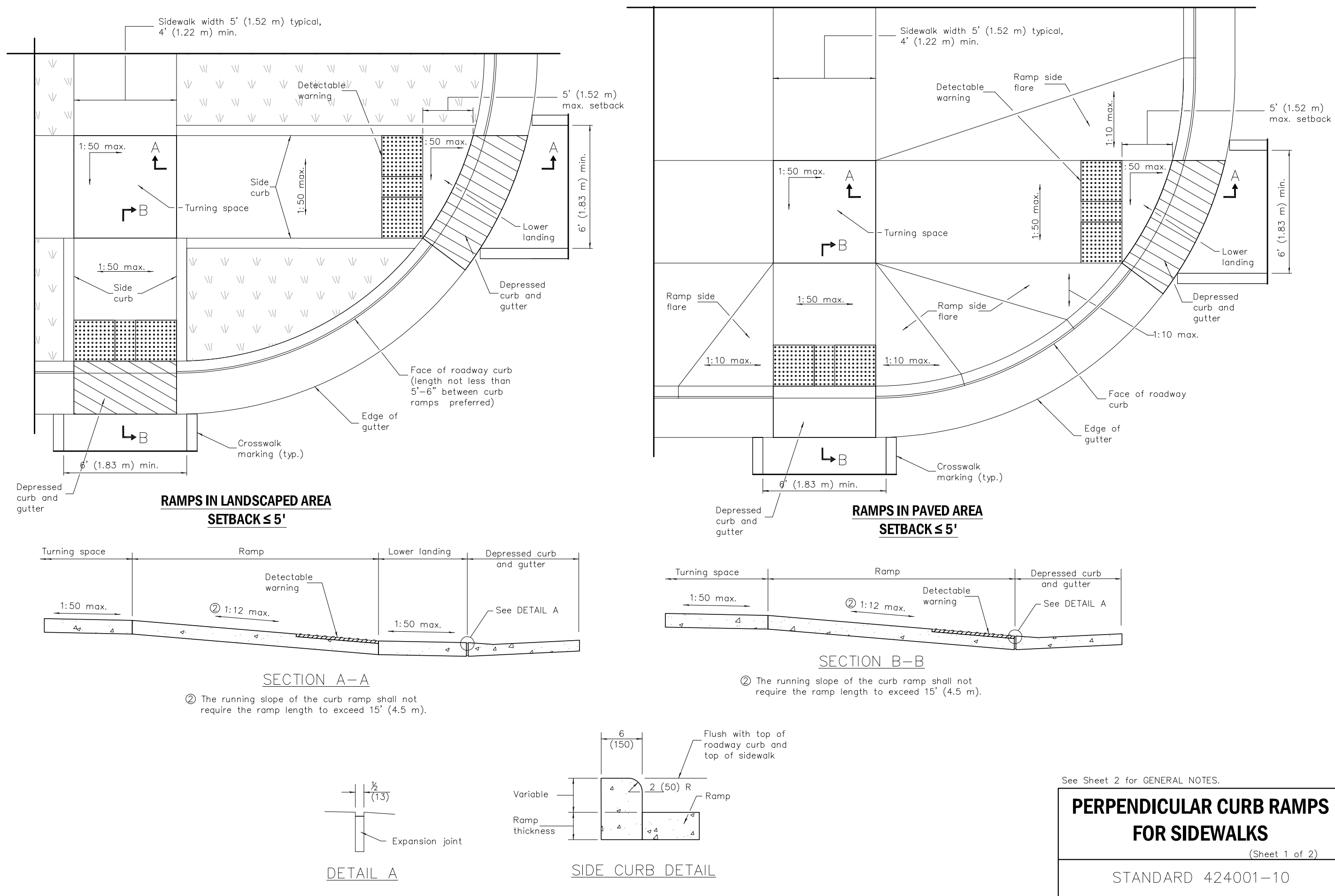
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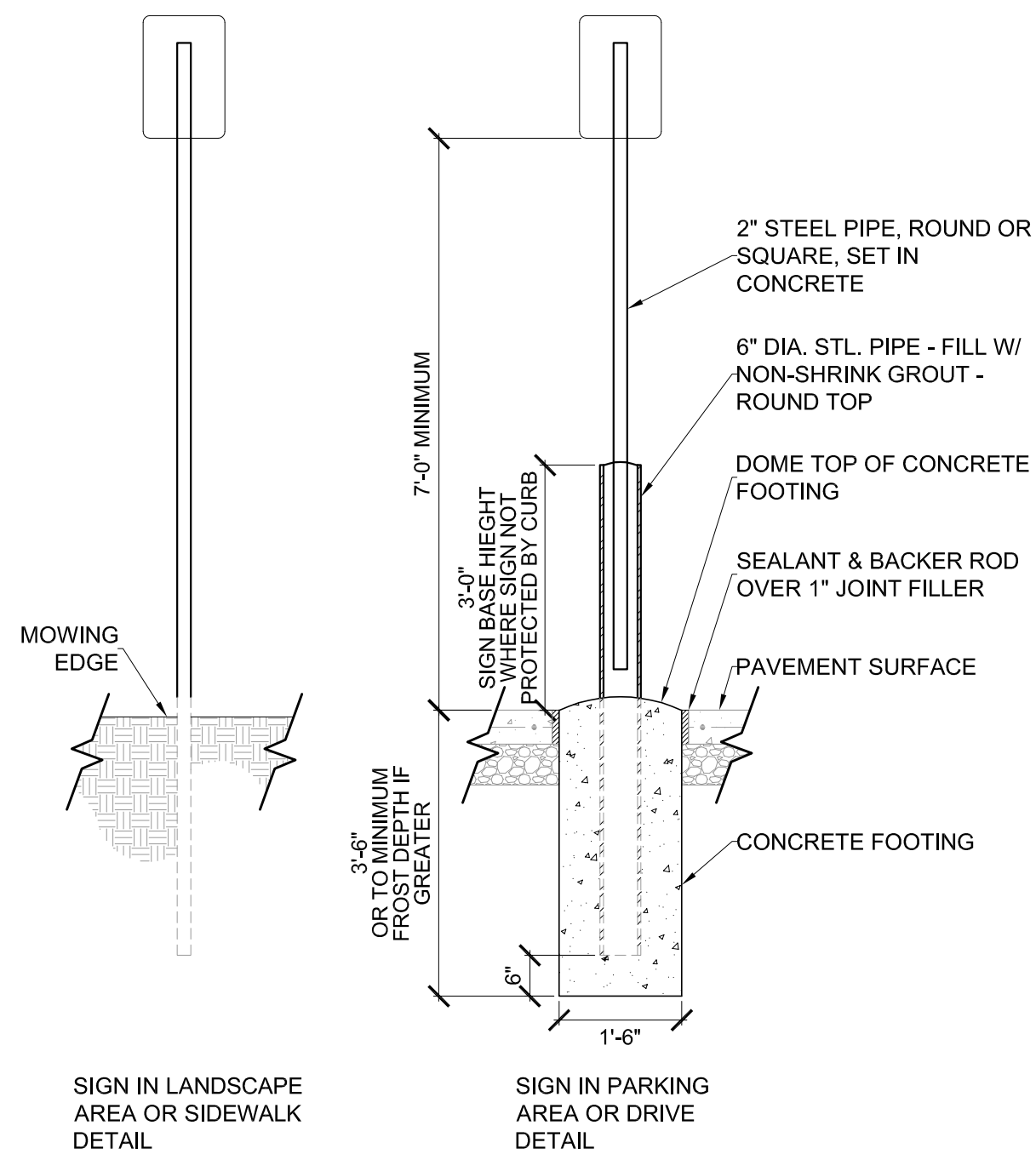
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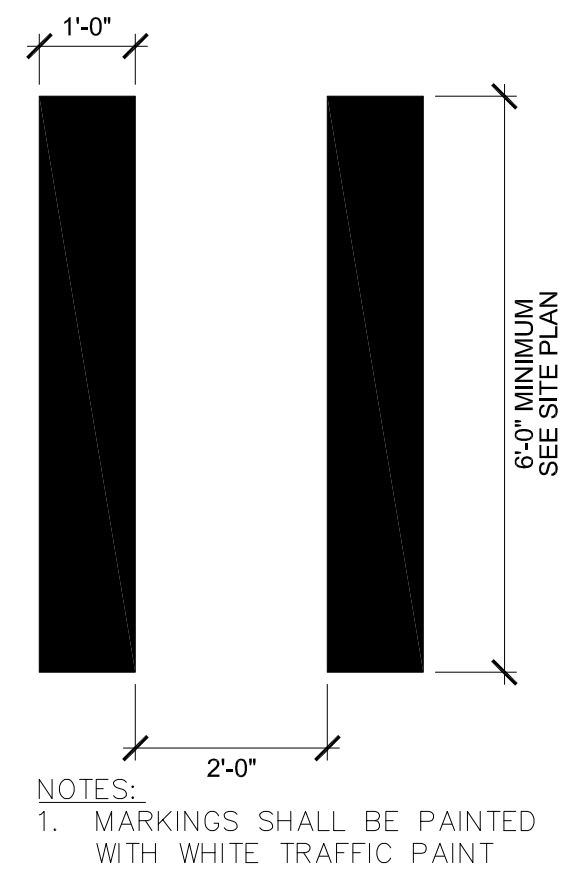
1 IDOT PERPINDICULAR CURB RAMPS FOR SIDEWALKS



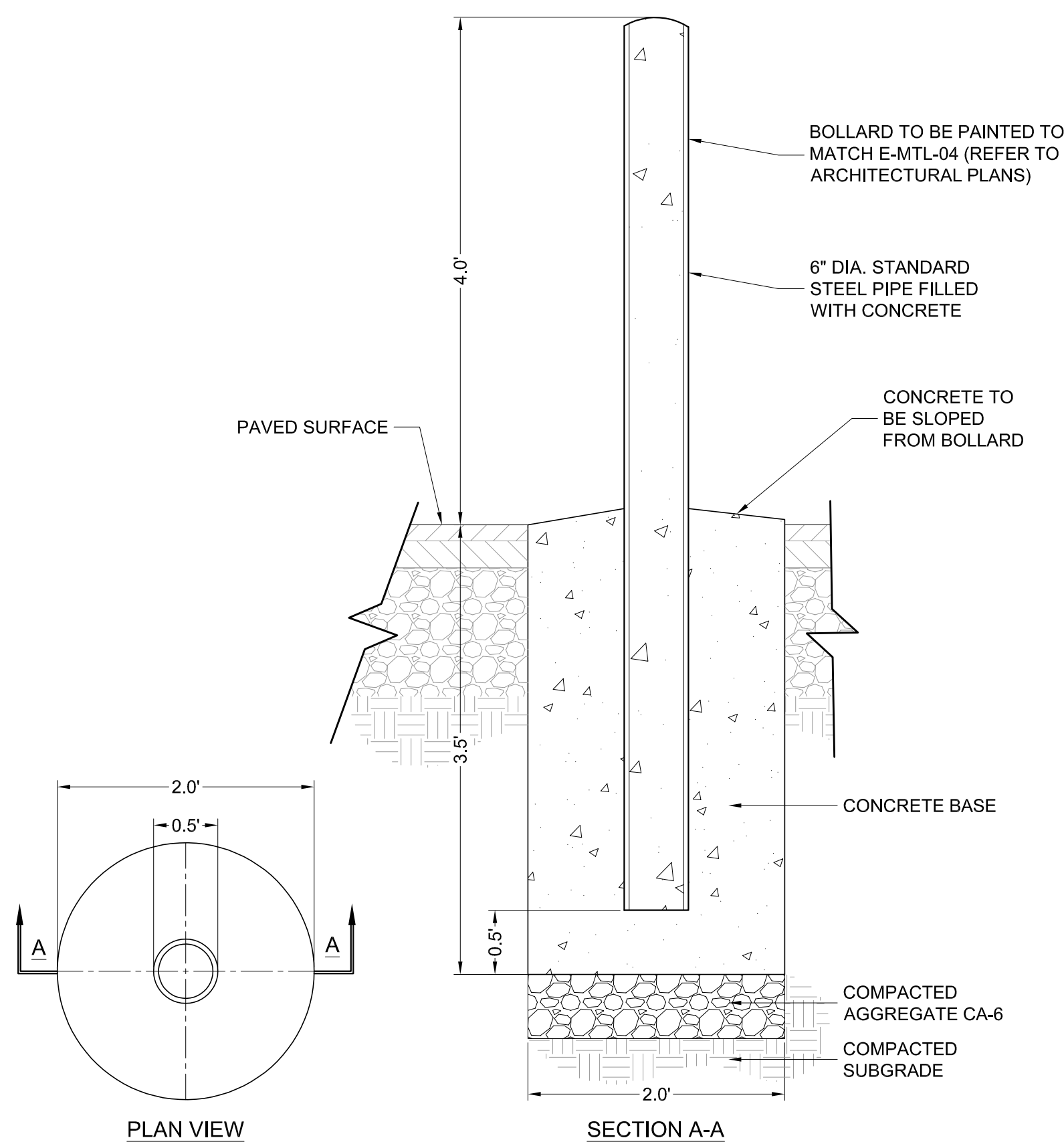
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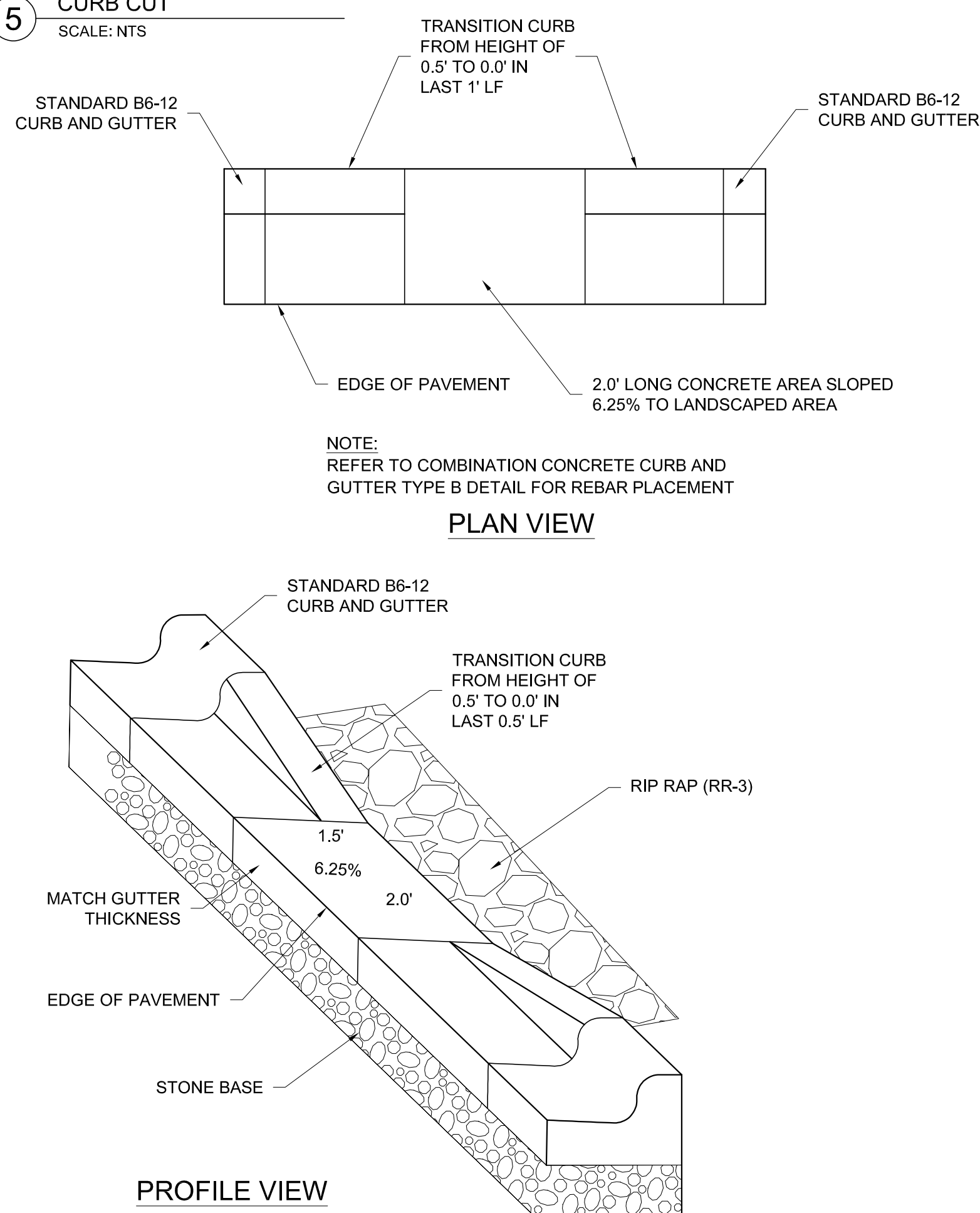
3 CROSSWALK MARKING
SCALE: 1"=1'-0"



4 BOLLARD
SCALE: 1"=1'-0"



5 CURB CUT
SCALE: NTS



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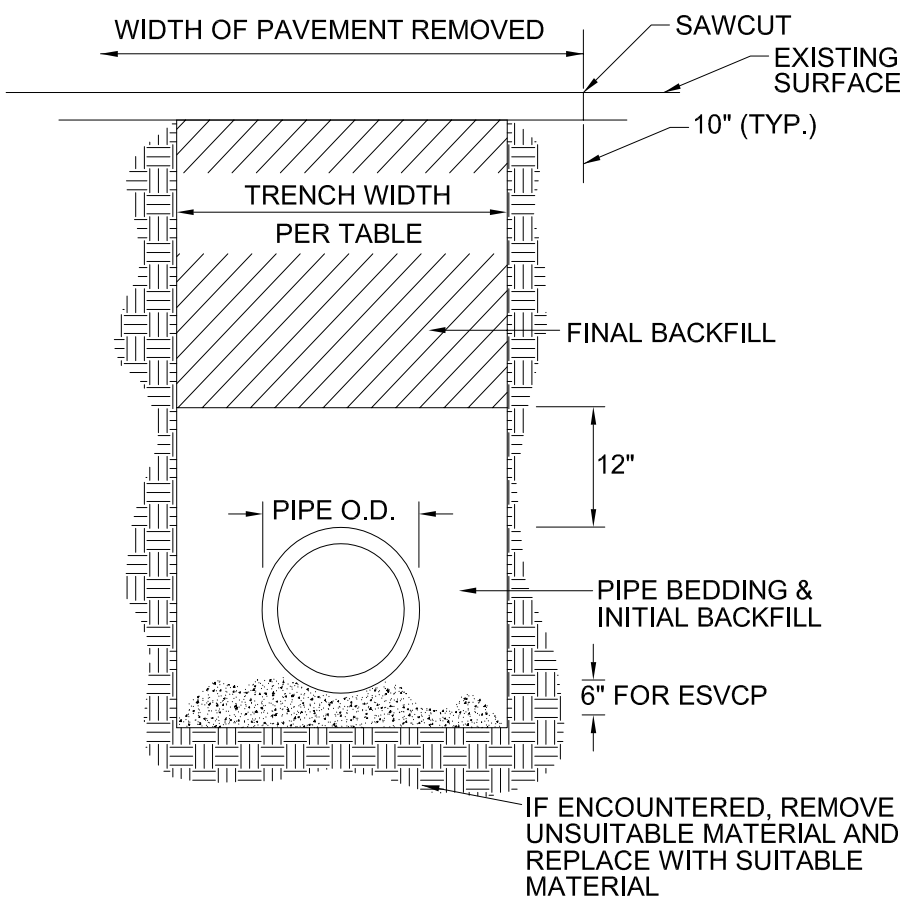
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1 UTILITY TRENCH
SCALE: NTS



TRENCH WIDTH- MINIMUM TO COMPLY WITH OSHA SAFETY STANDARDS

PIPE SIZE	ALLOWABLE TRENCH WIDTH	MAXIMUM TRENCH WIDTH
6"	3'-2"	3'-2"
8"	3'-2"	3'-2"
10"	3'-2"	3'-2"
12"	3'-4"	3'-4"
15"	3'-6"	3'-6"
18"	3'-8"	3'-8"
21"	4'-4"	4'-4"
24"	4'-8"	4'-8"

NOTES:

- TRENCH WIDTH - MINIMUM TO COMPLY WITH OSHA SAFETY STANDARDS.
- RESTORATION TO ORIGINAL SURFACE REQUIRED. NO CONCRETE PATCHES ON ASPHALT ROADS.
- CONTRACTORS SHALL ERECT AND MAINTAIN SUFFICIENT AND SUITABLE SIGNS AND BARRICADES DURING AND AFTER CONSTRUCTION FOR TRAFFIC CONTROL.
- STREETS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION WITHIN 72 HOURS FROM THE TIME THE WORK COMMENCED. STREET OPENINGS SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL AND A TEMPORARY PAVEMENT SURFACE OF COMPACTED COLD ASPHALT MATERIAL SHALL BE INSTALLED WITHIN 24 HOURS FROM THE TIME THE WORK COMMENCED.
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE MUNICIPALITY BEFORE BACKFILLING AND RESTORATION WORK ARE TO COMMENCE.

PIPE BEDDING AND INITIAL BACKFILL

FOR PVC AND HDPE, CRUSHED STONE (IDOT CA-11) TO 1 FOOT OVER PIPE. FOR RCP & DIP, CA-11 TO SPRING LINE. PLACE IN MAXIMUM 6" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY PER AASHTO T-99.

FINAL BACKFILL

IN PAVEMENT AREAS AND WHERE TRENCH FALLS WITHIN A 1 TO 1 SLOPE EXTENDED FROM THE EDGE OF THE PAVEMENT, MATERIAL SHALL BE TRENCH-BACKFILL (FA-6 PER I.D.O.T. SPECS.) COMPACTED TO 95% STANDARD PROCTOR DENSITY PER AASHTO T-99.

IN AREAS WHERE GRASS IS REMOVED AND PARKWAY RESTORATION IS REQUIRED LANDSCAPE FABRIC SHALL BE PLACED BETWEEN THE BACKFILLED MATERIAL AND THE REQUIRED TOPSOIL AS DIRECTED BY THE MUNICIPAL DIRECTOR OF PUBLIC WORKS.

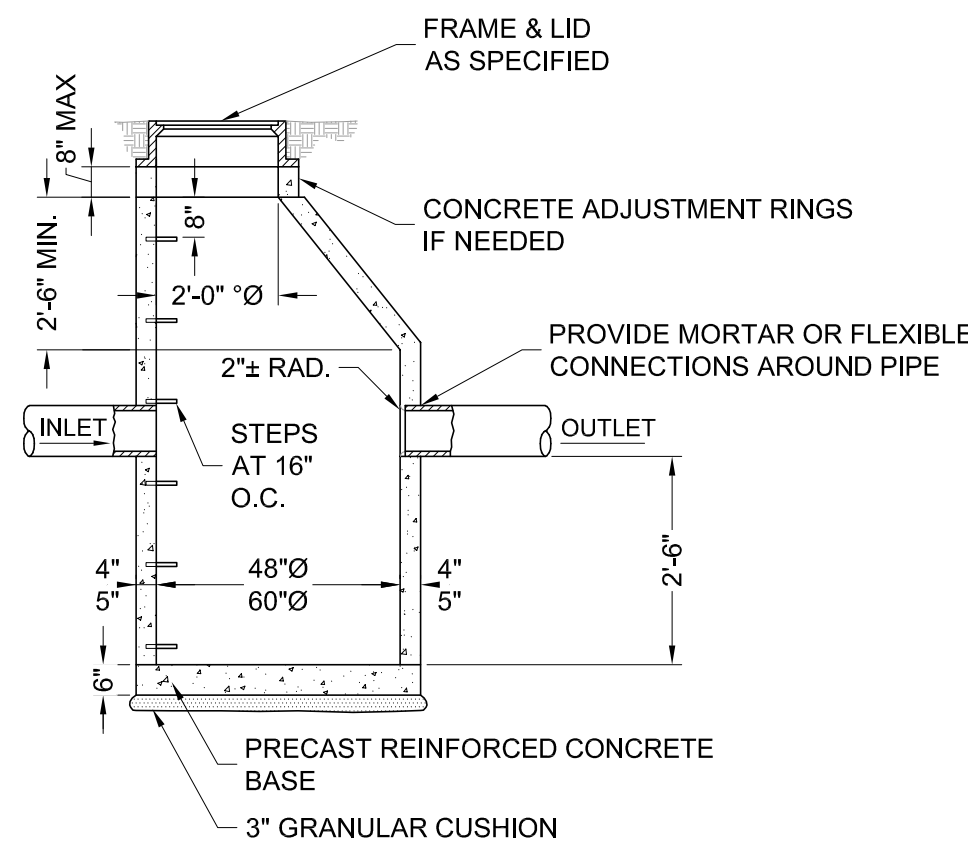
IN LANDSCAPE AREAS MATERIAL SHALL BE SELECT, EXCAVATED MATERIAL, FREE OF ROCKS AND DEBRIS COMPACTED TO 85% STANDARD PROCTOR DENSITY PER AASHTO T-99. (REFER TO SPECIFICATIONS FOR TYPE E FILL)

UTILITY CROSSINGS

AT UTILITY CROSSINGS, INSTALL TRENCH BACKFILL, AS ABOVE, FROM THE PIPE BEDDING TO 1 FOOT OVER THE HIGHER PIPE. SUCH A GRANULAR CRADLE SHALL BE CONSTRUCTED REGARDLESS OF WHETHER THE CROSSING OCCURS IN PAVED OR LANDSCAPED AREAS.

WHERE UTILITY CROSSINGS INCLUDE A WATER MAIN, USE CLASS IV COMPACTED SELECT EXCAVATED MATERIAL BETWEEN PIPES AS REQUIRED BY THE STANDARD SPECIFICATIONS FOR SEWER & WATER MAIN CONSTRUCTION IN ILLINOIS, STANDARD DRAWINGS 19 THROUGH 24.

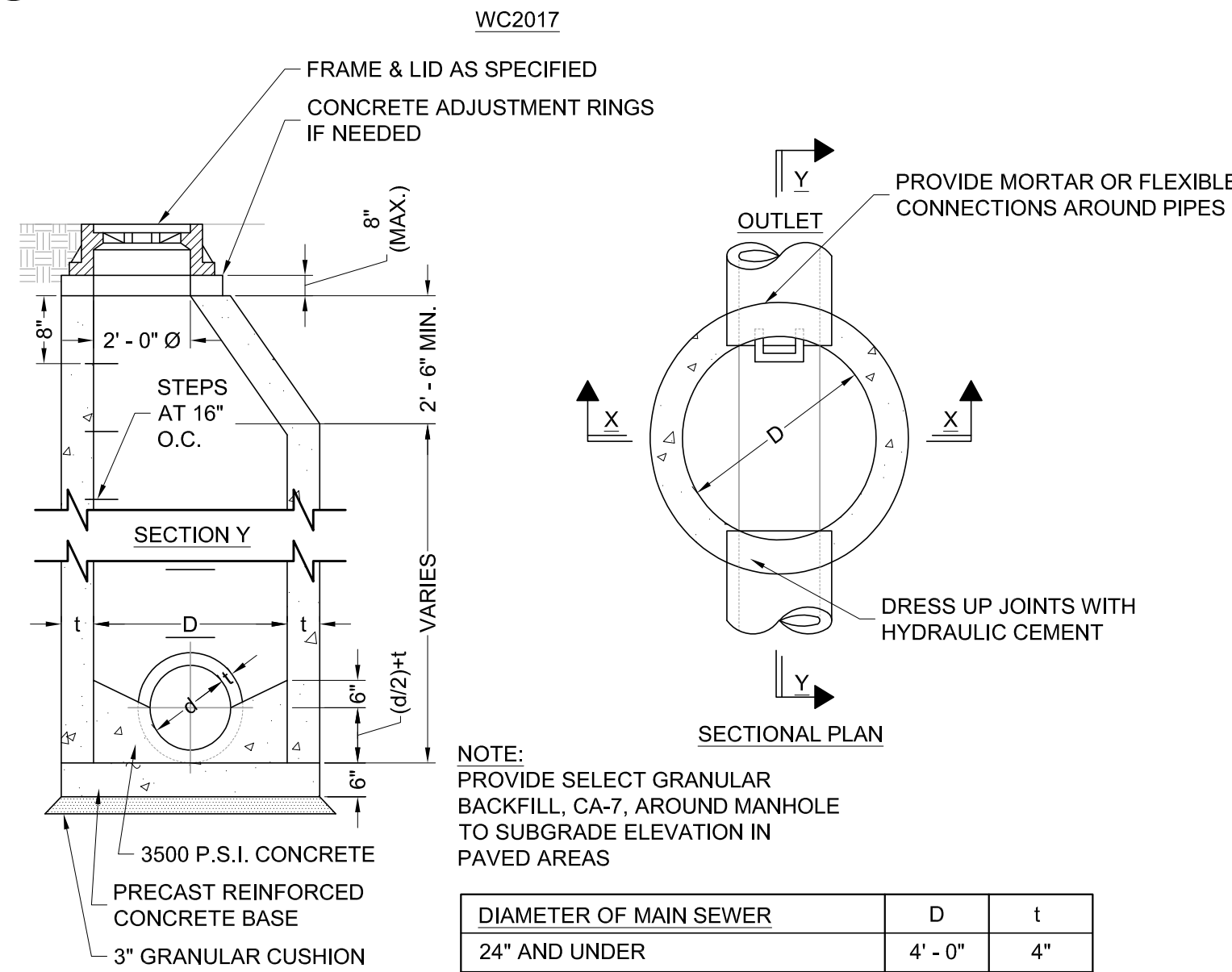
2 STANDARD CATCH BASIN, TYPE A
SCALE: NTS



NOTES:

- CATCH BASINS SHALL BE OF PRECAST REINFORCED CONCRETE SECTIONS UNLESS OTHERWISE SPECIFIED.
- PIPE OPENINGS, AS INDICATED ON THE PLANS, SHALL BE CAST INTO THE WALL SECTIONS.
- ALL CATCH BASINS SHALL BE CONSTRUCTED WITH A PRECAST REINFORCED CONCRETE BASE.
- ALL JOINTS BETWEEN PRECAST RISER, TOP SLAB SECTIONS, ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH A BITUMASTIC MATERIAL.
- MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS. STEPS SHALL BE IMBEDDED INTO THE WALL A MINIMUM OF 4" AND SHALL NOT BE EXTENDED ON THE OUTSIDE.
- FRAME AND LID CASTING SHALL BE AS SPECIFIED ON THE PLANS.
- THE CONTRACT UNIT PRICE FOR CATCH BASINS SHALL INCLUDE THE FRAME AND LID, STEPS AND THE GRANULAR CUSHION.
- WHERE A FLAT TOP IS REQUIRED, IT SHALL BE PRECAST AND CONFORM TO IDOT STANDARDS

3 STORM SEWER MANHOLE, TYPE A
SCALE: NTS

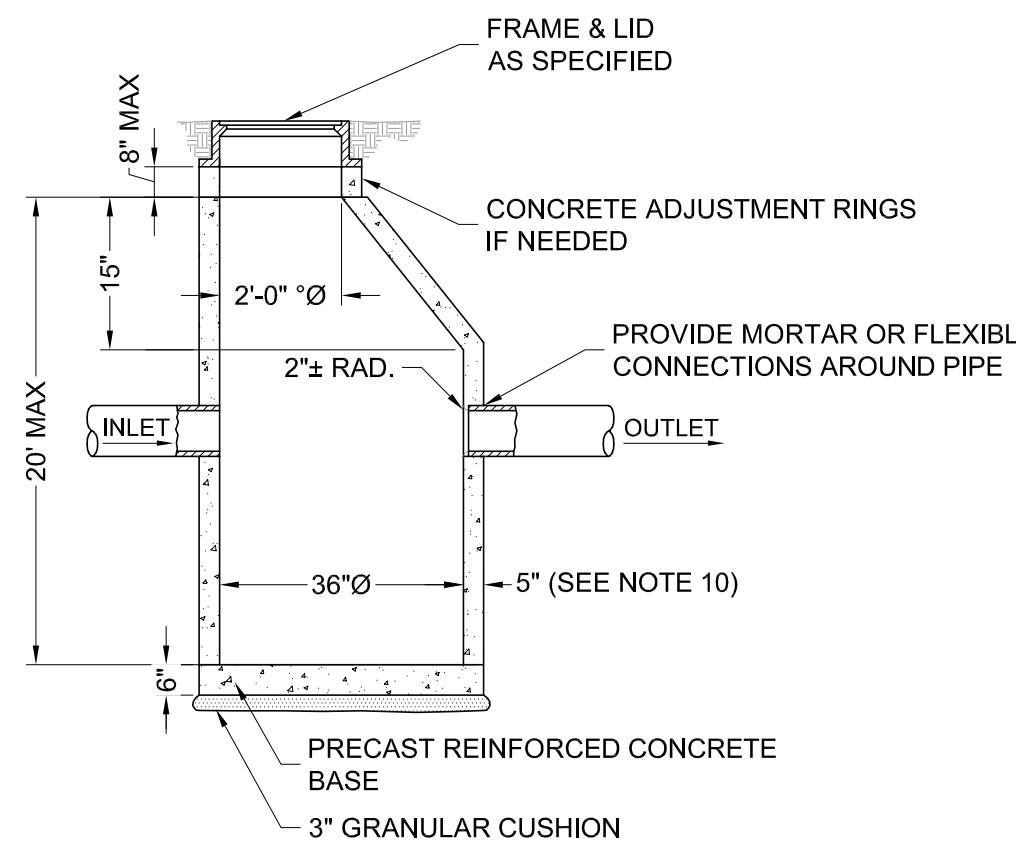


NOTES:

- ALL MANHOLES SHALL BE OF PRECAST REINFORCED CONCRETE SECTIONS.
- PIPE OPENINGS SHALL BE CAST INTO WALL.
- ALL MANHOLES SHALL BE CONSTRUCTED WITH A PRECAST REINFORCED CONCRETE BASE.
- ALL JOINTS BETWEEN PRECAST RISER, TOP SLAB SECTIONS, ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH A BITUMASTIC MATERIAL.
- MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
- STEPS SHALL BE IMBEDDED INTO THE WALL A MINIMUM OF 4 INCHES AND SHALL NOT BE EXTENDED ON THE OUTSIDE.
- FRAME AND LID CASTINGS SHALL BE AS SPECIFIED ON THE PLANS. THE WORD "STORM" SHALL BE CAST IN THE LID.
- THE CONTRACT UNIT PRICE FOR MANHOLES SHALL INCLUDE THE FRAME AND LID, STEPS AND THE GRANULAR CUSHION.
- WHERE A FLAT TOP IS REQUIRED, IT SHALL BE PRECAST AND CONFORM TO IDOT STANDARDS.

DIAMETER OF MAIN SEWER	D	t
24" AND UNDER	4' - 0"	4"
24" TO 36" INCLUSIVE	5' - 0"	5"
36" TO 42"	6' - 0"	6"

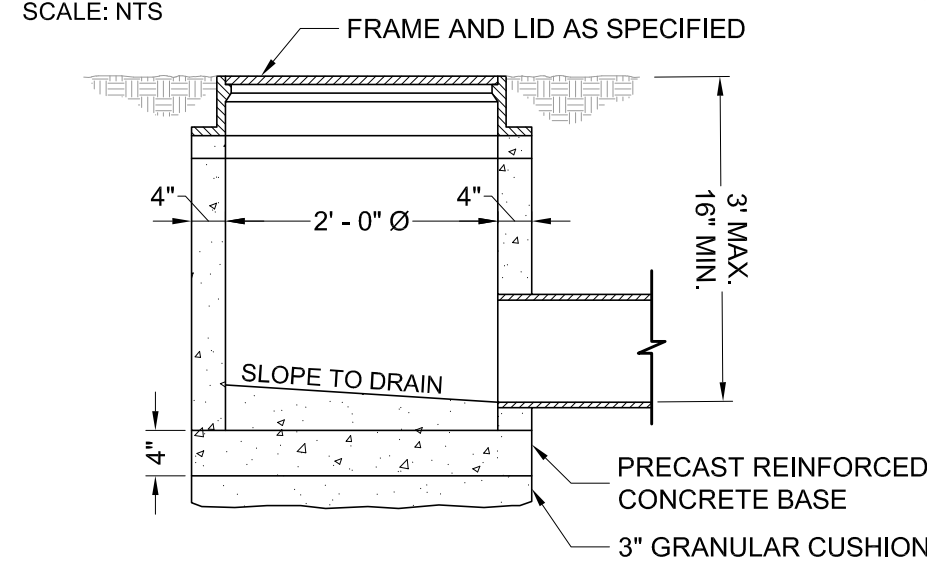
4 STANDARD CATCH BASIN, TYPE B
SCALE: NTS



NOTES:

- CATCH BASINS SHALL BE OF PRECAST REINFORCED CONCRETE SECTIONS UNLESS OTHERWISE SPECIFIED.
- PIPE OPENINGS, AS INDICATED ON THE PLANS, SHALL BE CAST INTO THE WALL SECTIONS.
- ALL CATCH BASINS SHALL BE CONSTRUCTED WITH A PRECAST REINFORCED CONCRETE BASE.
- ALL JOINTS BETWEEN PRECAST RISER, TOP SLAB SECTIONS, ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH A BITUMASTIC MATERIAL.
- MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
- STEPS SHALL BE IMBEDDED INTO THE WALL A MINIMUM OF 4" AND SHALL NOT BE EXTENDED ON THE OUTSIDE.
- FRAME AND LID CASTING SHALL BE AS SPECIFIED ON THE PLANS.
- THE CONTRACT UNIT PRICE FOR CATCH BASINS SHALL INCLUDE THE FRAME AND LID, STEPS AND THE GRANULAR CUSHION.
- WHERE A FLAT TOP IS REQUIRED, IT SHALL BE PRECAST AND CONFORM TO IDOT STANDARDS.
- MIN. WALL THICKNESS SHALL BE 5" FOR CONCRETE MASONRY UNITS, 8" FOR BRICK MASONRY, 3" FOR PRECAST REINFORCED CONCRETE SECTION, AND 6" FOR CAST-IN-PLACE CONCRETE.

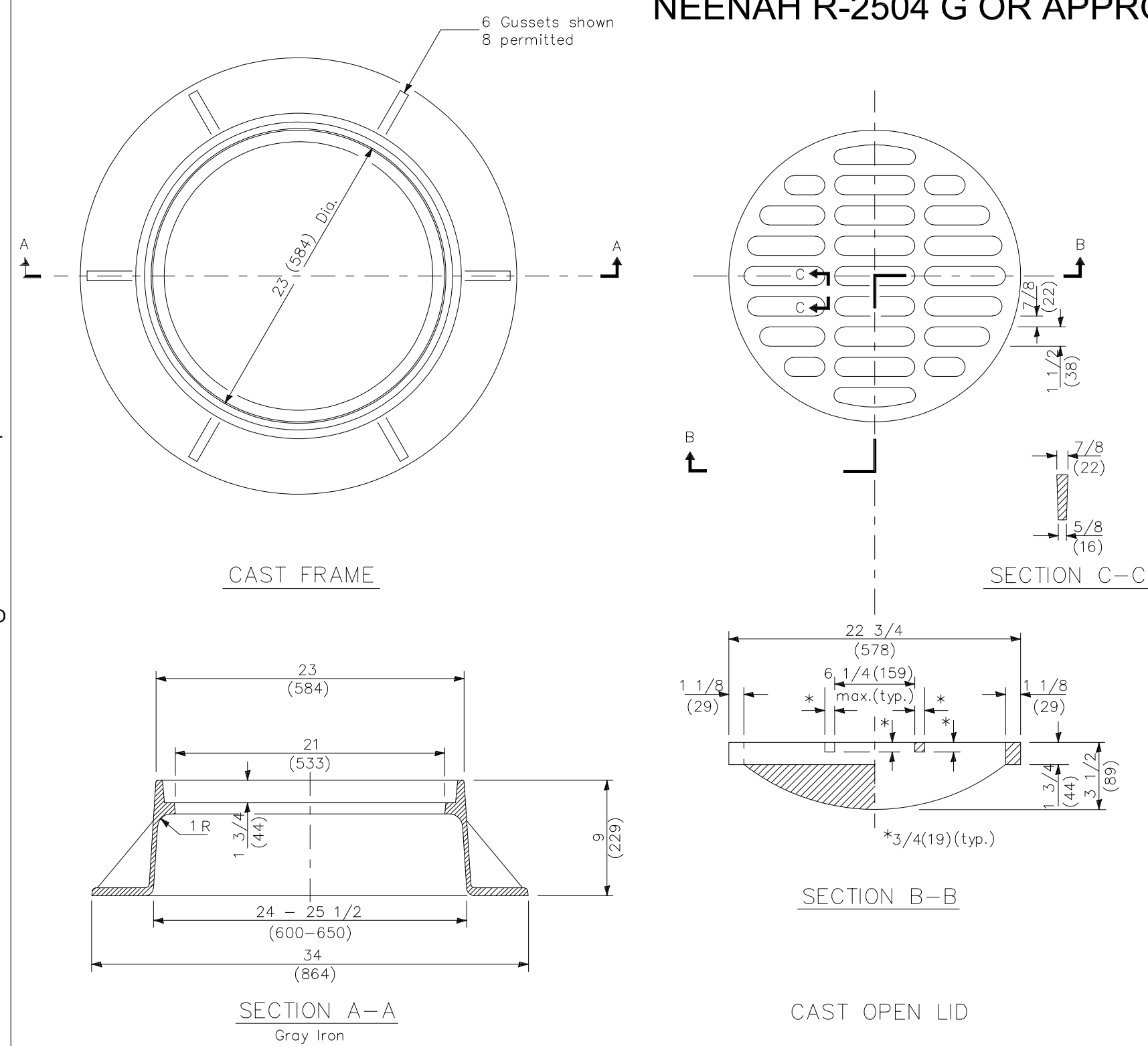
5 TYPE A INLET
SCALE: NTS



NOTES:

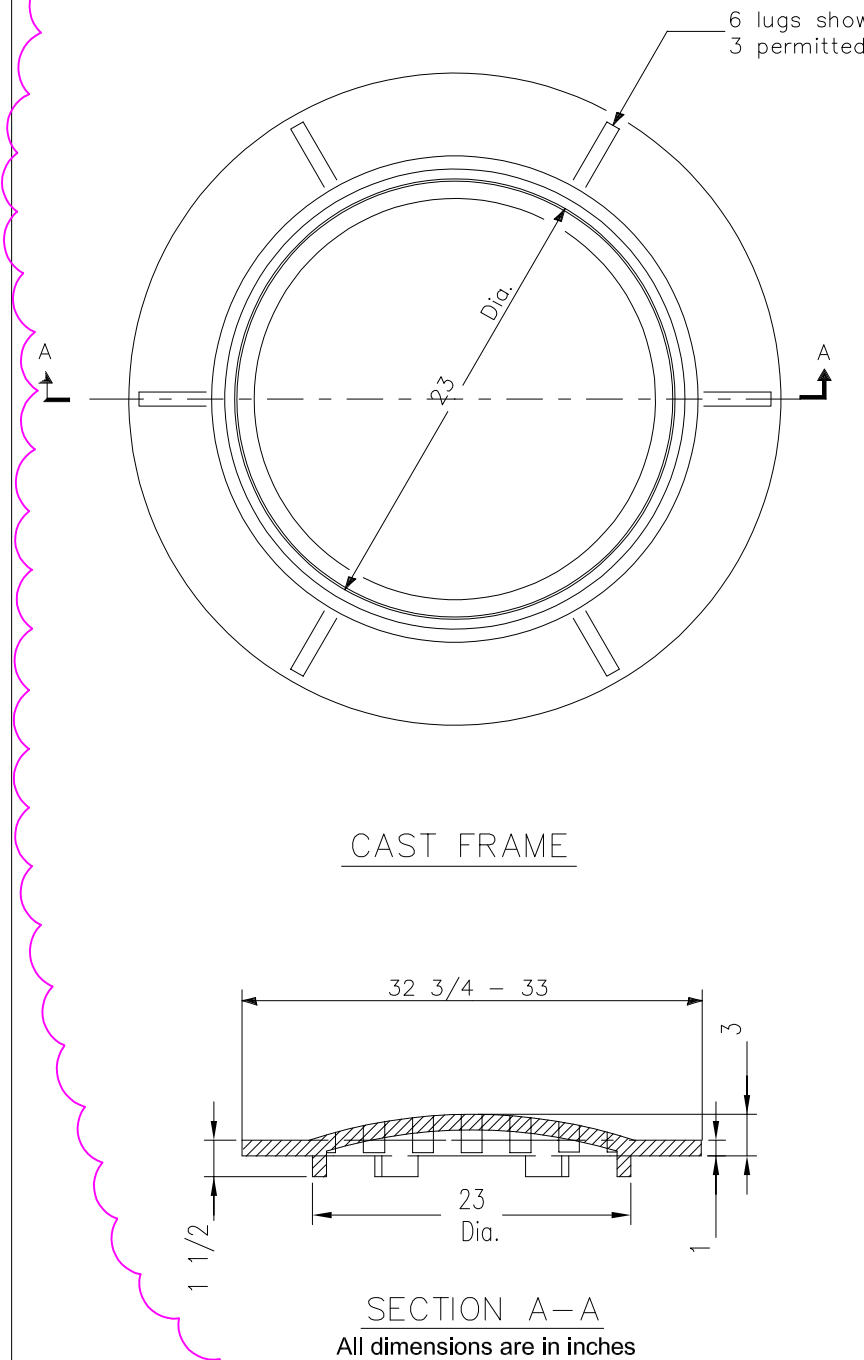
- INLETS SHALL BE OF PRECAST REINFORCED CONCRETE SECTIONS.
- PIPE OPENINGS, AS INDICATED ON THE PLANS, SHALL BE CAST INTO THE WALL SECTIONS.
- ALL INLETS SHALL BE CONSTRUCTED WITH A PRECAST REINFORCED CONCRETE BASE.
- ALL JOINTS BETWEEN PRECAST RISER, TOP SLAB SECTIONS, ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH A BITUMASTIC MATERIAL.
- MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
- STEPS SHALL BE IMBEDDED INTO THE WALL A MINIMUM OF 4" AND SHALL NOT BE EXTENDED ON THE OUTSIDE.
- FRAME AND LID CASTING SHALL BE AS SPECIFIED ON THE PLANS.
- THE CONTRACT UNIT PRICE FOR INLETS SHALL INCLUDE THE FRAME AND LID, STEPS AND THE GRANULAR CUSHION.
- WHERE A FLAT TOP IS REQUIRED, IT SHALL BE PRECAST AND CONFORM TO IDOT STANDARDS.

6 FRAME AND LIDS TYPE 1
SCALE: NTS

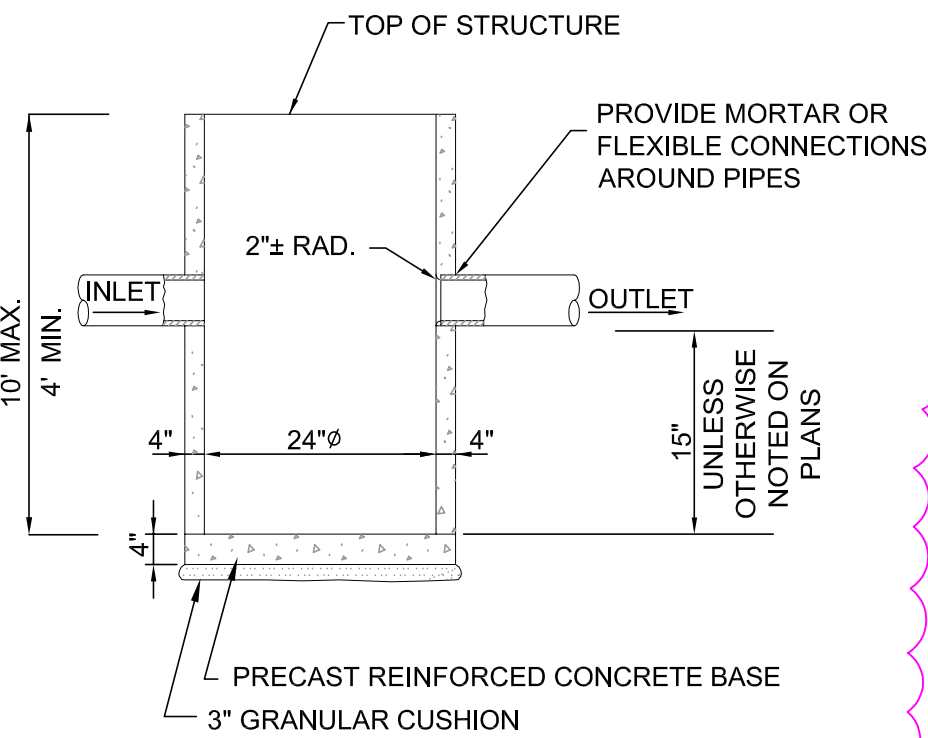


NEENAH R-2504 G OR APPROVED EQUAL

7 TYPE 8 GRATE
SCALE: NTS



8 TYPE C CATCH BASIN
SCALE: NTS



NOTES:

- INLETS SHALL BE OF PRECAST REINFORCED CONCRETE SECTIONS.
- PIPE OPENINGS, AS INDICATED ON THE PLANS, SHALL BE CAST INTO THE WALL SECTIONS.
- ALL INLETS SHALL BE CONSTRUCTED WITH A PRECAST REINFORCED CONCRETE BASE.
- ALL JOINTS BETWEEN PRECAST RISER, TOP SLAB SECTIONS, ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH A BITUMASTIC MATERIAL.
- MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
- STEPS SHALL BE IMBEDDED INTO THE WALL A MINIMUM OF 4" AND SHALL NOT BE EXTENDED ON THE OUTSIDE.
- FRAME AND LID CASTING SHALL BE AS SPECIFIED ON THE PLANS.
- THE CONTRACT UNIT PRICE FOR INLETS SHALL INCLUDE THE FRAME AND LID, STEPS AND THE GRANULAR CUSHION.



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VILLAGE COMMENT RESPONSE	03/09/2023	
ADDENDUM 1	03/06/2023	
VILLAGE COMMENT RESPONSE	02/13/2023	
ISSUE FOR BID GROUP 3	01/19/2023	
PERMIT RESPONSE #1	01/13/2023	
80% CONSTRUCTION DOCUMENTS	10/28/2022	
50% CONSTRUCTION DOCUMENTS	07/29/2022	
REV	DESCRIPTION	DATE

WILLOWBROOK
WILDLIFE CENTER

525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

CIVIL DETAILS

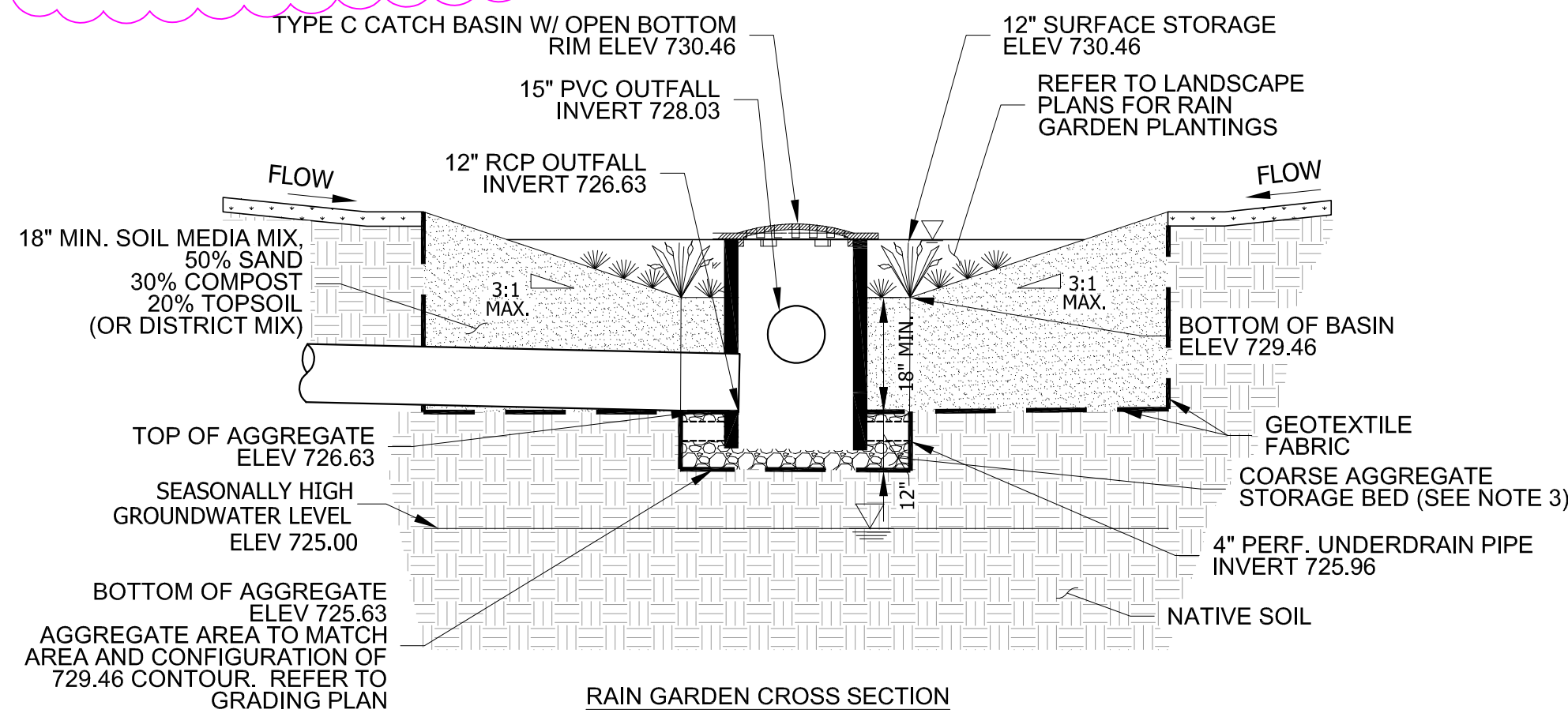
Project Number:
210107
Drawn By:
NKH
Sheet:

C5.07

\\wightco.com\ntServ\DuPage Forest Preserve\210107_WWC Phase II\01\11 Drawings\02 CD\210107 C5.00 CIVIL DETAILS-BC.dwg kbuck Mar 09, 2023 11:56:47 am
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1 RAIN GARDEN - PHASE B - BMP 4 (STM B1.0)

SCALE: NTS

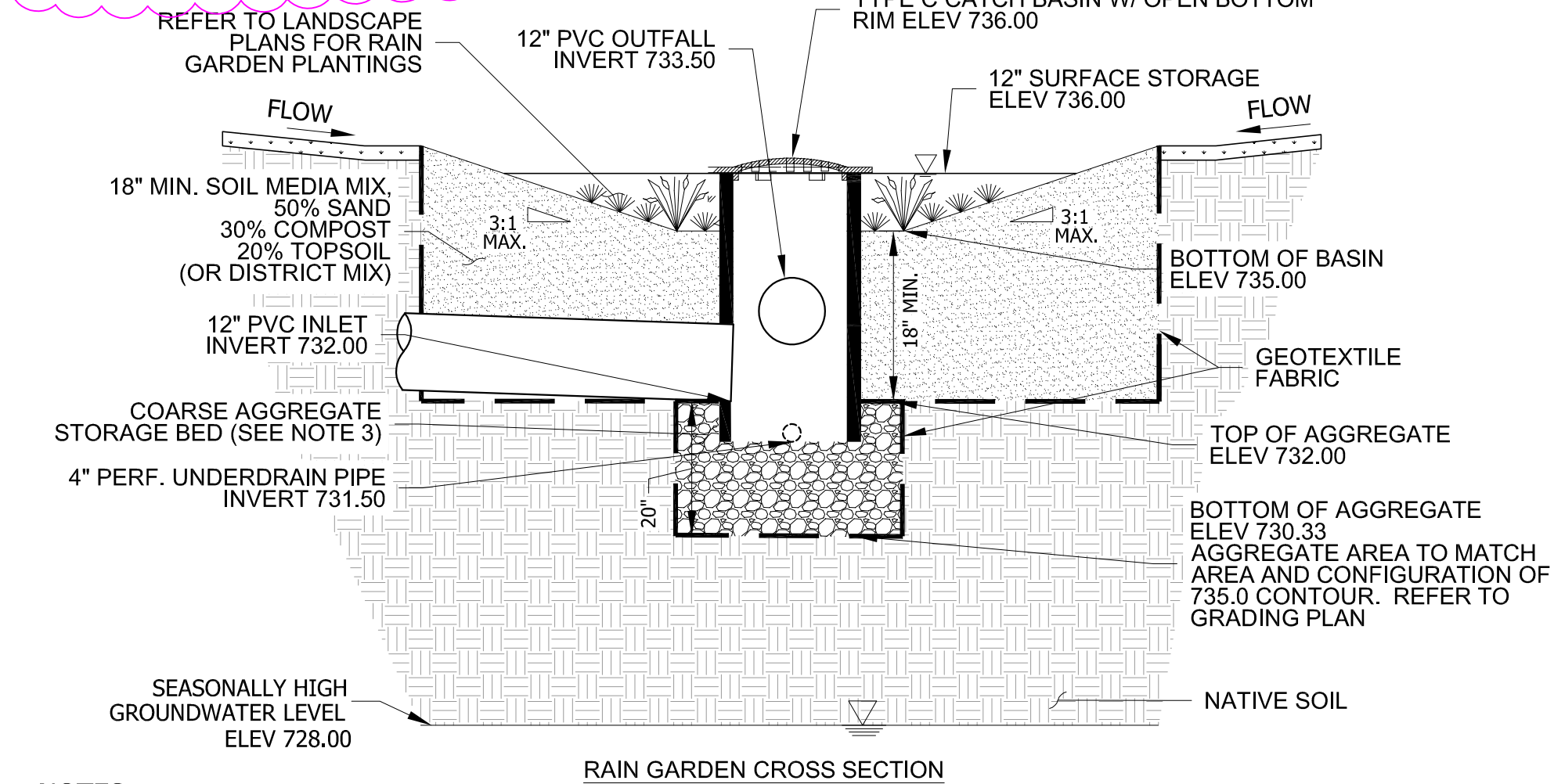


NOTES:

1. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL. GROWING MEDIUM SHALL BE 4 INCHES DEEPER THAN LARGEST PLANTED ROOT BALL.
2. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF IUM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS I). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).
3. STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.

5 RAIN GARDEN - PHASE C - BMP 3 (STM C1.6)

SCALE: NTS

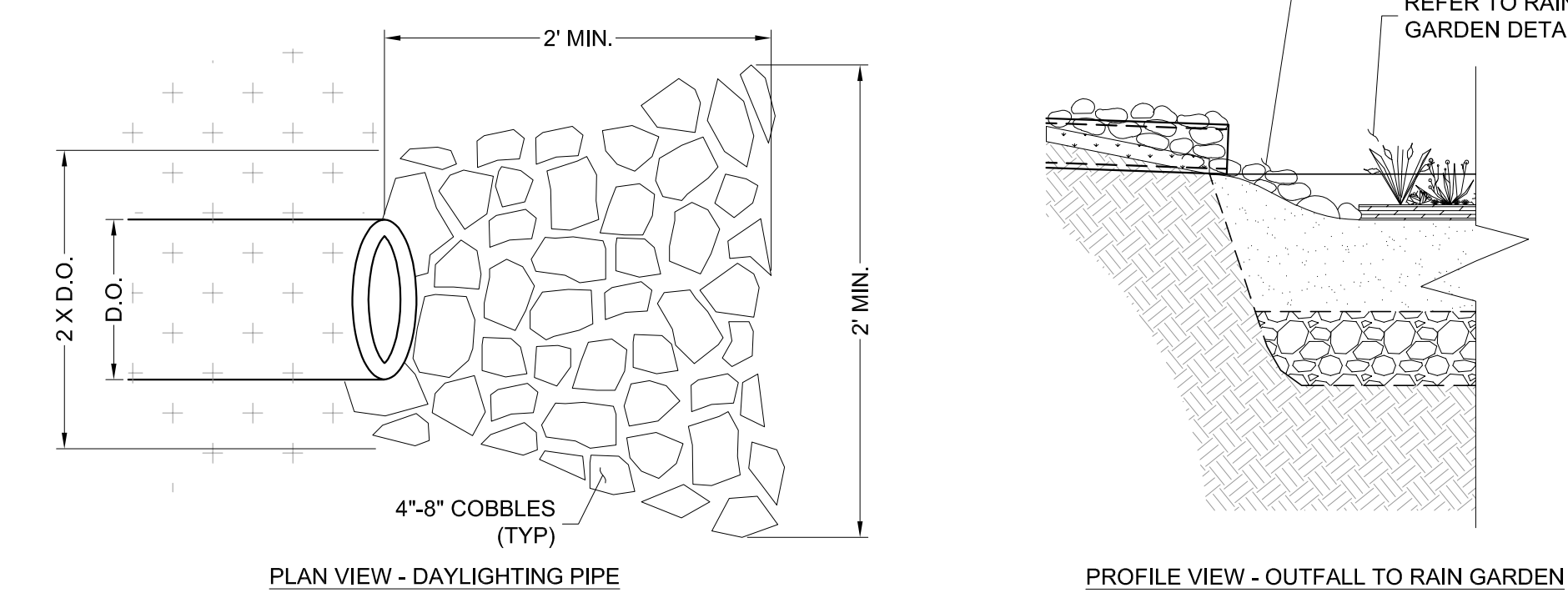


NOTES:

1. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL. GROWING MEDIUM SHALL BE 4 INCHES DEEPER THAN LARGEST PLANTED ROOT BALL.
2. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF IUM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS I). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).
3. STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.

6 PIPE OUTFALL TO RAIN GARDEN

SCALE: NTS

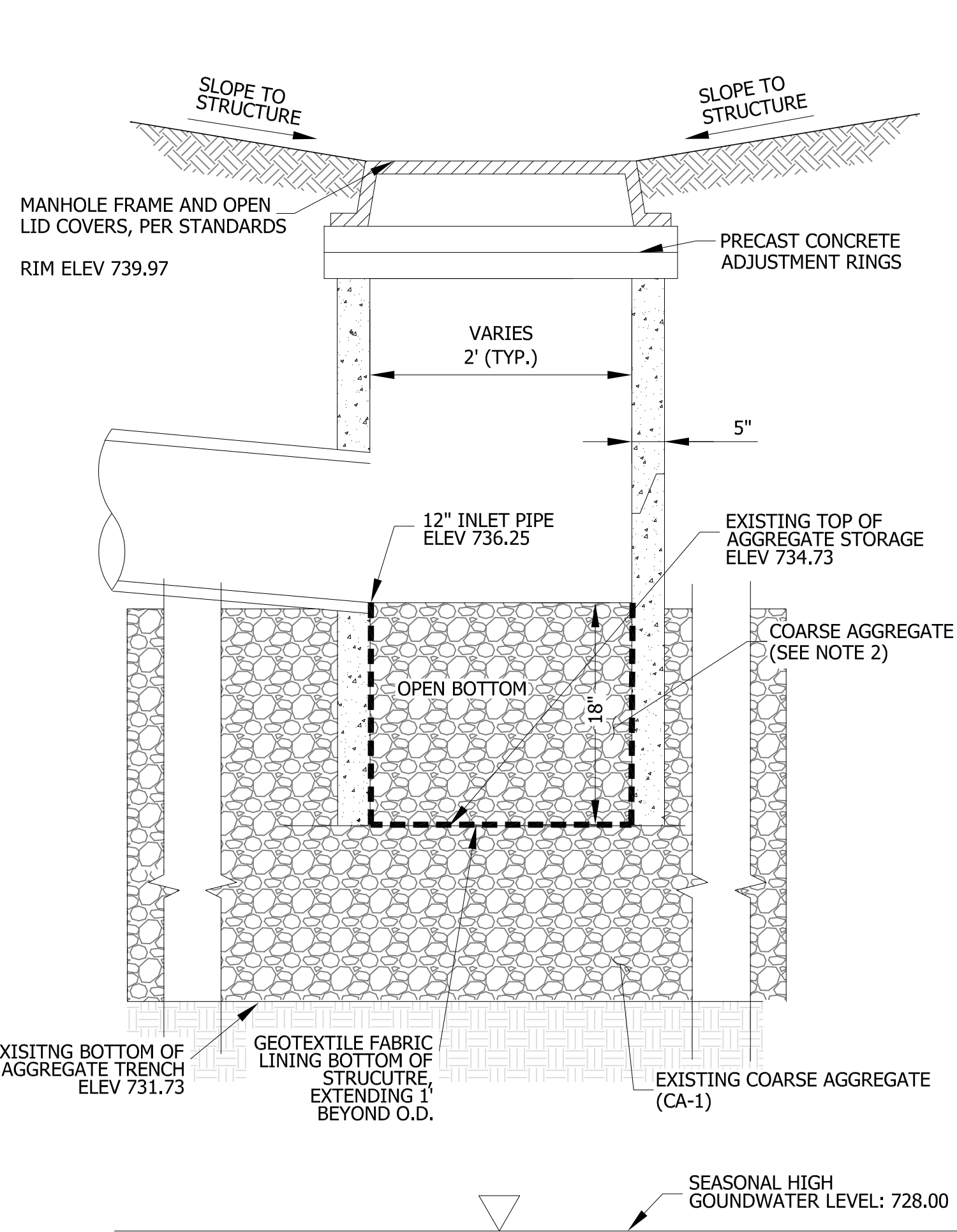


NOTES:

1. INITIAL WIDTH OF STONE APRON SHALL BE AT A MINIMUM EQUAL TO TWICE THE OUTLET PIPE DIAMETER (D.O.).
2. FOR OUTFALL INTO A RAIN GARDEN, COBBLES SHALL FAN OUT AT A 2:1 (LONGITUDINAL:LATERAL) TO AN ULTIMATE WIDTH EQUAL TO THAT OF 4 TIMES THE OUTLET PIPE DIAMETER (D.O.) AND COBBLES SHALL BE PLACED AROUND PIPE TO COVER EXPOSED PIPE.
3. ALL STONE PLACEMENT TO BE APPROVED BY SITE CIVIL ENGINEER IN THE FIELD PRIOR TO CONSTRUCTION.

2 DRY WELL CROSS SECTION - PHASE C - STM C1.3

SCALE: NTS

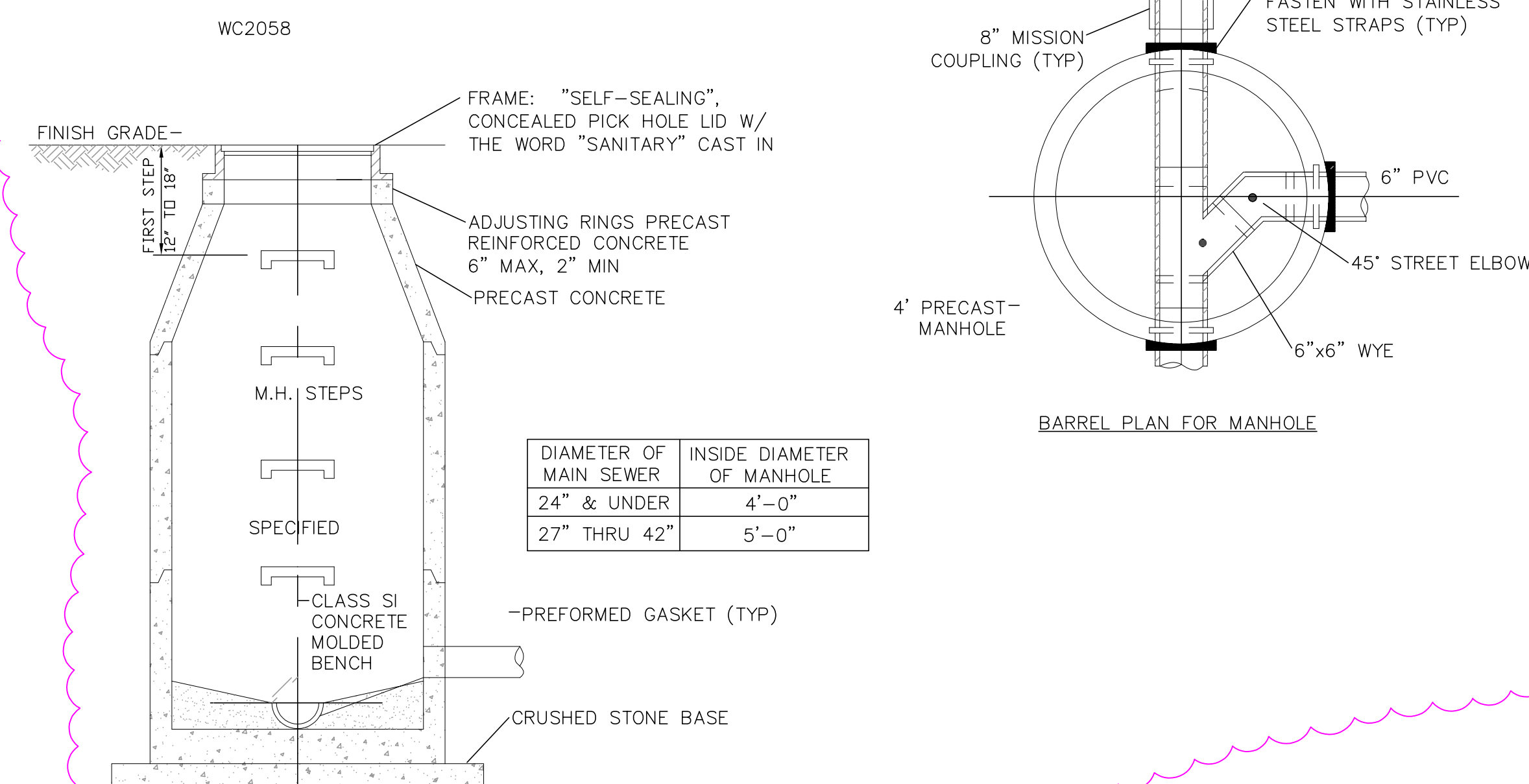


NOTES:

1. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF IUM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM. FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM.
2. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.
3. INTERIOR OF STRUCTURE TO BE LINED WITH GEOTEXTILE FABRIC AND FILLED WITH AGGREGATE TO THE INVERT OF THE INLET PIPE.

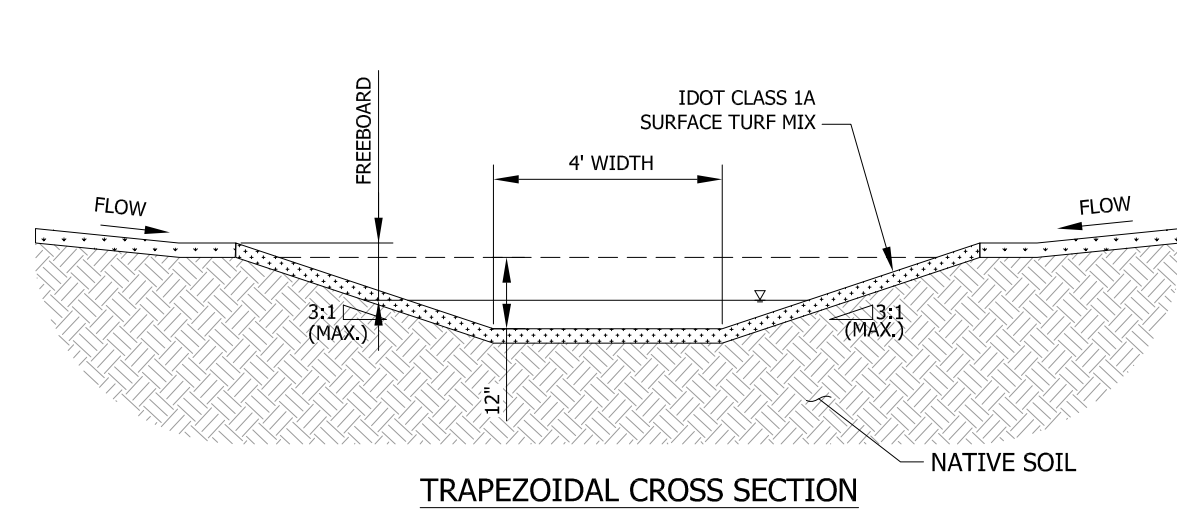
7 SANITARY SEWER MANHOLE, TYPE A

SCALE: NTS



3 DRAINAGE SWALE

SCALE: NTS

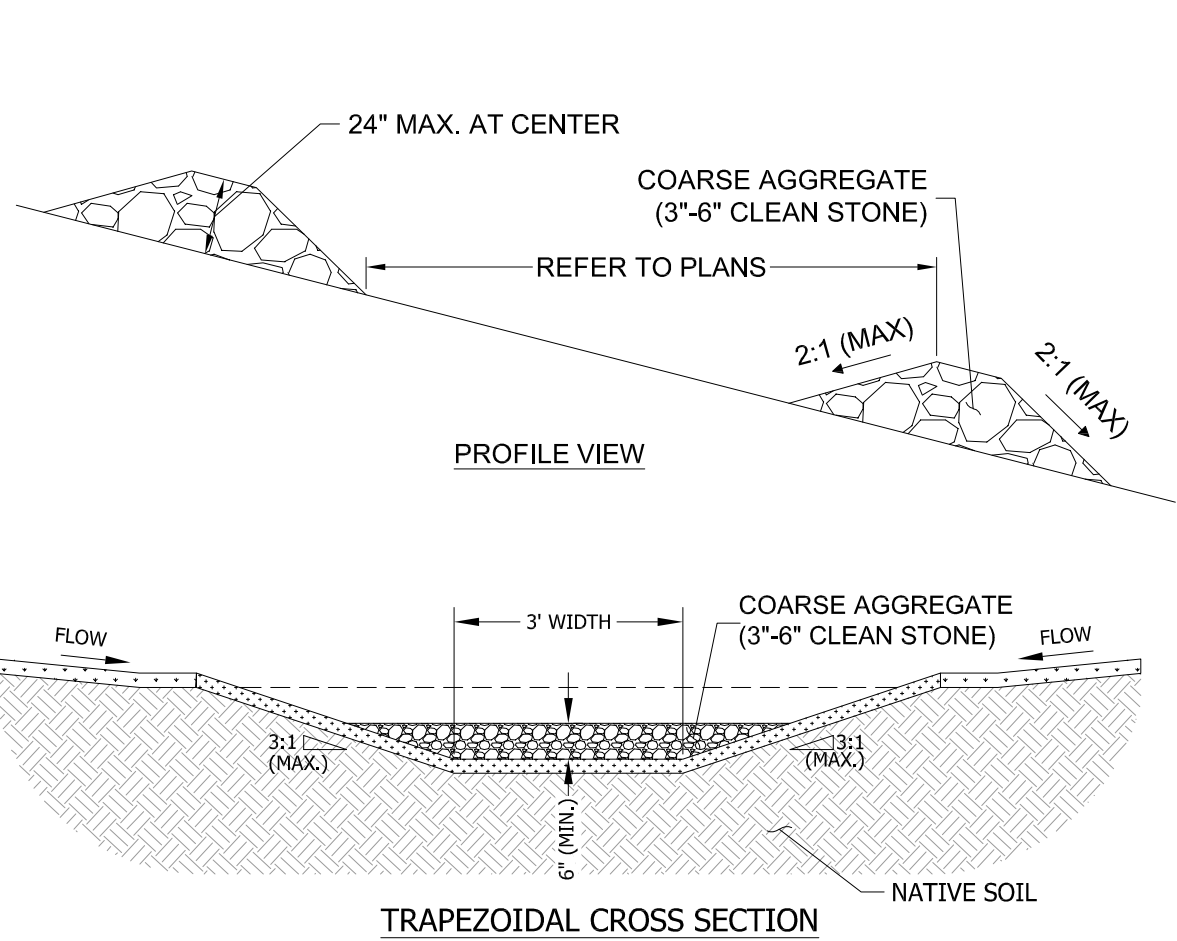


NOTES:

1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
2. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.

4 CHECK DAM

SCALE: NTS



NOTES:

1. CHECK DAM SPACING PER TABLE 1.
2. CENTER OF CHECK DAMS MUST BE A MINIMUM OF 6" LOWER THAN OUTSIDE EDGES TO PASS HIGH FLOWS EXCEPT TERMINAL ROCK CHECK DAM. TERMINAL ROCK CHECK DAM TO HAVE 12" OF STONE (MEASURED FROM BOTTOM) AND MATCH ELEVATION OF OUTSIDE EDGES.



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REV	DESCRIPTION DATE

WILLOWBROOK
WILDLIFE CENTER

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GLEN ELLYN, IL 60137

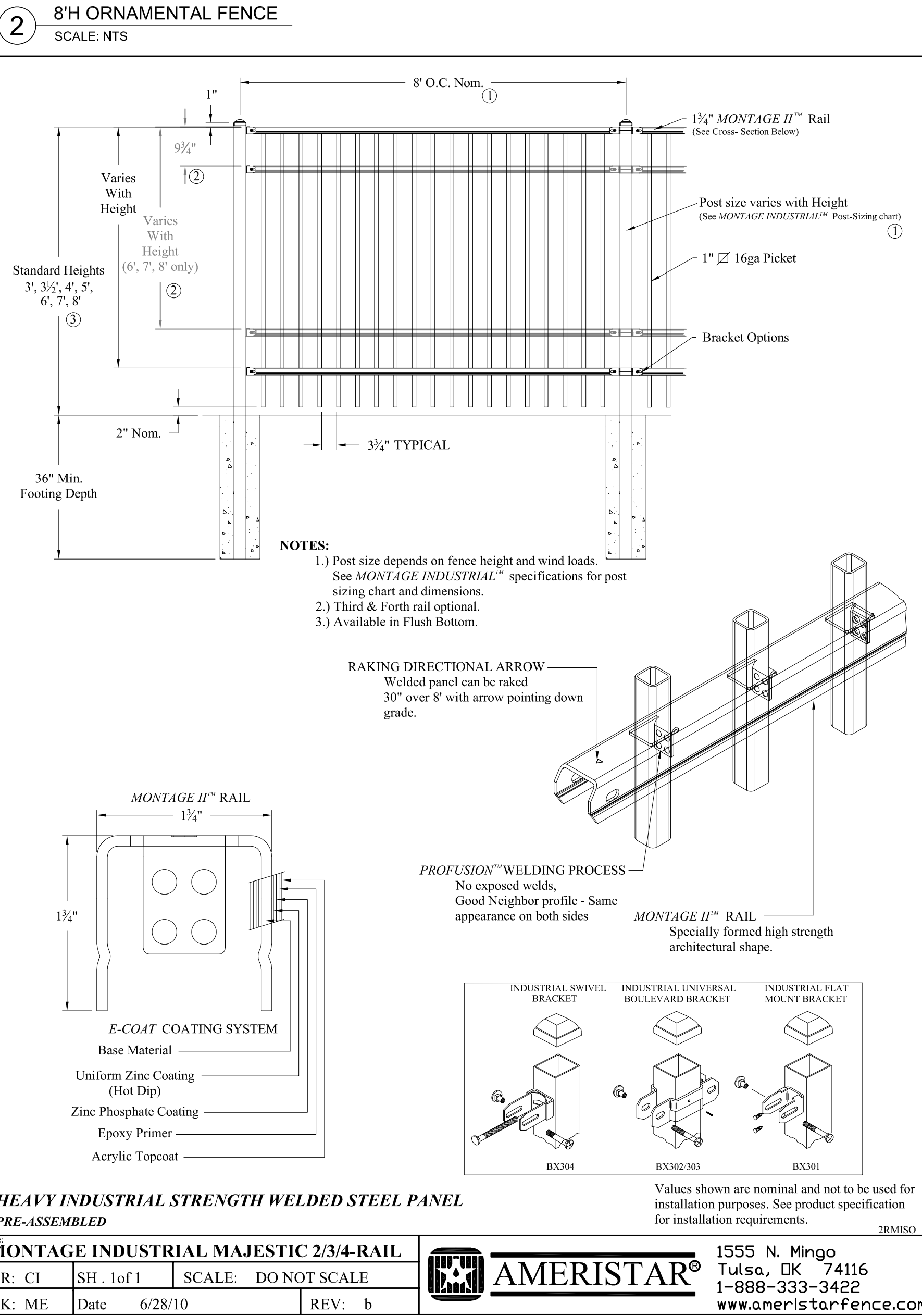
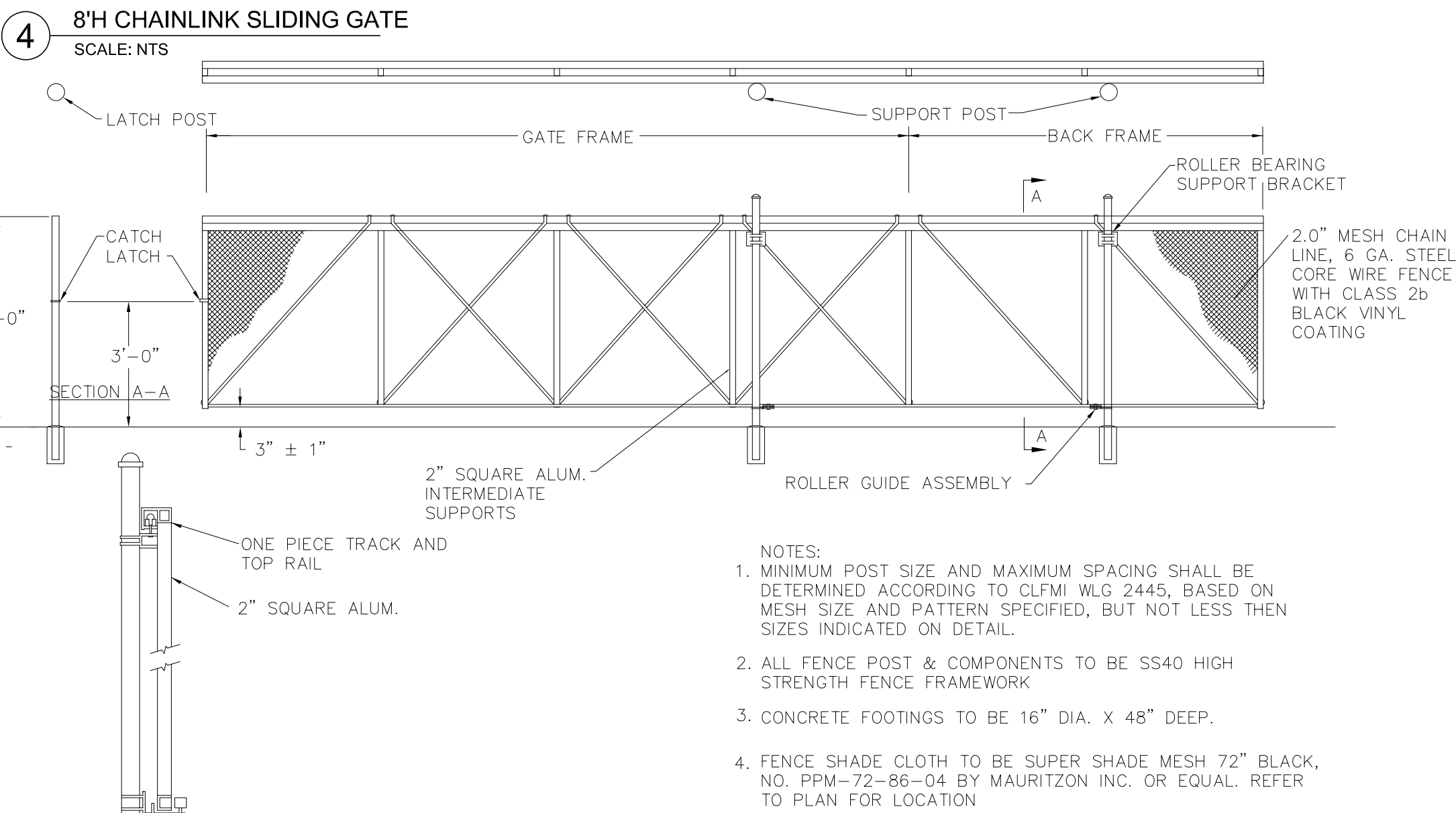
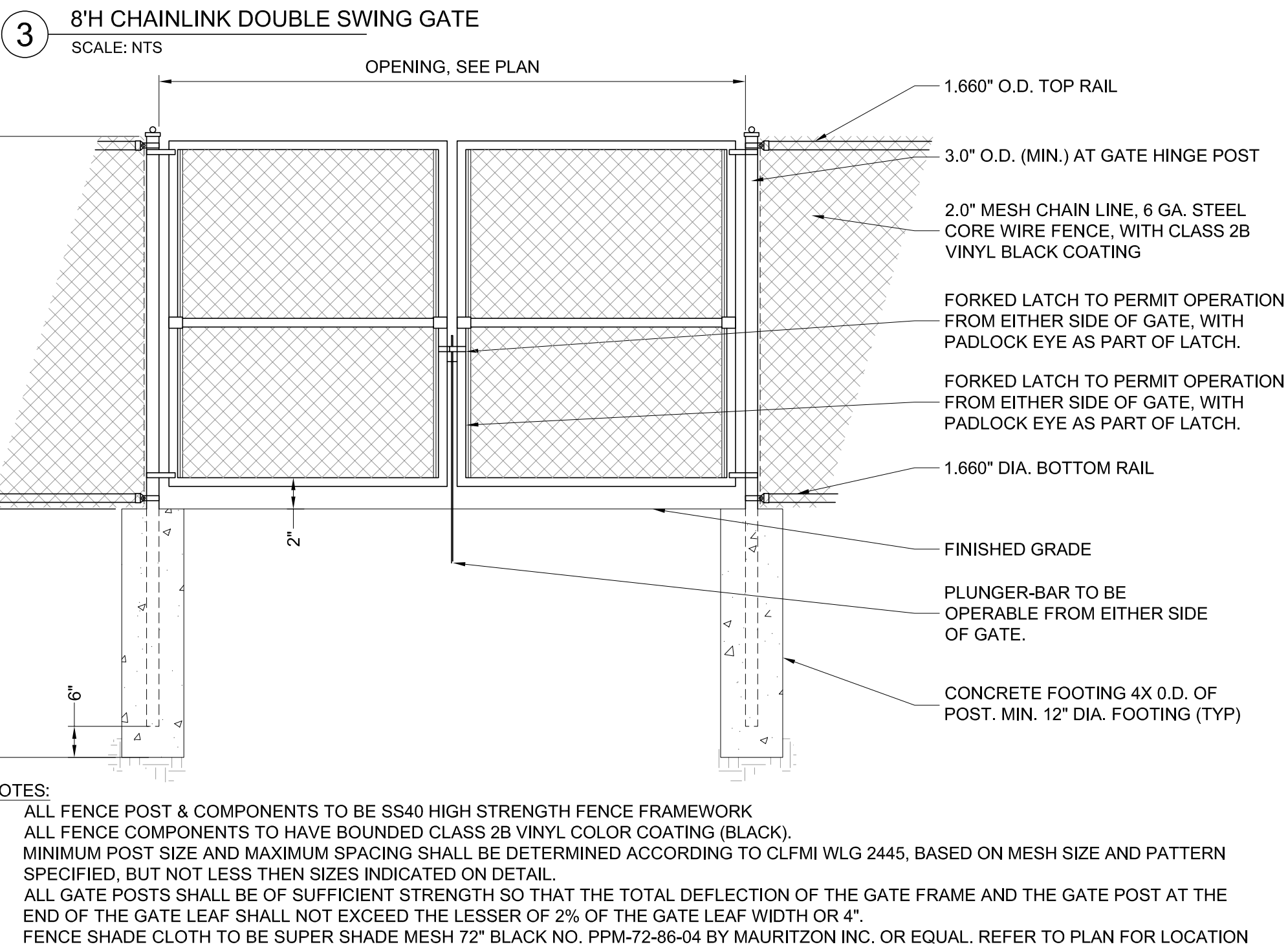
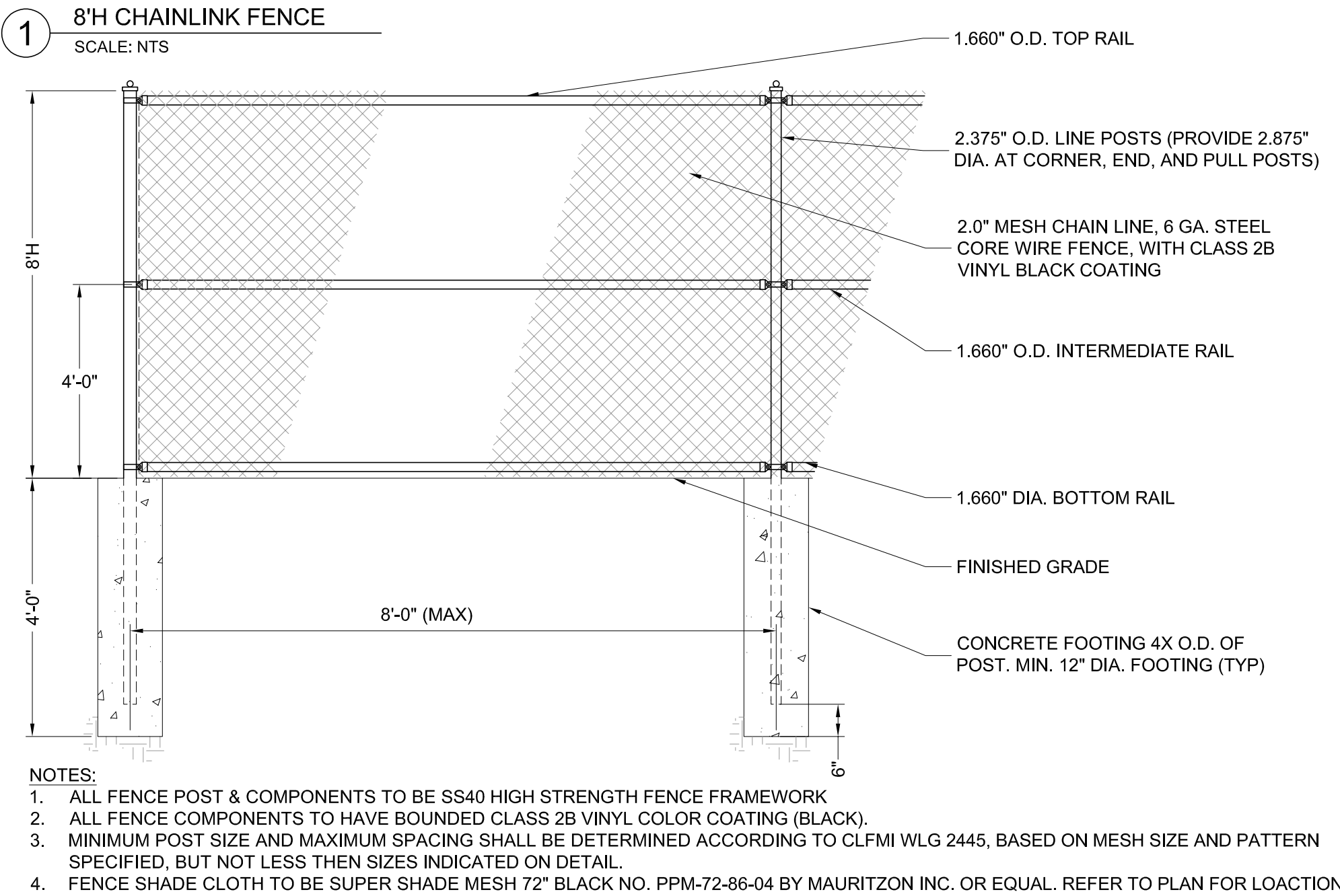
CIVIL DETAILS

Project Number:
210107
Drawn By:
NKH
Sheet:

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VILLAGE COMMENT RESPONSE	03/09/2023	
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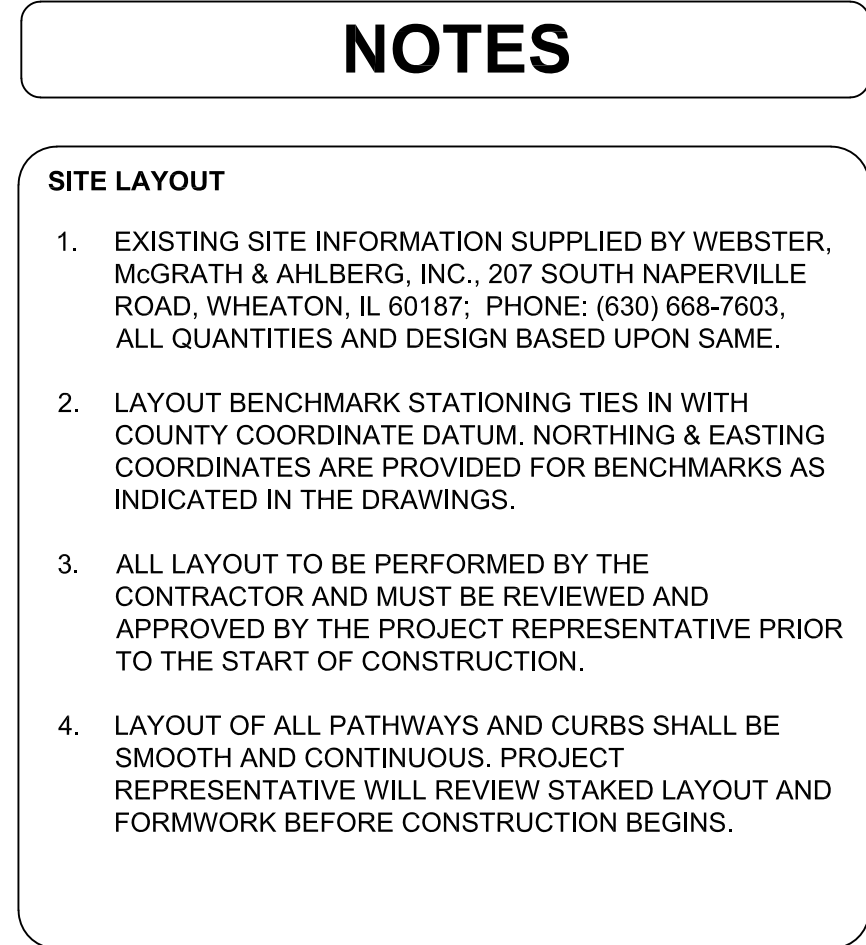
**WILLOWBROOK
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525 S. PARK BOULEVARD
GLEN ELLYN, IL 60137

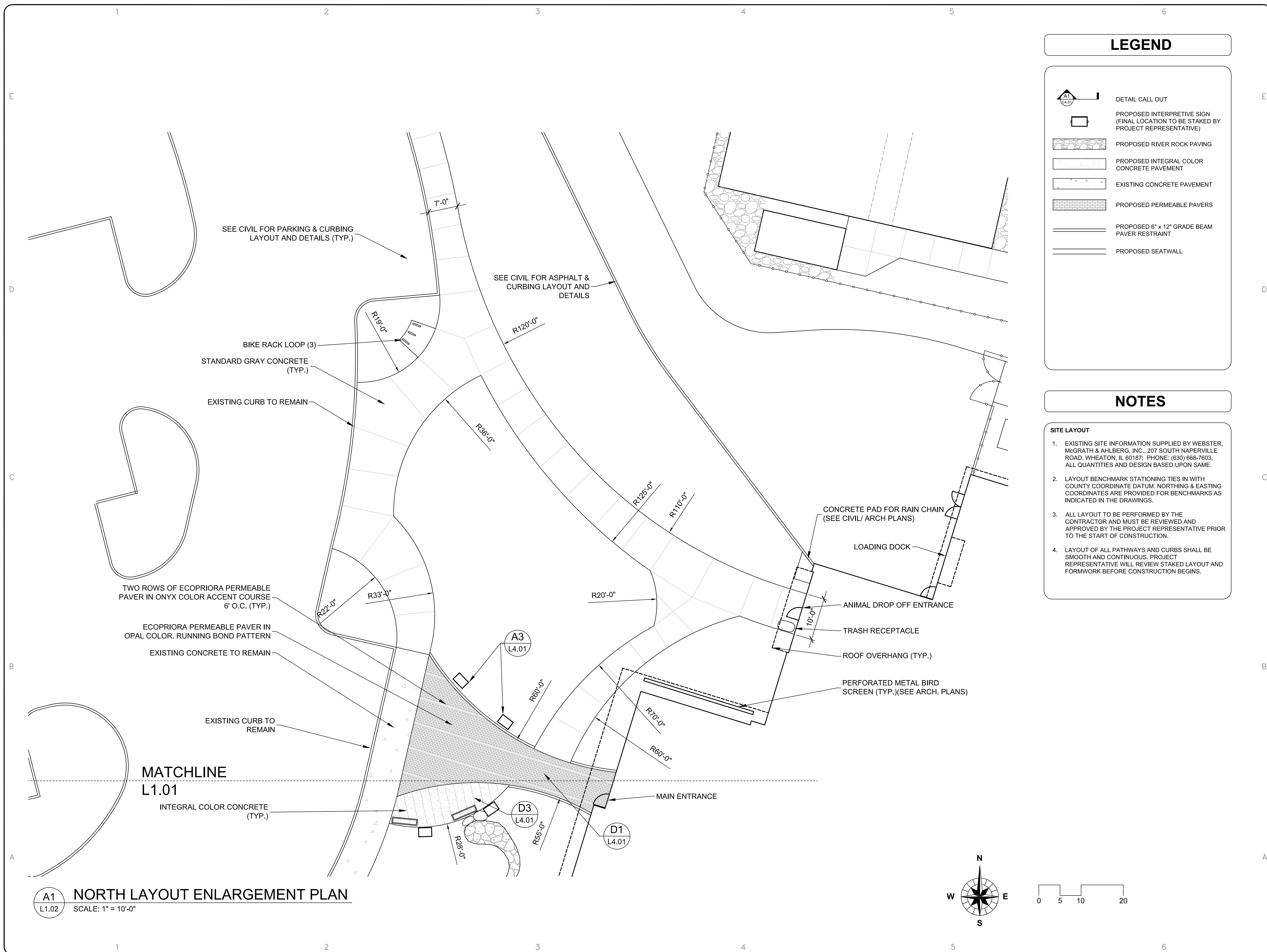
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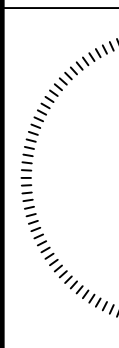
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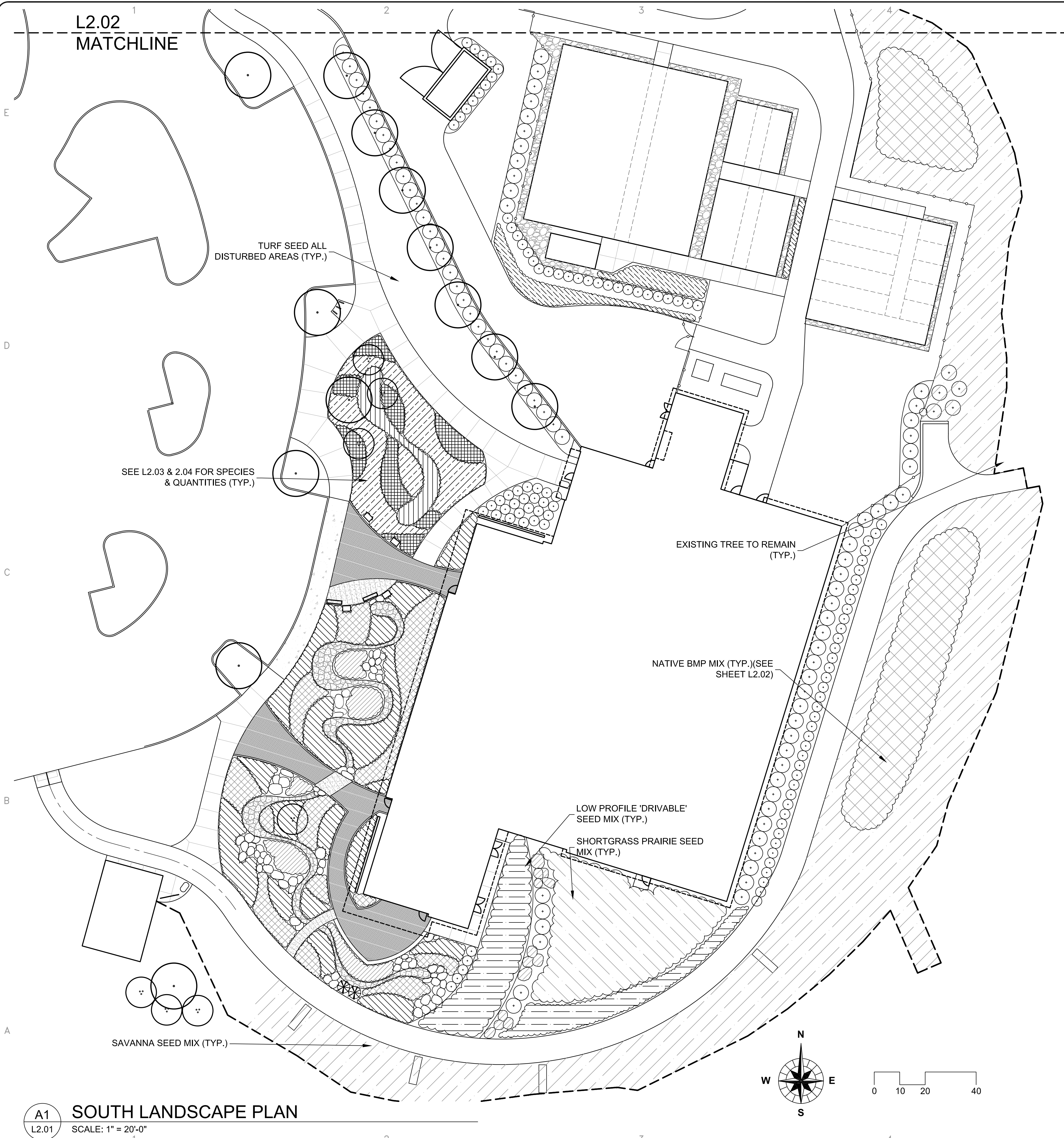
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OWNER:		STREET ADDRESS:																									
		3 S 580 NAPERVILLE ROAD WHEATON, IL 60189-8761																									
MAILING ADDRESS:		P.O. BOX 5000 WHEATON, IL 60189-5000																									
CONTACT NUMBERS:		PH# 630-933-7200 FAX# 630-933-7204																									
ARCHITECT LICENSE:		ENGINEER LICENSE:																									
																											
SIGNED:		SIGNED:																									
DATE:		DATE:																									
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EXP:		EXP:																									
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WILLOWBROOK WILDLIFE CENTER WILLOWBROOK MASTER PLAN PHASE 2		PH#:																									
		FAX#																									
		SUBCONSULTANT:																									
		CONSULTANT:																									
Address		PH#:	FAX#																								
<table border="1"><thead><tr><th>MARK:</th><th>DATE:</th><th>DESCRIPTION:</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td>2/13/2023</td><td>Village Comment Response</td></tr><tr><td></td><td>1/19/2023</td><td>Issue for Bid Group 3</td></tr><tr><td></td><td>1/13/2023</td><td>PERMIT REVISION #1</td></tr><tr><td></td><td>11/18/2022</td><td>BID GROUP 3</td></tr></tbody></table>				MARK:	DATE:	DESCRIPTION:											2/13/2023	Village Comment Response		1/19/2023	Issue for Bid Group 3		1/13/2023	PERMIT REVISION #1		11/18/2022	BID GROUP 3
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	11/18/2022	BID GROUP 3																									
PROJECT NO:		M-340-000																									
DRAWN BY:		MJA																									
CHECKED BY:		KG																									
DATE:		1/27/2022																									
SCALE:		1" = 10'-0"																									
SHEET TITLE:																											
LAYOUT PLAN																											
SHEET NO:																											
L1.02																											
SHEET 0 OF 00																											



A1 SOUTH LANDSCAPE PLAN
L2.01 SCALE: 1" = 20'-0"

Willowbrook Master Plan Phase B Plant List					
Symbol	Botanical Name	Common Name	Quantity	Size	Notes
Trees					
AME-L	<i>Amelanchier laevis</i>	Allegheny Shadblow	3	2" cal.	Ornamental
CEL-O	<i>Celtis occidentalis</i>	Hackberry	3	3" cal.	Shade
CER-C	<i>Cercis canadensis</i>	Redbud	3	2" cal.	Ornamental
CRA-V	<i>Crataegus viridis</i>	Green Hawthorn	1	2" cal.	Ornamental
GYM-D	<i>Gymnocladus dioica</i>	Kentucky Coffeetree	3	3" cal.	Shade
QUE-B	<i>Quercus bicolor</i>	Swamp White Oak	7	3" cal.	Shade
QUE-R	<i>Quercus rubra</i>	Red Oak	2	3" cal.	Shade
Shrubs					
ARO-M	<i>Aronia melanocarpa</i>	Black Chokeberry	31	5 Gal.	Deciduous Shrub
COR-A	<i>Corylus americana</i>	Hazelnut	83	5 Gal.	Deciduous Shrub
DIE-L	<i>Diervilla lonicera</i>	Dwarf Honeysuckle	59	5 Gal.	Deciduous Shrub
HAM-V	<i>Hamamelis virginiana</i>	Common Witchhazel	16	5 Gal.	Deciduous Shrub
HYD-A	<i>Hydrangea arborescens</i>	Smooth Hydrangea	24	5 Gal.	Deciduous Shrub
VIB-P	<i>Viburnum prunifolium</i>	Blackhaw Viburnum	11	5 Gal.	Deciduous Shrub
TAX-M	<i>Taxus x media 'Taunton'</i>	Taunton Yew	29	5 Gal.	Evergreen Shrub
Grasses					
AND-S	<i>Andropogon scoparius</i>	Little Bluestem	711	2.5" Plug	18" O.C.
BOU-C	<i>Bouteloua curtipendula</i>	Side-oats Grama	760	2.5" Plug	18" O.C.
SPO-H	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1145	2.5" Plug	18" O.C.
PAN-V	<i>Panicum virgatum</i>	Switchgrass	426	2.5" Plug	18" O.C.
CAR-G	<i>Carex gracillima</i>	Purple Sheathed Graceful Sedge	236	2.5" Plug	18" O.C.
CAR-P	<i>Carex pensylvanica</i>	Penn Sedge	776	2.5" Plug	18" O.C.
CAR-R	<i>Carex rosea</i>	Curly-styled Wood Sedge	439	2.5" Plug	18" O.C.
Forbs					
ASC-I	<i>Asclepias incarnata</i>	Swamp Milkweed	40	2.5" Plug	18" O.C.
PEN-D	<i>Penstemon digitalis</i>	Foxglove	69	2.5" Plug	18" O.C.
ECH-P	<i>Echinacea purpurea</i>	Purple Coneflower	30	2.5" Plug	18" O.C.
DOD-M	<i>Dodecatheon media</i>	Shooting Star	100	Pint	Field Layout
MER-V	<i>Mertensia virginica</i>	Virginia Bluebells	100	Pint	Field Layout
RUD-F	<i>Rudbeckia fulgida speciosa</i>	Black Eyed Susan	135	2.5" Plug	18" O.C.
SYM-N	<i>Symphyotrichum novae-angliae</i>	New England Aster	59	2.5" Plug	18" O.C.

D5 MASTER PLANT LIST
L2.01

Shortgrass Prairie Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Carex bicknellii</i>	Copper-shouldered Oval Sedge	2,000	32
<i>Elymus canadensis</i>	Canada Wild Rye	2,000	32
<i>Koeleria macrantha</i>	June Grass	0.125	2
<i>Allium cernuum</i>	Nodding Onion	0.500	8
<i>Aquilegia canadensis</i>	Wild Columbine	0.250	4
<i>Asclepias tuberosa</i>	Butterfly Weed	1,000	16
<i>Dalea purpurea</i>	Purple Prairie Clover	0.250	4
<i>Eryngium yuccifolium</i>	Rattlesnake Master	0.500	8
<i>Echinacea purpurea</i>	Purple Coneflower	1,000	16
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.250	4
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Rudbeckia fulgida</i>	Orange Coneflower	0.500	8
<i>Symphyotrichum novae-angliae</i>	New England Aster	0.250	4
Total Weight of Seeds		14.875	238

Low Profile/ Drivable Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	10,000	160
<i>Bouteloua curtipendula</i>	Side-oats Grama	10,000	160
<i>Koeleria macrantha</i>	June Grass	0.125	2
Total Weight of Seeds		6,000	96

Savanna Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Carex grisea</i>	Wood Gray Sedge	0.500	8
<i>Carex molesta</i>	Field Oval Sedge	0.500	8
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.500	8
<i>Elymus hystrix</i>	Bottlebrush Grass	2,000	32
<i>Elymus virginicus</i>	Virginia Wild Rye	5,000	80

<i>Asclepias exaltata</i>	Poke Milkweed	0.500	8
<i>Aquilegia canadensis</i>	Wild Columbine	0.250	4
<i>Dodecatheon meadia</i>	Shooting Star	0.125	2
<i>Echinacea purpurea</i>	Purple Coneflower	1,000	16
<i>Geranium maculatum</i>	Wild Geranium	0.500	8
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.250	4
<i>Polemonium reptans</i>	Jacobs Ladder	0.500	8
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Solidago ulmifolia</i>	Elm-leaved Goldenrod	0.063	1
<i>Symphyotrichum novae-angliae</i>	New England Aster	0.250	4
<i>Zizia aurea</i>	Golden Alexanders	0.250	4
Total Weight of Seeds		3,500	56

Native Area Cover Crop			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Avena sativa</i>	Oats	32	512

Note: all seeded areas to include erosion control blanket per civil plans.

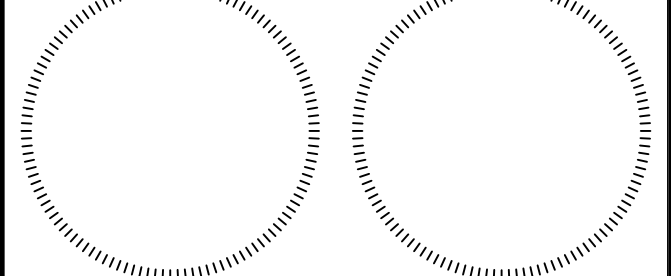
A5 NATIVE SEED LISTS
L2.01

OWNER: STREET ADDRESS:
3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:
P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:
PH# 630-933-7200
FAX# 630-933-7204

ARCHITECT LICENSE: ENGINEER LICENSE:



SIGNED: SIGNED:
DATE: DATE:
LIC#: LIC#:
EXP: EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER
WILLOWBROOK MASTER PLAN PHASE 2

Address

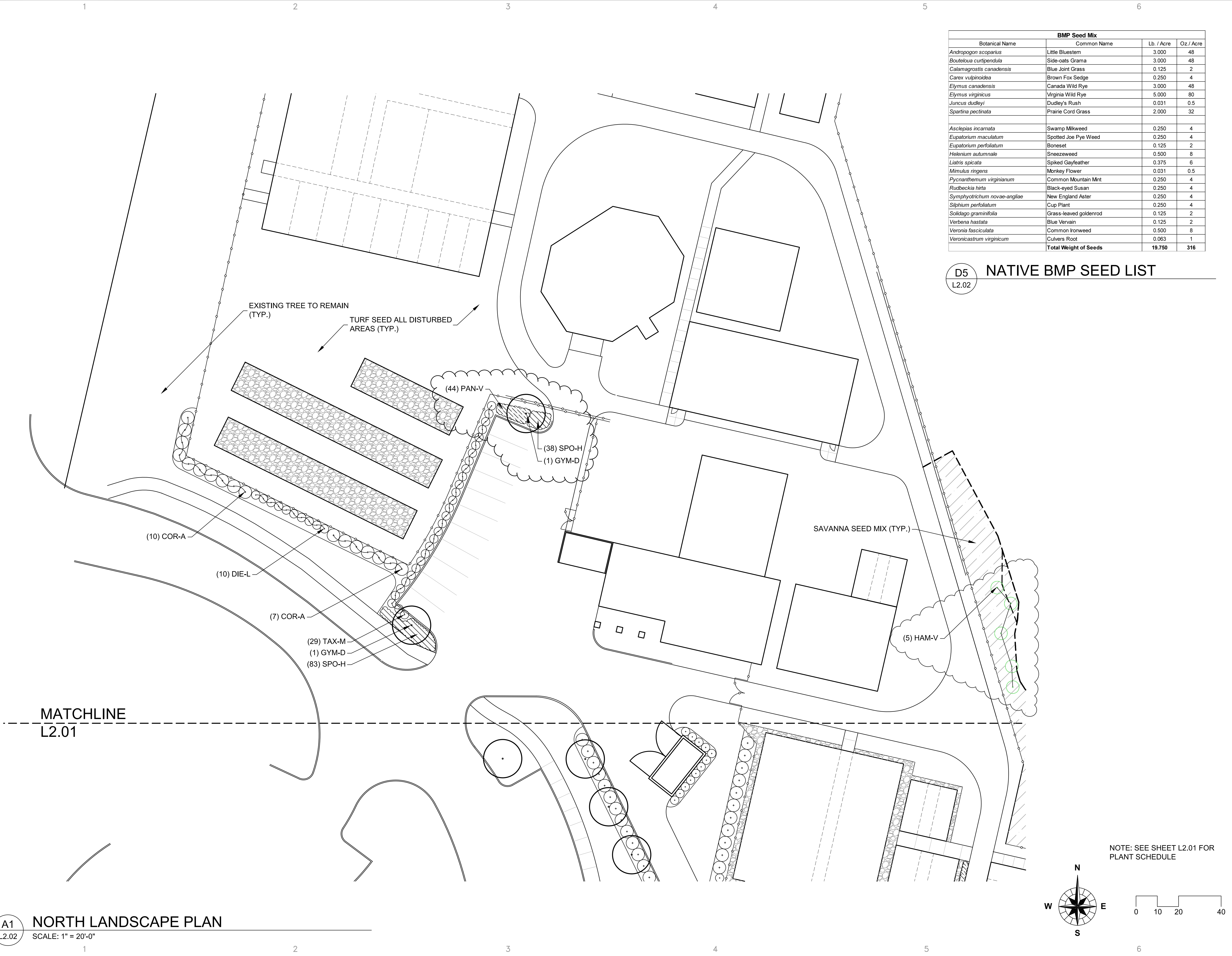
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SUBCONSULTANT:
PH#: FAX#
CONSULTANT:

MARK:	DATE:	DESCRIPTION:
	2/13/2023	Village Comment Response
	1/19/2023	Issue for Bid Group 3
	1/13/2023	PERMIT REVISION #1
	11/18/2022	BID GROUP 3

PROJECT NO: M-340-000
DRAWN BY: MJA
CHECKED BY: KG
DATE: 1/27/2022
SCALE: 1" = 20'-0"

SHEET TITLE:
SOUTH LANDSCAPE PLAN

SHEET NO:
L2.01
SHEET 0 of 00



A1 NORTH LANDSCAPE PLAN
L2.02 SCALE: 1" = 20'-0"

BMP Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz. / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.125	2
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.250	4
<i>Elymus canadensis</i>	Canada Wild Rye	3,000	48
<i>Elymus virginicus</i>	Virginia Wild Rye	5,000	80
<i>Juncus dudleyi</i>	Dudley's Rush	0.031	0.5
<i>Spartina pectinata</i>	Prairie Cord Grass	2,000	32
<i>Asclepias incarnata</i>	Swamp Milkweed	0.250	4
<i>Eupatorium maculatum</i>	Spotted Joe Pye Weed	0.250	4
<i>Eupatorium perfoliatum</i>	Boneset	0.125	2
<i>Helenium autumnale</i>	Sneezeweed	0.500	8
<i>Liatris spicata</i>	Spiked Gayfeather	0.375	6
<i>Mimulus ringens</i>	Monkey Flower	0.031	0.5
<i>Pycnanthemum virginianum</i>	Common Mountain Mint	0.250	4
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Symphotrichum novae-angliae</i>	New England Aster	0.250	4
<i>Silphium perfoliatum</i>	Cup Plant	0.250	4
<i>Solidago graminifolia</i>	Grass-leaved goldenrod	0.125	2
<i>Verbena hastata</i>	Blue Vervain	0.125	2
<i>Veronica fasciculata</i>	Common Ironweed	0.500	8
<i>Veronicastrum virginicum</i>	Culvers Root	0.063	1
Total Weight of Seeds		19.750	316

D5 NATIVE BMP SEED LIST
L2.02

OWNER:

STREET ADDRESS:

3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:

P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:

PH# 630-933-7200
FAX# 630-933-7204

ARCHITECT LICENSE:

ENGINEER LICENSE:

SIGNED:

SIGNED:

DATE:

DATE:

LIC#:

LIC#:

EXP:

EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER

WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:

FAX#:

SUBCONSULTANT:

PH#:

FAX#:

CONSULTANT:

MARK:

DATE:

DESCRIPTION:

2/13/2023

Village Comment Response

1/19/2023

Issue for Bid Group 3

1/13/2023

PERMIT REVISION #1

11/18/2022

BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 20'-0"

SHEET TITLE:

NORTH LANDSCAPE PLAN

SHEET NO:

L2.02

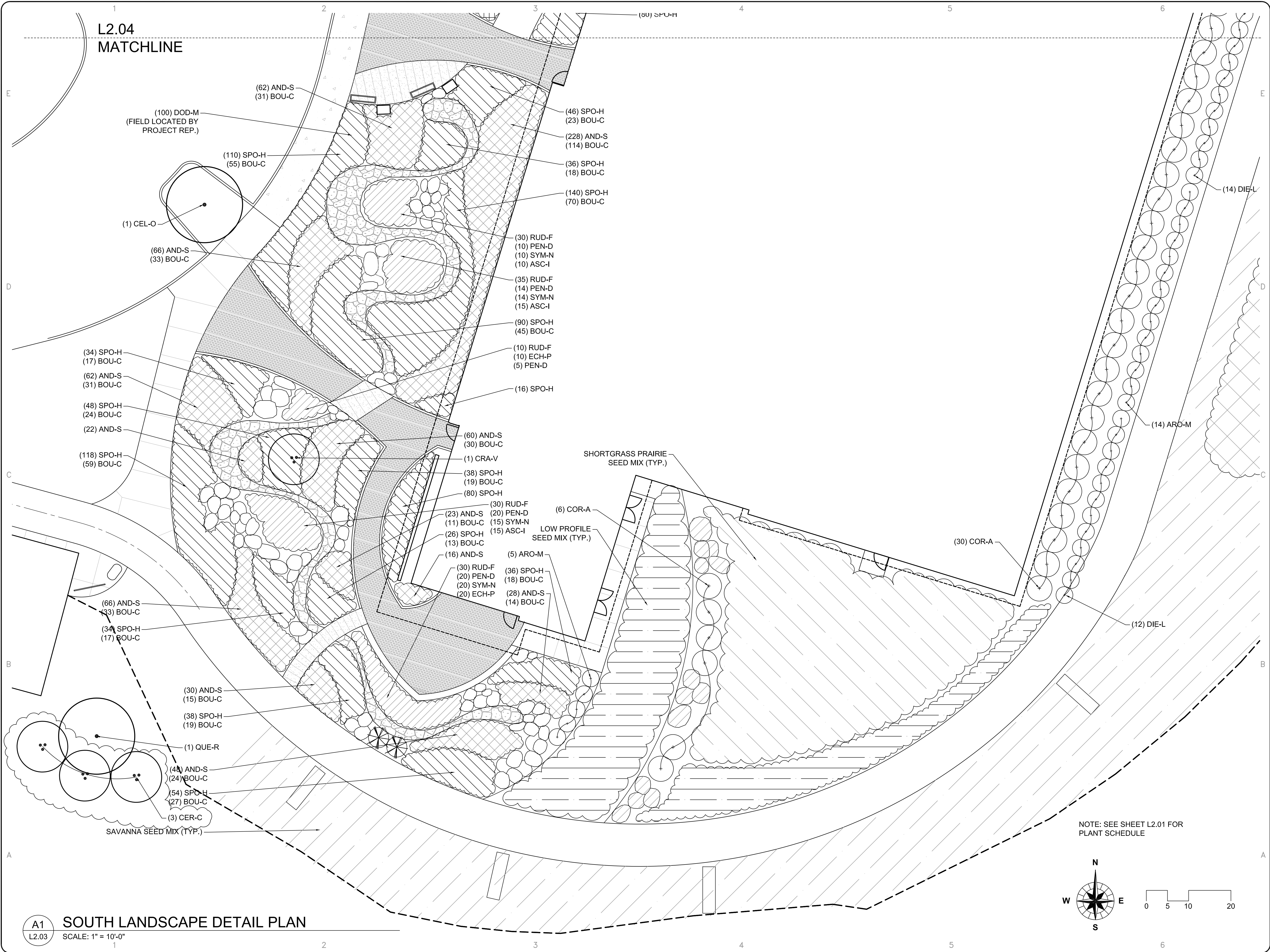
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Page 172 of 544



A1 SOUTH LANDSCAPE DETAIL PLAN
L2.03 SCALE: 1" = 10'-0"

OWNER:

STREET ADDRESS:
3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:
P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:
PH# 630-933-7200
FAX# 630-933-7204

ARCHITECT LICENSE:

ENGINEER LICENSE:

SIGNED:

DATE:

LIC#:

EXP:

SIGNED:

DATE:

LIC#:

EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER

WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:

FAX#:

SUBCONSULTANT:

CONSULTANT:

PH#:

FAX#:

MARK:	DATE:	DESCRIPTION:
	2/13/2023	Village Comment Response
	1/19/2023	Issue for Bid Group 3
	1/13/2023	PERMIT REVISION #1
	11/18/2022	BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 10'-0"

SHEET TITLE:

LANDSCAPE DETAIL PLAN

SHEET NO:

L2.03

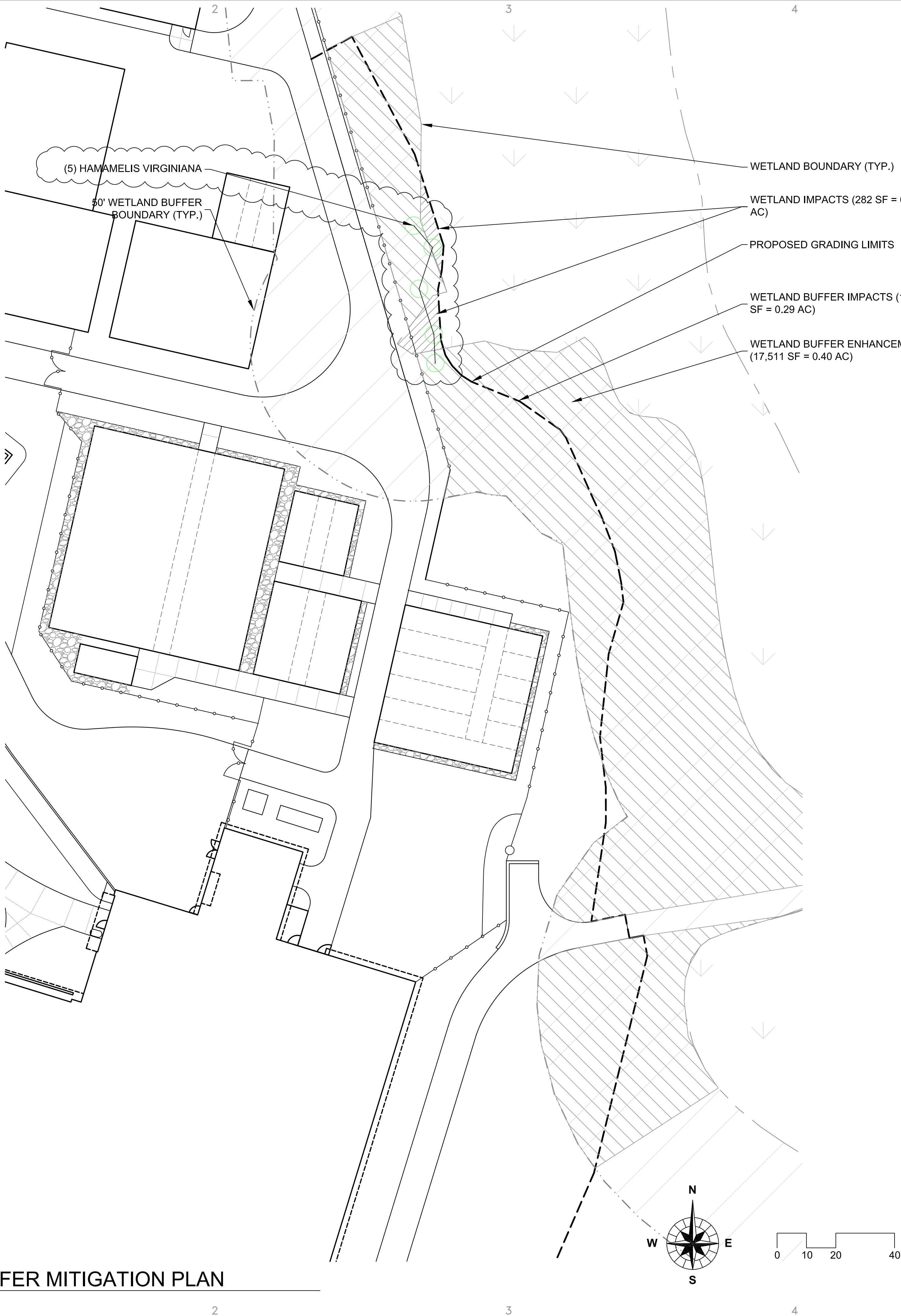
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CAD DWG FILE: C:\SDSKPROJ\Z-000-000.dwg Z-000-000.dwg Z-000-000_C0V1-0.dwg



LEGEND

WETLAND

WETLAND IMPACTS

WETLAND BUFFER

BUFFER ENHANCEMENTS

NOTES

SITE LAYOUT

1. CONTRACTOR SHALL MAINTAIN WETLAND BUFFERS AND ALL AREAS SEEDED AS PART OF THIS CONTRACT FOR A MINIMUM OF THREE (3) YEARS.

2. A TOTAL OF .29 ACRES OF WETLAND BUFFER WILL BE IMPACTED BY CONSTRUCTION AND GRADING ACTIVITIES. TO OFFSET THESE IMPACTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENHANCE SEEDED BUFFER AND EXISTING BUFFER VEGETATIVE BASELINES OF .4 ACRES OF WETLAND BUFFER.

3. THE CONTRACTOR SHALL MANAGE ALL NON-NATIVE, WEEDY AND INVASIVE WOODY AND HERBACEOUS VEGETATION WITHIN THE WETLAND BUFFER ENHANCEMENTS AREAS.

MITIGATION TABLE

WETLAND BUFFER ENHANCEMENT PERFORMANCE STANDARDS						
Monitoring & Management Period	Temporary Vegetative Cover / Permanent Soil Stabilization*	Percent Cover Native Vegetation*	Percent Cover of Seeded/ Planted Species	Floristic Quality Index (FQI)**	Coefficient of Conservatism (C)**	None of Three Most Dominant Species are Non-Native or Invasive***
Year 1	Must meet NPDES standards	10%	10%	---	---	Cover crop acceptable
Year 2	No Unvegetated areas >0.5m²	25%	25%	---	---	Required
Year 3	No Unvegetated areas >0.5m²	75%	50%	20	3.5	Required

As measured by aerial coverage, excluding the emergent zone. The emergent zone must achieve a minimum of 50% vegetative cover.

FQI and/or (C) can be adjusted downward when taking the context of the location into consideration.

***Species include, but are not limited to: Cattail (Typha spp.), Reed Canary Grass (Phalaris arundinacea), Purple Loosestrife (Lythrum salicaria), Common Reed (Phragmites australis), Canada Thistle (Cirsium arvense), Sandbar Willow (Salix exigua), Kentucky Blue Grass (Poa pratensis) and White Sweet Clover (Melilotus alba) Cut Leaved Teasel (Dipsacus laciniatus), Common Teasel (Dipsacus sylvestris), and Japanese Knotweed (Polygonum cuspidatum).

BMP Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz. / Acre
Andropogon scoparius	Little Bluestem	3,000	48
Bouteloua curtipendula	Side-oats Grama	3,000	48
Calamagrostis canadensis	Blue Joint Grass	0.125	2
Carex vulpinoidea	Brown Fox Sedge	0.250	4
Elymus canadensis	Canada Wild Rye	3,000	48
Elymus virginicus	Virginia Wild Rye	5,000	80
Juncus dudleyi	Dudley's Rush	0.031	0.5
Spartina pectinata	Prairie Cord Grass	2,000	32
Asclepias incarnata	Swamp Milkweed	0.250	4
Eupatorium maculatum	Spotted Joe Pye Weed	0.250	4
Eupatorium perfoliatum	Boneset	0.125	2
Helenium autumnale	Sneezeweed	0.500	8
Liatris spicata	Spiked Gayfeather	0.375	6
Mimulus ringens	Monkey Flower	0.031	0.5
Pycnanthemum virginianum	Common Mountain Mint	0.250	4
Rudbeckia hirta	Black-eyed Susan	0.250	4
Symphyotrichum novae-angliae	New England Aster	0.250	4
Silphium perfoliatum	Cup Plant	0.250	4
Solidago graminifolia	Grass-leaved goldenrod	0.125	2
Verbena hastata	Blue Vervain	0.125	2
Veronica fasciculata	Common Ironweed	0.500	8
Veronicastrum virginicum	Culvers Root	0.063	1
Total Weight of Seeds		19.750	316

Savanna Mix			
Botanical Name	Common Name	Lb. / Acre	Oz. / Acre
Andropogon scoparius	Little Bluestem	3,000	48
Bouteloua curtipendula	Side-oats Grama	3,000	48
Carex grisea	Wood Gray Sedge	0.500	8
Carex molesta	Field Oval Sedge	0.500	8
Carex vulpinoidea	Brown Fox Sedge	0.500	8
Elymus hystrix	Bottlebrush Grass	2,000	32
Elymus virginicus	Virginia Wild Rye	5,000	80
Asclepias exaltata	Poke Milkweed	0.500	8
Aquilegia canadensis	Wild Columbine	0.250	4
Dodecatheon meadia	Shooting Star	0.125	2
Echinacea purpurea	Purple Coneflower	1,000	16
Geranium maculatum	Wild Geranium	0.500	8
Penstemon digitalis	Foxglove Beard Tongue	0.250	4
Polemonium reptans	Jacobs Ladder	0.500	8
Rudbeckia hirta	Black-eyed Susan	0.250	4
Solidago ulmifolia	Elm-leaved Goldenrod	0.063	1
Symphyotrichum novae-angliae	New England Aster	0.250	4
Zizia aurea	Golden Alexanders	0.250	4
Total Weight of Seeds		3,500	56

Native Area Cover Crop			
Botanical Name	Common Name	Lb. / Acre	Oz. / Acre
Avena sativa	Oats	32	512

NOTE: all seeded areas to include erosion control blanket per civil plans.

A5

NATIVE SEED LISTS

A1

WETLAND BUFFER MITIGATION PLAN

L2.05

SCALE: 1" = 20'-0"

OWNER:

STREET ADDRESS:
3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:
P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:
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SIGNED:

DATE:

LIC#:

EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER

WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:

FAX#:

SUBCONSULTANT:

PH#:

FAX#:

CONSULTANT:

MARK:

DATE:

DESCRIPTION:

2/13/2023

Village Comment

Response

1/13/2022

PERMIT RESPONSE #1

11/18/2022

BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 20'-0"

SHEET TITLE:

WETLAND BUFFER MITIGATION PLAN

SHEET NO:

L2.05

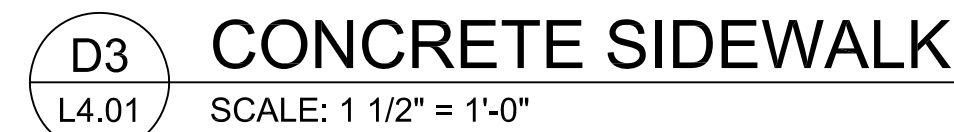
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Page 175 of 544



WILLOWBROOK WILDLIFE CENTER			
WILLOWBROOK MASTER PLAN PHASE 2			
SITework DETAILS			
Address			
CONSULTANT:		PH#:	SUBCONSULTANT:
		FAX#	FAX#

L4.01

SHEET 0 OF 00

ILLINOIS

WILLOWBROOK WILDLIFE CENTER
WILLOWBROOK MASTER PLAN PHASE 2

PH#:

PH#:

SUBCONSULTANT:

PH#:

CONSULTANT:

L4.02

SHEET 0 OF 00



INTRODUCTION

The Forest Preserve District of DuPage County is a nationally recognized conservation agency that envisions a community in which all citizens share a connection with nature and an appreciation for cultural history. As part of the Forest Preserve District of DuPage County, Willowbrook Wildlife Center provides native wildlife rehabilitation services to care for injured, sick, or orphaned wild animals. Historically Willowbrook Wildlife Center has been a pioneer in the field of wildlife medicine and strives to become a state-of-the-art facility that is a national leader in engaging visitors in veterinary science, medical care, and wildlife rehabilitation.

Willowbrook Wildlife Center serves as a resource for residents of DuPage County to learn about living in harmony with local wildlife and champions the interconnection between healthy wildlife and healthy ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in DuPage County and beyond.

The architectural style for the new Clinic and Visitor Center is designed to fit into the natural landscape and is planned around significant oak and walnut trees on the property. The front entrance features an oak tree that forms a soft separation between the animal intake entry and public visitor entry. Low slope roofs with long horizontal edges provide a low profile to the building, creating an intimate scale. Layers of structure and extended canopies help the profile of the architecture visually dissolve into the forest. Elements of sustainability and wellness are incorporated into the project in addition to features that support healthy wildlife such as bird-friendly glass and screening elements. The material, color, and texture of the exterior walls is designed to blend into the surrounding forest.

As a net-zero energy designed facility, the proposed design minimizes impacts on the environment while promoting nature and wildlife preservation and sustainability. The proposed site and building design will enhance the current use as a wildlife center and continue to be a source of pride that will attract new residents, business, and investments.

The Proposed Phase B-D Work is planned to start in Spring 2023. All additional information on implementation schedules is outlined in the following pages and is the subject of this overall special-use/development plan submittal.



PROPOSED CURRENT WORK

Existing Clinic & Education Building

1. To be demolished.

Existing Propagation Building

1. Existing 4,940 SF single story building to be renovated to support the captive propagation of at-risk species and research projects that will advance wildlife medicine and rehabilitation.

Proposed New Clinic Building:

1. A new 28,088 SF Clinic and Visitor Center designed to support an efficient and safe rehabilitation process.

Outdoor Animal Rehabilitation Enclosures

1. A variety of Outdoor Rehabilitation Enclosures approximately 9,140 SF are designed to prepare animals for release into the wild. The new enclosures will be enhanced to increase the quality of life for the animals and will not be visitable by the public.

Zoning Variations

1. Accessory Structure floor Area: Variance request for increase for the accessory structure allowable area required for animal housing to meet wildlife rehabilitation standards.
2. Fence Height: Variance request for increase in height to meet wildlife rehabilitation standards.
3. Landscaping: Variance request for quantity and types of landscaping to support Forest Preserves mission to use exclusively native plants and managed landscape areas.
4. Building Sign Quantity: Variance request for increase in sign quantity from one sign to two signs as needed to distinguish separate intake and exhibit services available to the public.
5. Accessory Structure Setback: Variance request to locate the ground mount Photovoltaic Array (accessory structure) in front the new Clinic (primary structure).
6. Building Height: Variance to allow for the maximum building height to be measured from the approach and parking areas in lieu of the 'average existing grade' defined in the ordinance.
7. Fence Openness Factor: Variance request for decrease in openness factor to meet wildlife rehabilitation standards.

Miscellaneous

1. The trash enclosure will be constructed away from public view and enclosed by screen walls designed to match the finish of the adjacent primary structure (propagation building).
2. A new decorative fence will be constructed to visually screen and control public access to the ground-mounted solar PV array adjacent to the parking lot.
3. A new fence shall also be constructed around the outdoor animal enclosures for the safety and security of the animals.



Site

1. New walking paths shall be constructed throughout the site for routine maintenance of the outdoor animal enclosures. The walking paths will not be accessible to the public.
2. New bio-infiltration areas (landscaped depressional areas) are anticipated within the exhibit area to act as an additional stormwater BMP (Best Management Practice).

NOTE: The BMPs will reduce stormwater quantity/runoff by promoting infiltration as well as improve stormwater quality by filtering contaminants.

Schedule for Implementation:

1. Construction is anticipated to start in Spring of 2023 and be complete in fall of 2024.



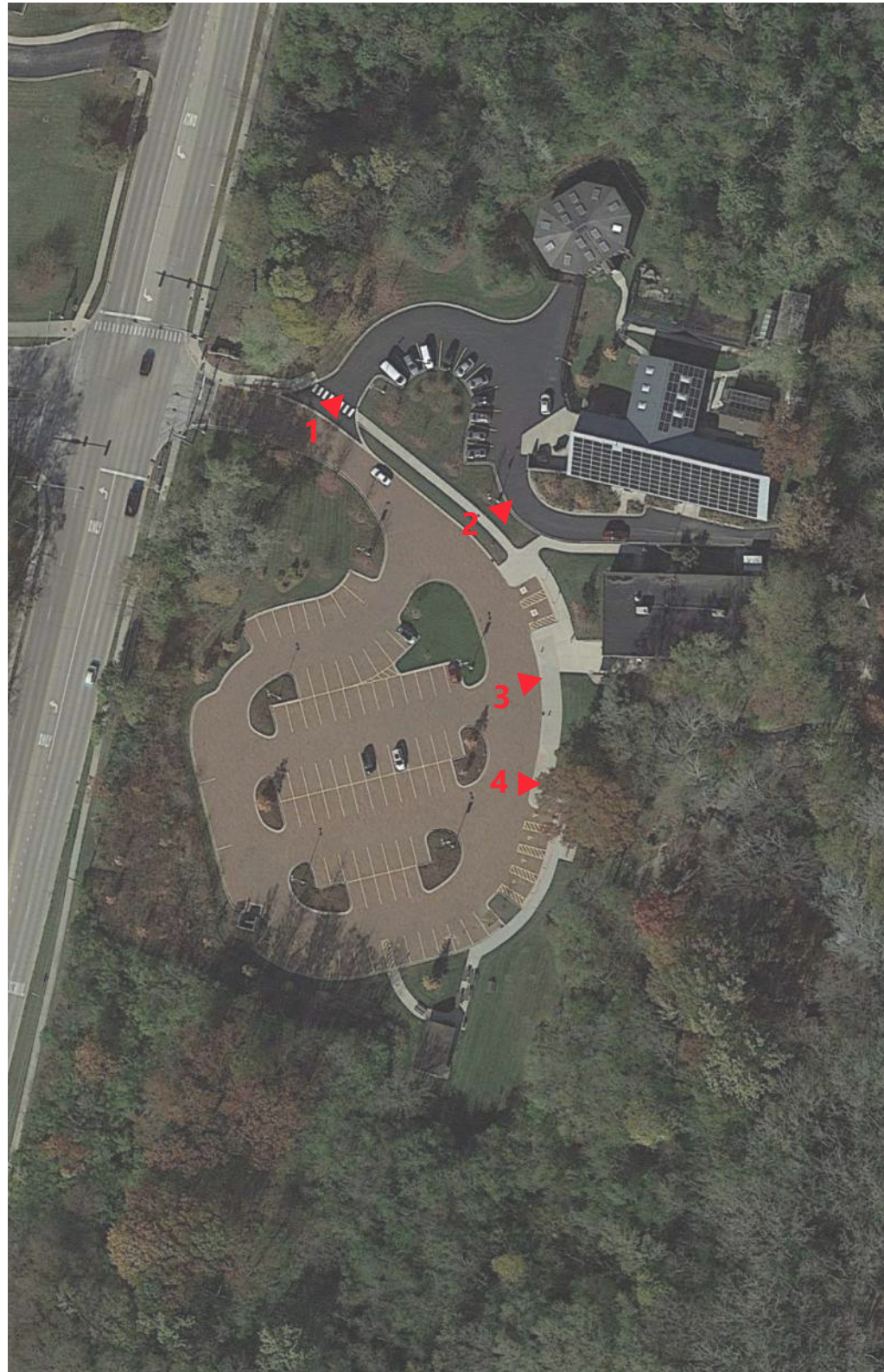
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY | **WILLOWBROOK WILDLIFE CENTER**

PROJECT OVERVIEW
1.12.2023

SITE DESIGN



SITE DESIGN EXISTING SITE PHOTOS



EXISTING SITE



PHOTO 1 - EXISTING STAFF PARKING



PHOTO 2 - EXISTING SPECIES PROPAGATION BUILDING



PHOTO 3 - EXISTING CLINIC BUILDING



PHOTO 4 - NEW CLINIC SITE

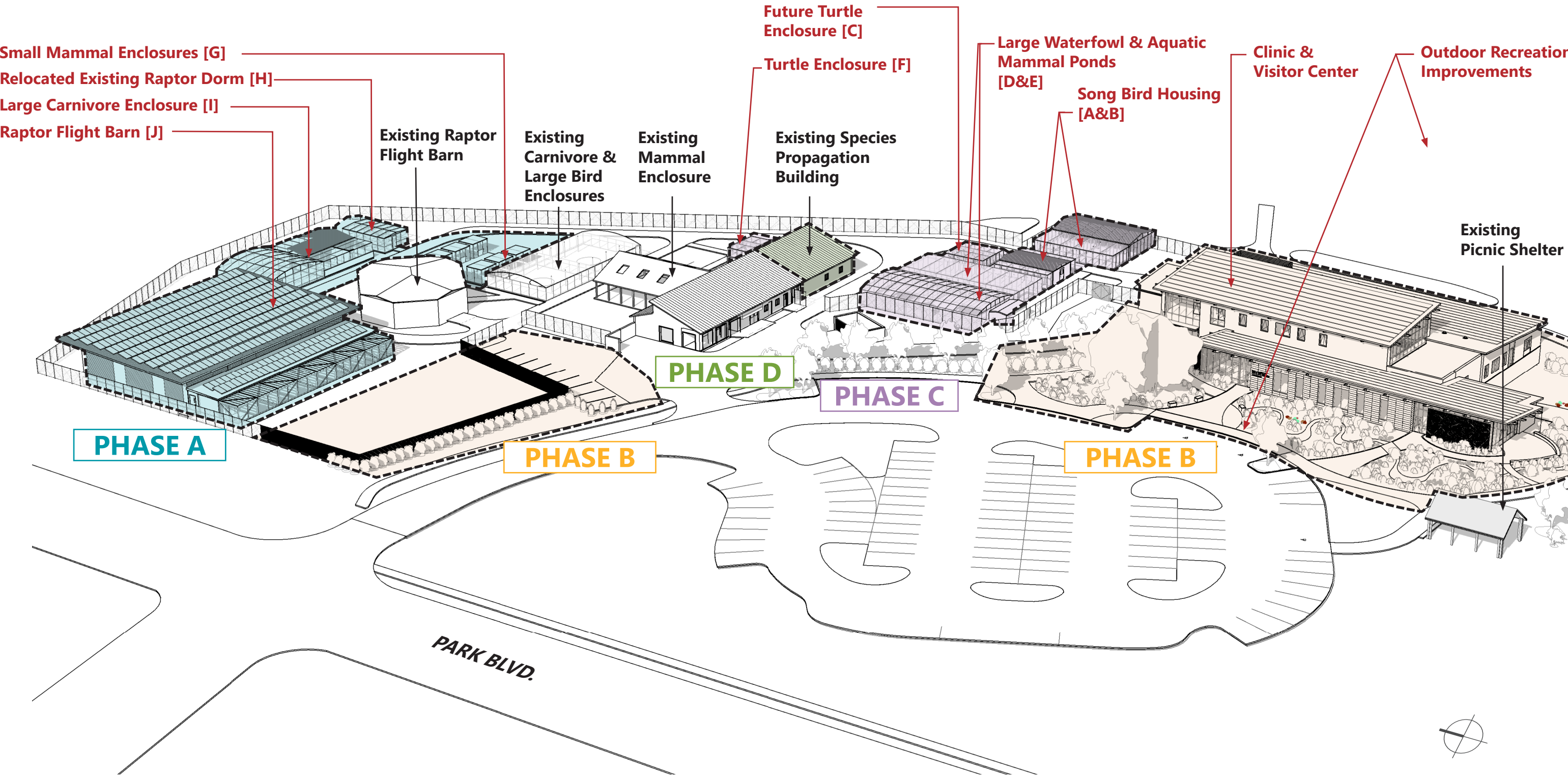
SITE DESIGN PHASING PLAN



- PHASE A - SUMMER 2022**
- Outdoor Rehabilitation Phase I
 - Removal of Dilapidated Enclosures
 - Relocation of Existing Resident Animals to New Enclosures
- PHASE B - SPRING 2023**
- New animal rehabilitation and visitor center
 - Site Development (Site Prep, drainage, paving, etc.)
 - Transition from old clinic to new clinic
 - Staff Parking and PV installation
- PHASE C - SPRING 2024**
- Demo old clinic
 - Remaining Outdoor Enclosures
- PHASE D - FALL 2024**
- Species Propagation Building - Conversion of existing office space to turtle propagation

PHASE A THROUGH D
Completion Fall 2024 (Standard Schedule)

SITE DESIGN
PHASING DIAGRAM



SITE DESIGN ENLARGED SITE PLAN



- Ⓐ Song Bird Housing
- Ⓑ Resident Song Bird Housing
- Ⓒ Turtle Enclosure
- Ⓓ Waterfowl & Aquatic Mammal Ponds
- Ⓔ Large Waterfowl Enclosure
- Ⓕ Blanding's Turtle Enclosure
- Ⓖ Future-ready pad for Small Mammal Enclosure
- Ⓗ Relocated Existing Raptor Dorm
- Ⓘ Large Carnivore Enclosure
- Ⓝ Raptor Flight Barn / Resident Raptor with roof mounted PV solar panles
- Ⓚ Existing Raptor Barn
- Ⓛ Existing Enclosure
- Ⓜ Existing Mammal Enclosure
- Ⓝ Existing Species Propagation Building
- Ⓞ Extended Service Drive
- Ⓟ Isolation Run
- Ⓠ Clinic & Visitor's Center with roof mounted PV solar panles
- Ⓡ Entry Plaza
- Ⓢ Outdoor Learning
- Ⓣ Reconfigured Interpretive Trail
- Ⓤ Existing Shelter
- Ⓥ Ground mounted PV Solar Panel

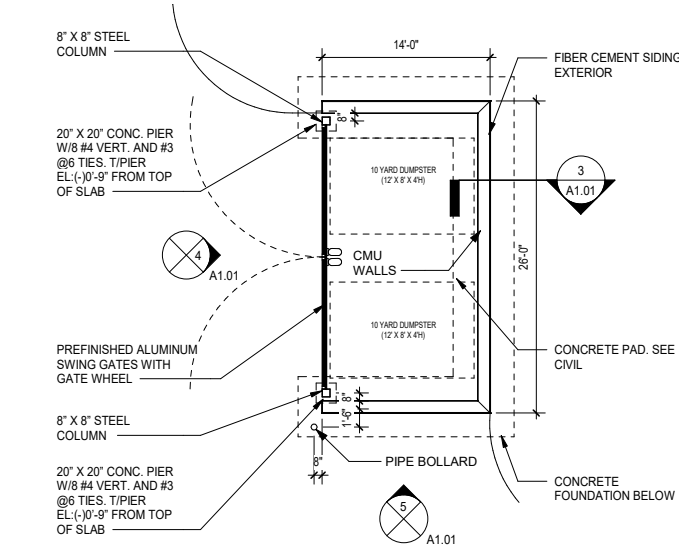
SITE DESIGN
TRASH ENCLOSURE DESIGN



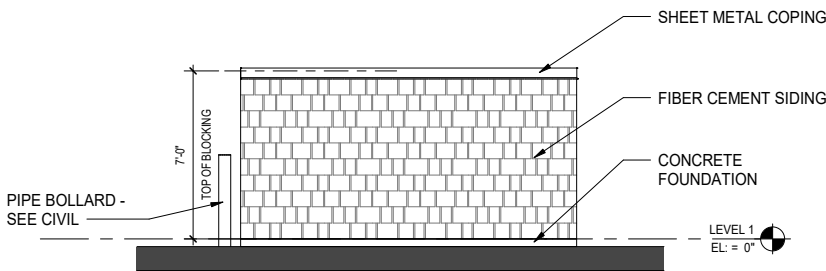
SITE PLAN



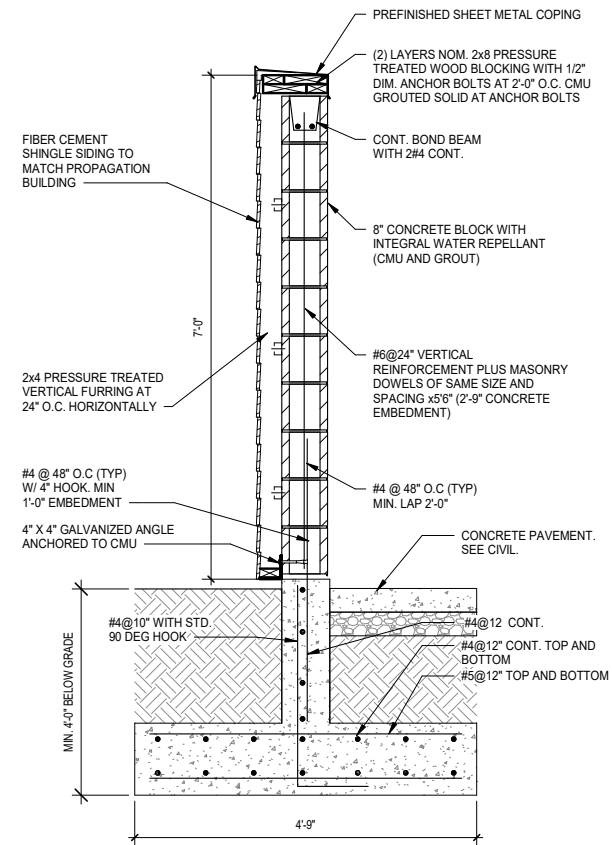
VIEW FROM PUBLIC ENTRANCE AND PARKING



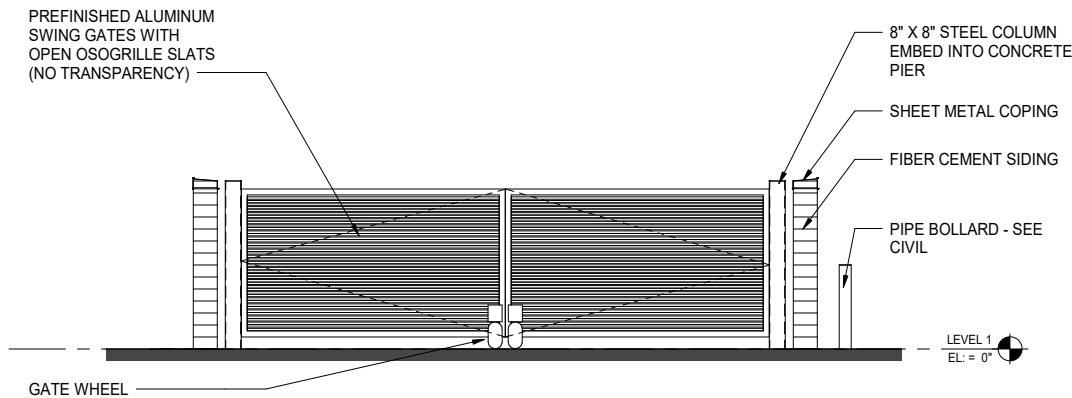
PLAN



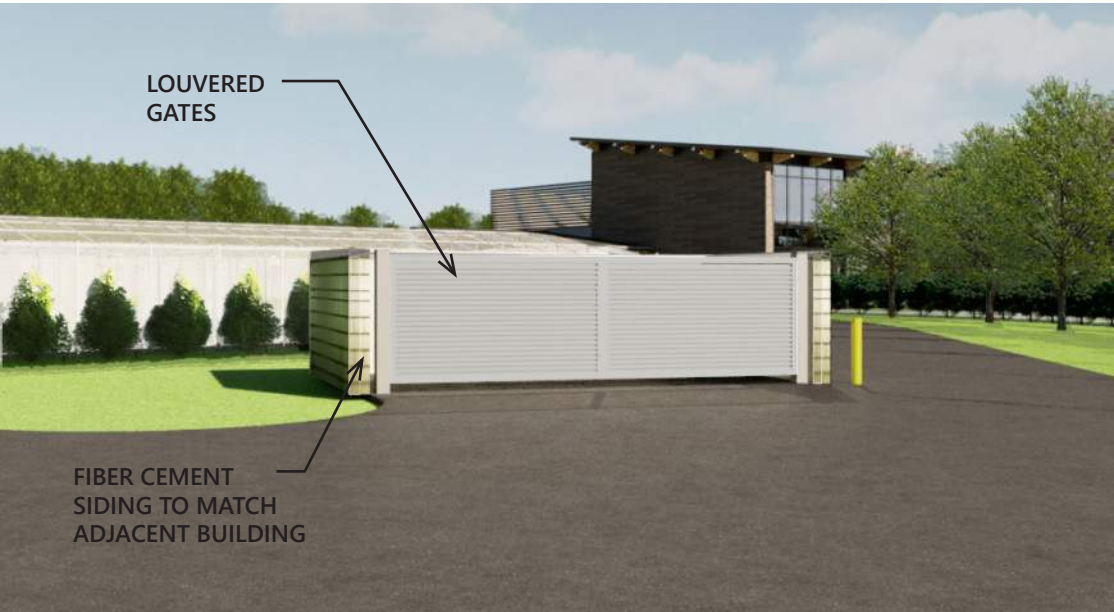
ELEVATION - SIDE



SECTION



ELEVATION - FRONT



TRASH ENCLOSURE - FRONT VIEW



TRASH ENCLOSURE PLAN

EXTERIOR MATERIALS



SHINGLE FIBER CEMENT SIDING -
TAUPE COLOR



TRASH ENCLOSURE - BACK VIEW



EXISTING PROPAGATION BUILDING



SHEET METAL COPING AND GATES -
LIGHT GREY COLOR

SITE DESIGN
FENCING TYPES

LEGEND



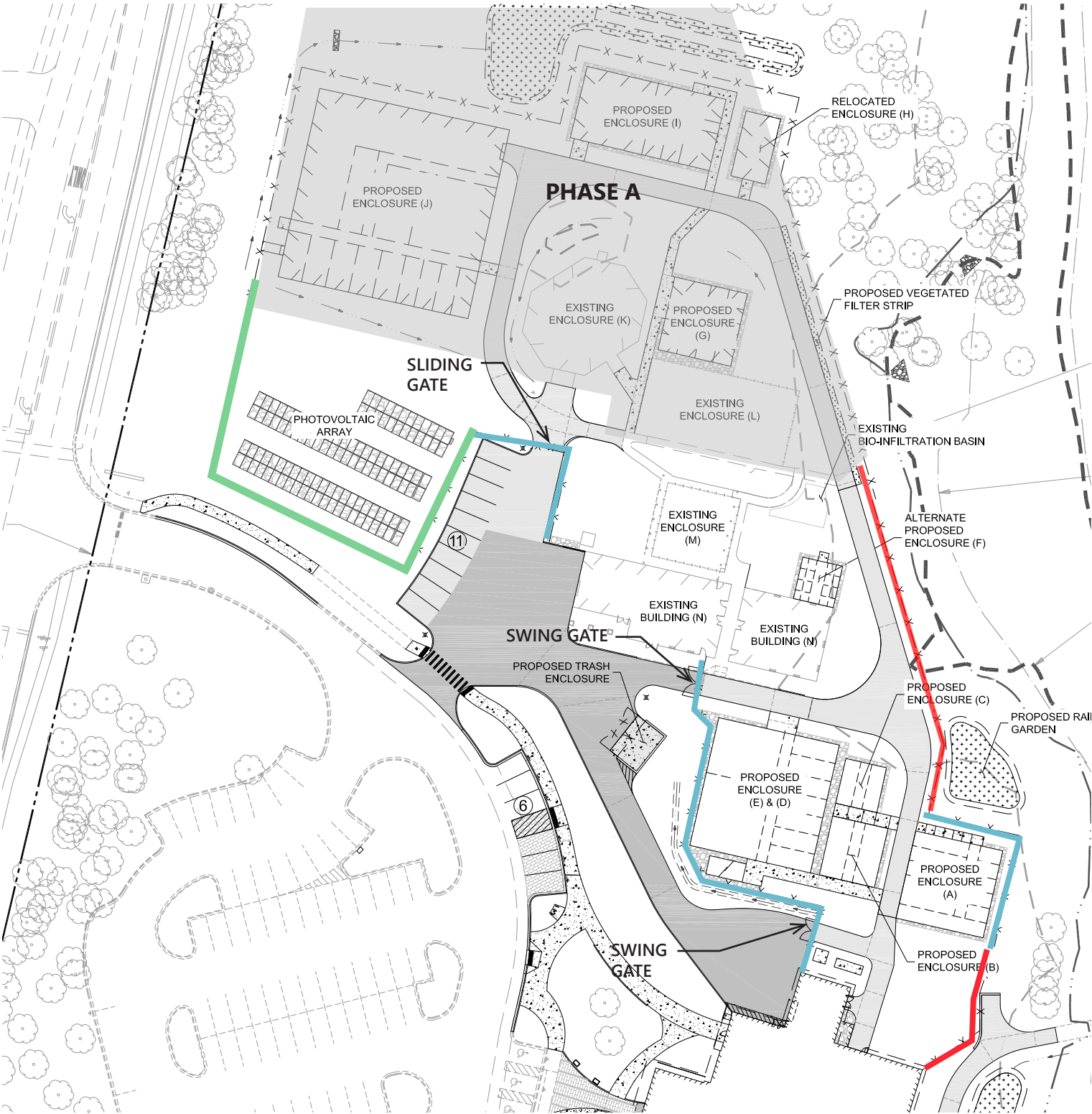
8 FOOT HIGH PICKET AND RAIL FENCE
CONSTRUCTED OF PREFINISHED ALUMINUM
TUBE COMPONENTS. BLACK FINISH



8 FOOT HIGH STANDARD CHAIN LINK FENCE
WITH SHADE CLOTH CONSTRUCTED OF
PREFINISHED STEEL TUBES AND RAILS WITH 2"
CHAIN LINK MESH. BLACK FINISH.



8 FOOT HIGH STANDARD CHAIN LINK FENCE
WITH NO SHADE CLOTH CONSTRUCTED OF
PREFINISHED STEEL TUBES AND RAILS WITH 2"
CHAIN LINK MESH. BLACK FINISH

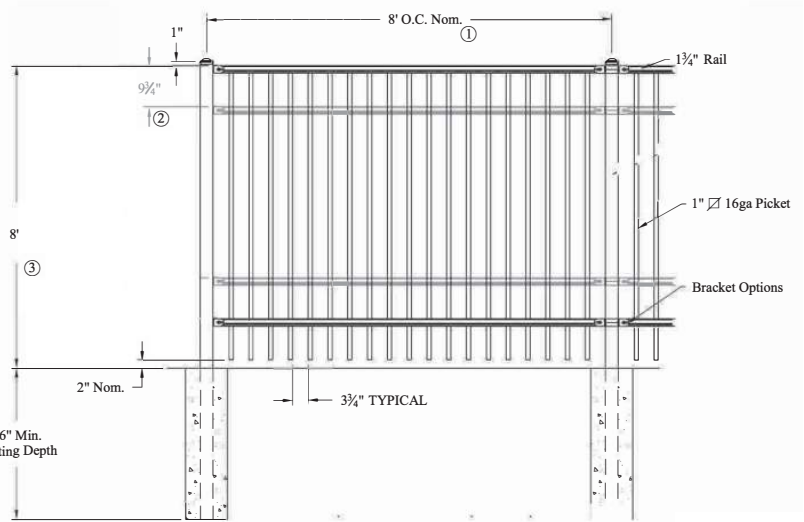


SITE PLAN - PROPOSED FENCING TYPES

SITE DESIGN
PV ARRAY SCREENING DESIGN



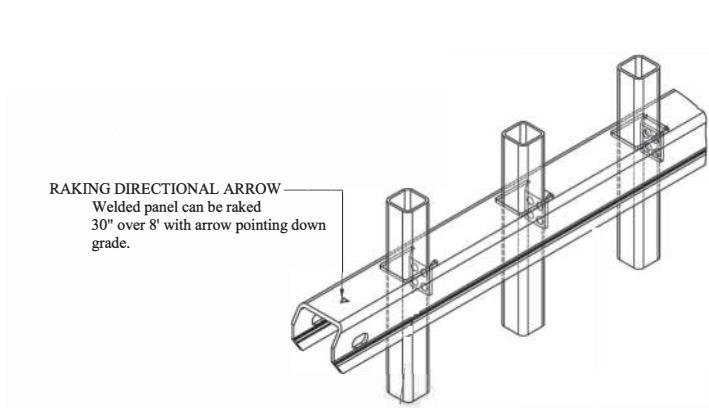
SITE PLAN



FENCE CONSTRUCTION



FENCE INSTALLATION



FENCE COMPONENTS



FENCE DETAIL



VIEW FROM ENTRANCE DRIVE



VIEW FROM PUBLIC PARKING

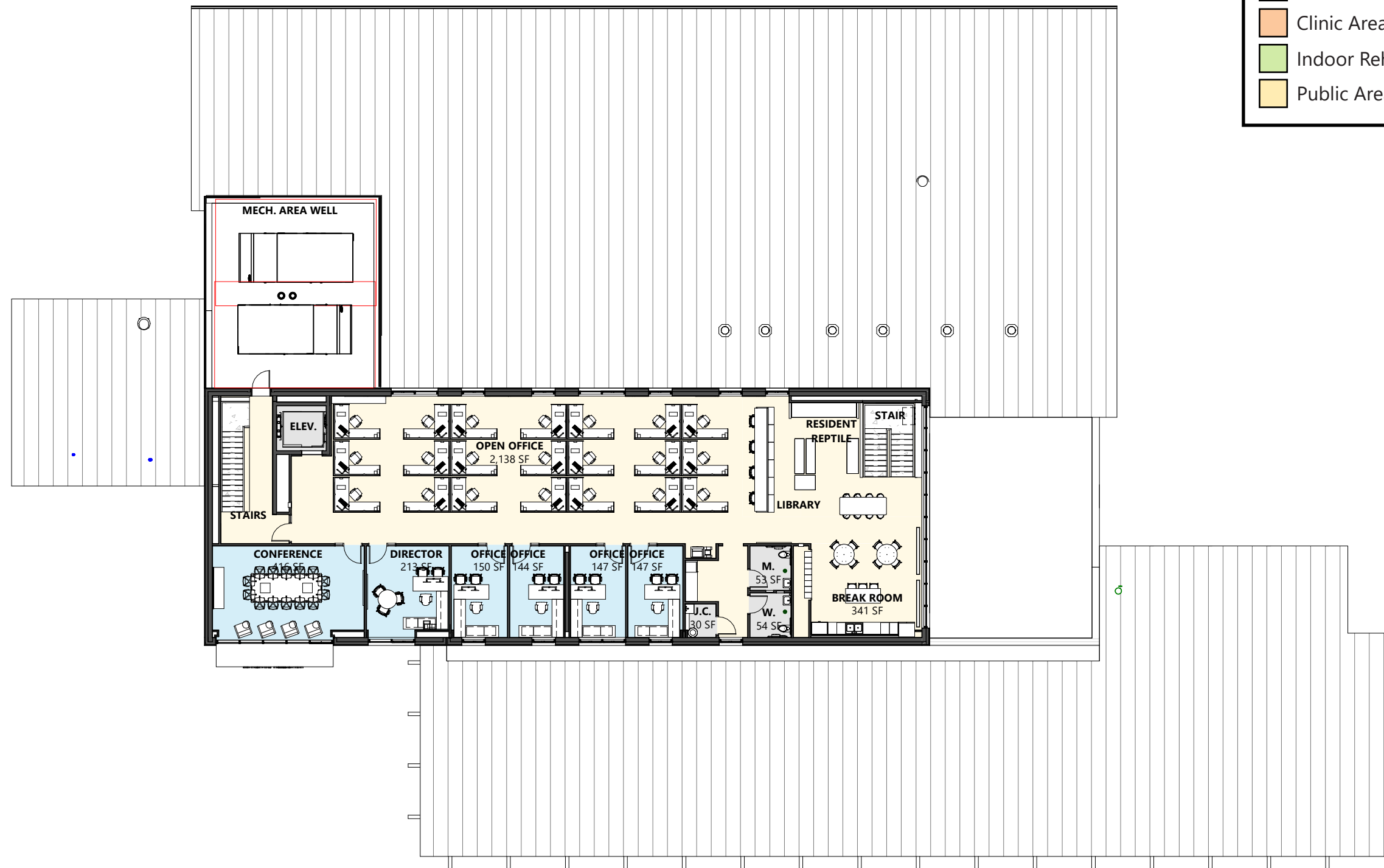
NEW CLINIC DESIGN

NEW CLINIC DESIGN
FIRST FLOOR PLAN



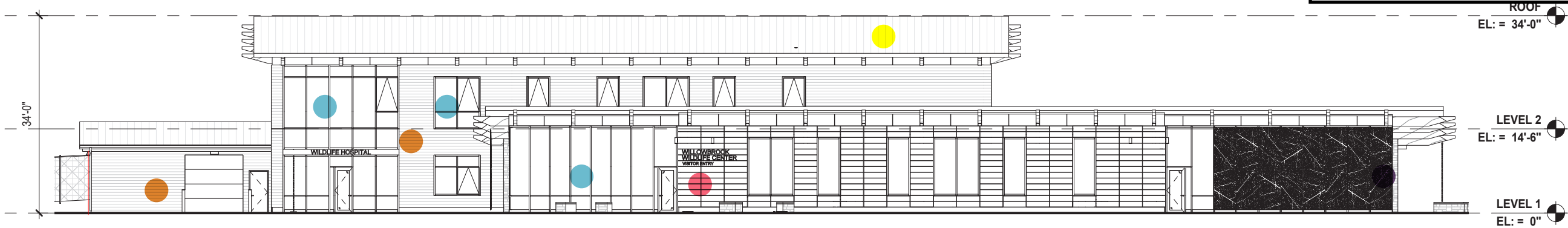
NEW CLINIC DESIGN SECOND FLOOR PLAN

- Administration
- Clinic Area
- Indoor Rehabilitation / Housing Area
- Public Areas & Education



NEW CLINIC DESIGN
ELEVATIONS - BUILDING MATERIALS

- Curtainwall w/ Operable Lites as shown
- Perforated Metal Sunshade/Bird Deterrent
- Fiber Cement Plank Rainscreen Wall
- Copper Anodized Rainscreen Wall
- Stone Masonry Cavity Wall: Cast Limestone
- Standing Seam Metal Roof (w/ PV as shown)



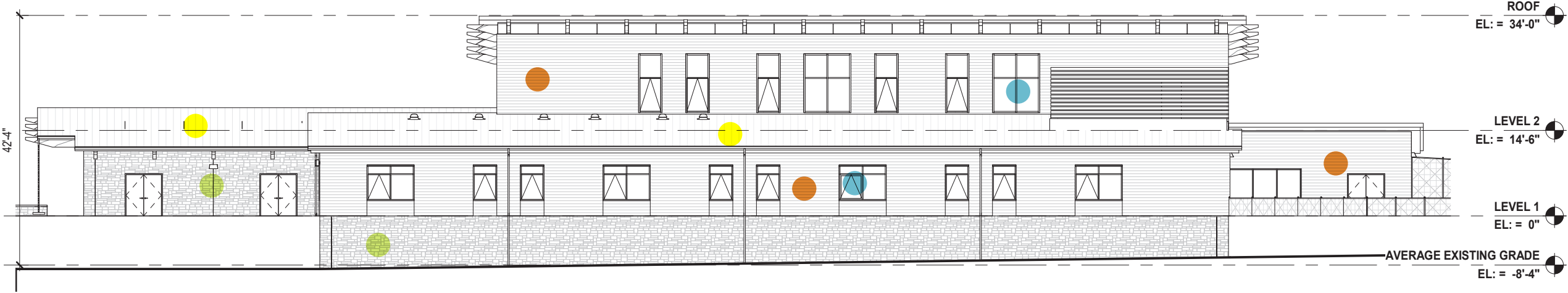
WEST ELEVATION



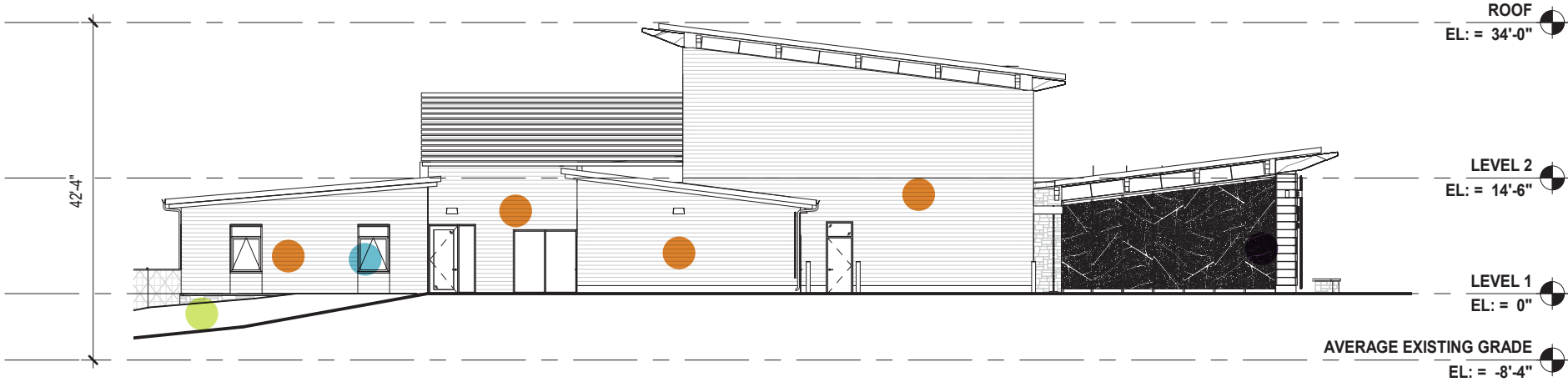
SOUTH ELEVATION

NEW CLINIC DESIGN
ELEVATIONS - BUILDING MATERIALS

- Curtainwall w/ Operable Lites as shown
- Perforated Metal Sunshade/Bird Deterrent
- Fiber Cement Plank Rainscreen Wall
- Copper Anodized Rainscreen Wall
- Stone Masonry Cavity Wall: Cast Limestone
- Standing Seam Metal Roof (w/ PV as shown)

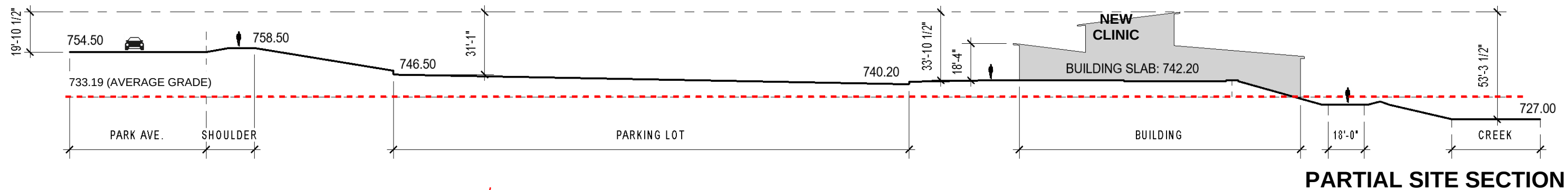


EAST ELEVATION



NORTH ELEVATION

AVERAGE EXISTING GRADE CALCULATION



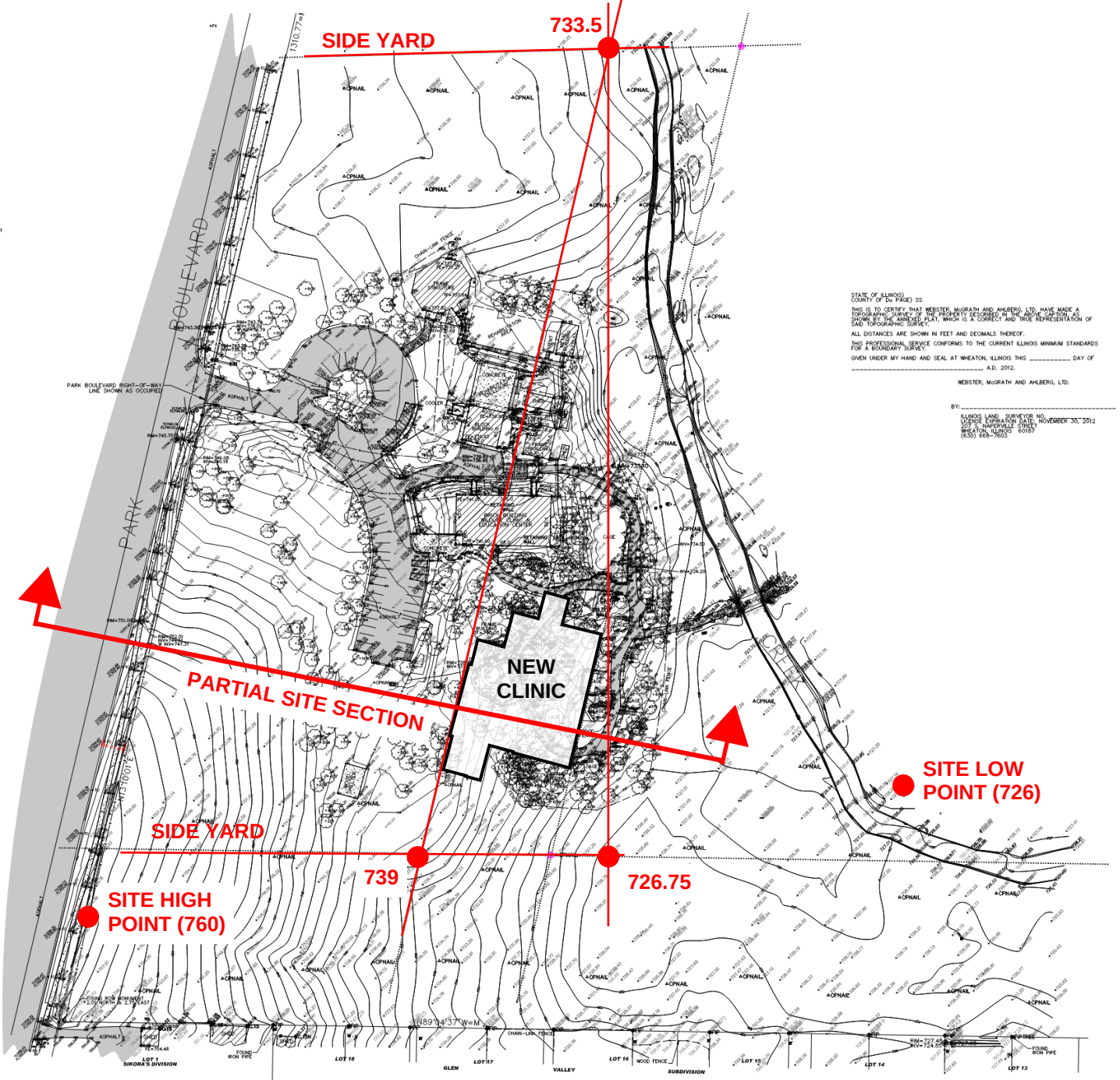
PARTIAL SITE SECTION

The physical conditions of the property present particular hardship to meeting the requested building height requirements of the ordinance based on the 'average existing grade' defined in Section 10-11-12. The existing topography of the property slopes significantly toward the creek in the middle of the site that equates to an 'average existing grade' that is approximately 9 feet lower than the proposed elevation of the new clinic. The building height relative to the existing parking lot meets the zoning ordinance 10-4-3(D) height requirement of 35 feet.

Limiting the building height relative to the average grade would require a single-story structure with a larger footprint. A larger footprint would increase the environmental disturbance of the site as well as reduce the operational efficiencies of the clinic.

Average Existing Grade Definition: The average grade is calculated from the grade elevations at the four points where an imaginary line parallel to the front and rear yard setback lines drawn through the furthest front and rear portion of the proposed structure respectively, intersects the required sideyard setback lines

AVERAGE GRADE =
 $733.5 + 733.5 + 739 + 726.75 = 2,932.75$
DIVIDED BY 4 = 733.19



PARTIAL GRADING PLAN

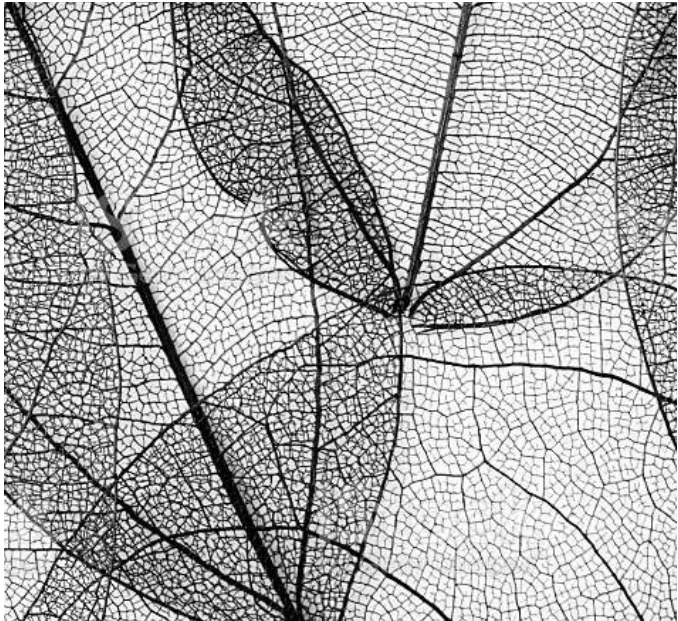
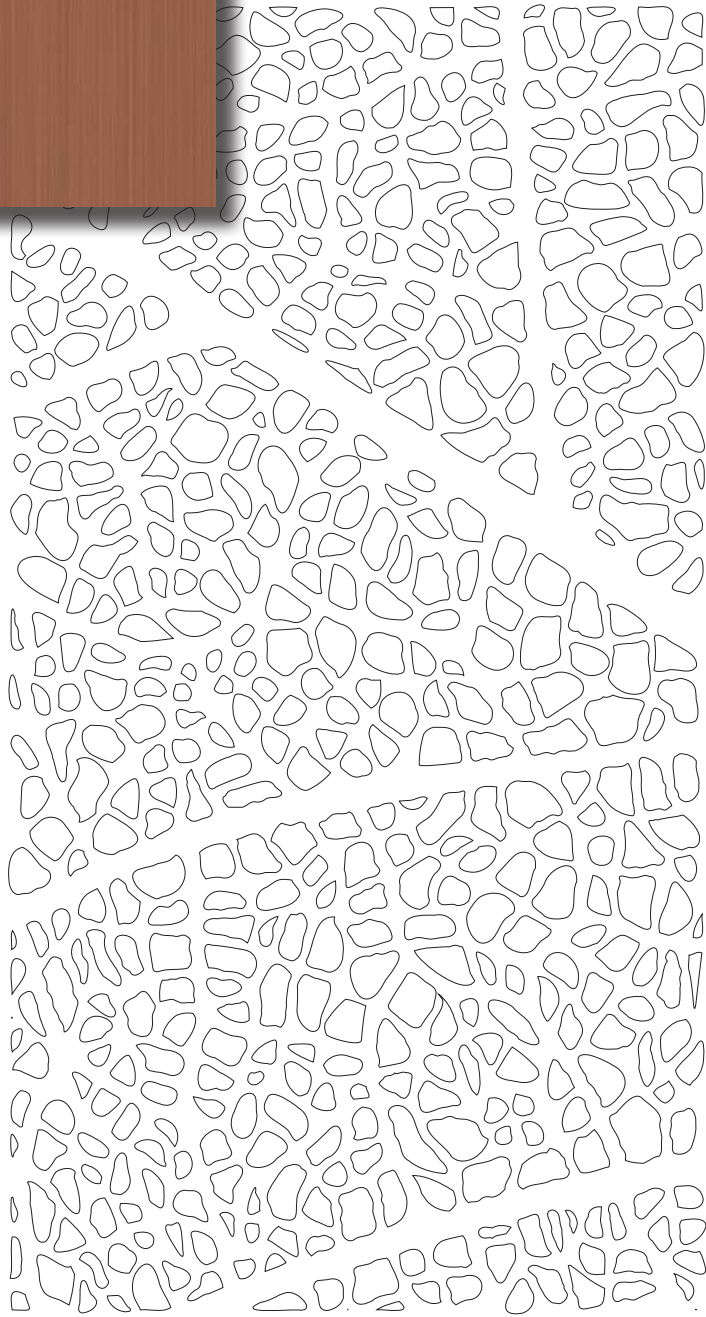
NEW CLINIC DESIGN BUILDING MATERIALS



- 1 HALQUIST STONE - CHILTON BROWN
- 2 COPPER ANODIZED RAINSCREEN WALL
- 3 PERFORATED METAL BIRD SCREEN
- 4 FIBER CEMENT PLANK
RAINSCREEN WALL
- 5 CURTAIN WALL
- 6 GLASS WITH ACID ETCH PATTERN
- 7 STRUCTURAL GLULAM SYSTEM
- 8 DOUGLAS FIR WOOD SPECIES



Anodized Copper Finish



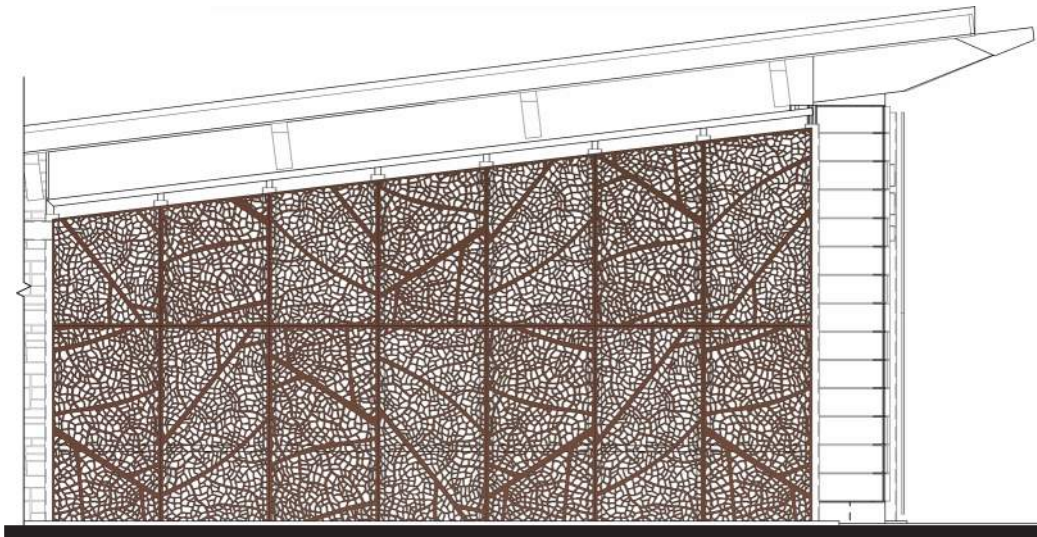
Leaf anatomy inspiration



Laser cut metal panel example

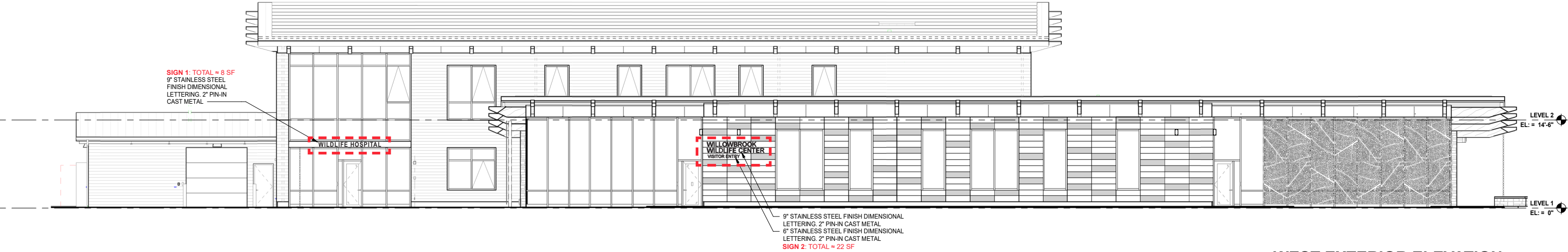


ELEVATION NORTH



ELEVATION WEST

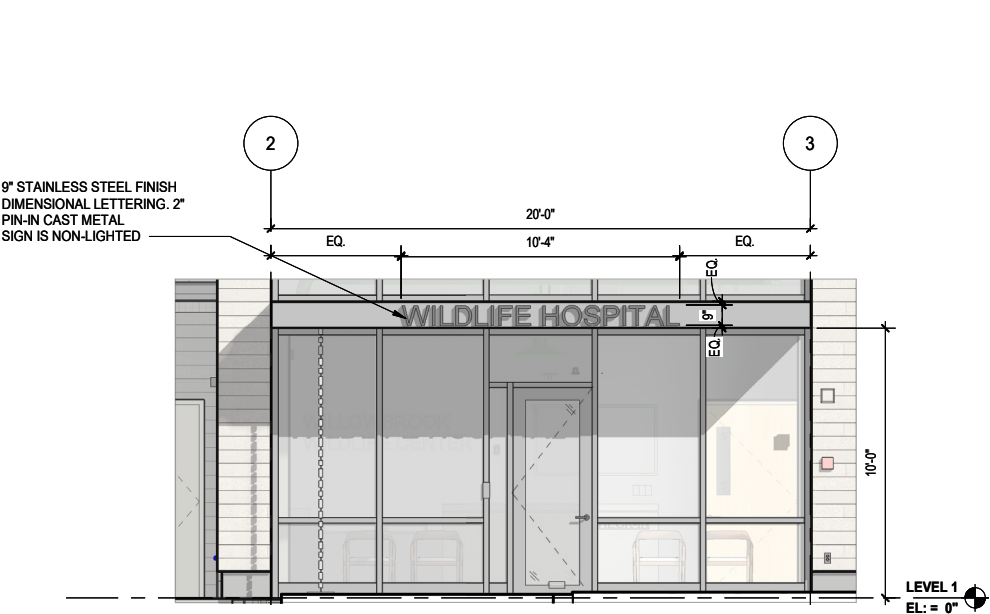
NEW CLINIC DESIGN
EXTERIOR SIGNAGE



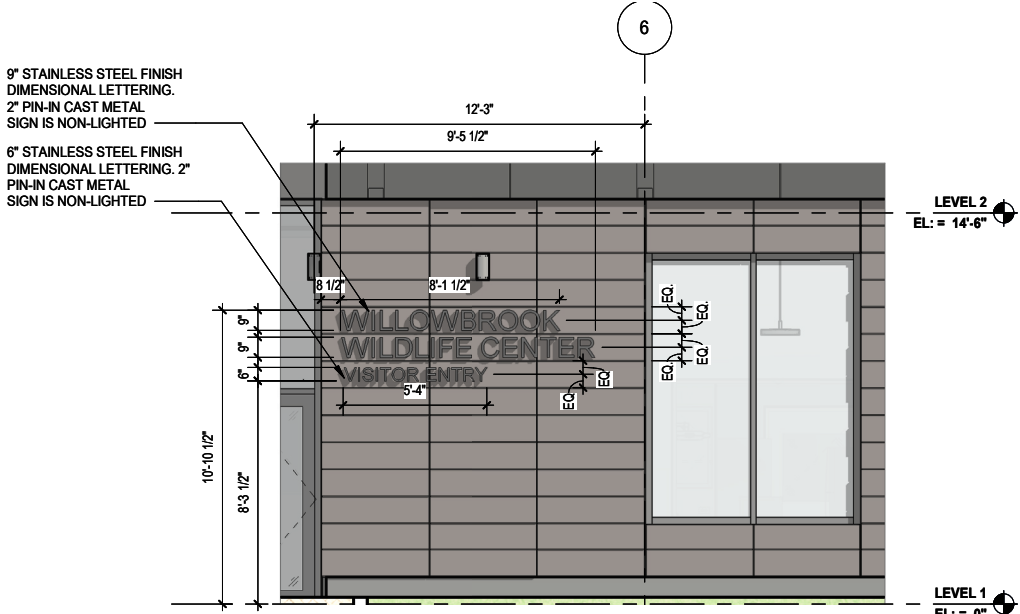
WEST EXTERIOR ELEVATION



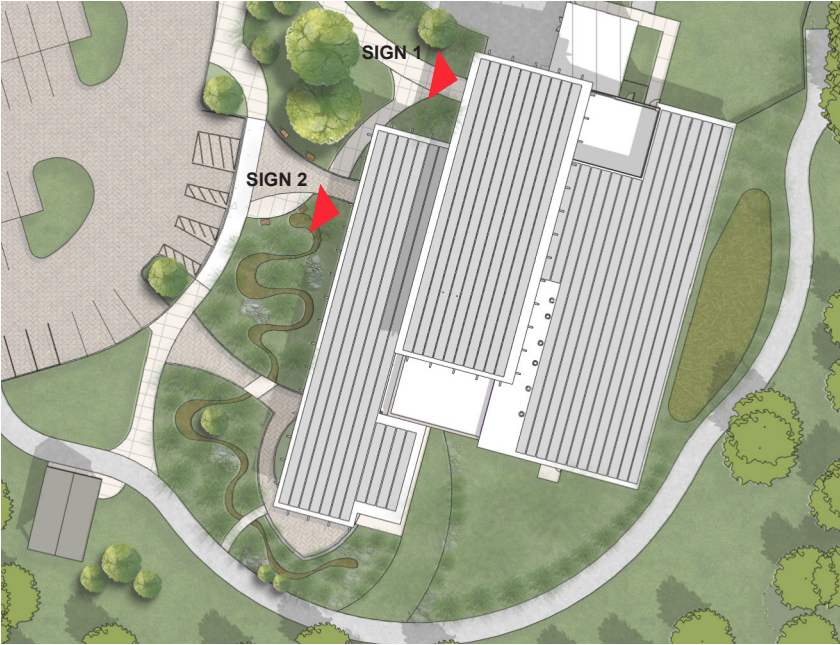
STAINLESS STEEL LETTER SIGN
EXAMPLE



SIGN 1



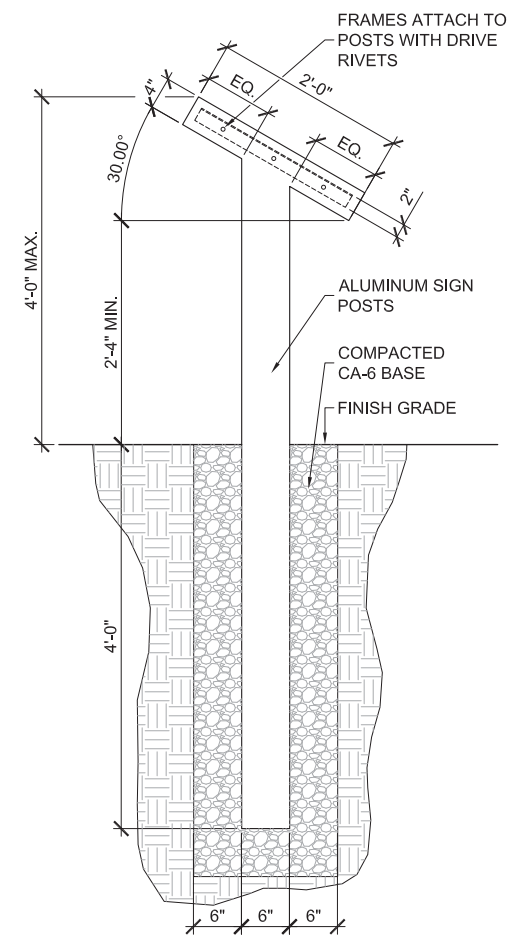
SIGN 2



SITE PLAN

NEW CLINIC DESIGN

EXTERIOR FREESTANDING INTERPRETIVE SIGNAGE



A3

L4.01

INTERPRETIVE PANEL DETAILS

SCALE: 1" = 1'-0"

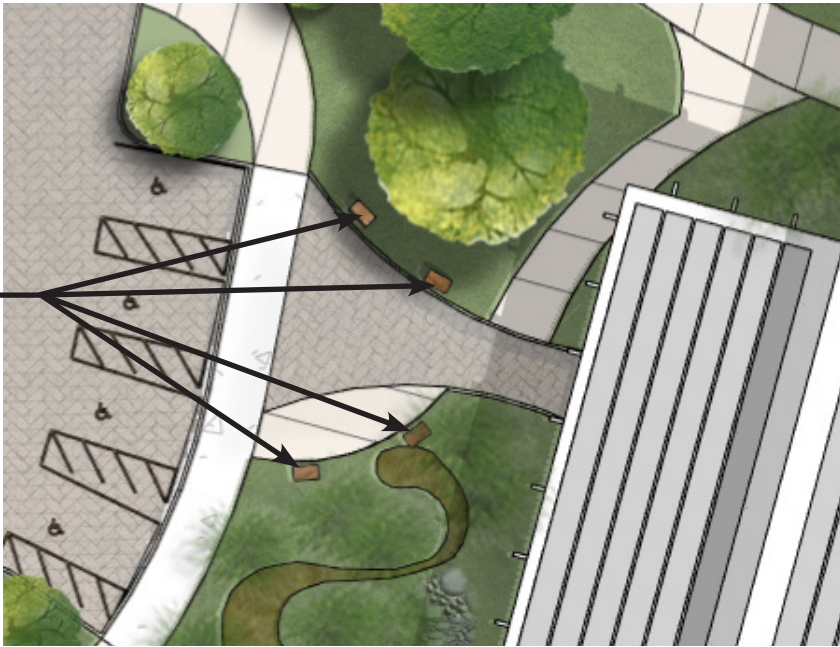


TYPICAL INSTALLATION



TYPICAL INSTALLATION

FREESTANDING
INTERPRETIVE
SIGNS



SITE PLAN

NEW CLINIC DESIGN
COLOR BUILDING RENDERINGS - VIEW TO INTAKE & ENTRY



A separate animal patient entry and public entry welcome visitors to Willowbrook Wildlife Center.

NEW CLINIC DESIGN

COLOR BUILDING RENDERINGS - VIEW FROM PARKING LOT



NEW CLINIC DESIGN
COLOR BUILDING RENDERINGS - VIEW FROM PICNIC SHELTER



A wildlife garden greets visitors as the building gradually steps back on the site as it gets taller, allowing it to blend into the environment.

NEW CLINIC DESIGN
COLOR BUILDING RENDERINGS - VIEW TO CLASSROOM



NEW CLINIC DESIGN

COLOR BUILDING RENDERINGS - VIEW FROM SOUTH EAST TRAIL



South of the building, a new trailhead connects visitors to the east half of the site which includes interpretive and observation nodes.

NEW CLINIC DESIGN

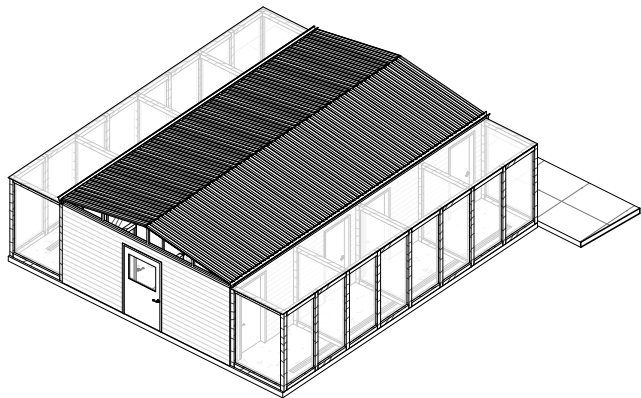
COLOR BUILDING RENDERINGS -VIEW FROM SITE ENTRY



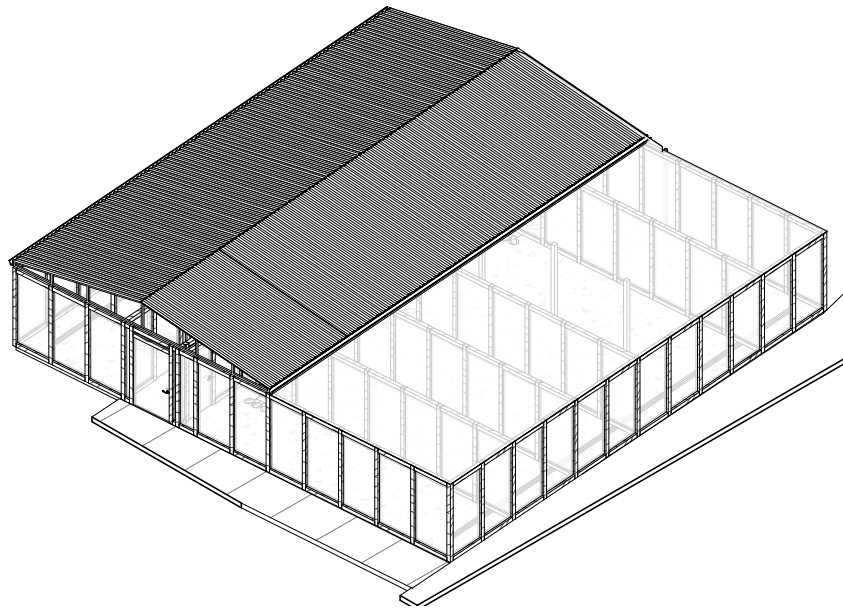
The new visitor center draws the public into the site while blending in to the natural environment.

OUTDOOR ENCLOSURES DESIGN

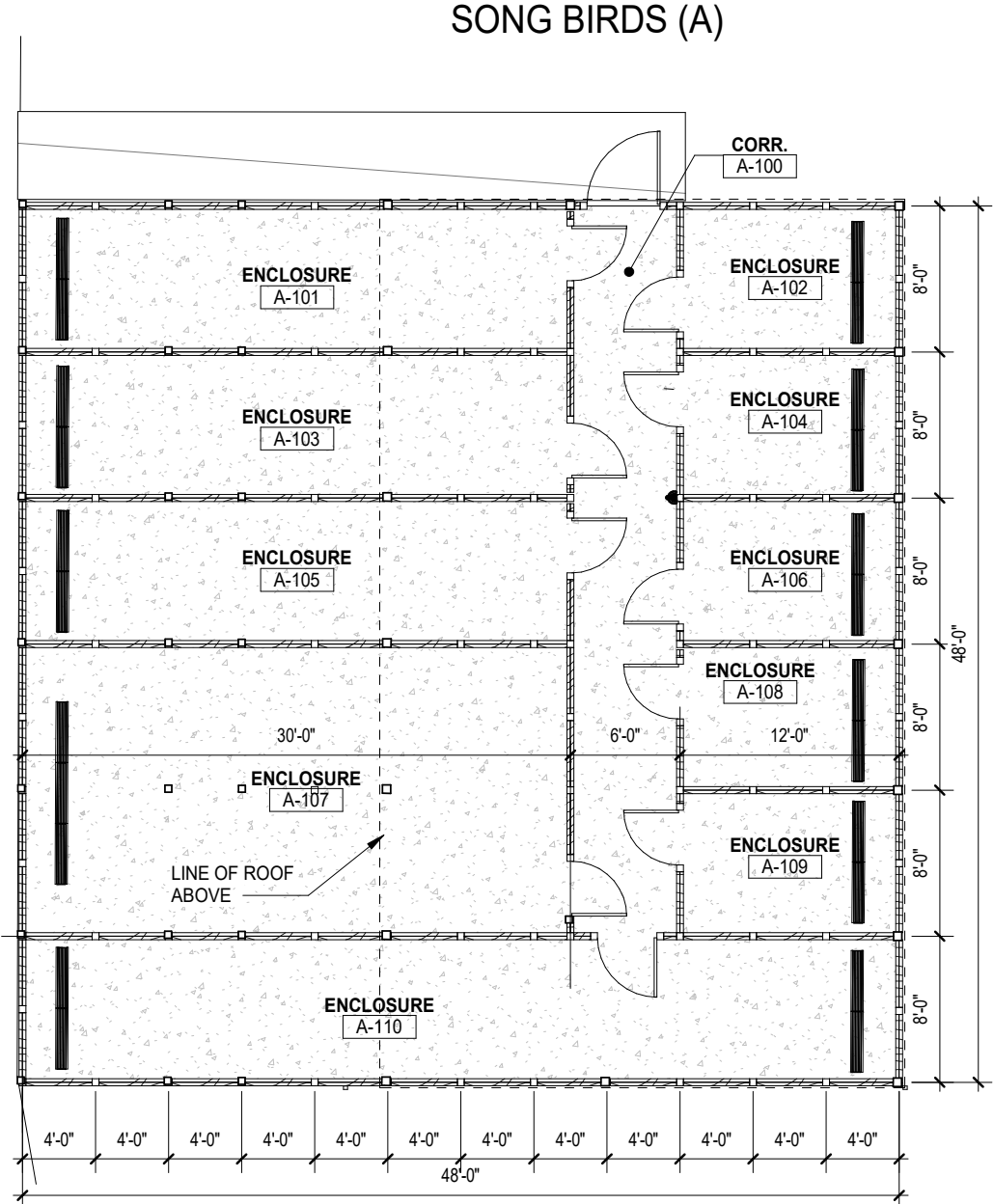
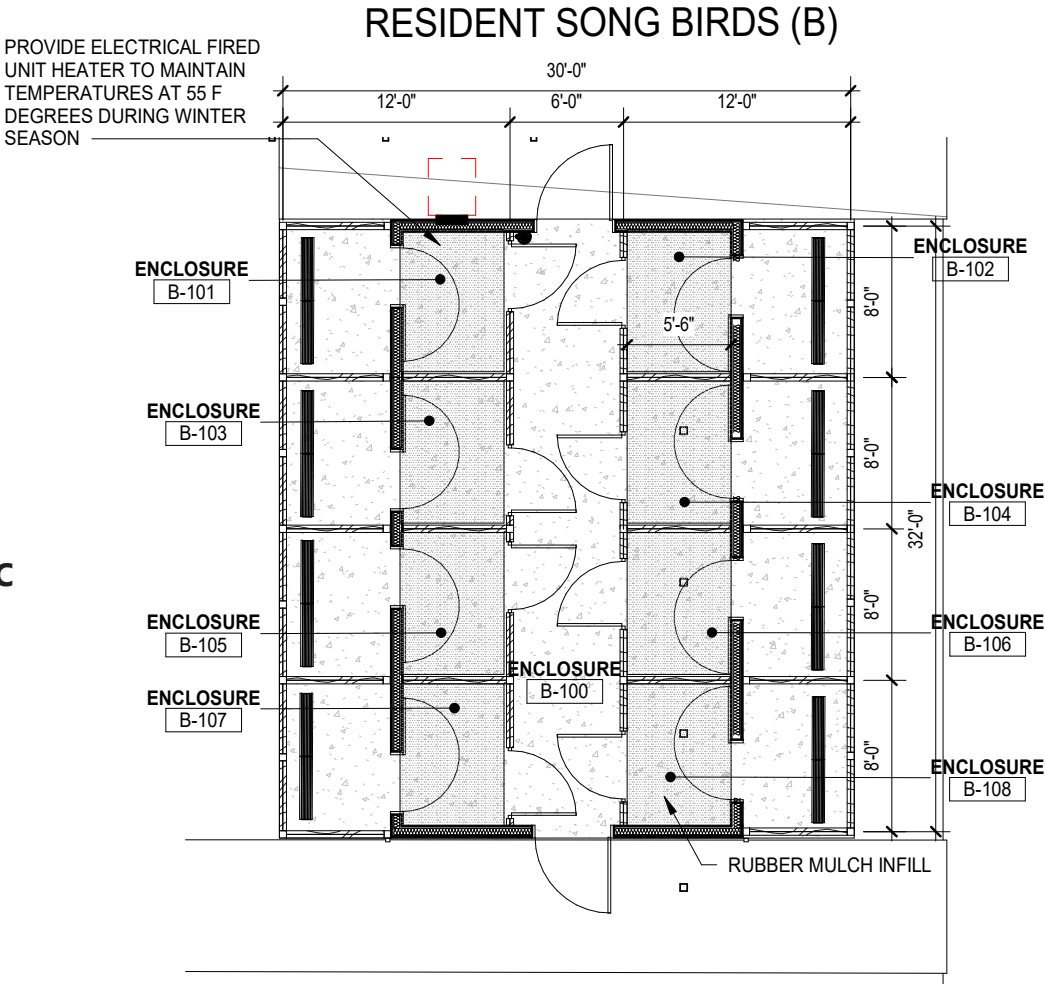
OUTDOOR ENCLOSURES DESIGN
SONG BIRD ENCLOSURES (A,B)



RESIDENT SONG BIRD ENCLOSURE (B) AXONOMETRIC

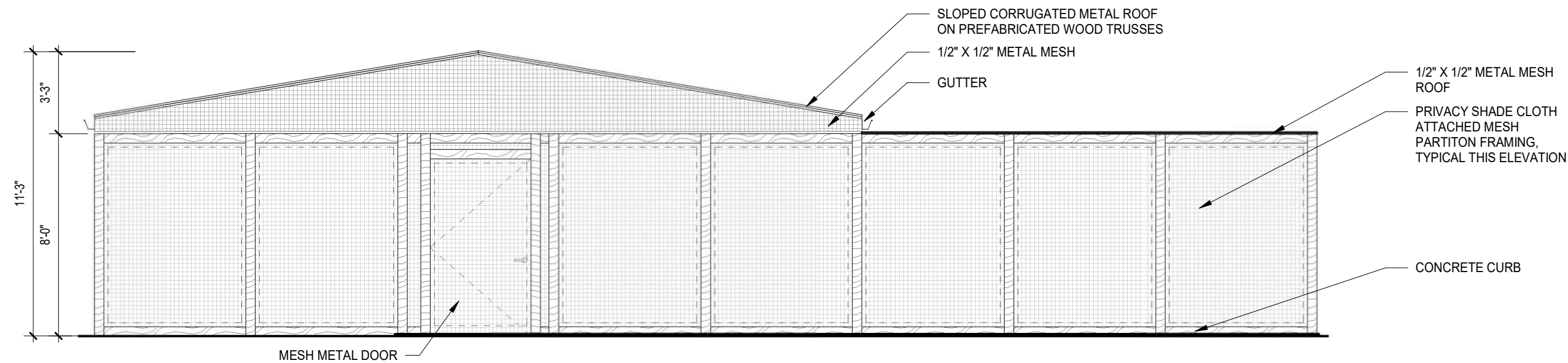


SONG BIRD ENCLOSURE (A) AXONOMETRIC

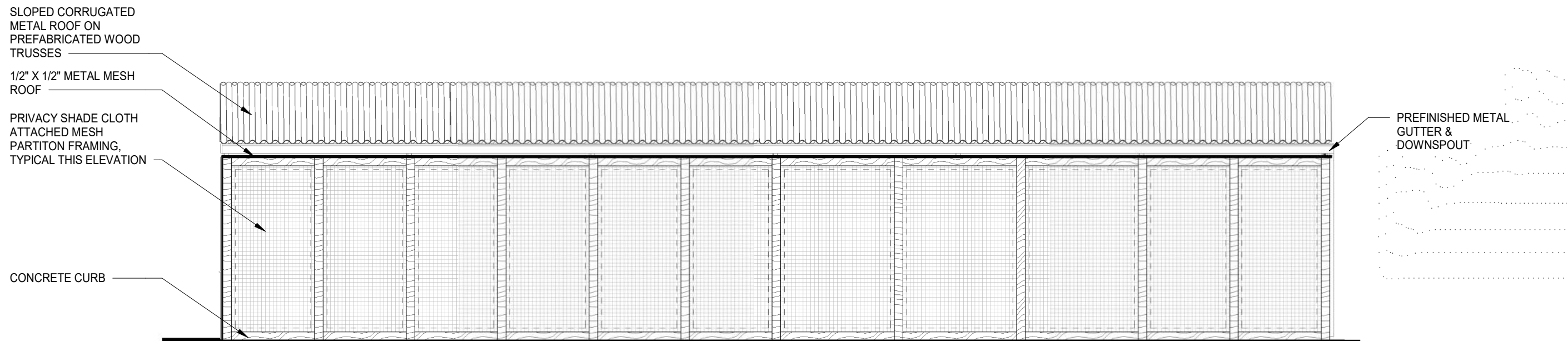


OUTDOOR ENCLOSURES DESIGN

SONG BIRD ENCLOSURE (A,B) EXTERIOR ELEVATIONS



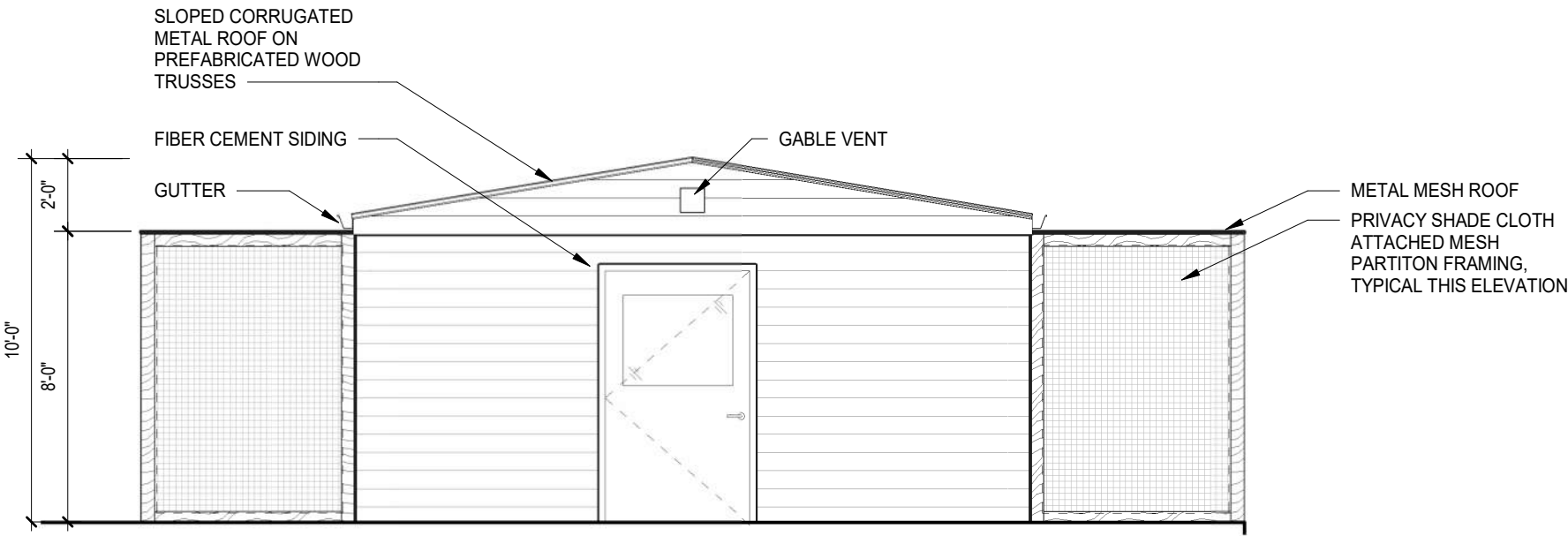
1 BUILDING A - NORTH
SCALE: 1/4" = 1'-0"



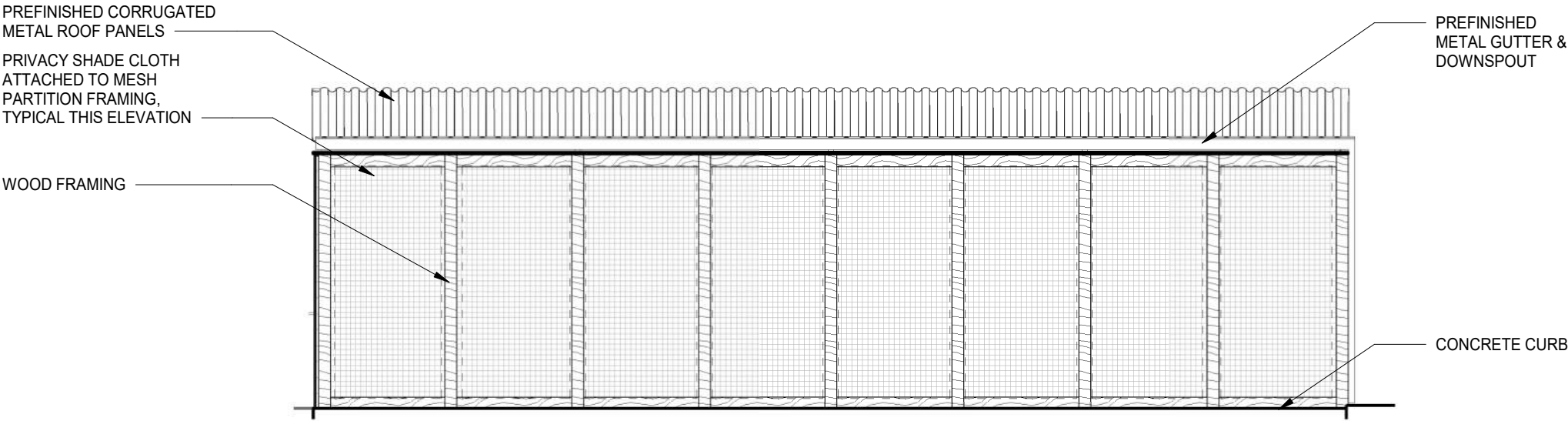
2 BUILDING A - WEST
SCALE: 1/4" = 1'-0"

OUTDOOR ENCLOSURES DESIGN

SONG BIRD ENCLOSURE (A,B) EXTERIOR ELEVATIONS

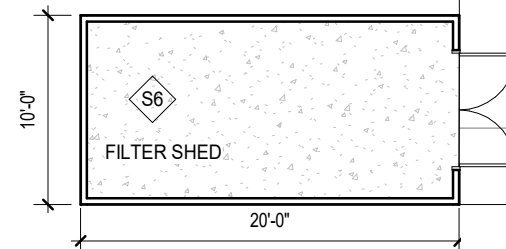


3 BUILDING B - NORTH
SCALE: 1/4" = 1'-0"



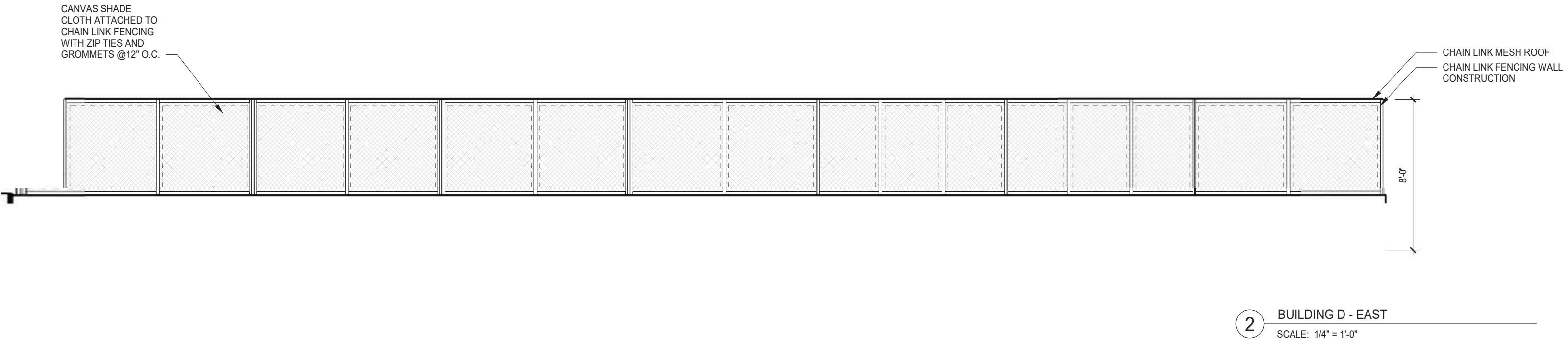
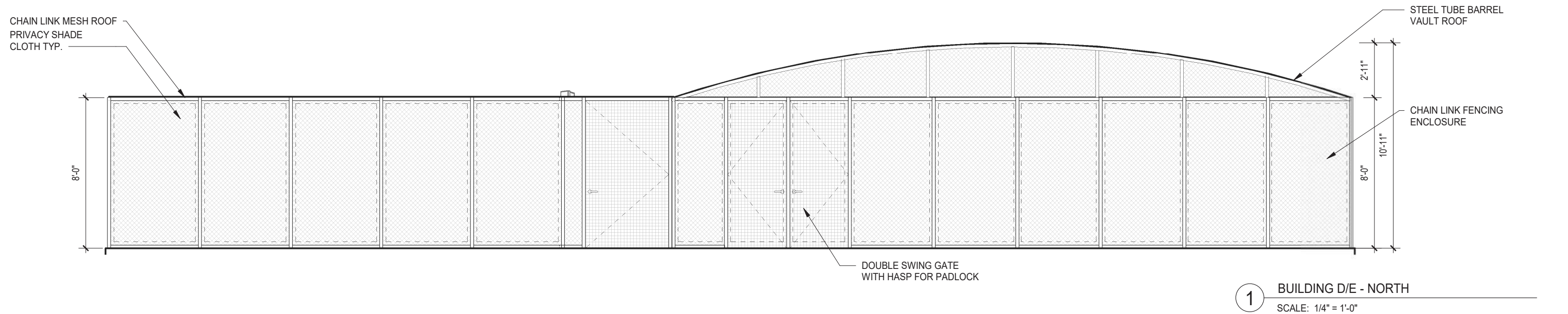
4 BUILDING B - WEST
SCALE: 1/4" = 1'-0"

OUTDOOR ENCLOSURES DESIGN



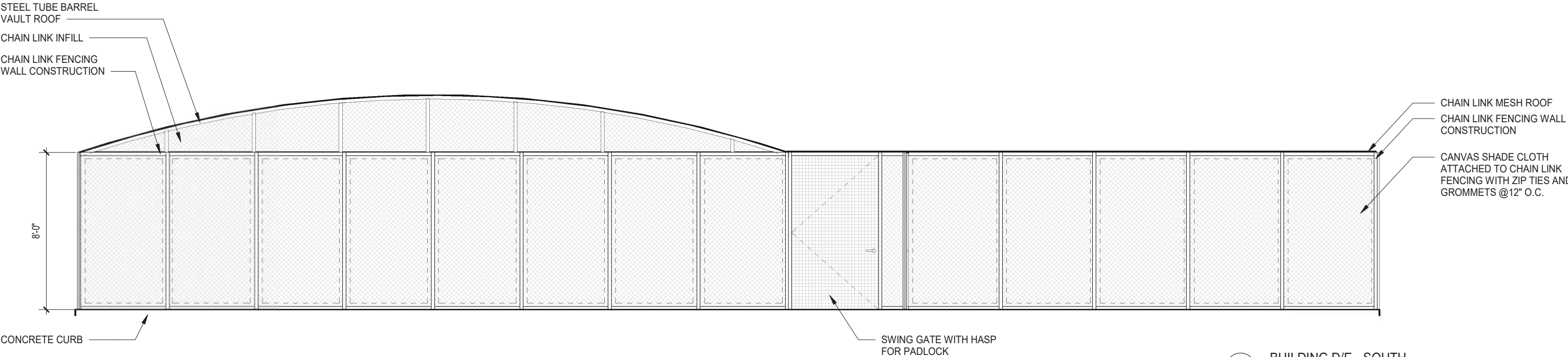
OUTDOOR ENCLOSURES DESIGN

LARGE WATERFOWL & AQUATIC MAMMAL PONDS ENCLOSURE (D,E) EXTERIOR ELEVATIONS



OUTDOOR ENCLOSURES DESIGN

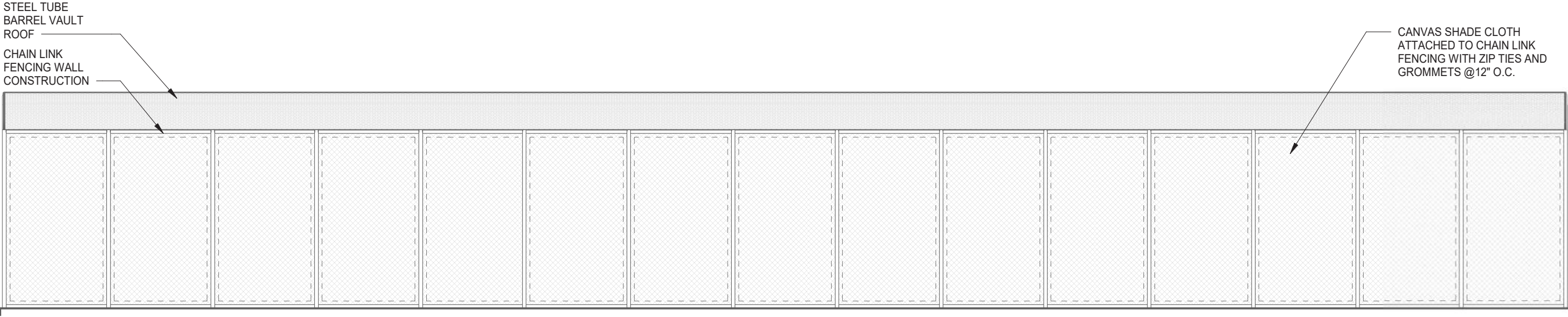
LARGE WATERFOWL & AQUATIC MAMMAL PONDS ENCLOSURE (D,E) EXTERIOR ELEVATIONS



3

BUILDING D/E - SOUTH

SCALE: 1/4" = 1'-0"



4

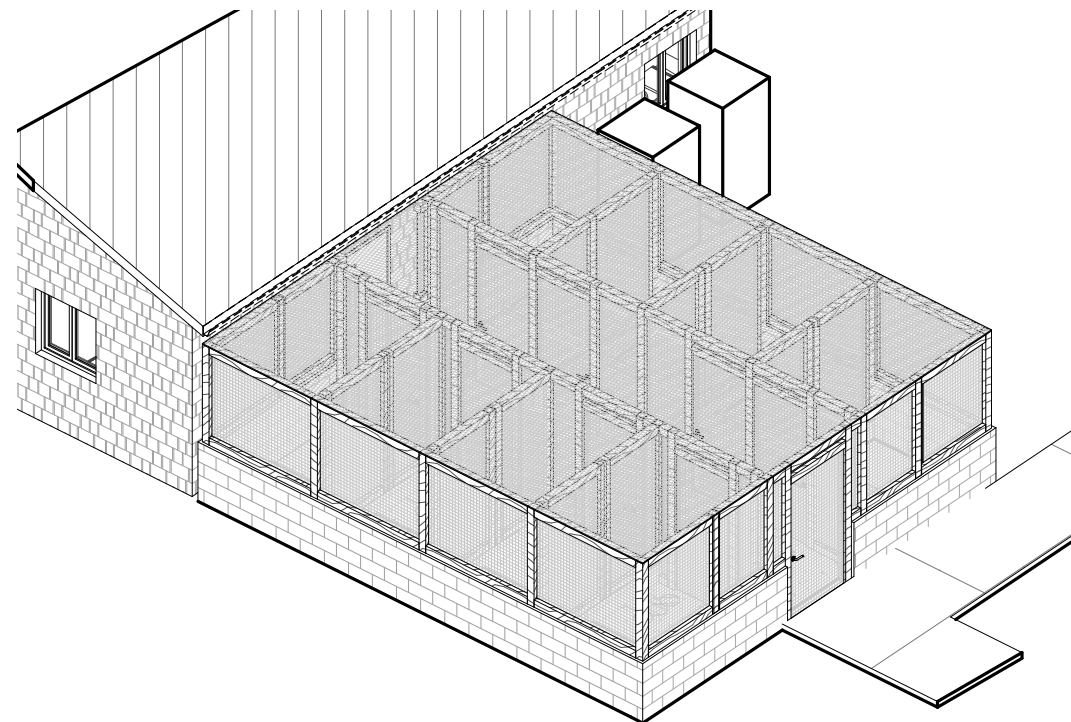
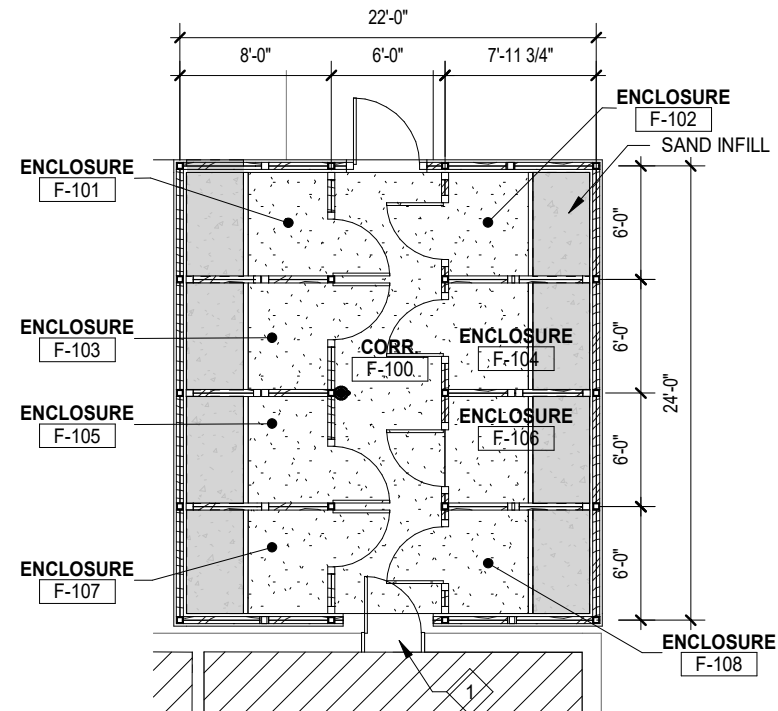
BUILDING E - WEST

SCALE: 1/4" = 1'-0"

OUTDOOR ENCLOSURES DESIGN

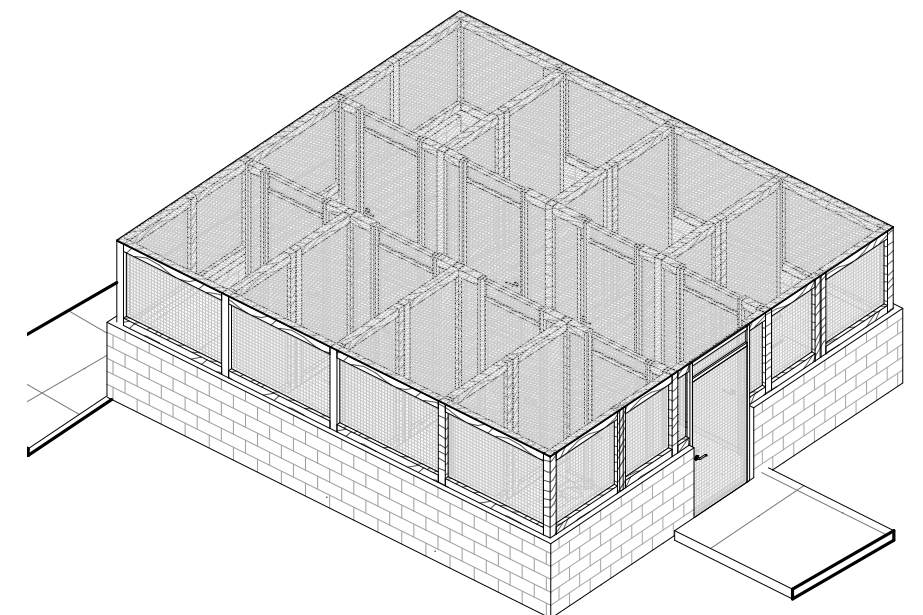
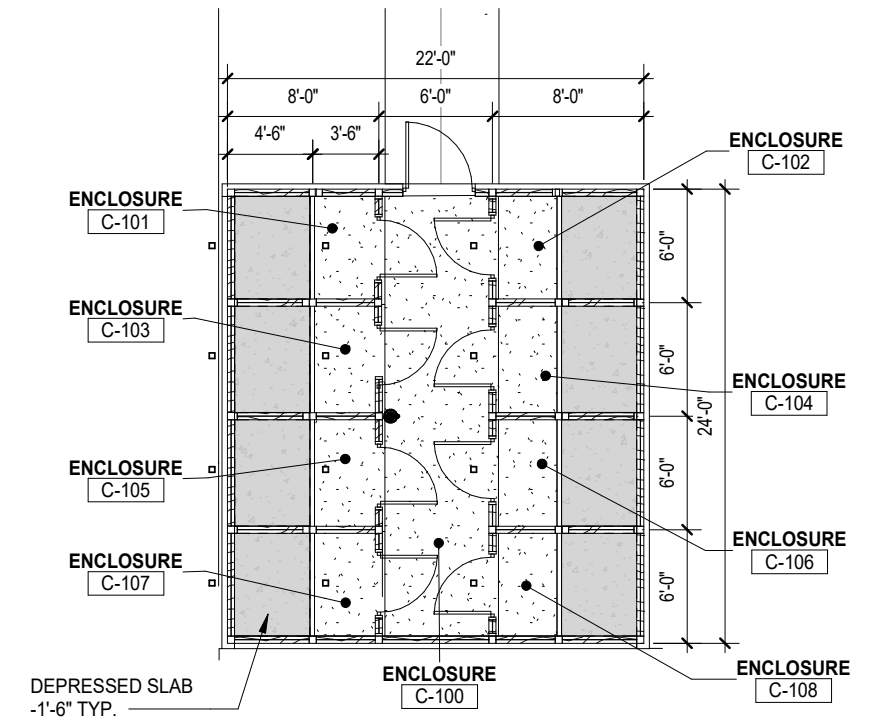
TURTLE ENCLOSURES (C,F)

TURTLE
ENCLOSURE
(F)



TURTLE ENCLOSURE (F) AXONOMETRIC

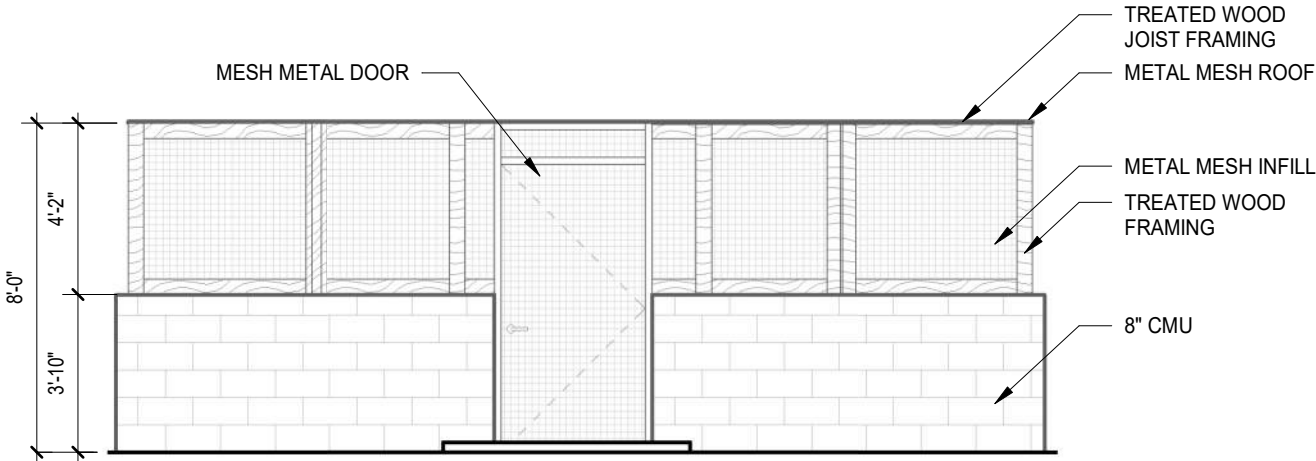
TURTLE ENCLOSURE (C)



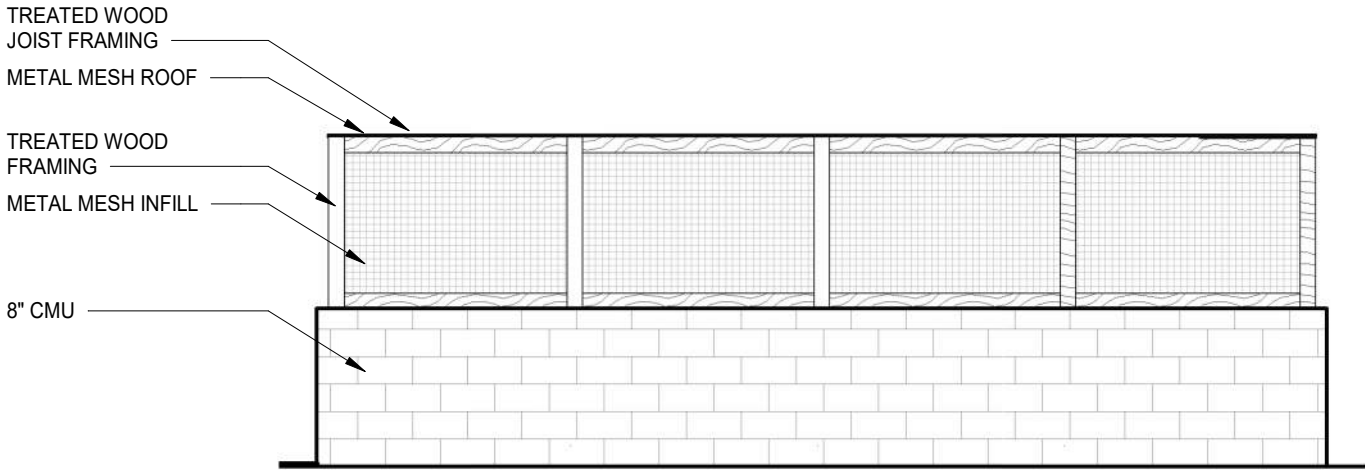
TURTLE ENCLOSURE (C) AXONOMETRIC

OUTDOOR ENCLOSURES DESIGN

TURTLE ENCLOSURES (C,F) EXTERIOR ELEVATION



5 BUILDING C/F - NORTH
SCALE: 1/4" = 1'-0"



6 BUILDING C/F - EAST
SCALE: 1/4" = 1'-0"

OUTDOOR ENCLOSURES DESIGN

EXTERIOR MATERIALS



WELDED WIRE MESH - GREY - GALVANIZED



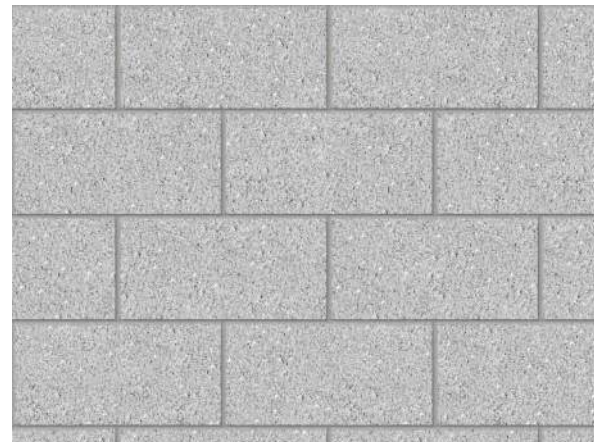
HORIZONTAL CEMENT SIDING - TAUPE COLOR



PRESSURE TREATED PLYWOOD
SHEATHING - NATURAL (NO SATIN)



CHAIN LINK FENCING - GREY - GALVANIZED



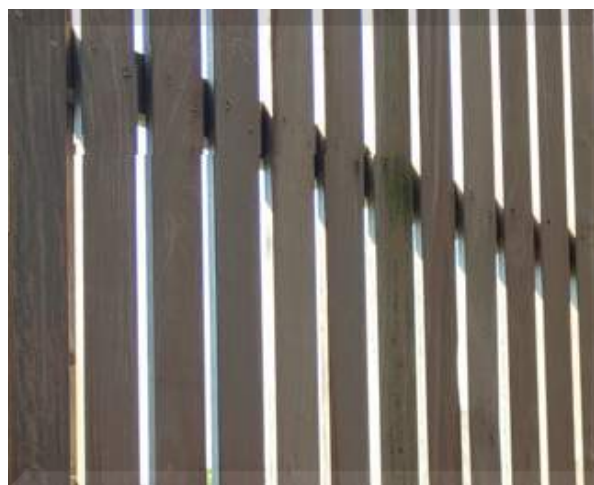
CONCRETE MASONRY UNIT - NATURAL GREY



HDPE SOLID PLASTIC PRIVACY PANELS - WHITE



PRIVACY CANVAS SHADE CLOTH - GREEN OR BLACK



PRESSURE TREATED WOOD CLADDING
BOARDS - NATURAL (NO SATIN)



STANDING SEAM ROOF - LIGHT GREY

OUTDOOR ENCLOSURES DESIGN
EXTERIOR RENDERINGS

SONG BIRD ENCLOSURE (A)



**LARGE WATERFOWL AND AQUATIC MAMMAL ENCLOSURES (D,E)
SONG BIRD ENCLOSURE (B)**



OUTDOOR ENCLOSURES DESIGN
EXTERIOR RENDERINGS

TURTLE ENCLOSURE (C)
LARGE WATERFOWL AND AQUATIC MAMMAL ENCLOSURES (D,E)



OWNERSHIP BY A CORPORATION

Date: **07/07/2022**

Address: **525 S. Park Blvd., Glen Ellyn, IL 60137**

Legal Description:

PIN 05-26-200-001

Legal Description as per Chicago Title and Trust Company Policy 240879

That part of the north half of Section 26, Township 39 North, Range 10 East of the third principal meridian, described as follows: beginning at the intersection of the center line of Joliet Road (also known as Park Boulevard) with the north line of said Section 26 and running thence North 89° 36' East 1305.2 feet to fence corner; thence South 0° 52' West 1324.0 feet to fence corner; thence north 88° 17' West along fence line 1591 feet, more or less, to the center of Joliet Road (also known as Park Boulevard); thence North 13° 30' East along the center of Joliet Road (also known as Park Boulevard) 1307 feet, more or less, to the point of beginning, in DuPage County, Illinois.

LIST ALL SHAREHOLDERS AND OFFICERS/DIRECTORS (AND % OF INTEREST OWNED IN EXCESS OF 5% OF STOCK)

Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
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Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____
Name: N/A	Address: _____	% _____

Affidavit Affirming No Conflict of Interest

The undersigned, being duly sworn and under oath, states as follows:

1. My name is **Karie Frilling**, and I hold the position of **Executive Director** for **Forest Preserve District of Dupage County** ("**Applicant**").
2. I have personal knowledge of all facts stated in this Affidavit, and if called to testify, I could and would testify competently thereto.
3. I am authorized by the Applicant to make the representations and statements in this Affidavit on the Applicant's behalf in support of the application for development approval ("**Application**") the Applicant filed with the Village of Glen Ellyn ("**Village**").
4. To the best of my knowledge, and as of the Application's date, no individual that is employed by the Village or sits on an elected or appointed Village board or commission has a financial interest in the Applicant, the Application, or the project proposed by the Applicant.
5. To the best of my knowledge, and as of the Application's date, no individual that is related to any person that is employed by the Village or sits on an elected or appointed Village board or commission has a financial interest in the Applicant, the Application, or the project proposed by the Applicant.
6. I will immediately notify the Village if the Applicant learns of the material inaccuracy of any statement within this Affidavit.

Further affiant sayeth naught.



Name: **Karie Frilling**

Title: **Executive Director**

Applicant's Name: *Karie Frilling*

Subscribed and sworn to me this

27 day of October, 2022.

Mary Frances P. Sheahan
Notary Public

AFFIDAVIT OF AUTHORIZATION

I, Karie Frilling - Executive Director, Forest Preserve District of DuPage County owner of the property described as

Willowbrook Wildlife Center at Willowbrook Forest Preserve 525 S. Park Ave. Glen Ellyn, IL

verify that **Kevin Horsfall - Assistant Director of Resource Management and Development**
is duly authorized to apply and represent my interests before the Glen Ellyn Plan Commission, Village Board and/or Zoning Board of Appeals. Owner acknowledges that any notice given applicant is actual notice to owner.



Karie Frilling
OWNER SIGNATURE
12/28/2022
DATE

Subscribed and sworn to before me this

28 day of December, 2022

Mary Frances P. Sheahan

Notary Public

REIMBURSEMENT OF FEES AGREEMENT

Village of Glen Ellyn Acct: # _____

Initial Deposit Amount: _____

- I. DESCRIPTION OF PROJECT: Construction of a new clinic building, 5 outdoor wildlife rehabilitation enclosures for song birds (960 SF and 2,304 SF), turtles (2 @ 528 SF) and waterfowl (4,620 SF), related site work, and light renovation of the existing propagation building.
- II. OWNER:
- A. Owner of Property: Forest Preserve District of DuPage County
- B. Owner's Address: 3S580 Naperville Road, Wheaton, IL 60189
- C. Owner's Home Phone Number: 630-933-7200 Fax: 630-933-7686
- D. Owner's Work Phone Number: 630-933-7225
- E. Owner's E-mail: kfrilling@dupageforest.org / Executive Director Forest Preserve District of DuPage County
- 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: Kevin Horsfall/Assistant Director of Resource Management and Development
- B. Petitioner's Address: 3S580 Naperville Rd. Wheaton, IL 60189
- C. Petitioner's Phone Number: 630-933-7200
- D. Petitioner's Work Number: 630-933-7242 (direct)
- E. Petitioner's E-mail: khorsfall@dupageforest.org
- IV. LOCATION OF PROPERTY:
- A. General Location of Property: 525 S. Park Blvd., Glen Ellyn, IL
- B. Acreage of Parcel: 43.08 Acres
- C. Permanent Index Number(s): PIN 05-26-200-001
- 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 Community 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 Community 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 Community 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 Community 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 Community Development Director for a refund of his or her remaining escrow balance. The Community 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.

Kevin Horsfall
Petitioner

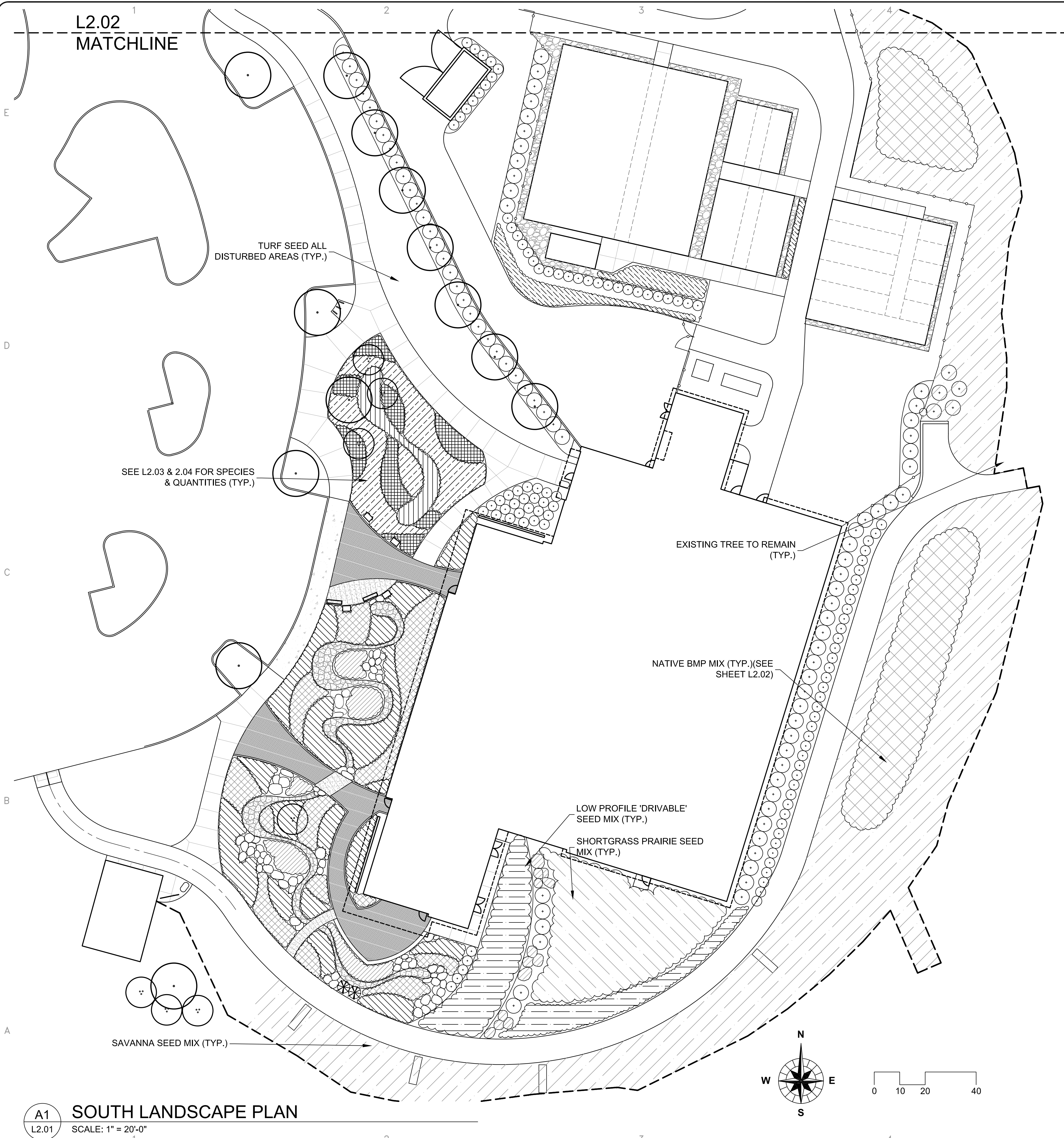
Katie Fuley
Owner

Date: 10/27/2022

Village of Glen Ellyn

By: _____
Community Development Director

Date: _____



Willowbrook Master Plan Phase B Plant List					
Symbol	Botanical Name	Common Name	Quantity	Size	Notes
Trees					
AME-L	<i>Amelanchier laevis</i>	Allegheny Shadblow	3	2" cal.	Ornamental
CEL-O	<i>Celtis occidentalis</i>	Hackberry	3	3" cal.	Shade
CER-C	<i>Cercis canadensis</i>	Redbud	3	2" cal.	Ornamental
CRA-V	<i>Crataegus viridis</i>	Green Hawthorn	1	2" cal.	Ornamental
GYM-D	<i>Gymnocladus dioica</i>	Kentucky Coffeetree	3	3" cal.	Shade
QUE-B	<i>Quercus bicolor</i>	Swamp White Oak	7	3" cal.	Shade
QUE-R	<i>Quercus rubra</i>	Red Oak	2	3" cal.	Shade
Shrubs					
ARO-M	<i>Aronia melanocarpa</i>	Black Chokeberry	31	5 Gal.	Deciduous Shrub
COR-A	<i>Corylus americana</i>	Hazelnut	83	5 Gal.	Deciduous Shrub
DIE-L	<i>Diervilla lonicera</i>	Dwarf Honeysuckle	59	5 Gal.	Deciduous Shrub
HAM-V	<i>Hamamelis virginiana</i>	Common Witchhazel	16	5 Gal.	Deciduous Shrub
HYD-A	<i>Hydrangea arborescens</i>	Smooth Hydrangea	24	5 Gal.	Deciduous Shrub
VIB-P	<i>Viburnum prunifolium</i>	Blackhaw Viburnum	11	5 Gal.	Deciduous Shrub
TAX-M	<i>Taxus x media 'Taunton'</i>	Taunton Yew	29	5 Gal.	Evergreen Shrub
Grasses					
AND-S	<i>Andropogon scoparius</i>	Little Bluestem	711	2.5" Plug	18" O.C.
BOU-C	<i>Bouteloua curtipendula</i>	Side-oats Grama	760	2.5" Plug	18" O.C.
SPO-H	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1145	2.5" Plug	18" O.C.
PAN-V	<i>Panicum virgatum</i>	Switchgrass	426	2.5" Plug	18" O.C.
CAR-G	<i>Carex gracillima</i>	Purple Sheathed Graceful Sedge	236	2.5" Plug	18" O.C.
CAR-P	<i>Carex pensylvanica</i>	Penn Sedge	776	2.5" Plug	18" O.C.
CAR-R	<i>Carex rosea</i>	Curly-styled Wood Sedge	439	2.5" Plug	18" O.C.
Forbs					
ASC-I	<i>Asclepias incarnata</i>	Swamp Milkweed	40	2.5" Plug	18" O.C.
PEN-D	<i>Penstemon digitalis</i>	Foxglove	69	2.5" Plug	18" O.C.
ECH-P	<i>Echinacea purpurea</i>	Purple Coneflower	30	2.5" Plug	18" O.C.
DOD-M	<i>Dodecatheon media</i>	Shooting Star	100	Pint	Field Layout
MER-V	<i>Mertensia virginica</i>	Virginia Bluebells	100	Pint	Field Layout
RUD-F	<i>Rudbeckia fulgida speciosa</i>	Black Eyed Susan	135	2.5" Plug	18" O.C.
SYM-N	<i>Symphotrichum novae-angliae</i>	New England Aster	59	2.5" Plug	18" O.C.

D5 MASTER PLANT LIST

Shortgrass Prairie Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Carex bicknellii</i>	Copper-shouldered Oval Sedge	2,000	32
<i>Elymus canadensis</i>	Canada Wild Rye	2,000	32
<i>Koeleria macrantha</i>	June Grass	0.125	2
<i>Allium cernuum</i>	Nodding Onion	0.500	8
<i>Aquilegia canadensis</i>	Wild Columbine	0.250	4
<i>Asclepias tuberosa</i>	Butterfly Weed	1,000	16
<i>Dalea purpurea</i>	Purple Prairie Clover	0.250	4
<i>Eryngium yuccifolium</i>	Rattlesnake Master	0.500	8
<i>Echinacea purpurea</i>	Purple Coneflower	1,000	16
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.250	4
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Rudbeckia fulgida</i>	Orange Coneflower	0.500	8
<i>Symphotrichum novae-angliae</i>	New England Aster	0.250	4
Total Weight of Seeds		14.875	238

Low Profile/ Drivable Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	10,000	160
<i>Bouteloua curtipendula</i>	Side-oats Grama	10,000	160
<i>Koeleria macrantha</i>	June Grass	0.125	2
Total Weight of Seeds		6,000	96

Savanna Mix			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Carex grisea</i>	Wood Gray Sedge	0.500	8
<i>Carex molesta</i>	Field Oval Sedge	0.500	8
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.500	8
<i>Elymus hystrix</i>	Bottlebrush Grass	2,000	32
<i>Elymus virginicus</i>	Virginia Wild Rye	5,000	80

<i>Asclepias exaltata</i>	Poke Milkweed	0.500	8
<i>Aquilegia canadensis</i>	Wild Columbine	0.250	4
<i>Dodecatheon meadia</i>	Shooting Star	0.125	2
<i>Echinacea purpurea</i>	Purple Coneflower	1,000	16
<i>Geranium maculatum</i>	Wild Geranium	0.500	8
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.250	4
<i>Polemonium reptans</i>	Jacobs Ladder	0.500	8
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Solidago ulmifolia</i>	Elm-leaved Goldenrod	0.063	1
<i>Symphotrichum novae-angliae</i>	New England Aster	0.250	4
<i>Zizia aurea</i>	Golden Alexanders	0.250	4
Total Weight of Seeds		3,500	56

Native Area Cover Crop			
Botanical Name	Common Name	Lb. / Acre	Oz / Acre
<i>Avena sativa</i>	Oats	32	512

Note: all seeded areas to include erosion control blanket per civil plans.

A5 NATIVE SEED LISTS

OWNER:

DU PAGE COUNTY

STREET ADDRESS:
3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:
P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:
PH# 630-933-7200
FAX# 630-933-7204

ARCHITECT LICENSE:

ENGINEER LICENSE:

SIGNED:
DATE:
LIC#:
EXP:

SIGNED:
DATE:
LIC#:
EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER
WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:
FAX#:
SUBCONSULTANT:
CONSULTANT:
PH#:
FAX#:

MARK:

DATE:

DESCRIPTION:

2/13/2023 Village Comment Response

1/19/2023 Issue for Bid Group 3

1/13/2023 PERMIT REVISION #1

11/18/2022 BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 20'-0"

SHEET TITLE:

SOUTH LANDSCAPE PLAN

SHEET NO:

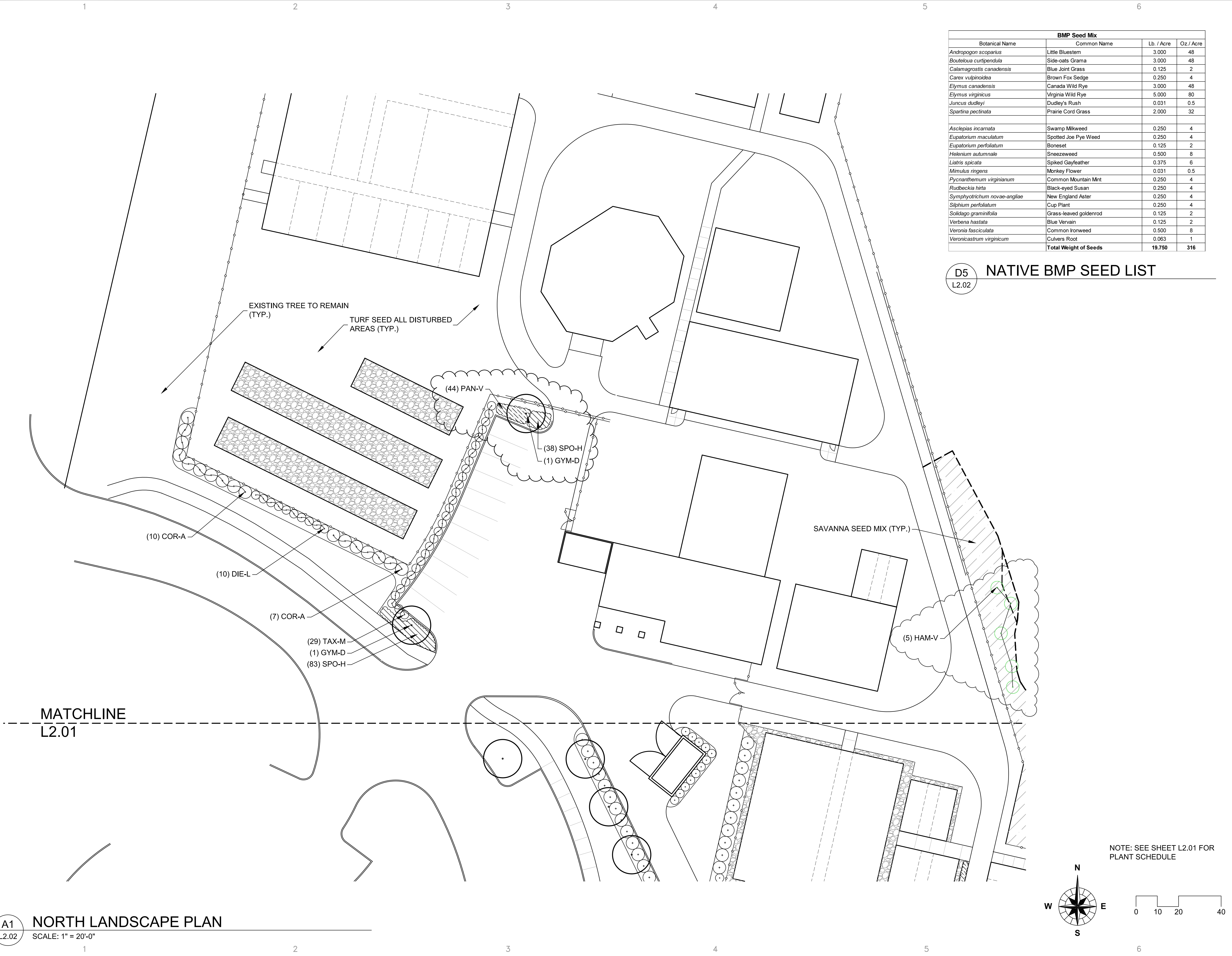
L2.01

SHEET

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OF

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A1 NORTH LANDSCAPE PLAN
L2.02 SCALE: 1" = 20'-0"

BMP Seed Mix			
Botanical Name	Common Name	Lb. / Acre	Oz. / Acre
<i>Andropogon scoparius</i>	Little Bluestem	3,000	48
<i>Bouteloua curtipendula</i>	Side-oats Grama	3,000	48
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.125	2
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.250	4
<i>Elymus canadensis</i>	Canada Wild Rye	3,000	48
<i>Elymus virginicus</i>	Virginia Wild Rye	5,000	80
<i>Juncus dudleyi</i>	Dudley's Rush	0.031	0.5
<i>Spartina pectinata</i>	Prairie Cord Grass	2,000	32
<i>Asclepias incarnata</i>	Swamp Milkweed	0.250	4
<i>Eupatorium maculatum</i>	Spotted Joe Pye Weed	0.250	4
<i>Eupatorium perfoliatum</i>	Boneset	0.125	2
<i>Helenium autumnale</i>	Sneezeweed	0.500	8
<i>Liatris spicata</i>	Spiked Gayfeather	0.375	6
<i>Mimulus ringens</i>	Monkey Flower	0.031	0.5
<i>Pycnanthemum virginianum</i>	Common Mountain Mint	0.250	4
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.250	4
<i>Symphotrichum novae-angliae</i>	New England Aster	0.250	4
<i>Silphium perfoliatum</i>	Cup Plant	0.250	4
<i>Solidago graminifolia</i>	Grass-leaved goldenrod	0.125	2
<i>Verbena hastata</i>	Blue Vervain	0.125	2
<i>Veronica fasciculata</i>	Common Ironweed	0.500	8
<i>Veronicastrum virginicum</i>	Culvers Root	0.063	1
Total Weight of Seeds		19.750	316

D5 NATIVE BMP SEED LIST
L2.02

OWNER:

DU PAGE COUNTY

STREET ADDRESS:

3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:

P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:

PH# 630-933-7200
FAX# 630-933-7204

ARCHITECT LICENSE:

ENGINEER LICENSE:

SIGNED:

SIGNED:

DATE:

DATE:

LIC#:

LIC#:

EXP:

EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER

WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:

FAX#:

SUBCONSULTANT:

CONSULTANT:

PH#:

FAX#:

MARK:	DATE:	DESCRIPTION:
	2/13/2023	Village Comment Response
	1/19/2023	Issue for Bid Group 3
	1/13/2013	PERMIT REVISION #1
	11/18/2022	BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 20'-0"

SHEET TITLE:

NORTH LANDSCAPE PLAN

SHEET NO:

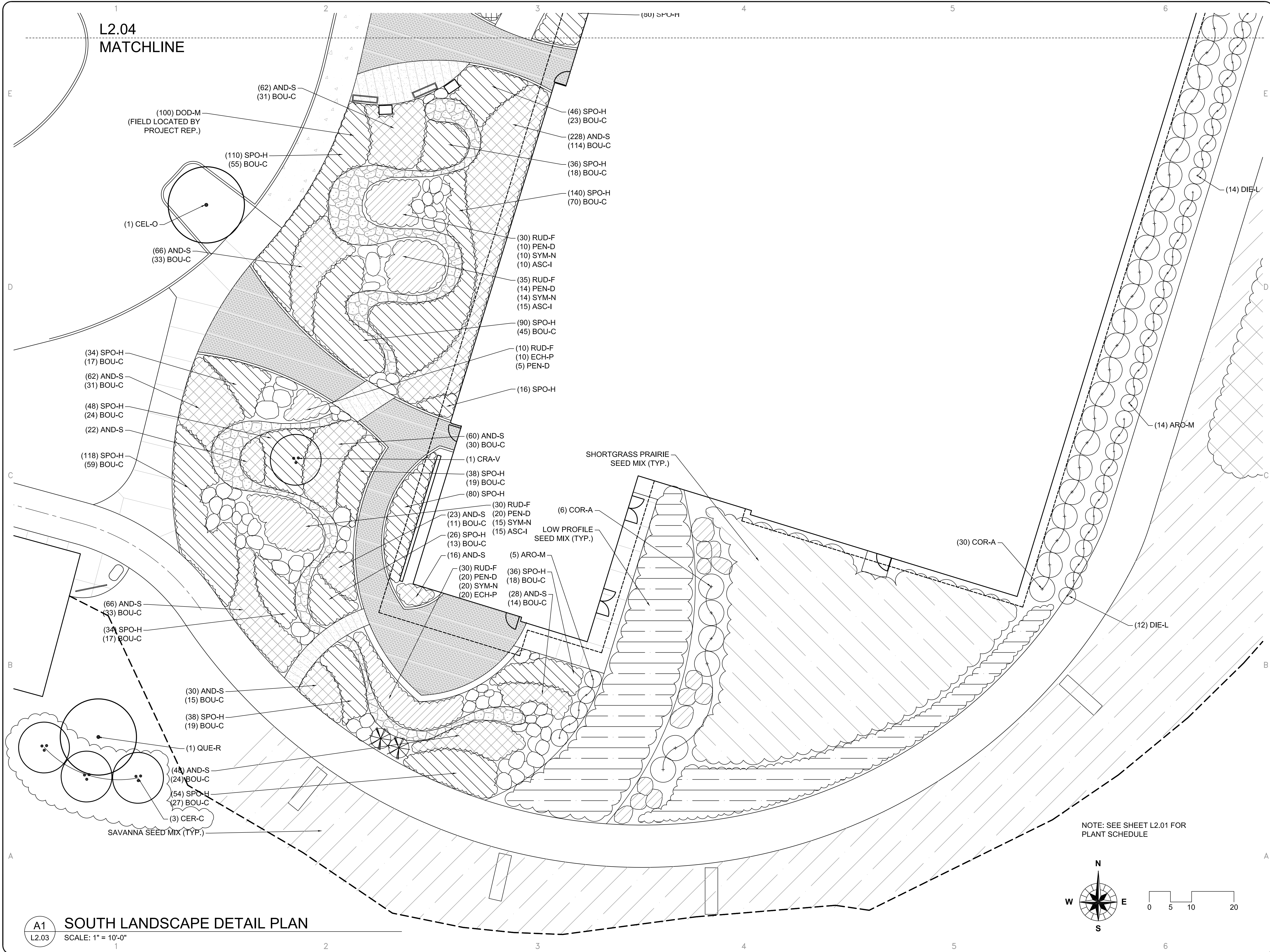
L2.02

SHEET

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of

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OWNER: STREET ADDRESS:
3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:
P.O. BOX 5000
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CONTACT NUMBERS:
PH# 630-933-7200
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SIGNED: DATE: LIC#: EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER
WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#: FAX#

SUBCONSULTANT:

PH#: FAX#

CONSULTANT:

MARK: DATE: DESCRIPTION:

2/13/2023 Village Comment Response

1/19/2023 Issue for Bid Group 3

1/13/2023 PERMIT REVISION #1

11/18/2022 BID GROUP 3

PROJECT NO: M-340-000

DRAWN BY: MJA

CHECKED BY: KG

DATE: 1/27/2022

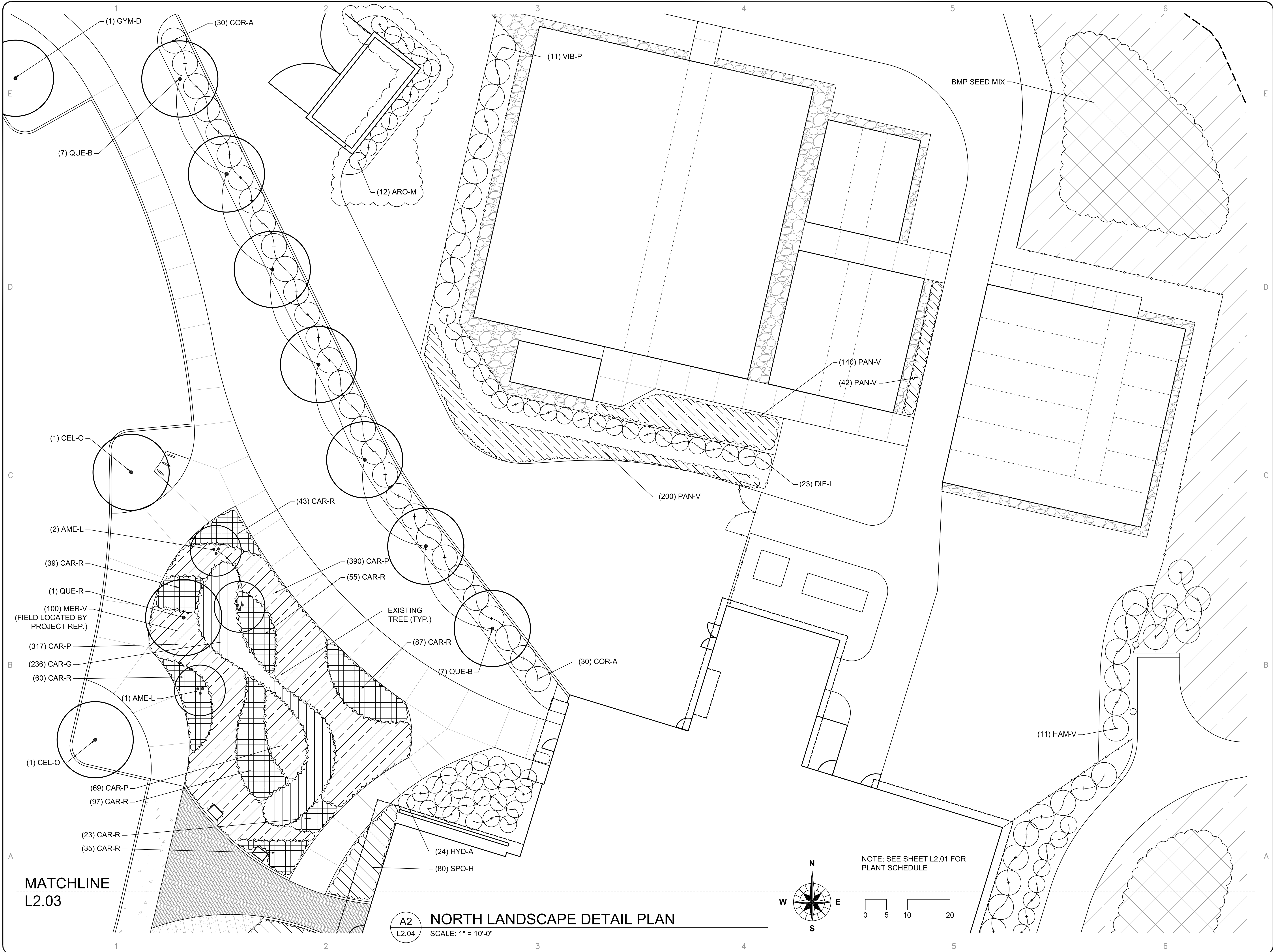
SCALE: 1" = 10'-0"

SHEET TITLE:
LANDSCAPE
DETAIL PLAN

SHEET NO:
L2.03

SHEET 0 of 00

CAD DWG FILE: C:\SDSKPROJ\Z-000-000.dwg Z-000-000.dwg Z-000-000_C0V1-0.dwg



OWNER:

DU PAGE COUNTY

STREET ADDRESS:

3 S 580 NAPERVILLE ROAD
WHEATON, IL 60189-8761

MAILING ADDRESS:

P.O. BOX 5000
WHEATON, IL 60189-5000

CONTACT NUMBERS:

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ARCHITECT LICENSE:

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SIGNED:

SIGNED:

DATE:

DATE:

LIC#:

LIC#:

EXP:

EXP:

ILLINOIS

WILLOWBROOK WILDLIFE CENTER

WILLOWBROOK MASTER PLAN PHASE 2

Address

PH#:

FAX#:

SUBCONSULTANT:

PH#:

FAX#:

CONSULTANT:

MARK:	DATE:	DESCRIPTION:
	2/13/2023	Village Comment Response
	1/19/2023	Issue for Bid Group 3
	1/13/2023	PERMIT REVISION #1
	11/18/2022	BID GROUP 3

PROJECT NO:

M-340-000

DRAWN BY:

MJA

CHECKED BY:

KG

DATE:

1/27/2022

SCALE:

1" = 10'-0"

SHEET TITLE:

**LANDSCAPE
DETAIL PLAN**

SHEET NO:

L2.04

SHEET

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Accessories	Symbol	Unit	Quantity	Material description	Quantity	Number of items	Unit price	Total price	Photo	
	F18		8	Non-reflective 24 8332 65 24 8332 65	24 8332 65	8	1325	0.85	21	
	F16		4	Ultrasonic lighting "ULI" 200 P3 100 W, 1000 K	ULI 200 P3 100 W, 1000 K	1	6889	0.85	58	
	F17		3	German mechanical lighting FDH 14220 A8 10W 120	FDH 14220 A8 10W 120 FDH 14220 A8 10W 120 FDH 14220 A8 10W 120	1	1320	0.85	18.5	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.9 fc	90.7 fc	0.0 fc	N/A	N/A

Luminaire Schedule					
Symbol	Tag	Qty	Description	Arrangement	LLF
	A2	4	GLEON-SA2D-740-U-5WQ	BACK-BACK	0.912
	C	5	GLEON-SA2D-740-U-SL3	SINGLE	0.912

Calculation Summary					
Label	CalcType	Avg	Max	Min	Max/Min
BEYOND PROPERTY LINE	Illuminance	0.01	0.9	0.0	N.A.
OVERALL SITE	Illuminance	0.32	9.9	0.0	N.A.
PARKING Planar	Illuminance	2.01	8.9	0.0	N.A.
PROPERTY LINE	Illuminance	0.10	1.5	0.0	N.A.

Luminaire Locations						
Location						
No.	Label	X	Y	MH	Orientation	Tilt
2	F15	143.30	110.50	12.00	180.00	0.00
3	F15	215.20	110.50	12.00	180.00	0.00
4	F15	221.50	112.40	12.00	90.00	0.00
5	F15	221.60	212.80	9.00	90.00	0.00
6	F15	221.60	221.10	9.00	90.00	0.00
1	F16	35.80	188.30	10.00	270.00	0.00
2	F16	57.50	172.60	10.00	180.00	0.00
3	F16	239.30	157.40	10.00	0.00	0.00
4	F16	66.70	217.20	10.00	270.00	0.00
1	F17	73.40	142.00	10.00	0.00	0.00
2	F17	79.30	142.10	10.00	0.00	0.00
3	F17	85.30	142.10	10.00	0.00	0.00
1	F15	137.10	112.10	12.00	270.00	0.00

DESCRIPTION

The GalleonTM LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED OpticsTM system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #	GLEON-AA-04-LED-E1-5WQ-AP	Type
Project	Willowbrook Wildlife Center	A2 (DUAL HEAD) C (SINGLE HEAD)
Comments		Date
Prepared by		10-11-13

SPECIFICATION FEATURES

Construction
 Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
 Choice of 12 patented, high-efficiency AccuLED OpticsTM manufactured from injection molded acrylic. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in

4000K (+/- 275K) CCT and nominal 70 CRI. Optional 6000K CCT and 3000K CCT (80 CRI).

Electrical
 LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. 90% lumen maintenance expected at 60,000 hours.

Mounting
 Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Designed for pole or

wall mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish
 Housing finished in Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
 Five-year warranty.



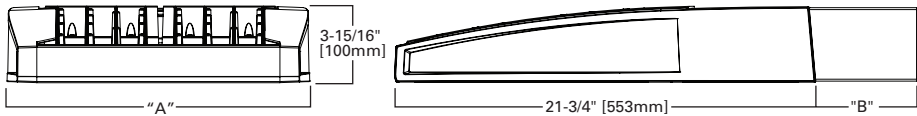
GAN
GALLEON LED

1-10 Light Squares
Solid State LED

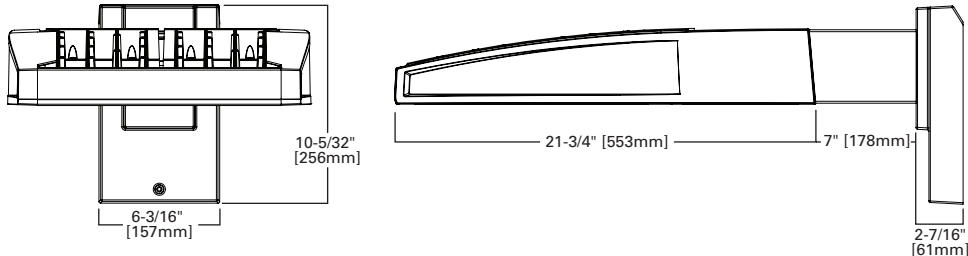
AREA / ROADWAY LUMINAIRE

DIMENSIONS

POLE MOUNT



WALL MOUNT



DIMENSION DATA

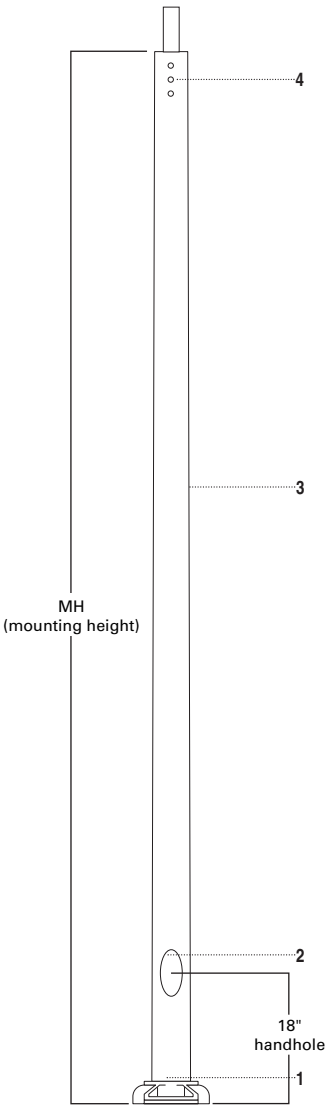
Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

RTA ROUND TAPERED ALUMINUM

10'—40' MOUNTING HEIGHT

Willowbrook Wildlife Center
Type S1 pole
part # RTA6L20ABM2



POLE HEIGHT FROM GRADE
TO FIXTURE = 23'-0"

SPECIFICATION FEATURES

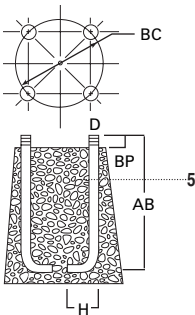
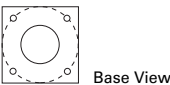
- 1···Cast aluminum alloy shoe base with aluminum alloy bolt covers or base cover dependent upon base type.
- 2···Flush reinforced 2 3/8" x 4 1/2" for 4" shafts. Hand hole assembly with internal reinforcing frame. 3" x 5" for 5" and 6" shafts, 4" x 6" for 7", 8", 10" shafts. Ground lug located opposite hand hole opening drilled & tapped for 3/8" 16NC-2 grounding screw.
- 3···Tapered aluminum lighting shaft with polished finish.
- 4···Drilled or Tenon (specify).
- 5···Anchor bolt per ASTM A576 with (1) nut, (1) flat washer, and (2) shims. Nuts, washers and threaded portion of bolt are hot dip galvanized.

FOUR BOLT ANCHORAGE [See ordering information]

BC=Bolt Circle
BP=Bolt Projection
AB=Bolt Dimensions
D=Bolt Diameter
H=Bolt Dimensions

FINISH COLORS [See ordering information. Other finish colors available.]

B=Clear Anodized
C=Dark Bronze Anodized
D=Black Anodized
E=Medium Bronze Anodized
F=Dark Bronze Powder Coat
V=Grey Powder Coat
W=White Powder Coat
X=None (natural aluminum)
Y=Black Powder Coat



WARNING: THE USE OF UNAUTHORIZED ACCESSORIES SUCH AS BANNERS, SIGNS OR PENNANTS FOR WHICH THE POLE WAS NOT DESIGNED FOR VOIDS THE COOPER LIGHTING WARRANTY AND MAY RESULT IN POLE FAILURE CAUSING SERIOUS INJURY OR PROPERTY DAMAGE. COOPER LIGHTING'S POLE WARRANTY IS ALSO VOIDED IF LUMINAIRE IS NOT INSTALLED AT TIME OF POLE INSTALLATION.



WST LED

Architectural Wall Sconce



Catalog
Number

Notes

Type

TYPE:F16

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

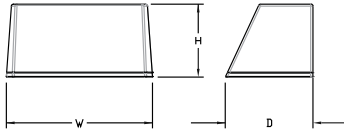
Luminaire

Height: 8-1/2"
(21.59 cm)

Width: 17"
(43.18 cm)

Depth: 10-3/16"
(25.9 cm)

Weight: 20 lbs
(9.1 kg)

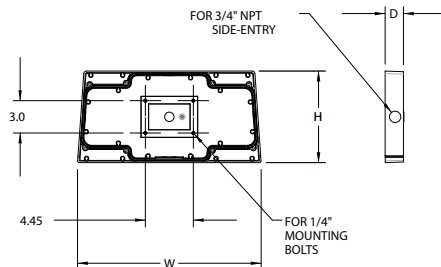


Optional Back Box (PBBW)

Height: 8.49"
(21.56 cm)

Width: 17.01"
(43.21 cm)

Depth: 1.70"
(4.32 cm)

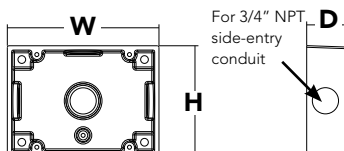


Optional Back Box (BBW)

Height: 4"
(10.2 cm)

Width: 5-1/2"
(14.0 cm)

Depth: 1-1/2"
(3.8 cm)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a **shaded background**. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability¹
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a **shaded background**¹

To learn more about A+, visit www.acuitybrands.com/aplus.

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)



COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com
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WST-LED
Rev. 11/22/21

Ordering Information

EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

WST LED							
Series	Performance Package	Color temperature	Distribution	Voltage		Mounting	
WST LED	P1 1,500 Lumen package	27K 2700 K	VF Visual comfort forward throw	MVOLT ¹	277 ²	Shipped included (blank) Surface mounting bracket Shipped separately BBW Surface-mounted back box ³ PBBW Premium surface-mounted back box ^{3,4}	
	P2 3,000 Lumen package	30K 3000 K	VW Visual comfort wide	120 ²	347 ²		
	P3 6,000 Lumen package	40K 4000 K		208 ²	480 ²		
		50K 5000 K		240 ²			

Options			Finish (required)		
NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights ^{5,6,7}	E7WC	Emergency battery backup, CA Title 20 Noncompliant (cold, 7W) ^{7,12}	DDBXD	Dark bronze
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights ^{5,6,7}	E7WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 7W) ^{7,13}	DBLXD	Black
PE	Photoelectric cell, button type ⁸	E20WH	Emergency battery pack 18W constant power, Certified in CA Title 20 MAEDBS ⁷	DNAXD	Natural aluminum
PER	NEMA twist-lock receptacle only (controls ordered separate) ⁹	E20WC	Emergency battery pack -20°C 18W constant power, Certified in CA Title 20 MAEDBS ^{7,12}	DWHXD	White
PER5	Five-wire receptacle only (controls ordered separate) ⁹	E23WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 20W) ^{7,12,14}	DSSXD	Sandstone
PER7	Seven-wire receptacle only (controls ordered separate) ⁹	LCE	Left side conduit entry ¹⁵	DDBTXD	Textured dark bronze
PIR	Motion/Ambient Light Sensor, 8-15' mounting height ^{5,6}	RCE	Right side conduit entry ¹⁵	DBLBXD	Textured black
PIR1FC3V	Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{5,6}	BAA	Buy America(n) Act Compliant	DNATXD	Textured natural aluminum
PIRH	180° motion/ambient light sensor, 15-30' mounting height ^{5,6}			DWHGXD	Textured white
PIRH1FC3V	Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{5,6}			DSSTXD	Textured sandstone
SF	Single fuse (120, 277, 347V) ²				
DF	Double fuse (208, 240, 480V) ²				
DS	Dual switching ¹⁰				
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) ¹¹				
E7WH	Emergency battery backup, Non CEC compliant (7W) ⁷				

Accessories

Ordered and shipped separately.

WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTXD U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ¹⁷
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ¹⁷
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ¹⁷

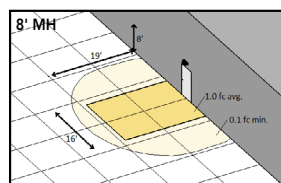
NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory; see accessories information.
- Top conduit entry standard.
- Not available with VG or WG. See PER Table.
- Reference Motion Sensor table.
- Not available with 347/480V.
- Need to specify 120, 208, 240 or 277 voltage.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- Not available with Emergency options, PE or PER options.
- DMG option not available with standalone or networked sensors/controls.
- Battery pack rated for -20° to 40°C.
- Comes with PBBW.
- Warranty period is 3-years.
- Not available with BBW.
- Must order with fixture; not an accessory.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table.

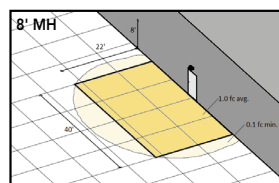
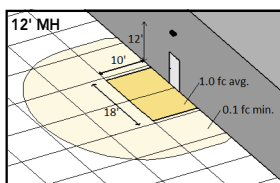
Emergency Battery Operation

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency backup configurations include an independent secondary driver with an integral relay to immediately detect AC power loss, meeting interpretations of [NFPA 70/NEC 2008 - 700.16](#). The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per [International Building Code Section 1006](#) and [NFPA 101 Life Safety Code Section 7.9](#), provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions. The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package and VF distribution product in emergency mode.

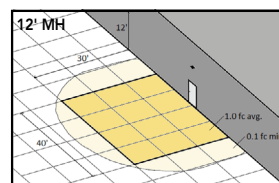
10' x 10' Gridlines
8' and 12' Mounting Height



WST LED P1 27K VF MVOLT E7WH



WST LED P2 40K VF MVOLT E20WH



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.95	>0.92	>0.87

Electrical Load

Performance package	System Watts	Current (A)					
		120	208	240	277	347	480
P1	11	0.1	0.06	0.05	0.04	---	---
	14	---	---	---	---	0.04	0.03
P1 DS	14	0.12	0.07	0.06	0.06	---	---
P2	25	0.21	0.13	0.11	0.1	---	---
	30	---	---	---	---	0.09	0.06
P2 DS	25	0.21	0.13	0.11	0.1	---	---
P3	50	0.42	0.24	0.21	0.19	---	---
	56	---	---	---	---	0.16	0.12
P3 DS	52	0.43	0.26	0.23	0.21	---	---

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

*for use with site wide Dusk to Dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	✗	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion	✗	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof*	✗	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof* with Motion	✗	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture

✓ Recommended

✗ Will not work

⚠ Alternate

*Futureproof means: Ability to change controls in the future.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT ¹)	Dist. Type	27K (2700K, 70 CRI)					30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	12W	VF	1,494	0	0	0	125	1,529	0	0	0	127	1,639	0	0	0	137	1,639	0	0	0	137
		VW	1,513	0	0	0	126	1,548	0	0	0	129	1,659	0	0	0	138	1,660	0	0	0	138
P2	25W	VF	3,163	1	0	1	127	3,237	1	0	1	129	3,469	1	0	1	139	3,468	1	0	1	139
		VW	3,201	1	0	0	128	3,276	1	0	0	131	3,512	1	0	0	140	3,512	1	0	0	140
P3	50W	VF	6,025	1	0	1	121	6,165	1	0	1	123	6,609	1	0	1	132	6,607	1	0	1	132
		VW	6,098	1	0	1	122	6,240	1	0	1	125	6,689	1	0	1	134	6,691	1	0	1	134

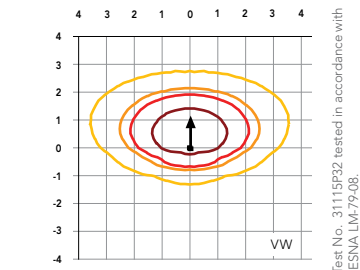
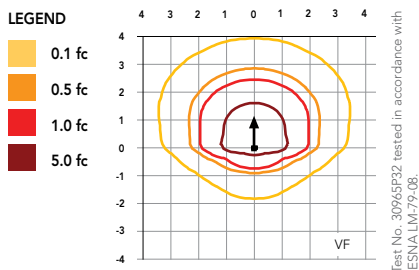


COMMERCIAL OUTDOOR

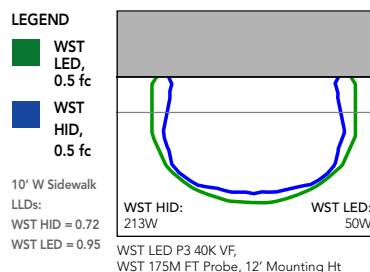
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com
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WST-LED
Rev. 11/22/21

Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



Distribution overlay comparison to 175W metal halide.



FEATURES & SPECIFICATIONS

INTENDED USE

The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WST LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) consist of 98 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 2 electronic driver has a power factor >90%, THD <20%. Easily-serviceable surge protection device meets a minimum Category B (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. PIR and back box options are rated for wet location. Rated for -30°C to 40°C ambient.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

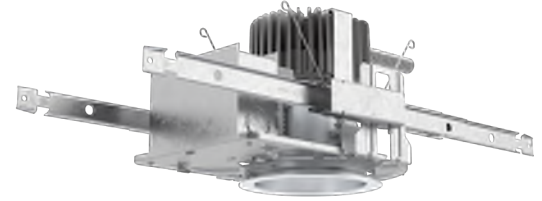
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



General Illumination Round Downlight

4"

TYPE:F17



Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution



Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500
Delivered Lumens	271	573	808	1001	1527	1994	2580	3110	3612
Wattage	3.1	7.2	7.9	8.8	13.7	19.5	25.7	31.2	38.4
Lumens per Watt	87.4	79.6	102.3	113.8	111.5	102.3	100.4	99.7	94.1

Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



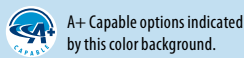
Clean Room



Shower



Steam Room



Design2Ship Quick Ship Program: Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details. **Maximum Order Quantity: 100 units; 50 for Chicago Plenum.**

Luminaire Type:

Catalog Number:

EXAMPLE: EV04 35/25 AR MWD LSS 120 EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Distribution	Finish	Voltage
EV04	27/ 2700 K	02 250 lumens	AR Clear	(blank) Self-flanged FL Flangeless	MD Medium (0.9 s/mh)	LSS Semi-specular	MVOLT
	30/ 3000 K	05 500 lumens	PR Pewter			LD Matte-diffuse	120
	35/ 3500 K	07 750 lumens	WTR Wheat		MWD Medium wide (1.0 s/mh)	LS Specular	277
	40/ 4000 K	10 1000 lumens	GR Gold		WD Wide (1.2 s/mh)		347 ^{2,3}
	50/ 5000 K	15 1500 lumens	WR ¹ White				
		20 2000 lumens	BR ¹ Black				
		25 2500 lumens	WRAMF ¹ White Anti-microbial				
		30 3000 lumens					
		35 3500 lumens					
		40 4000 lumens					
		45 4500 lumens					

Driver ⁴	Control Interface	Options
GZ10 0-10V driver dims to 10%	NLT ⁵ nLight [®] dimming pack controls	SF Single Fuse. Specify 120V or 277V
GZ1 0-10V driver dims to 1%	NLTER ^{2,6,10} nLight [®] dimming pack controls emergency circuit	TRW ⁷ White painted flange
EZ10 eldoLED 0-10V EC0drive. Linear dimming to 10% min.	NLTAIR ^{2,13} nLight [®] Air enabled	TRBL ⁸ Black painted flange
EZ1 eldoLED 0-10V EC0drive. Linear dimming to 1% min.	NLTAIRER ^{2,10,13} nLight [®] AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit	EL ⁹ Emergency battery pack, 10W, with integral test switch
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	NLTAIREM ^{2,13} nLight [®] AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit with battery pack options.	ELR ⁹ Emergency battery pack, 10W, with remote test switch
EDAB ⁴ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.		ELSD ⁹ Emergency battery pack, 10W, with self-diagnostics, integral test switch
EDXB ⁴ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Minimum 1000 lumens. Includes termination resistor. Refer to DMXR Manual .	EXA1 XPoint Wireless, eldoLED 0-10V EC0drive. Linear dimming to 1%. Refer to XPoint tech sheet.	ELRSD ⁹ Emergency battery pack, 10W, with self-diagnostics, remote test switch
ECOS2 ⁵ Lutron [®] Hi-Lume [®] 2-wire forward-phase driver. 120V only. Minimum dimming level 1%. Min: 1000LM; Max: 2500LM	EXAB XPoint Wireless, eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. Refer to XPoint tech sheet.	E10WCP ⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch
ECOD ⁵ Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Min: 2500LM; Max: 4000LM.		E10WCPR ⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
		N80 ¹¹ nLight [®] Lumen Compensation
		BGTD Bodine generator transfer device. Specify 120V or 277V.
		90CRI High CRI (90+)
		CP ¹² Chicago Plenum. Specify 120V or 277V for 5000lm and above.
		RRL RELOC [®] -ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature.

ACCESSORIES — order as separate catalog numbers (shipped separately)

SCA4	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 .
CTAEV04	4" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5").
CTA4-8 YK	4"-8" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). For use with CWW/DWW trims, EDXB, CP or nTune options.
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC .

ORDERING NOTES

- Not available with finishes.
- Not available with emergency battery pack options.
- Supplied with factory installed step down transformer.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight[®] and XPoint options.
- Must specify voltage.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- 11" of plenum depth or top access required for battery pack maintenance.
- ER for use as UL924 Emergency Operation via power sense lead. Will require an emergency hot feed and normal hot feed. EM for use as UL924 Emergency Operation via power interrupt detection.
- Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
- Not available with ELR, HAO, EXA1, or EXAB options.
- Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.

Optical Assembly

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from below the ceiling. Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control. Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Electrical

The luminaire shall operate from a 50 or 60 Hz ± 3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output. The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output. Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages. Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Luminaire shall be equipped with interface for nLight wired or wireless network with integral power supply as per specification.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%. eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered. Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

Construction

Luminaire housing shall be constructed of 20-gauge galvanized steel and have telescopic mounting bars with maximum 26" and minimum 15" extension and 4" vertical adjustment. Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 2"). Tool-less adjustments shall be possible after installation. The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration. 25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise). For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling. Luminaire configurations are Energy Star certified through testing in EPA-recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit www.energystar.gov for specific configurations listed.

Buy American

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to <https://www.acuitybrands.com/resources/buy-american> for additional information.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours. Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by a point at the intersection of the CCT line and the black body locus line in CIE chromaticity space.

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note:

Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

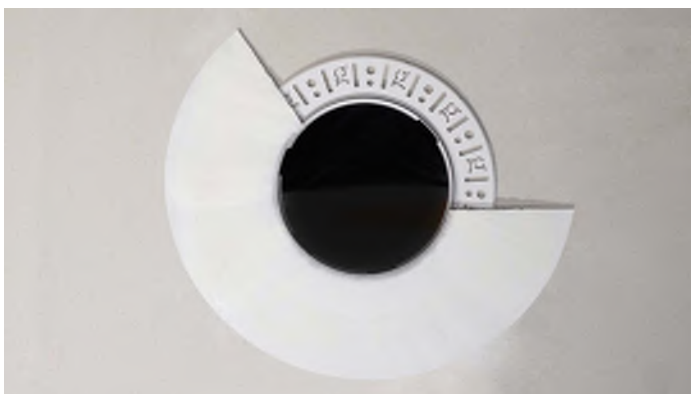
- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details



Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.



EVO with flangeless trim

Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.

EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EXA1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic	Linear
EXAB	<1%	Logarithmic	Linear
EDXB	<1%	Logarithmic	Linear

Distributions	
Distribution	Beam
MD	51
MWD	57
WD	73

CCT/CRI Multiplier Table		
CRI	CCT	Multiplier
80	2700K	0.96
	3000K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	3000K	0.83
	3500K	0.85
	4000K	0.87
	5000K	0.91

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73

Driver		Control Provided (note: 347V/UVOLT versions provided with 347 option selected)				
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIR2ER	NLTAIREM2
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2

How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

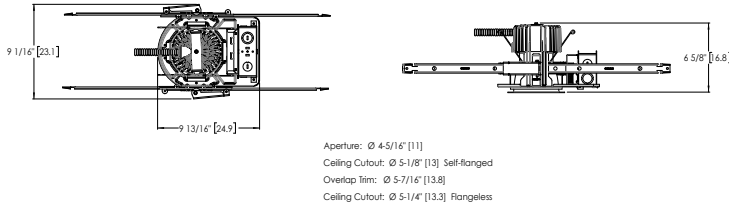
Aperture: 4-5/16" (11)

Ceiling Opening: 5-1/8" (13) self-flanged

Overlap trim: 5-7/16" (13.8)

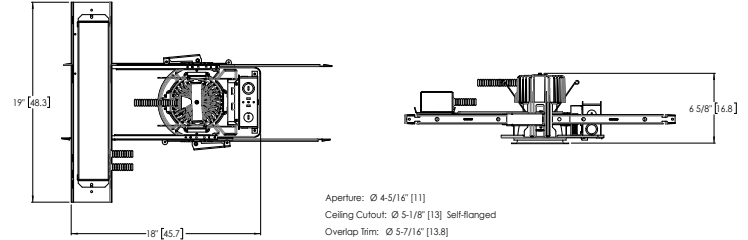
5-1/4" (13.3) flangeless

Standard



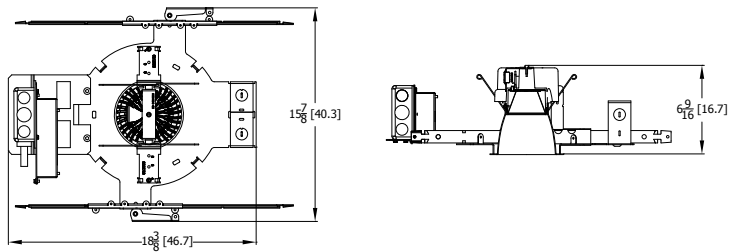
Aperture: $\varnothing$ 4-5/16" (11)
Ceiling Cutout: $\varnothing$ 5-1/8" (13) Self-flanged
Overlap Trim: $\varnothing$ 5-7/16" (13.8)
Ceiling Cutout: $\varnothing$ 5-1/4" (13.3) Flangeless

Battery Pack



Aperture: $\varnothing$ 4-5/16" (11)
Ceiling Cutout: $\varnothing$ 5-1/8" (13) Self-flanged
Overlap Trim: $\varnothing$ 5-7/16" (13.8)
Ceiling Cutout: $\varnothing$ 5-1/4" (13.3) Flangeless

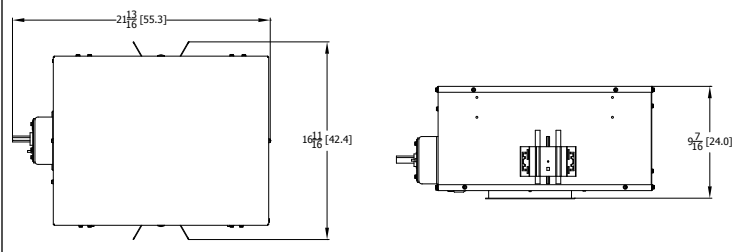
CP Standard



15 7/8" [40.3]

6 9/16" [16.7]

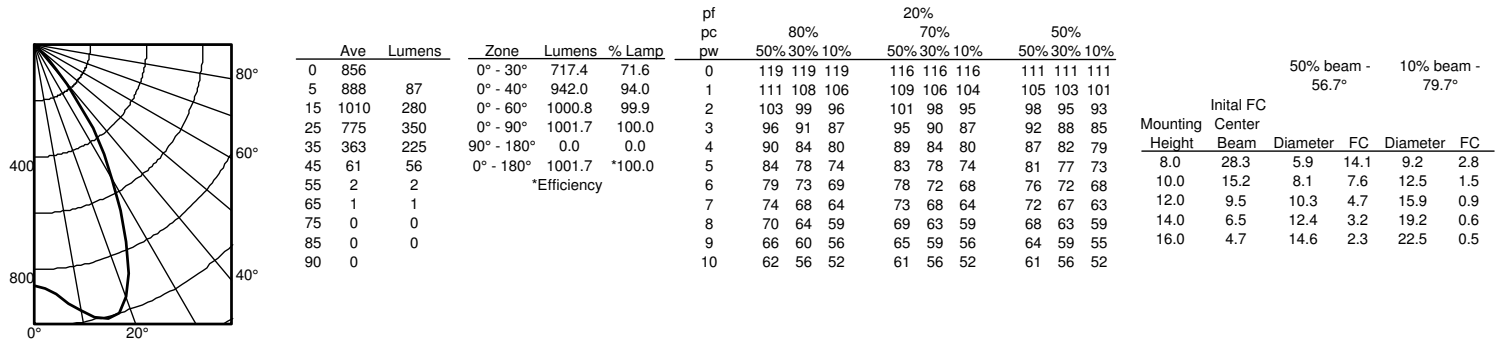
CP Enclosed For Use With Battery Pack & nLight



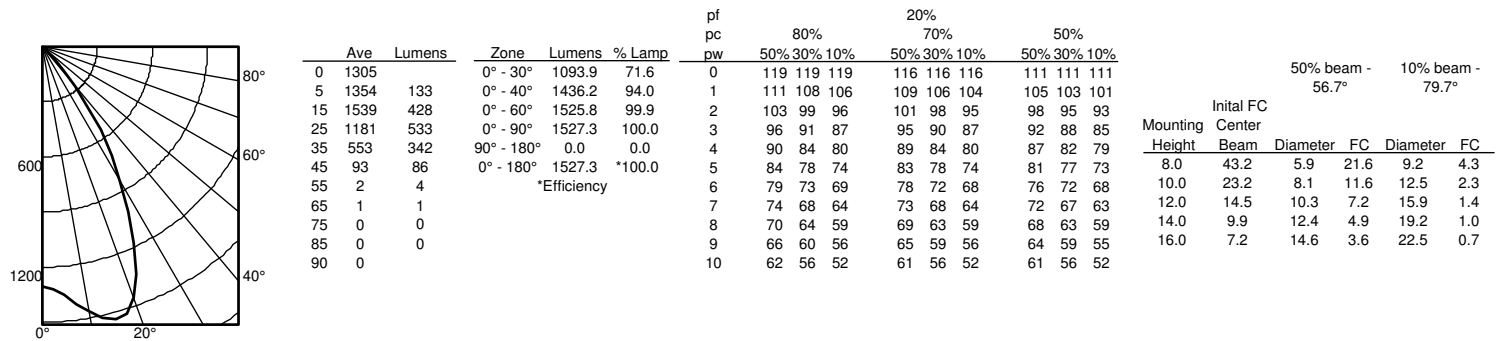
16 11/16" [42.4]

9 7/16" [24.0]

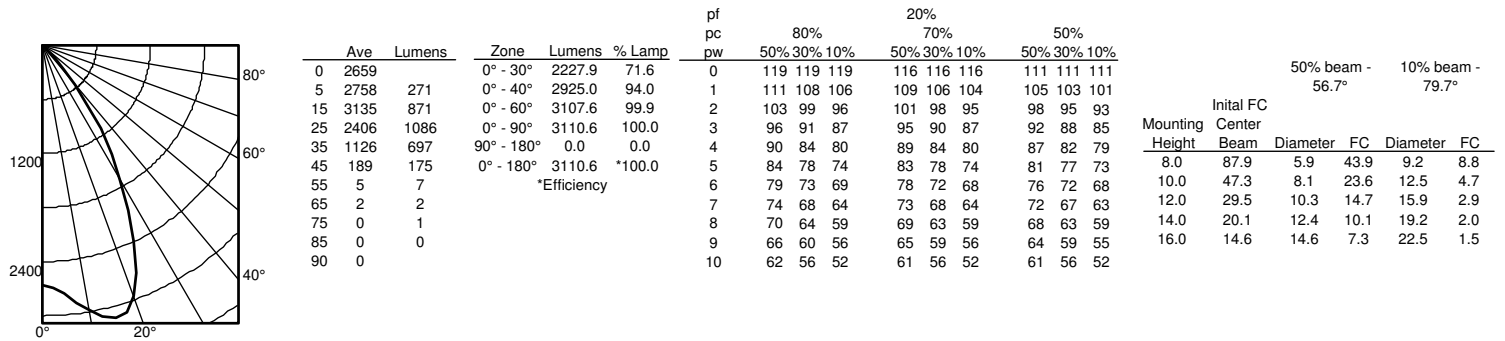
EV04 35/10 MWD LS INPUT WATTS: 8.8W, DELIVERED LUMENS: 1001.7LM, LPW = 113.8, 1.08 S/MH, TEST NO. LTL27786P131



EV04 35/15 MWD LSS INPUT WATTS: 13.7W, DELIVERED LUMENS: 1527.3LM, LPW = 111.4, 1.08 S/MH, TEST NO. LTL27786P137



EV04 35/30 MWD LSS INPUT WATTS: 31.2W, DELIVERED LUMENS: 3110.6LM, LPW = 99.6, 1.08 S/MH, TEST NO. LTL27786P155



nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

nLight® AIR Control Accessories

Order as separate catalog number. Visit [nLight AIR](#).

Wall Switches

Model Number	
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

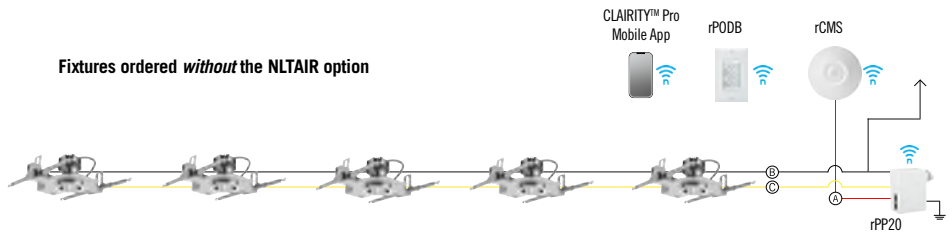
nLight® AIR Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

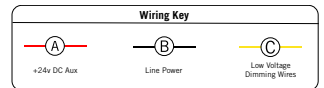
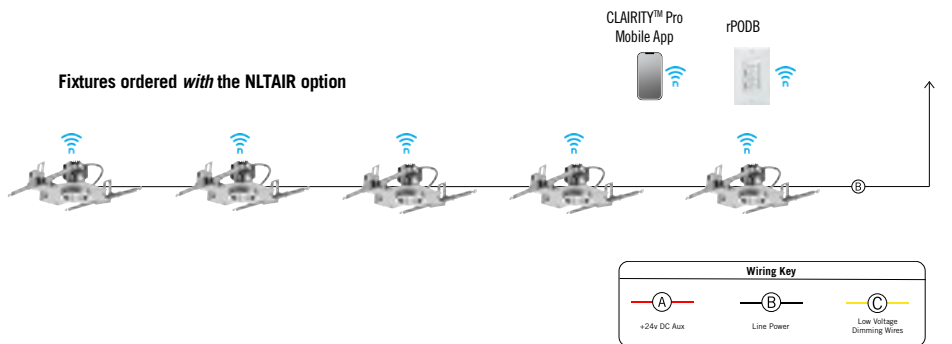
Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

Possibilities for nLight® AIR

Fixtures ordered *without* the NLTAIR option



Fixtures ordered *with* the NLTAIR option



nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit [nLight](#).

Wall Switches

Model Number	
On/Off single pole	nPODM (color)
On/Off two pole	nPODM 2P (color)
On/Off & raise/lower single pole	nPOD DX (color)
On/Off & raise/lower two pole	nPODM 2P DX (color)
Graphic touchscreen	nPOD GFX (color)

Photocell Controls

Dimming	nCM ADCX
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nLight® Wired Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

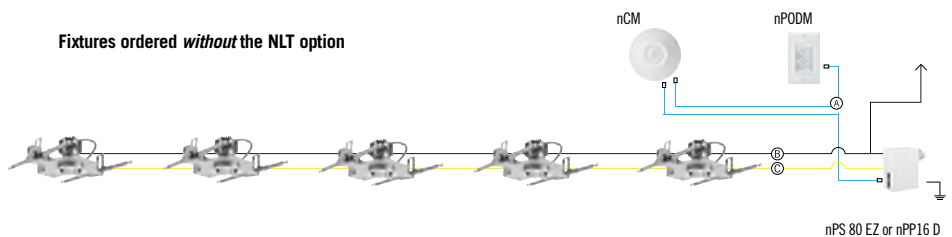
Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

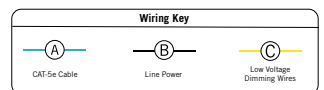
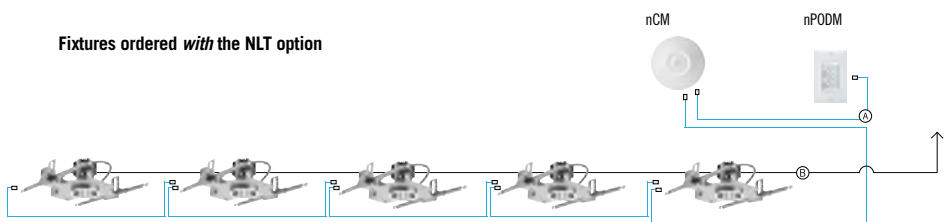
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

Possibilities for nLight® wired

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option



Application

LED wall luminaires with directed narrow beam light distribution on one side that can be oriented ~~upward~~ or downward. Arranged individually or in groups, they are great design elements for a host of lighting applications.

Materials

Luminaire housing and faceplate constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 6.6 lbs

Electrical

Operating voltage 120-277V AC
Minimum start temperature -30° C
LED module wattage 18.1 W
System wattage 21.0 W
Controllability 0-10V dimmable
Color rendering index Ra > 80
Luminaire lumens 1,725 lumens (3000K)
Lifetime at Ta = 15° C 395,000 h (L70)
Lifetime at Ta = 30° C 295,000 h (L70)

LED color temperature

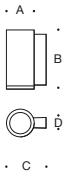
- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

- Available colors □ Black (BLK) □ White (WHT) □ RAL:
 □ Bronze (BRZ) □ Silver (SLV) □ CUS :



LED wall luminaire - one-sided light output							Required wiring box
	LED	β	A	B	C	D	
24 035	18.1 W	15°	6	11 3⁄4	7 7⁄8	1 5⁄8	19 537

β = Beam angle

Type:
BEGA Product:
Project:
Modified:

TYPE:F18

fixture to be mounted downward

Available Accessories
□ **79 547** Surface mounted wiring box
See individual accessory spec sheet for details.





WILLOWBROOK WILDLIFE CENTER
Phase 2 Master Plan Improvements
Willowbrook Forest Preserve
525 S. Park Blvd.
Glen Ellyn, Illinois 60137

November 2, 2022
Project No. M-340-000

Summary of Operations



Prepared by:
Forest Preserve District of DuPage County
Office of Planning
3 S. 580 Naperville Road
P.O. Box 5000
Wheaton, Illinois 60189
630-933-7200 tel | 630-933-7686 fax



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INTRODUCTION

In 2021, the District hired Wight & Company to revise the Phase 2 Master Plan for Willowbrook Wildlife Center, based on recent changes to the programming and vision for the center, as well as updated guidelines provided by National Wildlife Rehabilitators Association (NWRA) and International Wildlife Rehabilitation Council (IWRC) Minimum standards for Wildlife Rehabilitation. Phase 1 Master Plan improvements were constructed in 2013 and complete in 2014. With these changes to programming and guidelines, the Phase 2 Master Plan required an update.

HISTORY

Willowbrook Forest Preserve is located near the center of the county on approximately 50 acres of land within the incorporated village limits of Glen Ellyn, Illinois. The Willowbrook Wildlife Center functions primarily as a wildlife rehabilitation and environmental education center. The facility has been in operation for over 50 years and attracts an estimated 120,000 visitors annually, which includes vehicular and pedestrian guests, who come to enjoy the exhibits at the center as well as the walking trails and interpretive experiences offered throughout the preserve. The staff there provides medical treatment to more than 10,000 sick or injured native wildlife that are brought to the center each year. Once restored to health, they are released back into their native habitat. The Center also provides learning experiences for citizens to help them live in closer harmony with native Northeastern Illinois wildlife and to better understand the natural world. The District wants to transform the Willowbrook Wildlife Center to be more closely aligned with its Mission and has established a new vision and program for the facility.

SUMMARY OF PROPOSED OPERATIONS

Willowbrook Wildlife Center at Willowbrook Forest Preserve in Glen Ellyn is a native wildlife rehabilitation facility that provides care and medical treatment to injured and orphaned wild animals. It also serves as a resource to teach DuPage County's residents about living in harmony with local wildlife. Willowbrook partners with organizations and individuals, including the Lincoln Park Zoo, Illinois Department of Natural Resources, Chicago Area Bird Collision Monitors, county and local municipal animal control agencies, and private wildlife rehabilitators. In 2021, Willowbrook rehabilitated 219 unique species.

With the proposed Phase 2 improvements, a brand new clinic and rehabilitation building with visitor center will be constructed. Forty percent of the building is dedicated to animal care – including an animal intake area, triage area, exam room, surgery room, and indoor recovery areas. Thirteen percent of the building will house offices for staff and volunteers who treat and care for the wildlife and provide interpretation services for the public. Office areas will include a conference room and library for research and classroom for training and programs. Sixteen percent of the building will be used for public engagement and interpretation of wildlife rehabilitation and human impacts to wildlife including climate change. The remaining portions of the building is for the bathrooms, circulation, mechanical equipment and storage.



VISION PROGRAM

Outreach

Willowbrook aims to be inclusive in our outreach to audiences of different ages, experiences, and socioeconomic backgrounds and provide a shared experience where all members of the community can feel closer to their environment and native wildlife.

Willowbrook Mission

Willowbrook Wildlife Center at Willowbrook Forest Preserve in Glen Ellyn is a native wildlife rehabilitation facility that provides care and medical treatment to injured, sick and orphaned wild animals. It also serves as a resource to teach DuPage residents about living in harmony with local wildlife.

Willowbrook Vision

Willowbrook Wildlife Center is state of the art wildlife rehabilitation facility that is a national leader in engaging visitors in veterinary science, medical care and wildlife rehabilitation in action while championing healthy interconnected ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in DuPage County and beyond.

Goals: (Critical success factors / key performance indicators, mandates)

1. Over the next 10 years, Willowbrook will transition away from having a collection of 54 non-releasable animals to focusing on 100% rehabilitation and reintroduction into the wild by 2031.
2. To improve the safety and conditions of the facilities for the rehabilitation and restoration of animals and animal species.
3. To improve safety and efficiency of facilities and work environment for Willowbrook staff and volunteers
4. To improve the ability of the facilities to engage and immerse the public in the wildlife rehabilitation processes and ecosystem environments that make up of 26,000 acres of DuPage County open space consisting of restored savannahs, woodlands, wetlands, and prairie environments to foster a greater appreciation for the native species, animal habitats, ecosystem functions and the interconnectivity of natural systems
5. To make the facility more sustainable utilizing the latest in energy efficient, LEED, and green infrastructure design principles.
6. To support the captive propagation of at-risk species and research projects that will advance wildlife medicine and wildlife rehabilitation.



WILLOWBROOK WILDLIFE CENTER Phase 2 Master Plan Improvements

Willowbrook Forest Preserve
525 S. Park Blvd.
Glen Ellyn, Illinois 60137

October 26, 2022
Project No. M-340-000

Comparison of Existing and Proposed Uses

	Existing	Proposed
Visitor Experience	2,022 SF	3,140 SF
Classroom	325 SF	802 SF
Office	1,235 SF *	3,199 SF ^
Clinic ¥	1,090 SF	3,569 SF
Rehab	420 SF	6,417 SF

Notes:

* Includes 922 s.f. of office space in separate propagation building.

^ Includes open office, private offices, conference room, and library.

¥ Clinic areas do not include exterior enclosures or existing propagation building to remain.

See attached floor plans of the Existing Clinic/Visitor Center and Proposed Clinic/Visitor Center.



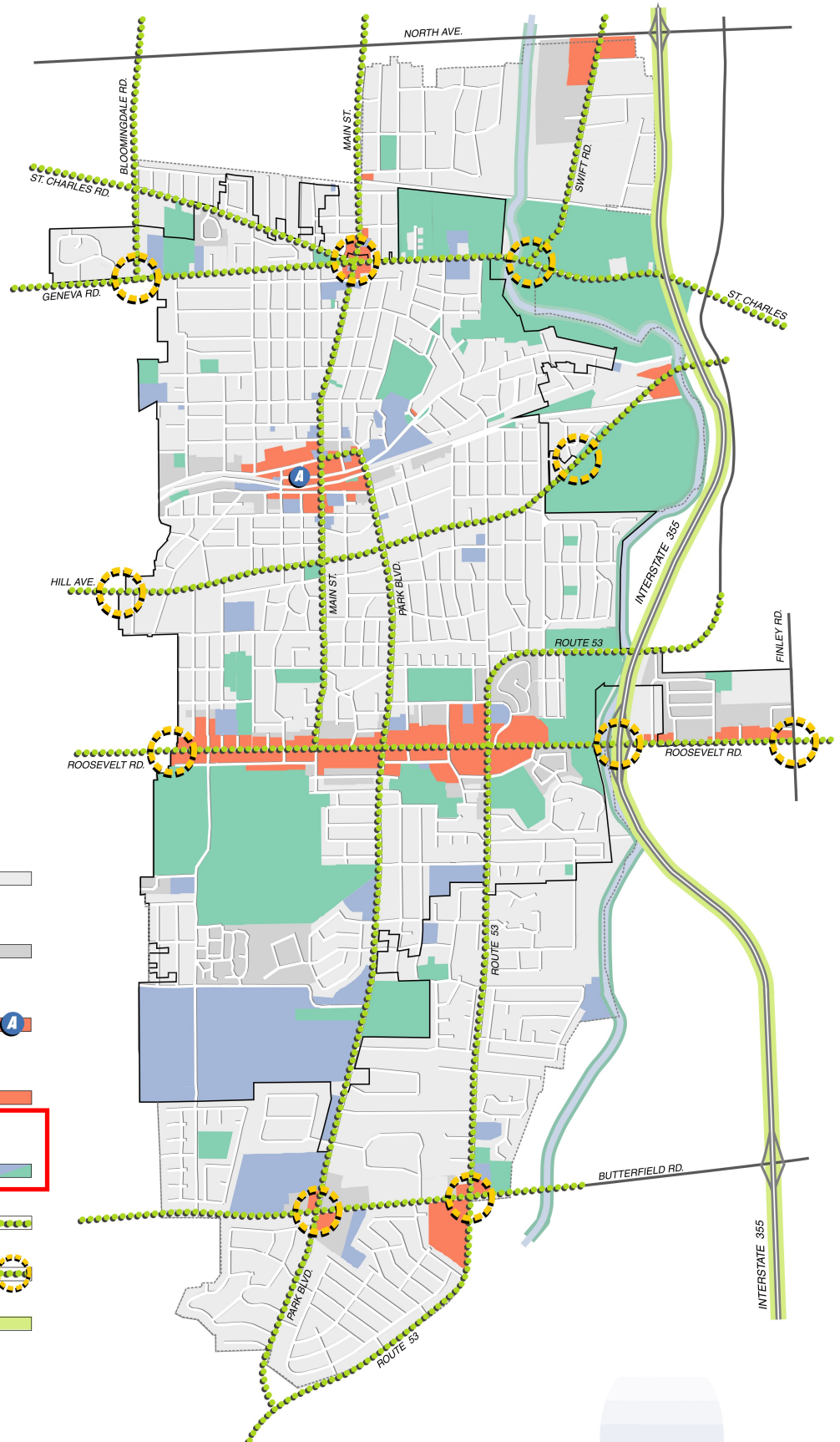
Figure 3

Community Character

The Community-Wide Plan emphasizes the need to protect and enhance Glen Ellyn's established image and appearance. Each component of the Plan strives to ensure that future improvements and developments are compatible with and complement the traditional character of the community. Figure 3 summarizes several of the features mentioned in the Plan that contribute to the appearance and character of Glen Ellyn. The Plan promotes increased public awareness of this important aspect of Glen Ellyn and encourages new discussion and consideration of "community character" in the future.

Map Legend:

- Maintain the traditional distinguishing characteristics of existing neighborhoods. 
- Ensure that new residential development is compatible with existing neighborhoods. 
- Reinforce the historic scale, character and pedestrian orientation of Downtown. 
- Improve the appearance of other commercial, business and mixed-use areas. 
- Enhance parks, open spaces and public buildings as focal points and landmarks. 
- Upgrade the appearance of Route 53 and other major street corridors. 
- Improve community "gateways" and "wayfinding" signage. 
- Work with the Tollway Authority to enhance the I-355 corridor. 



Comprehensive Plan • Village of Glen Ellyn, Illinois

Prepared by Trkla, Pettigrew, Allen & Payne, Inc. • Parsons Transportation Group • April 2001

The Roosevelt Road corridor has been substantially improved. Several older, marginal properties have been redeveloped for new retail and business uses and new multi-family developments have replaced underutilized buildings behind the commercial uses fronting the corridor. The appearance of the corridor has also been enhanced, including improvements to private properties and the public right-of-way.

Through an area-wide program of historic preservation and compatible new construction, the Stacy’s Corners area has emerged as an attractive northern gateway to the community. Marginal and vacant properties have been replaced with a mix of new neighborhood commercial, residential and public uses.

Glen Ellyn continues to benefit from a superb regional location, and is easily accessible via the interstate highway system, arterial streets and public transportation. Through continued improvements to the Village’s multi-modal transportation network, including enhancements to the Metra station, bus service lines and bicycle paths/lanes, the Village is safe and convenient for pedestrians, bicyclists, and those using alternate forms of transportation.

During the past 10 years, traffic operational conditions have been enhanced along several arterial streets. In addition to traffic enhancements, Route 53 and Roosevelt Road are now more safe and inviting for pedestrians and bicyclists.

A new commuter rail station has been constructed within Downtown and compatible new “transit oriented development” has been undertaken within walking distance of the new station. Roadway and traffic operational improvements have been implemented to address the lengthy delays caused by rail traffic within Downtown and a vehicle and two pedestrian underpasses have improved pedestrian safety.

Glen Ellyn is served by public and private schools which not only provide top-quality educational services, but also serve as focal points for community life and activity. College of DuPage has continued to prosper and now offers even more special facilities, services, cultural activities and programs to local residents. The Village and College continue to work cooperatively to enhance economic development opportunities and foster entrepreneurship in the downtown.

Glen Ellyn is widely recognized as the “Village in the Park”. It maintains a rich variety of parks, open spaces and recreational facilities, and is characterized by tree-lined streets and neighborhoods. During the past 10 years, existing parks have been upgraded, facilities and services for teens have been expanded, and new pocket parks and gathering spaces have been created in the downtown.

Glen Ellyn is known for its outstanding municipal facilities and services. Fire and police protection are highly rated. Village facilities have been modernized and upgraded. The Library incorporates the latest technological advancements and continues to respond to the “informational needs” of local residents.

During the past 10 years, substantial improvements have been made to the public infrastructure, particularly with regard to stormwater management, drainage facilities and street surface conditions. Additional utility lines within the Village’s commercial and residential areas continue to be located underground.

The Village has worked with unincorporated residents and businesses to devise a long-range plan and program for annexation.

While it continues to be comprised of several diverse and recognizable neighborhood areas, a number of programs, services and facilities have been implemented to unite all geographic areas and demographic sectors of Glen Ellyn into a single, unified community. As always, community spirit and “volunteerism” are hallmarks of the community.

The improvements and developments that have occurred within Glen Ellyn during the past 10 years have been the result of significant citizen participation, excellent leadership from Village officials, and a strong partnership between the public and private sectors. Local residents continue to play an active role in formulating planning policies. The Village has undertaken a number of public improvement projects, and has utilized a range of creative techniques to assist the private sector in the implementation of innovative development and redevelopment efforts.

Goals & Objectives

Community Appearance & Character

Goal

An attractive and distinctive community image and identity that builds upon and enhances Glen Ellyn’s unique qualities and characteristics, and distinguish it from surrounding communities.

- **Objective 1:** Maintain and enhance the Village’s “small town” atmosphere and character.
- **Objective 2:** Maintain the attractive tree-lined streets, pedestrian scale and other distinguishing qualities of Glen Ellyn’s existing residential neighborhoods.
- **Objective 3:** Upgrade the image and appearance of existing commercial areas, including buildings, parking lots, signage and the public rights-of-way.
- **Objective 4:** Minimize the visual impact of surface parking areas through perimeter and interior landscaping and placement of parking lots at the rear of buildings.
- **Objective 5:** Screen parking lots from streets using either shrubs, low walls, berms or a combination of materials.
- **Objective 6:** Reinforce and strengthen the traditional role of Downtown as the Village’s centralized, multi-purpose focal point with a unique charm, appeal and historic character.
- **Objective 7:** Undertake design and appearance improvements along the major thoroughfares that pass through the community.
- **Objective 8:** Continue to coordinate with utility companies to move overhead utilities underground to reduce interference with natural elements, enhance service predictability, improve aesthetics, and protect the Village’s mature tree canopy.
- **Objective 9:** Continue to improve and enhance the community gateways through the use of special signage, landscaping and other entry design features.
- **Objective 10:** Design and locate public sites and buildings so that they become focal points and landmarks within the community.
- **Objective 11:** Emphasize Glen Ellyn’s numerous parks and open spaces as distinguishing features of the community.
- **Objective 12:** Preserve sites and buildings with local historic and cultural interest and value.

- **Objective 13:** Continue the “greening” of Glen Ellyn by maintaining existing trees, reforestation and new landscape plantings.
- **Objective 14:** Promote high standards of design and construction for all development within the Village.
- **Objective 15:** Promote continuous collaboration and cooperation between the various districts and agencies serving the Village in order to better unite all parts of Glen Ellyn.
- **Objective 16:** Establish and update boundary agreements with neighboring communities where appropriate.
- **Objective 17:** Sponsor and promote programs, activities, events and celebrations that can stimulate public involvement and participation, foster a strong and unified community spirit and identity, and bring together residents from the various neighborhoods on a regular basis.
- **Objective 18:** Leverage financial incentives to encourage redevelopment and site improvements including TIFs, SSAs, and Village awards.

East Branch DuPage River Greenway Trail

The proposed 28-mile East Branch DuPage River Greenway Trail, or East Branch Trail, would extend along the DuPage River and through the Commonwealth Edison right-of-way to the Morten Arboretum. This would create a much-desired connection between the Great Western Trail, Illinois Prairie Path, North Central DuPage Regional Trail, and Southern DuPage County Regional Trail. 75 per cent of the trail still lacks funding; however, it was recently approved by the Chicago Metropolitan Agency for Planning (CMAP) to receive support in conducting a feasibility study for the central portion of the trail between the Great Western Trail and Butterfield Road.

The Village should continue to support the development of the East Branch Trail and work together with CMAP to conduct the approved feasibility study. If approved for construction, the Village should ensure safe, clearly marked crossings are provided where the trail intersects with major roadways, including Roosevelt Road and IL Route 53. New opportunities for designated bike routes or multiuse trails should be identified that would increase resident’s access to the trail from within the Village, including from Roosevelt Road southward along Pershing Avenue, Abbey Drive, and Maryknoll Circle; along Roosevelt Road northward to Baker Hill Drive, Woodview Drive, and Spring Avenue; and down Spring Avenue, along the eastern side of Baker Hill to the trail’s intersection with Roosevelt Road. Other opportunities include incorporating a multiuse trail along Hill Avenue, and constructing trail heads at the Glenbard Wastewater Authority, Glen Oak Forest Preserve, and the existing vacant lots at the eastern end of Shady Lane.

Forest Preserve District Master Plan

The Forest Preserve District recently completed the process of planning a Master Plan providing guidance in acquiring, preserving, protecting, and restoring the natural resources in DuPage County while connecting people to nature. The Master Plan outlines the following six goals:

- Preserve, protect and restore open spaces.
- Help people cultivate a lifelong enthusiasm for nature by offering meaningful, first-rate outdoor recreation and learning experiences.
- Improve preserves to increase access, use, efficiency and productivity.
- Refocus resources by reducing infrastructures and tasks not related to the mission.
- Foster community engagement and increase awareness of the Forest Preserve District.
- Use effective and innovative methods to execute the master plan while continuing on sound financial footing.

The Village should evaluate the plan to identify potential partnership opportunities that support the implementation of the Master Plan’s goals and objectives. For example, this could include working with the Forest Preserve District to identify underutilized areas for potential conversion into open space, gain feedback from Glen Ellyn residents, and create new trail connections.

Parks and Recreation

-  Regional Trail

 Proposed Greenway Trail

 Neighborhood Park

 Community Park
-  Golf Course

 Sports Complex

 Natural Resource

1. Center Ice of DuPage

2. Spalding Park

3. Churchill Park

4. Stacy Park

5. Ackerman Park

6. Churchill Woods

7. George Park

8. Joseph Sam Perry Nature Preserve

9. Lake Ellyn Park

10. Benjamin Gault Wildlife & Bird Sanctuary

11. Babcock Grove Park

12. Dr. Frank Johnson Center

13. Dandy Park

14. Prairie Path Park

15. Memorial Field

16. Ada Harmon Wildflower Preserve

17. Ellynwood Nature Preserve

18. Walnut Glen Park

19. Illinois Prairie Path

20. Glen Oak Country Club

21. Commonwealth Edison Right-of-Way

22. Pjuetze Park
23. Main Street Recreation Center

24. Glen Oak Park

25. Marie Ulhorn/Presidents Park

26. Spring Avenue Recreation Center

27. Surrey Park

28. Glen Oak County Forest Preserve

29. Newton Park

30. Sunset Park & Pool

31. Glen Ellyn Manor Park

32. Village Green Park

33. Village Links of Glen Ellyn

34. Co-Op Park

35. Panfish Park

36. HealthTrack Sports Wellness

37. Maryknoll Park

38. Willowbrook Wildlife Center

39. East Prairie and Ecology Study

40. Russell R. Kirt Prairie

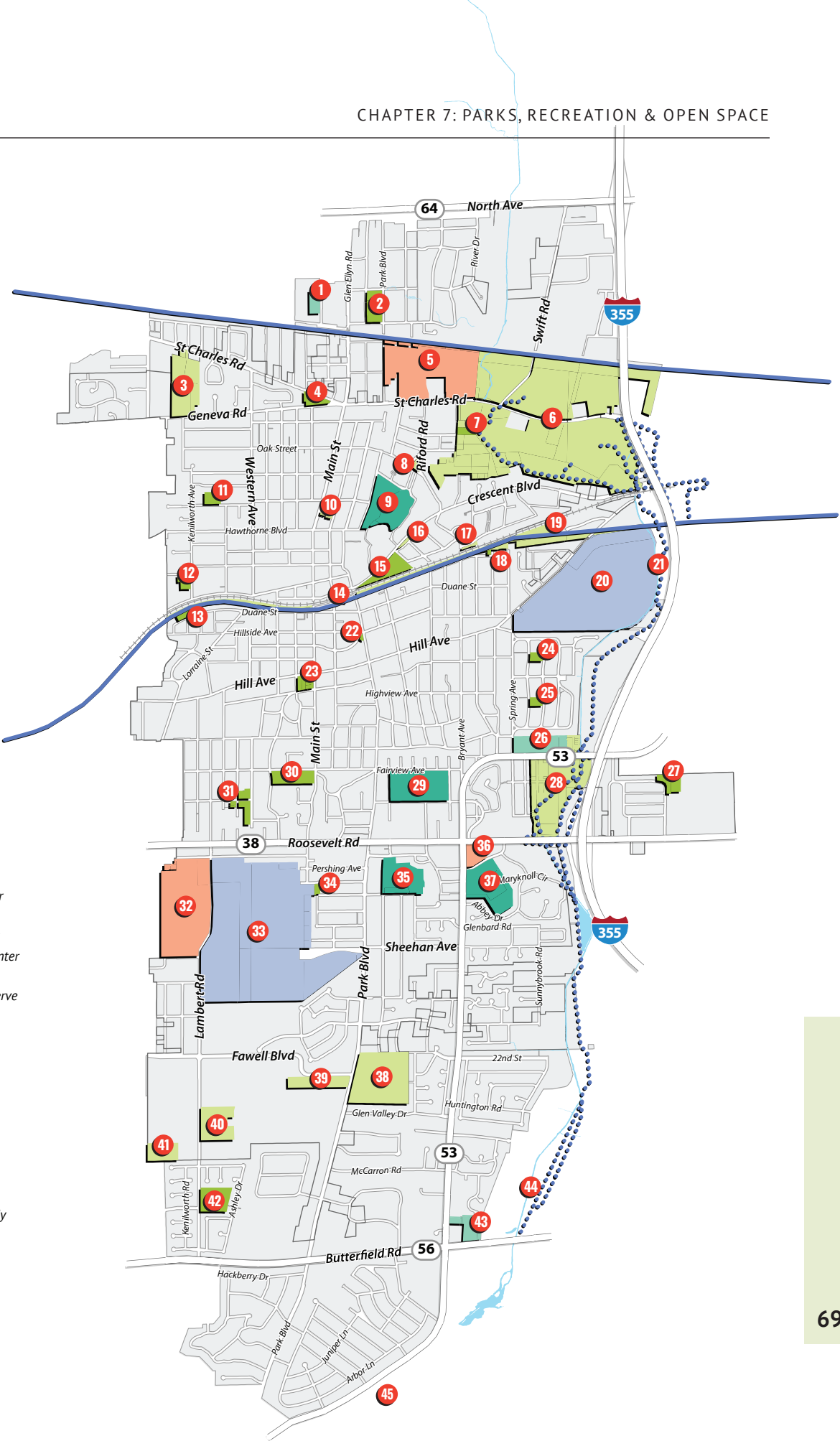
41. Hoddinott Wildlife Sanctuary

42. Lake Foxcroft Park

43. Butterfield Park District

44. DuPage River

45. Morton Arboretum





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

Meeting 4/27/2023 7:00 PM
Department: Community Development
Department Head: Marty Scott
Category:
Prepared By: Atrin Fard

**AGENDA ITEM (ID
2023-476)**

DOC ID: 2023-476

**1102 Hill Avenue: Special Use Permit to allow the addition of DISH
Wireless 5G capable antennas and support equipment to an existing
cellular tower.**

Statement of the Issue:

Please see attached.

Analysis:

Please see attached.

Budget Impact:

N/A

Contribution to Strategic Plan (if applicable)

Action Requested:

Please see attached.

Attachments:

1. PC Staff Report 1102 Hill SUP Presentation-4-27-23
2. 1. Zoning Map
3. 2. Aerial Map
4. 3. Public Hearing Notice
5. 4. Public Hearing Notification Map
6. 5. Ancel Glink's Memorandum, dated March 1, 2023
7. 6. Eligible Facility Request Cover Letter, dated February 1, 2023
8. 7. DISH Wireless Narrative Statement, dated February 2, 2023
9. 8. DISH Wireless RF Statement, dated September 14, 2022
10. 9. Construction Drawings, stamped received July 14, 2022
11. 10. Structural Analysis, stamped received July 14, 2022
12. 11. 5G Infographics
13. 12. Comprehensive Plan Excerpts
14. 13. Petitioners' SUP Application Packet, dated April 2, 2022
15. 14. Plat of Survey
16. 15. Lombard Ordinance 3565 – Conditional Use approval
17. 16. Ordinance 6164 – Annexation Agreement

18. 17. Ordinance 6207 – Creation of I1 Zoning District
19. 18. Ordinance 6631 – Annexation
20. 19. Ordinance 6632 – Zoning Map Amendment, change to I1
21. 20. Draft Minutes from December 8, 2022 Plan Commission Meeting
22. 21. Minutes from February 13, 2023 Village Board Meeting
23. 22. Draft Findings of Fact
24. 23. Draft Motion to Approve
25. 24. Draft Motion to Deny

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Marty Scott, Director of Community Development

DATE: April 21, 2023

FOR: April 27, 2023 Plan Commission Meeting

SUBJECT: OBO Crown Castle USA Inc. & DISH Wireless LLC – 1102 Hill Avenue – Special Use Permit

PETITIONER: The petitioners are Crown Castle and DISH Wireless, represented by Tony Phillips and Ariel Stouder of Fullerton Engineering, as licensee of a portion of the property located at 1102 Hill Avenue.

REQUEST: Crown Castle and DISH Wireless are requesting approval of a Special Use Permit in accordance with Sections 10-8-7 and 10-4-19(E)3 of the Glen Ellyn Zoning Code to allow an addition of DISH Wireless 5G capable antennas and support equipment to the existing cellular tower.

PUBLIC NOTICE: Notice of the public hearing was published in the February 21, 2023 edition of The Daily Herald advertising a public hearing to be held on Thursday, March 9, 2023. Notices were mailed to property owners within 350 feet of the subject property in addition to an expanded group of residential properties as shown in the attached Public Hearing Notification Map. A placard was also placed on the site. The March 9, 2023 hearing was continued until April 27, 2023.

**LOCATION/
SURROUNDING
USES:**

The subject structure is located on the north side of Hill Avenue between Route 53 and Walnut Road in the I1 Light Industrial District. The existing establishment on the site is currently occupied by Safe Seal – Chicago Basement Waterproofing. The surrounding zoning and land uses are as follows:

Surrounding Land Uses:

North: Churchill Woods and
Union Pacific Railroad
South: Industrial Equipment Supplier
East: Distribution Service Corporation
West: Electrician Service Corporation

Surrounding Zoning:

CR Conservation Recreation
& R-4 DuPage County
I1, Light Industrial District
I1, Light Industrial District
I1, Light Industrial District

COMP**PLANS:**

According to the 2001 Glen Ellyn Comprehensive Plan, “this area should be improved and upgraded as a limited and self-contained business area. Compatible new light industrial and high-tech uses would also be appropriate” (pg. 18). The 2023 Draft Comprehensive Plan recommends that the Village’s light industrial areas “should continue to be maintained to support the Village’s industrial base” (pg. 10).

STRATEGIC**PLAN:**

The 2020-2022 Strategic Plan identifies an initiative of successful growth, development, annexation & business retention. One of the measures of success for that initiative includes the annexation of industrial properties on the south side of Hill Avenue, across the street from the subject site.

PROJECT**HISTORY:**

Historic Timeline: Parcel 05-12-207-033, currently addressed 1102 Hill Avenue, was previously located within the Village of Lombard corporate limits, and zoned I Limited Industrial District. In 1992, Village of Lombard granted a Special Use Permit to construct an 87-foot-tall monopole antenna at the rear of the subject property (Ordinance 3565). Sometime between 1992 to 2013, the subject property was de-annexed from Village of Lombard and the address was changed to 21W180 Hill Avenue, in unincorporated DuPage County. At this time, the property was zoned DuPage County I-1 Light Industrial District. The property owner signed an annexation agreement with the Village of Glen Ellyn in 2013 (Ordinance No. 6164). Consequently, in 2014, the Village of Glen Ellyn created a new zoning district, I1 Light Industrial District, to accommodate the incoming industrial use (Ordinance 6207). The property was officially annexed into the Village of Glen Ellyn in 2018 with the address 1102 Hill Avenue (Ordinance No. 6631). Upon annexation, consistent with the annexation agreement, a Zoning Map Amendment was approved (Ordinance 6632) rezoning the property to I1 Light Industrial District. Currently, the cellular tower’s height is 70 feet, which exceeds the maximum allowable height of 45 feet for structures located in the I1 Light Industrial District. As no Special Use Permit has been granted by the Village of Glen Ellyn, the cellular tower is considered legal nonconforming to Glen Ellyn Zoning Code.

December 8, 2022 Plan Commission: The Plan Commission discussed the addition of a 5G capable antenna to the tower and expressed concerns on the subject and their desire for the Village Board to be notified of this. Commissioners also clarified with staff that if another carrier wanted to co-locate on the tower alongside the DISH Wireless antenna, they would

have to seek a separate Special Use Permit. Commissioners noted that the granting of this Special Use Permit would serve as a reuse of a currently unused structure. No one from public spoke in favor or against of the request. By a vote of 7-1, the Plan Commission recommended approval of the request, subject to the following conditions:

1. That the new DISH Wireless antenna added to the existing cellular tower be operated in substantial conformance with the application materials submitted and testimony presented at the December 8, 2022 Plan Commission public hearing and before the Village Board of Trustees; and
2. That it be stated to the Village Board of Trustees that a purpose of the installation is for 5G.

After the Plan Commission meeting, staff spoke with the petitioner to seek further clarification on the topic and asked that the petitioner provide a Narrative Statement (attached) that explicitly outlines the use of 5G and the concerns that were expressed.

February 13, 2023 Village Board: The Village Board discussed the installation of the antennas, the safety of residents from 5G technology, and the legal jurisdiction of the Village Board to review and regulate such Special Use Permit requests. Nancy Perlman, a Glen Ellyn resident, spoke in opposition of the request and urged the Board to not approve or at least table the request until 5G's impacts on the community are further researched. One of the Trustees inquired whether the distributed public notice detailed the 5G capability of the proposed DISH Wireless, to which staff responded no. After deliberations, Village Board decided to remand the request back to the Plan Commission and requested re-notification of all properties within 350 feet of the subject site, with specific reference to the 5G installation, to give more people a chance to voice their opinions. The March 9, 2023 Commission hearing was continued until April 27, 2023.

**PROJECT
SUMMARY:**

At this time, the petitioners are proposing to replace the existing vacant carrier antennas and associated equipment on the existing cellular tower with new DISH Wireless entry port, antennas and radio equipment. At the base of the tower, within the fenced compound area, an ice bridge, a 5' by 7' metal platform, and an equipment cabinet will be installed. The proposed additions will neither increase the height of the tower nor the existing leased ground footprint. The proposed DISH Wireless antennas will be unmanned and will only require power and fiber connections that already exist on the site. It will require service by a technician

approximately once a month.

In addition to the above-mentioned services, the proposed antenna equipment would support 5G technology. The petitioner has provided a Radio Frequency (RF) interference statement provided by DISH RF Engineers to confirm that all frequencies utilized by DISH Wireless shall follow guidelines enforced by the Federal Communications Commission (FCC). The FCC grants licenses for the use of certain radio frequencies exclusively by wireless service providers, including DISH Wireless, which shall use certain frequencies (channels) on which to transmit and receive radio signals. Pursuant to these licenses, DISH is authorized to provide wireless service nationwide. Per petitioner's narrative statement, the proposed DISH antennas will comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy and will not present any detrimental effect to the community public safety, health and/or welfare, even with the 5G technology capability.

The proposed antenna will be installed on top of the pole at approximately 67 feet high. According to the petitioner, the cellular tower at 1102 Hill Avenue has been selected to fill a gap in the DISH Wireless network as the tower's height and location are important factors in determining how network coverage can be expanded. The petitioner adds that the higher the structure is the farther the coverage will extend. Per Section 10-4-19(B)18, television and radio towers and antenna support structures that exceed district's maximum height, will require a Special Use Permit. Given the maximum allowable height of 45 feet in I1 District, the proposed antenna will require approval of a Special Use Permit. Section 10-4-19(E)3 confirms the requirement for a Special Use Permit stating that "the height of a television or radio tower, antenna support structure... shall be specified in the ordinance granting a special use permit". As proposed, the maximum height will be set as 70 feet in the associated ordinance.

Zoning Code Section 10-8-7 also states that the "lawfully existing, nonconforming use of part or all of a building or structure, all or substantially all of which building or structure is designed or intended for a use permitted in the district in which it is located, may be continued" subject to the provision stating the "nonconforming use of part of a building or structure shall not be expanded or extended". Given the legally nonconforming height and operation of the existing tower, the proposed work therefore triggers a need for a Special Use Permit, as the intended work expands upon the existing nonconforming use.

**PLAN COMMIS-
SION ACTION:**

The Plan Commission is asked to consider the petitioner's request for a

Special Use Permit to allow an addition of DISH Wireless 5G capable antennas to the existing cellular tower and the addition of support equipment at the base of the monopole in a licensed area.

The Plan Commission may make a recommendation to the Village Board for approval, approval with conditions, or denial of the request. The Village has consulted with Adam B. Simon of Ancel Glink Professional Corporation, regarding the certain factors the Plan Commission may consider in reviewing the current Special Use Permit proposal (please see Ancel Glink's Memorandum attached). Accordingly, the Plan Commission is legally directed to base its decision on the evidence limited to facts that tend to either support or undermine satisfaction of the criteria for granting approval of a Special Use Permit as set forth in Section 10-10-14 of the Glen Ellyn Zoning Code. Some permissible bases for decisions include height, setbacks, structural aspects, property value concerns, and community character. So long as the petitioner verifies that the FCC regulations for limiting RF emissions will be met, the Plan Commission is not authorized to further inquire about the general impact from radio frequency (RF) emissions or place further conditions on its Zoning decision. Additional review and commentary related to the proposed antenna and associated equipment will be provided prior to the meeting by Stuart Chapman, President of Municipal Services Associates, Inc. Mr. Chapman's firm specializes in the evaluation of telecommunications matters impacting municipalities. Mr. Chapman will also attend the Plan Commission meeting and be available for questions.

Staff has prepared draft findings of fact for a recommendation of approval of the Special Use (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 the request 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.

ATTACHMENTS:

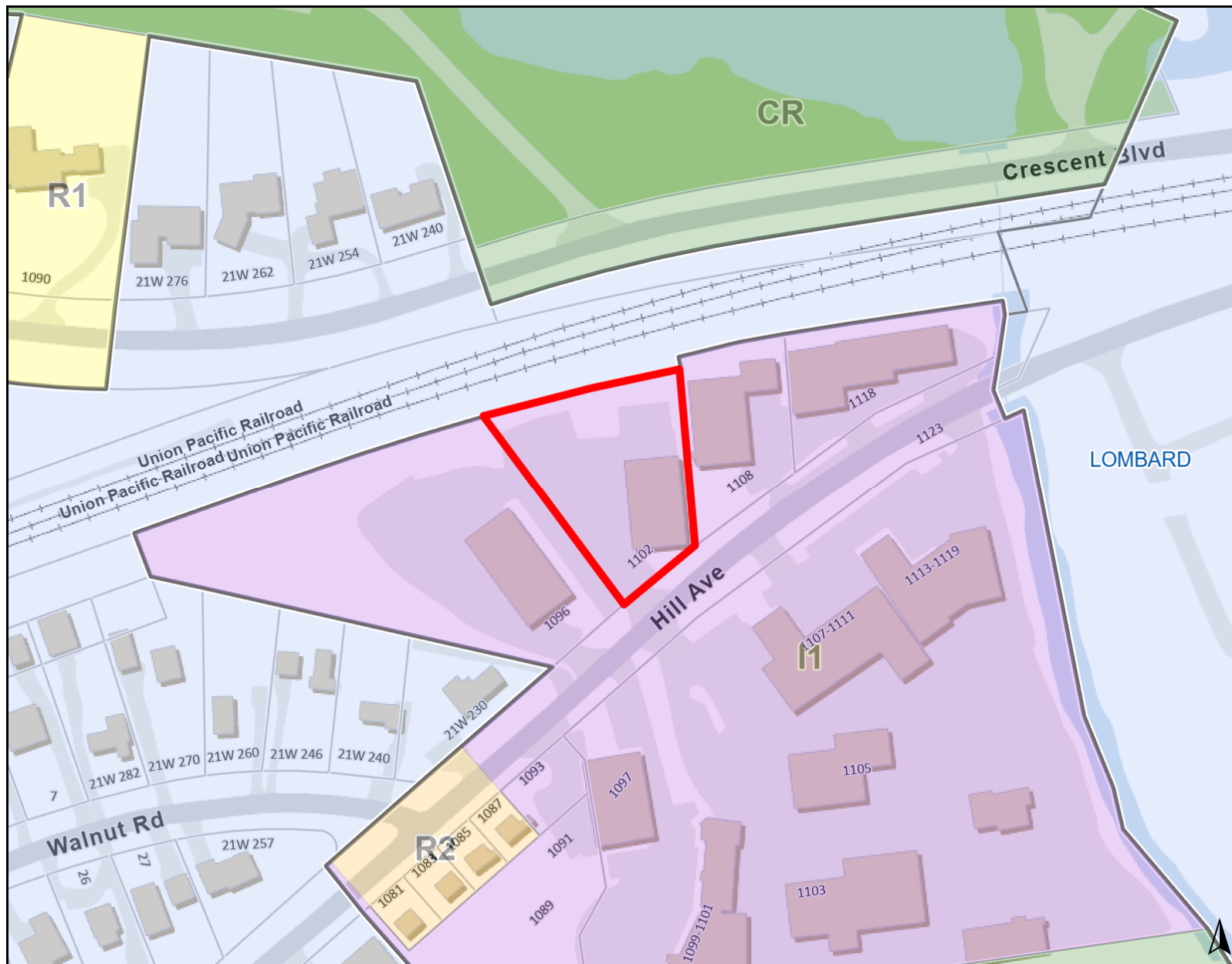
1. Zoning Map
2. Aerial Map
3. Public Hearing Notice
4. Public Hearing Notification Map
5. Ancel Glink's Memorandum, dated March 1, 2023
6. Eligible Facility Request Cover Letter, dated February 1, 2023
7. DISH Wireless Narrative Statement, dated February 2, 2023
8. DISH Wireless RF Statement, dated September 14, 2022
9. Construction Drawings, stamped received July 14, 2022

10. Structural Analysis, stamped received July 14, 2022
11. 5G Infographics
12. Comprehensive Plan Excerpts
13. Petitioners' SUP Application Packet, dated April 2, 2022
14. Plat of Survey
15. Lombard Ordinance 3565 – Conditional Use approval
16. Ordinance 6164 – Annexation Agreement
17. Ordinance 6207 – Creation of I1 Zoning District
18. Ordinance 6631 – Annexation
19. Ordinance 6632 – Zoning Map Amendment, change to I1
20. Draft Minutes from December 8, 2022 Plan Commission Meeting
21. Minutes from February 13, 2023 Village Board Meeting
22. Draft Findings of Fact
23. Draft Motion to Approve

cc: Tony Phillips, Fullerton Engineering Consultants
Ariel Stouder, Fullerton Engineering Consultants

X:\Plandev\PLANNING\DEVELOPMENT PROJECTS\Hill\Hill 1102, Cell Tower, SUP\Meetings\PC II 4-27-23\PC Staff Report 1102 Hill SUP Presentation-4-27-23.doc

GIS Consortium Zoning Map - 1102 Hill Ave



Legend

Zoning and Development

Zoning

- CR: Conservation/Recreation District
- I1: Light Industrial District
- R1: Single Family Residential District
- R2: Single Family Residential District

0 300 600
ft

Print Date: 6/2/2022

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.



Legend

0 150 300
ft

Print Date: 6/2/2022

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.



NOTICE OF PUBLIC HEARING

Tony Phillips and Ariel Stouder of Fullerton Engineering Consultants, LCC, on behalf of DISH Wireless LLC and OBO Crown Castle USA Inc., are requesting approval of a Special Use Permit in accordance with Sections 10-4-19(E)-3 and 10-8-7 of the Zoning Code to allow an addition of DISH Wireless 5G capable antennas and support equipment to the existing cellular tower at 1102 Hill Avenue. The Glen Ellyn Plan Commission heard this case on December 8, 2022 and will conduct a second public hearing to consider the Special Use Permit on **Thursday, March 9, 2023, at 7:00 p.m.** in the Galligan Board Room on the 3rd floor of the Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois, 60137.

The property is located in the I1- Light Industrial District and legally described as follows:

A PARCEL OF LAND FOR AMCI LEASE SITE PURPOSES LOCATED WITHIN HERON SAID LOT 1 IN HLL OAKSUBDIVISION BEING A PARK OF LOT 12 OF THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY IN ASSESSMENT DIVISION OF SECTION 12, TOWNSHIP 39 NORTH RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAY OF SAID HILL OAK SUBDIVISION RECORDED May 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION, RECORED MAY 21, 1970 AS DOCUMENT R70-15844.

BEGINNING AT A POINT OF INTERSECTION OF A LINE DRAWN 10.00 FEET WESTERLY OF THE EAST LINE OF SAID LOT 1 WITH A CURVED LINE DRAWN 15.00 FEET SOUTHERLY OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 1; THENCE SOUTH 05 DEGREES 06 MINUTES 42 SECONDS EAST PARALLEL WITH AND 10.00 FEET WESTERLY OF AS MEASURED PERPENDICULAR TO THE EAST LINE OF SAID LOT 1, A DISTANCE OF 54.00 FEET; THENCE SOUTH 84 DEGREES 53 MINUTES 18 SECONDS WEST, A DISTANCE OF 50.00 FEET; THENCE NORTH 05 DEGREES 06 MINUTES 42 SECONDS WEST, A DISTANCE OF 47.41 FEET; THENCE ALONG A NON-TANGENTIAL CURVE TO THE RIGHT HAVING A RADIUS OF 3306.38 FEET FOR A DISTANCE OF 50.43 FEET FORMING A CHORD BEARING OF NORTH 77 DEGREES 22 MINUTES 59 SECONDS EAST TO THE PLACE OF BEGINNIG, CONTAINING 2538.55 SQUARE FEET ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N. 05-12-207-033

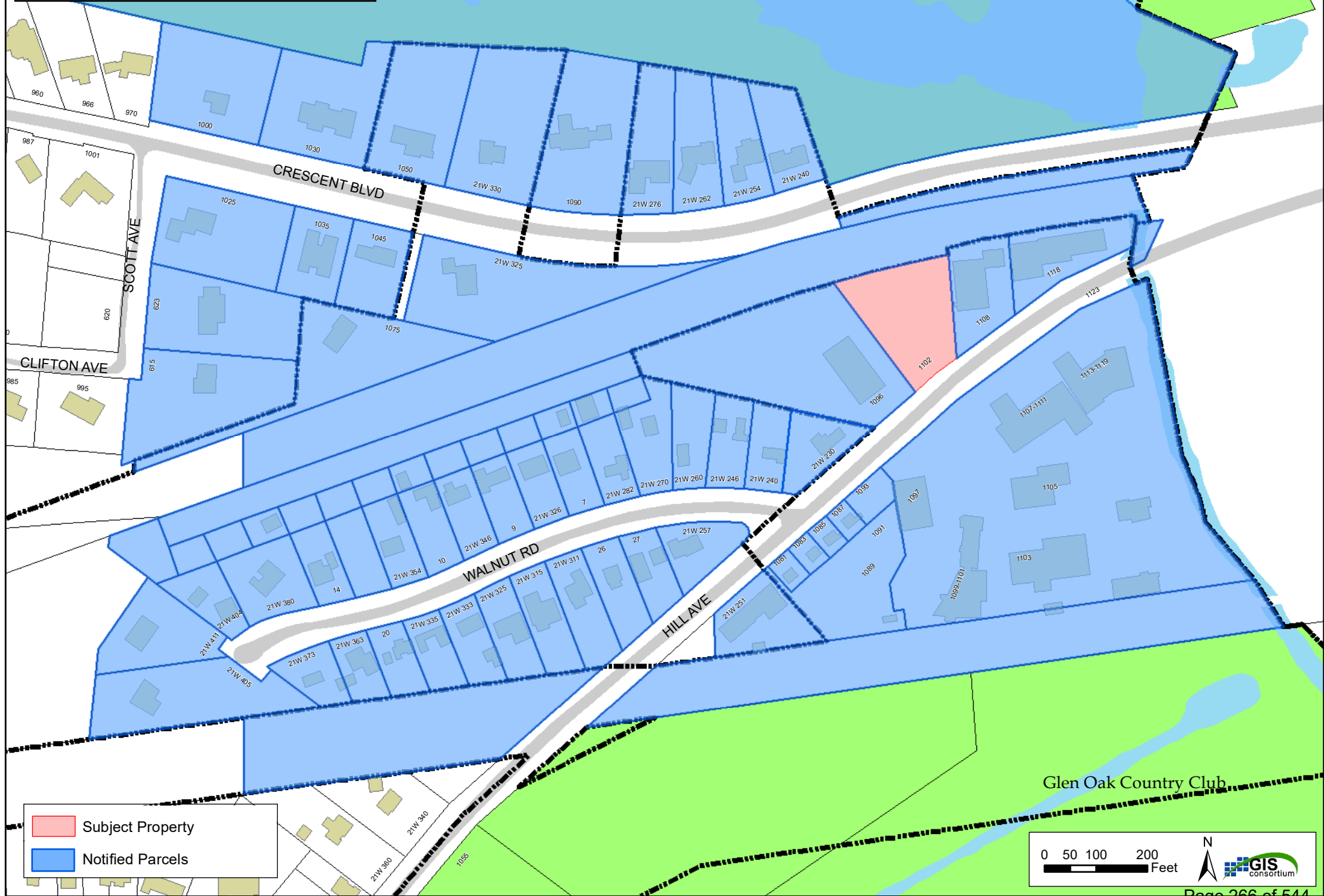
All persons who are interested are invited to attend the public hearing of the Plan Commission to listen and be heard. Information related to the request, including the plans for the proposed project are available for public review at any time before or after the meeting between the hours of 8:00am and 4:30pm in the Community Development Department of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois. Questions related to the request should be directed to Atrian Fard, Senior Planner, afard@glenellyn.org. All public comments received by 4:30 pm on Thursday, March 9, 2023 will be read into the record at the public hearing.



Village of Glen Ellyn

1102 Hill Ave Notification

Churchill Woods Forest Preserve



- Subject Property
- Notified Parcels





A Professional Corporation
175 E. Hawthorn Parkway, Suite 145
Vernon Hills, IL 60061
www.ancelglink.com

Adam B. Simon
asimon@ancelglink.com
(P) 847.856.5440
(F) 847.247.7405

MEMORANDUM

PRIVILEGED AND CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION

To: Plan Commission
Village of Glen Ellyn

CC: Greg Mathews, Village Attorney

From: Adam B. Simon

Subject: Plan Commission Review of Applications to Collocate 5G Antennas

Date: March 1, 2023

The Village has requested that I provide an opinion regarding the factors the Plan Commission may consider in reviewing an application for installation of 5G wireless antenna(s) on an existing cell tower located on private property. As you know, the Village can only apply the zoning regulations which exist at the time the application is filed.

Background

There exists a monopole antenna support structure on the property located at 1102 Hill Avenue, Glen Ellyn, Illinois (the "Property"). I understand that the Property was formerly in the Village of Lombard, which in 1992 granted a special use permit for an 87-foot tall monopole antenna. The Property was subsequently disconnected from Lombard and the owner signed an Annexation Agreement with Glen Ellyn in 2013. The property was annexed to Glen Ellyn in 2018.

The Property is located within the I-1 Light Industrial District, which includes a height limit of 45 feet for structures in the District. Antenna support structures exceeding the 45-foot limit require approval of a special use permit. This support structure is 70 feet, and Section 10-4-19(B)(18), makes that a special use in the I-1 District. Likewise, Section 10-8-8 likewise expresses existing uses which are special uses shall not be nonconforming uses, but shall require a special use permit for any enlargement or extension or intensification or change of use.

The petitioners are Crown Castle and DISH Wireless.¹

¹ By way of background, one of the Federal government's conditions of approval of the merger of T-Mobile and Sprint was that they needed to sell a share of their cellular licenses to DISH Wireless so the consumer market would retain four national cellular carriers. As a result, DISH Wireless is building out its own network now.

Federal Law

Cellular communication is deemed to be a matter of interstate concern and the federal government has therefore interceded, to a limited degree, into zoning regulations, an area that is normally reserved for state and local control. Specifically, Section 704 of the Telecommunications Act of 1996 (Telecommunications Act)² creates a balance between the federal priority for expansion of cellular communications and the local authority to control zoning decisions. Accordingly, both the federal rules and the local standards that shape a local zoning authority's jurisdiction and discretion are of importance.

Characterized as an exercise in cooperative federalism, the Telecommunication Act reserves to local governments authority over zoning decisions related to cellular tower and antenna placement and construction. There are, however, several significant constraints on this authority enumerated in the Telecommunication Act:³

- (1) Nondiscrimination and Prohibition of Service: While state or local governments or instrumentalities may regulate the placement and construction of facilities, they shall not “discriminate among providers of functionally equivalent services,” nor “prohibit or have the effect of prohibiting the provision of personal wireless services.”
- (2) Timeliness of Government Action: Local governments must “act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed . . . taking into account the nature and scope of such request.”
- (3) Evidence and Written Records: All governmental denials of requests “must be in writing and supported by substantial evidence contained in a written record.”⁴
- (4) Environmental and Health Concerns: State and local governments or their instrumentalities may not “regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.”

² 47 U.S.C. §332(c)(7).

³ 47 U.S.C. §332(c)(7)(B).

⁴ This Federal requirement for a “closed record” applies despite the final decision being a legislative judgment reserved for the Village Board. Otherwise, under Illinois law a Village Board decision would be subject to de novo review on appeal. 65 ILCS 5/11-13-25(a).

ANCEL GLINK

Village of Glen Ellyn
Zoning Review of Applications to Collocate 5G Antennas
March 1, 2023
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PRIVILEGED AND CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION

Additional Limitations on Local Government Zoning Authority

Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012⁵ (the “Collocation Law”), substantively amended the Telecommunications Act by limiting local government authority to control (a) the collocation of new facilities, and (b) the removal or replacement of facilities on existing towers or structures.

The pertinent language from Collocation Law states:

(a) FACILITY MODIFICATIONS. —

(1) IN GENERAL. — Notwithstanding section 704 of the Telecommunications Act of 1996⁶ (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that ***does not substantially change the physical dimensions of such tower or base station.***

(2) ELIGIBLE FACILITIES REQUEST.— For purposes of this subsection, the term “eligible facilities request” means any request for modification of an existing wireless tower or base station that involves —

- (A) ***collocation of new transmission equipment;***
- (B) removal of transmission equipment; or
- (C) replacement of transmission equipment.

To rephrase this more simply, the Village shall approve any application for collocation of new wireless antennas which does not substantially change the size of the tower or base station.

State Law

Many times when an application references a 5G antenna it is related to the deployment of a “small wireless facility,” or “small cell,” as defined by the Small Wireless Facility Deployment Act.⁷ However, based on my review of the application the petitioner has described a conventional cellular installation which will operate in the “5G” radio band comprising an

⁵ Pub. L. No. 112-96, § 6409(a), 126 Stat. 156 (2012) (codified at 47 U.S.C. § 1455(a)).

⁶ Section 704 refers to 47 U.S.C. §332(c), the Federal law which sets the general limitations on local zoning authority as applied to personal wireless telecommunications facilities.

⁷ 50 ILCS 840/1, et seq.

ANCEL GLINK

Village of Glen Ellyn
Zoning Review of Applications to Collocate 5G Antennas
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PRIVILEGED AND CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION

antenna platform and a set of three antennas that will cumulatively exceed six cubic feet in volume.⁸ For this reason, the narrow restrictions on zoning authority applicable to small wireless facilities do not apply to this application.⁹

Village Ordinances

Aside from the Small Wireless Facility Deployment Act, Illinois law does not contain any express limitations regarding the exercise of municipal zoning power over personal wireless service facilities. As a result, the general rules of substantive due process apply to these applications in the same manner as other zoning applications. The zoning regulations applicable to personal wireless service facilities must be clear, predictable and bear a rational relationship to legitimate zoning purposes. They must also be applied in a consistent, nondiscriminatory manner.

As mentioned above, the application is requesting approval of a special use permit for the existing antenna support structure to ratify approval of the structure above the maximum height in the I-1 district. The Village's Zoning Code does not contain any supplemental regulations nor any supplemental application requirements applicable to antenna support structures. As a result, the proper scope of review for the Plan Commission is limited to evidence and testimony which is germane to the findings of fact required to recommend a special use permit.

Under Section 10-10-14(E) of the Zoning Code, the findings of fact for a special use permit are presented below:

(E) The Plan Commission shall not recommend that a special use be granted nor shall the Village Board grant a special use, unless it shall find, based upon the evidence presented to the Plan Commission in each specific case, that the special use:

1. Will be harmonious with and in accordance with the general objectives, or within a specific objective of the Comprehensive Plan and/or this title;

⁸ Although all cellular operators advertise 5G service, each carrier operates on a unique set of frequencies licensed by the FCC within the 5G band of the radio spectrum. There should not be confusion that all 5G antennas share the same frequencies.

⁹ Caution should be observed when reviewing genuine small wireless facility applications because of the narrow restrictions on zoning authority and short decision deadlines permitted by the Small Wireless Facility Deployment Act. The Act provides that small wireless facilities shall be deemed permitted uses on property zoned for commercial or industrial use.

ANCEL GLINK

Village of Glen Ellyn
Zoning Review of Applications to Collocate 5G Antennas
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Page 5

PRIVILEGED AND CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION

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;
3. Will not be hazardous or disturbing to existing or future neighborhood uses;
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;
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;
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;
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;
8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief; and
9. Will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community;

Based on the foregoing, the Plan Commission should only consider evidence and testimony which tends to support or dispute these findings of fact, subject to the restrictions contained in Federal law described above (e.g. exclusion of health effects of RF emissions).

As a reminder, the Plan Commission may recommend and the Village Board may require such conditions and restrictions upon the premises benefited by a special use as may be necessary in their opinion to comply with the foregoing standards and to reduce or minimize injurious effect of such special use upon other property in the neighborhood.

ANCEL GLINK

Village of Glen Ellyn
Zoning Review of Applications to Collocate 5G Antennas
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PRIVILEGED AND CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION

Analysis

The review of this application should be bifurcated between the antenna support structure and the new DISH Wireless antenna attachment. As mentioned above, the monopole requires a special use permit because it exceeds the permitted height in the I-1 district. The Village is allowed to review the special use permit application because this facility has not previously received any zoning approval from Glen Ellyn. This application should follow the permitted scope of review described in the preceding section.

However, if the special use permit is granted to allow the monopole to be 70' tall, the new antenna attachment becomes a collocation, rather than a new structure, and falls within the scope of the Collocation Law.¹⁰ In reviewing the presentation packet filed by DISH Wireless, LLC, the application for the antenna attachment to the monopole seems to be an eligible facility request that does not substantially change the physical dimensions of the tower. The proposal does not (1) increase the height of the tower, (2) require installation of more than one new equipment shelter, (3) add an appurtenance to the tower which would protrude too greatly, or (4) involve excavation outside the boundaries of the current cellular compound or the related easements. Based on these findings, the application is one which the Village must approve.

Although the Village must approve the application to collocate the DISH Wireless antenna attachment, the Village may still apply reasonable conditions to enforce generally applicable public safety regulations (e.g. electric code, building code) to ensure the new antennas are erected safely.

Please let me know if you have any questions about the findings and opinions in this memorandum.

¹⁰ Moreover, Section 10-4-19(A)(24) would make all new antenna applications which do not exceed the height permitted for the monopole a permitted use.



9045 River Rd,
Indianapolis, IN 46240

Phone: (317) 249-2028
www.crowncastle.com

February 2, 2023

IL – Glen Ellyn
Village of Glen Ellyn
Community Development Department
535 Duane Street
Glen Ellyn, IL 60137

Via Mail

*******NOTICE OF ELIGIBLE FACILITIES REQUEST*******

RE: Request for Minor Modification to Existing Wireless Facility – Section 6409

Site Address: 21 W 180 Hill Avenue, Glen Ellyn, IL 60137S

Crown Site Number: 817173 / Crown Site Name: IL-CCI-T-817173

Customer Site Number: CHCHI00652A / Application Number: 570902

Dear Staff:

On behalf of DISH Wireless L.L.C. (“Dish Wireless” or “Applicant”), Crown Castle USA Inc. (“Crown Castle”) is pleased to submit this request to modify the existing wireless facility noted above through the collocation, replacement and/or removal of the Applicant’s equipment as an eligible facilities request for a minor modification under Section 6409¹ and the rules of the Federal Communications Commission (“FCC”).²

Section 6409 mandates that state and local governments must approve any eligible facilities request for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. Under Section 6409, to toll the review period, if the reviewing authority determines that the application is incomplete, it must provide written notice to the applicant within 30 days, which clearly and specifically delineates all missing documents or information reasonably related to whether the request meets the federal requirements.³ Additionally, if a state or local government, fails to issue any approvals required for this request within 60 days, these approvals are deemed granted. The FCC has clarified that the 30-day and 60-day deadlines begins when an applicant: (1) takes the first step required under state or local law; and (2) submits information sufficient to inform the jurisdiction that this modification qualifies under the federal law⁴. Please note that with the submission of this letter and enclosed items, the thirty and sixty-day review periods have started. **Based on the May 26th 2022 submission, the deadline for written notice of incomplete application was Monday June 28, 2022. Notification of an incomplete application was received on June 7th, 2022. Confirmation of a completed application to be added to the Village of Glen Ellyn Planning Commission was received on November 2, 2022. The updated timeline on the deadline for issuance of approval was December 20, 2022.**

¹ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6409 (2012) (codified at 47 U.S.C. § 1455).

² *Acceleration of Broadband Deployment by Improving Wireless Facility Siting Policies*, 29 FCC Rcd. 12865 (2014) (codified at 47 CFR § 1.6100); and *Implementation of State & Local Governments’ Obligation to Approve Certain Wireless Facility Modification Requests Under Section 6409(a) of the Spectrum Act of 2012*, WT Docket No. 19-250 (June 10, 2020).

³ See 47 CFR § 1.6100 (c)(3). ⁴ See 2020 Upgrade Order at paragraph 16.

The Foundation for a Wireless World

CrownCastle.com



9045 River Rd,
Indianapolis, IN 46240

Phone: (317) 249-2028
www.crowncastle.com

The proposed scope of work for this project includes:

Collocation of antennas, ancillary equipment, and ground equipment as per plans for a new carrier on an existing wireless communication facility.

At the end of this letter is an updated checklist, as of February 1, 2023, of the applicable substantial change criteria under Section 6409. Additionally, please find enclosed the following information in support of this request:

- (1) Special Use Permit Application;
- (2) Existing Plat of Survey;
- (3) \$750.00 Non-Refundable Application Fee;
- (4) \$1,000.00 Escrow;
- (5) Proof of Ownership;
- (6) RF Statement from DISH RF Engineer;
- (7) Construction Drawings;
- (8) Structural Analysis; and
- (9) Section 6409 Substantial Change Checklist.

As these documents indicate, (i) the modification involves the collocation, removal or replacement of transmission equipment; and (ii) such modification will not substantially change the physical dimensions of such tower or base station. As such, it is an “eligible facilities request” as defined in the FCC’s rules to which the 60-day deadline for approval applies. Accordingly, Applicant requests all authorization necessary for this proposed minor modification under Section 6409.

Our goal is to work with you to obtain approvals earlier than the deadline. We will respond promptly to any request for related information you may have in connection with this request. Please let us know how we can work with you to expedite the approval process. We look forward to working with you on this important project, which will improve wireless telecommunication services in your community using collocation on existing infrastructure. If you have any questions, please do not hesitate to contact me.

Regards,

Crown Castle
Agent for Applicant

**Section 6409 Substantial Change Checklist
Towers Outside of the Public Right of Way**

The Federal Communications Commission has determined that a modification substantially changes the physical dimension of a wireless tower or base station under 47 U.S.C. § 1455(a) if it meets one of six enumerated criteria under 47 C.F.R. § 1.6100.

Criteria for Towers Outside the Public Rights of Way

YES/NO NO	Does the modification increase the height of the tower by more than the greater of: (a) 10% (b) or, the height of an additional antenna array plus separation of up to 20 feet from the top of the nearest existing antenna?
YES/NO NO	Does the modification add an appurtenance to the body of the tower that would protrude from the edge of the tower more than 20 feet or more than the width of the tower structure at the level of the appurtenance, whichever is greater?
YES/NO NO	Does the modification involve the installation of more than the standard number of new equipment cabinets for the technology involved or add more than four new equipment cabinets?
YES/NO NO	Does the modification entail any excavation or deployment outside the current site by more than 30 feet in any direction, not including any access or utility easements?
YES/NO NO	Does the modification defeat the concealment elements of the eligible support structure?
YES/NO NO	Does the modification violate conditions associated with the siting approval with the prior approval the tower or base station other than as specified in 47 C.F.R. § 1.6100(c)(7)(i) – (iv)?

If all questions in the above section are answered “NO,” then the modification does not constitute a substantial change to the existing tower under 47 C.F.R. § 1.6100.



3025 Highland Pkwy ySuite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

February 2, 2023

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

Re: Narrative on 5G Concerns for Special Use Permit to allow the Installation and Operation of New DISH Wireless

Network Equipment to the Existing Tower at 1102 Hill Avenue
DISH Site CHCHI00652A / Crown Site 817173

To Whom It May Concern,

Fullerton Engineering on behalf of DISH Wireless, and Tower Owner Crown Castle, submit for review and approval, a Special Use Application for the proposed addition of DISH Wireless Antennas and Support Equipment to the tower at 1102 Hill Avenue. DISH Wireless is proposing to install their telecommunication equipment on the tower and on the ground within a leased space. Crown Castle is the owner of the telecommunications tower located at this referenced tower location. Currently, there are no carriers operating on this tower.

DISH Wireless would install their equipment on the top tower space for operation. This centerline for installation is located on the tower at the 67' high mark. The antenna equipment that DISH is proposing to install on the tower would support 5G technology. This is a key offering that their network would provide to their consumers. The proposed new Co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G capable technology that the equipment would bring to the community.

DISH Wireless is a division of the company we all know to be the satellite television provider. In recent years, DISH has become one of the major wireless carriers. Their focus will be providing 5G wireless connectivity to power the Smart Cities of the future. Smart Homes, Factories, Driverless Cars, and Artificial Intelligence...in addition to the millions of wearables, sensors, devices, and robots that will support them. Additional information regarding the DISH Story is available on their web site at <https://about.dish.com/company-info>.

Wireless Communications have been designated Critical Infrastructure by the Federal Government and should be considered Essential Services in all Comprehensive Plans. Adding a New Carrier to an existing wireless support structure in the Industrial Zoning District should be considered at the top of a site hierarchy.

The Foundation for a Wireless World

CrownCastle.com



3025 Highland Pkwy ySuite 510
Downers Grove, IL 60515

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As DISH Wireless is constructing this new network, every new facility in the network is essential to the seamless operation. This Crown Castle tower, located at 1102 Hill Avenue, was selected to fill a gap in the DISH Wireless network. The tower height and location are important factors in determining how network coverage can be expanded. Structure height is key in extending that coverage. The higher the structure the farther the coverage will extend.

On the Crown Castle tower, DISH Wireless would be installing their antennas, radio equipment, and associated cabling at top location on the tower. At the base of the tower, within the fenced compound area, DISH would install an ice bridge, a 5' x 7' metal platform, and an equipment cabinet. The proposed addition of DISH Wireless's equipment will not cause an increase in the height of the tower or in the existing leased ground space.

The new antenna equipment would support 5G technology. This would be in addition to other technologies that would the DISH network would offer to consumers. As an example, another technology supported by this antenna would be 4G. There is no hazard emission that is produced from the use of 5G technology. Consumers would only be able to utilize this 5G network if they should purchase a cellular device that has 5G capable technologies. The only way any individual would come to harm is if they were to stand directly in front of antenna located at the top of the tower. Which is why warning signs are posted in all telecommunication site entrances for safety.

Submitted with the Special Use Permit Application, we have included a radio frequency interference statement provided by DISH RF Engineers confirming that all frequencies utilized by DISH Wireless will follow guidelines enforced by the Federal Communications Commission. This is further confirmation the proposed new Co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G technology capability provided by the new antennas.

It is also worth mentioning that the antenna equipment DISH Wireless is utilizing would be of similar make and models that other carriers are installing on their telecommunication towers to support their network. As technology improves for cellular networks there will always be the need for future equipment upgrades to DISH Wireless's network. This need would be the same for any carrier in the cellular market.

In the coming years, DISH Wireless will continue to expand their network. As mentioned previously, every new facility in the DISH network is essential to the seamless operation of this new network. This Crown Castle tower, located at 1102 Hill Avenue, was selected to fill a gap in the DISH Wireless network.



3025 Highland Pkwy ySuite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

The proposed addition of the DISH Wireless equipment at this location, even with the 5G technology offered by the antennas, this tower will not be hazardous to the community surrounding this property. As confirmed in the radio frequency statement provided by the DISH RF Engineering Manager, DISH Wireless shall comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy.

If there are still any outstanding questions or concerns, please feel free to reach out using any of my contact information listed below in my signature. Addressing all concerns for this project is of utmost importance to myself, and Crown Castle.

Best regards,

Ariel Stouder
Senior Zoning and Permitting Specialist
Fullerton Engineering, on behalf of Crown Castle
M: 574-849-8420
Email: astouder@fullertonengineering.com



DISH Wireless L.L.C.
9601 S. Meridian Blvd.
Englewood, CO 80112
303.723.1000

Village of Glen Ellyn, Building Division
535 Duane Street
Glen Ellyn, IL 60137

9/14/2022

RE: Project Description and Location: DISH Site CHCHI00652A at 21 W, 180 Hill Ave, Glen Ellyn, IL
(the "Project")

To whom it may concern:

This letter responds to your request for information about the Project referenced above, specifically the potential to interfere with communication facilities located nearby and conformance with the Federal Communications Commission ("FCC") rules governing human exposure to radio frequency energy (see FCC OET Bulletin 65 guidelines). DISH Wireless L.L.C. ("DISH") shall comply with all FCC rules regarding interference with other radio services and all FCC rules concerning human exposure to radio frequency energy.

The FCC has granted licenses for the use of certain radio frequencies exclusively by wireless service providers, including DISH. Each wireless service provider uses specific frequencies (channels) on which to transmit and receive radio signals. Pursuant to these licenses, DISH is authorized to provide wireless service nationwide.

Wireless transmitters must be type-accepted by the FCC to ensure compliance with technical standards that limit the frequencies, output power, radio frequency emissions, spurious radio noise, and other technical parameters. Wireless licensees like DISH are required to use type-accepted equipment. The assignment of frequencies and the FCC rules keep cellular radio signals from interfering with, or being interfered with by, other radio transmissions and provide guidelines outlining the limits for permissible human radio frequency exposure.

DISH shall comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy. In the unlikely event that interference does occur, DISH agrees to fully cooperate with the entity experiencing interference to identify and correct, to the extent reasonably possible, any issues caused by the DISH installation.

Very truly yours,

Imran Khan
RF Engineering Manager – Chicago



DISH Wireless L.L.C. SITE ID:

CHCHI00652A

DISH Wireless L.L.C. SITE ADDRESS:

**1102 HILL AVENUE
GLEN ELLYN, IL 60137**

ILLINOIS - CITY OF GLEN ELLYN CODE OF COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES

CODE TYPE	CODE
BUILDING	2019 IBC
ELECTRICAL	2011 NEC
MECHANICAL	2009 IMC

SHEET INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
LS1	SITE SURVEY
A-1	OVERALL AND ENLARGED SITE PLAN
A-2	ELEVATION, ANTENNA LAYOUT AND SCHEDULE
A-3	EQUIPMENT PLATFORM AND H-FRAME DETAILS
A-4	EQUIPMENT DETAILS
A-5	EQUIPMENT DETAILS
A-6	EQUIPMENT DETAILS
E-1	ELECTRICAL/FIBER ROUTE PLAN AND NOTES
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE
G-1	GROUNDING PLANS AND NOTES
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
RF-1	RF CABLE COLOR CODE
GN-1	LEGEND AND ABBREVIATIONS
GN-2	RF SIGNAGE
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES
GN-5	GENERAL NOTES

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- TOWER SCOPE OF WORK:**
- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
 - INSTALL (1) PROPOSED ANTENNA PLATFORM MOUNT
 - INSTALL PROPOSED JUMPERS
 - INSTALL (6) PROPOSED RRUs (2 PER SECTOR)
 - INSTALL (1) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP)
 - INSTALL (1) PROPOSED HYBRID CABLE
- GROUND SCOPE OF WORK:**
- INSTALL (1) PROPOSED METAL PLATFORM
 - INSTALL (1) PROPOSED ICE BRIDGE
 - INSTALL (1) PROPOSED PPC CABINET
 - INSTALL (1) PROPOSED EQUIPMENT CABINET
 - INSTALL (1) PROPOSED POWER CONDUIT
 - INSTALL (1) PROPOSED TELCO CONDUIT
 - INSTALL (1) PROPOSED TELCO-FIBER BOX
 - INSTALL (1) PROPOSED GPS UNIT
 - INSTALL (1) PROPOSED SAFETY SWITCH (IF REQUIRED)
 - INSTALL (1) PROPOSED FIBER NID (IF REQUIRED)
 - INSTALL (1) PROPOSED METER SOCKET

SITE PHOTO



UNDERGROUND SERVICE ALERT
UTILITY NOTIFICATION CENTER OF ILLINOIS
(800) 892-0123
WWW.ILLINOIS1CALL.COM

CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION



GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

SITE INFORMATION

PROPERTY OWNER: JAC PROPERTIES GE LLC
ADDRESS: 4554 E ECO INDUSTRIAL PLACE
TUCSON, AZ 85756

TOWER TYPE: MONOPOLE

TOWER CO SITE ID: 817173

TOWER APP NUMBER: 570902

COUNTY: DUPAGE

LATITUDE (NAD 83): 41° 52' 59.17" N
41.883111 N

LONGITUDE (NAD 83): 88° 2' 16.85" W
88.038028 W

ZONING JURISDICTION: GLEN ELLYN

ZONING DISTRICT: N/A

PARCEL NUMBER: 0512207033

OCCUPANCY GROUP: U

CONSTRUCTION TYPE: II-B

POWER COMPANY: COMED

TELEPHONE COMPANY: TBD

PROJECT DIRECTORY

APPLICANT: DISH Wireless L.L.C.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

TOWER OWNER: CROWN CASTLE
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
(877) 486-9377

SITE DESIGNER: INFINIGY ENGINEERS, PLLC
FIRM REGISTRATION# 84005973-0002
500 WEST OFFICE CENTER DRIVE
SUITE 150
FORT WASHINGTON, PA 19034

SITE ACQUISITION: SARAH PARSONS
SARAH.PARSONS@CROWNCastle.COM

CONSTRUCTION MANAGER: GEORGE DITCHMAN
GEORGE.DITCHMAN@DISH.COM

RF ENGINEER: CHRISTOPHER HOLMES
(224) 600-0546

DIRECTIONS

DIRECTIONS FROM CHICAGO O'HARE INTERNATIONAL AIRPORT:

DEPART AND HEAD NORTHEAST ON CHICAGO O'HARE INTERNATIONAL AIRPORT, KEEP STRAIGHT TO GET ONTO I-190 E / KENNEDY EXPY, HEAD RIGHT ON THE RAMP FOR I-294 SOUTH TOWARD INDIANA, HEAD RIGHT ON THE RAMP FOR I-290 WEST TOWARD ROCKFORD, TAKE THE RAMP ON THE RIGHT FOR I-355 S, TAKE THE RAMP ON THE RIGHT AND FOLLOW SIGNS FOR IL-64, TURN LEFT ONTO IL-64 / NORTH AVE, BEAR RIGHT, THEN BEAR RIGHT ONTO IL-53 / N COLUMBINE AVE, TURN LEFT ONTO W SAINT CHARLES RD, TURN RIGHT ONTO CRESCENT BLVD, TURN LEFT ONTO FINLEY RD, THEN IMMEDIATELY TURN RIGHT ONTO GLEN OAK RD, ROAD NAME CHANGES TO HILL AVE, TURN RIGHT, ARRIVE AT DESTINATION

VICINITY MAP



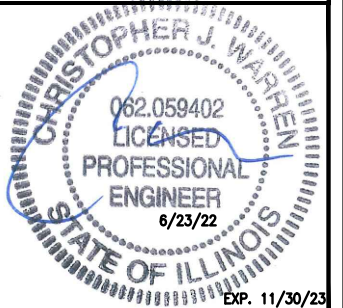
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DRAWN BY: CHECKED BY: APPROVED BY:

RCD SS CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	06/30/2021	ISSUED FOR REVIEW
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A&E PROJECT NUMBER
6039-Z0001-C

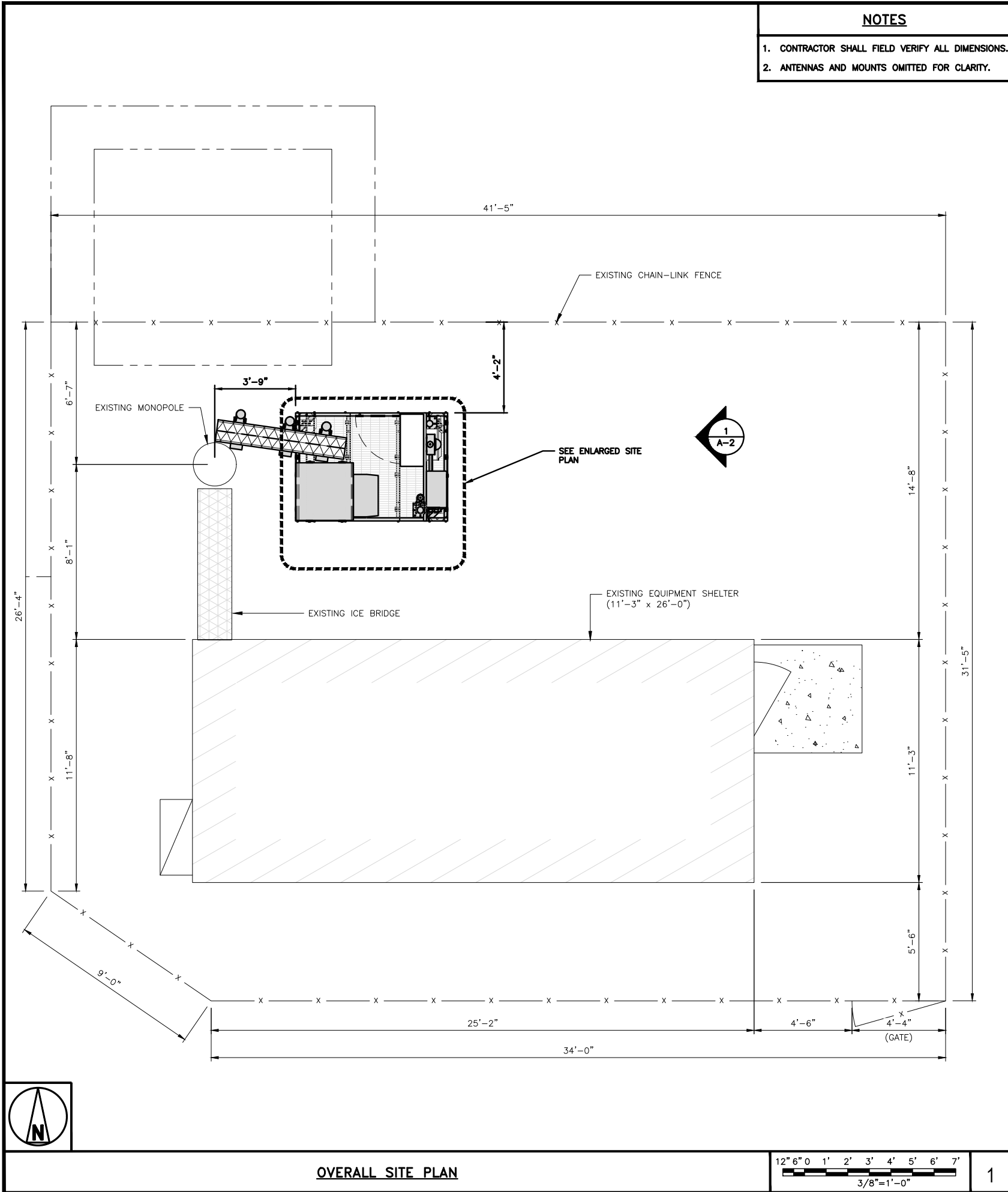
DISH Wireless L.L.C.
PROJECT INFORMATION

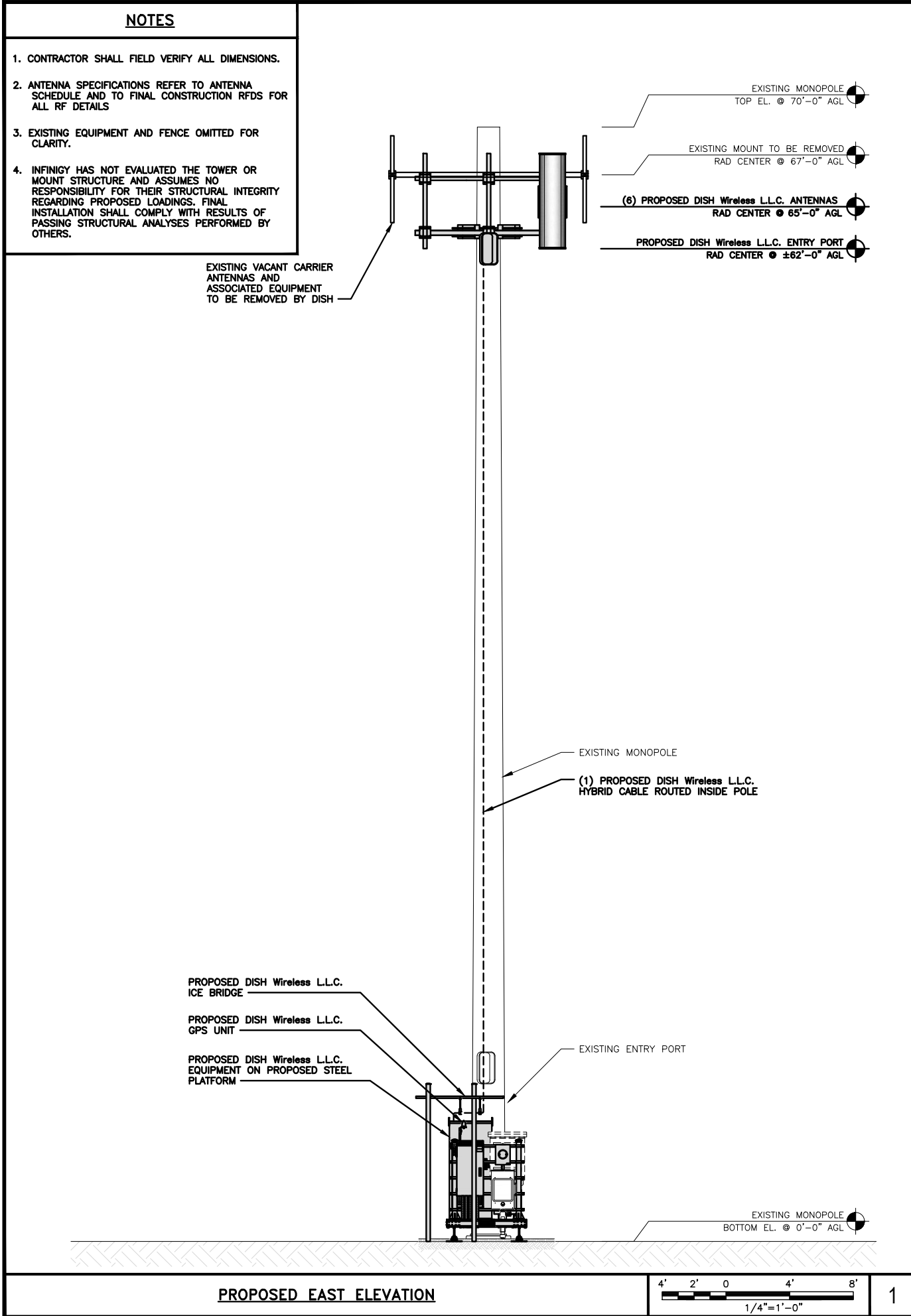
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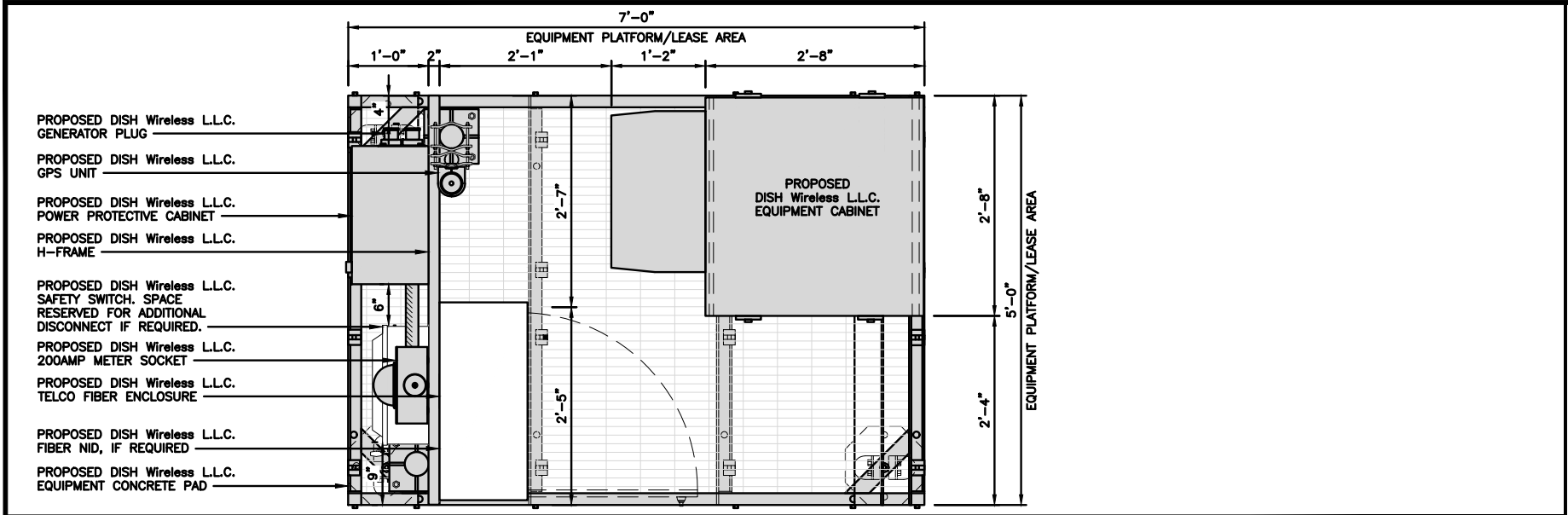
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SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

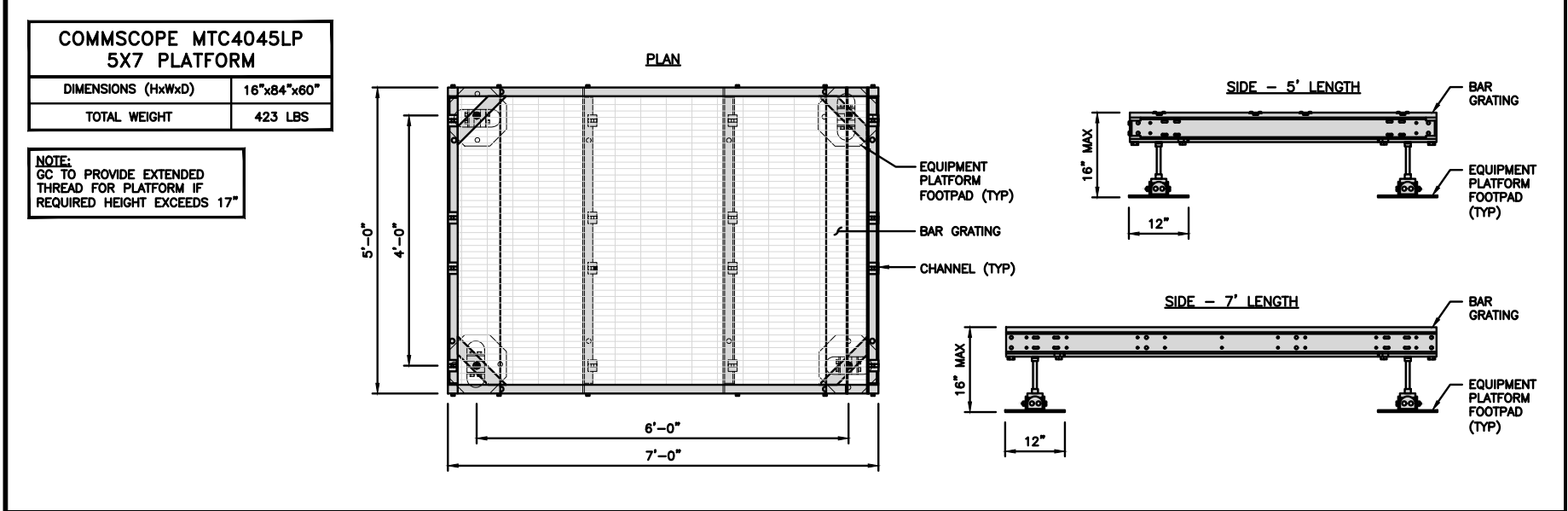






PLATFORM EQUIPMENT PLAN

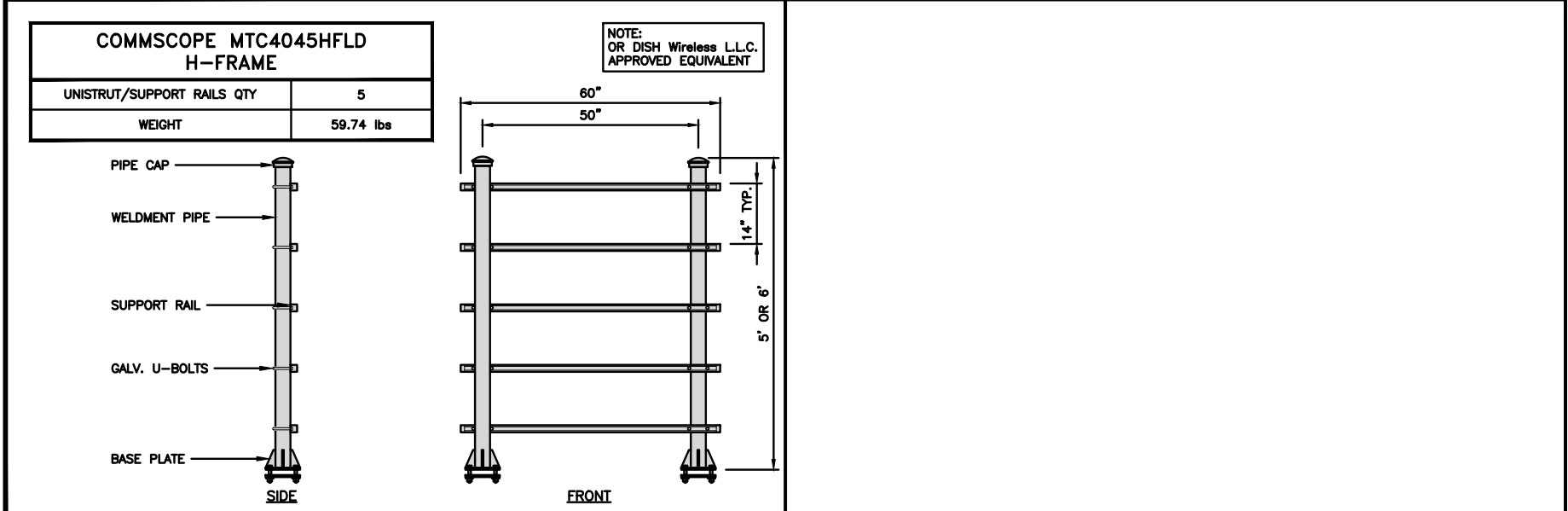
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PLATFORM DETAIL

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3



H-FRAME DETAIL

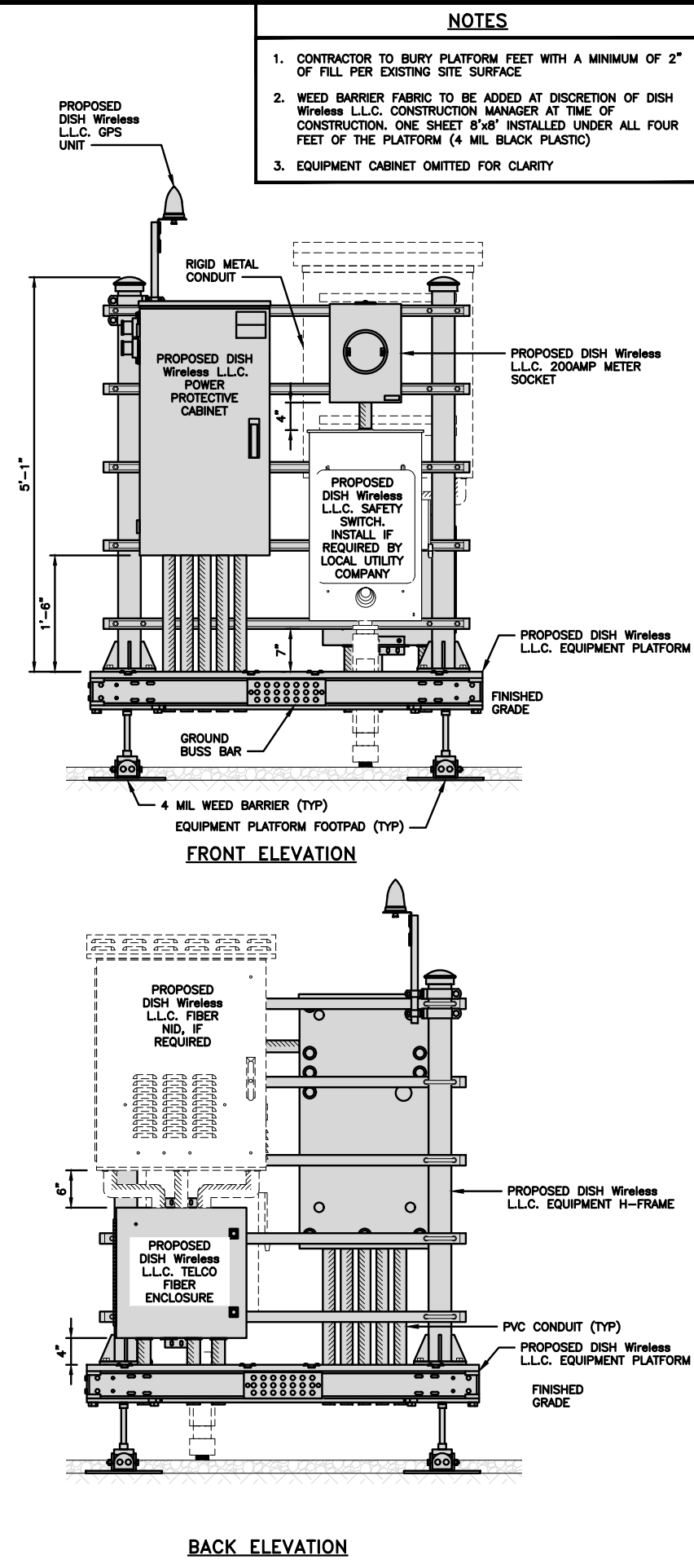
NO SCALE

4

NOT USED

NO SCALE

5



H-FRAME EQUIPMENT ELEVATION

12" 9" 6" 3" 0 1' 2' 1"=1'-0"

5

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

CROWN CASTLE

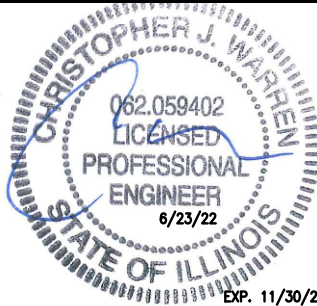
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DRAWN BY: CHECKED BY: APPROVED BY:

RCD

SS

CJW

RFDS REV #: N/A

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DISH Wireless L.L.C.
PROJECT INFORMATION

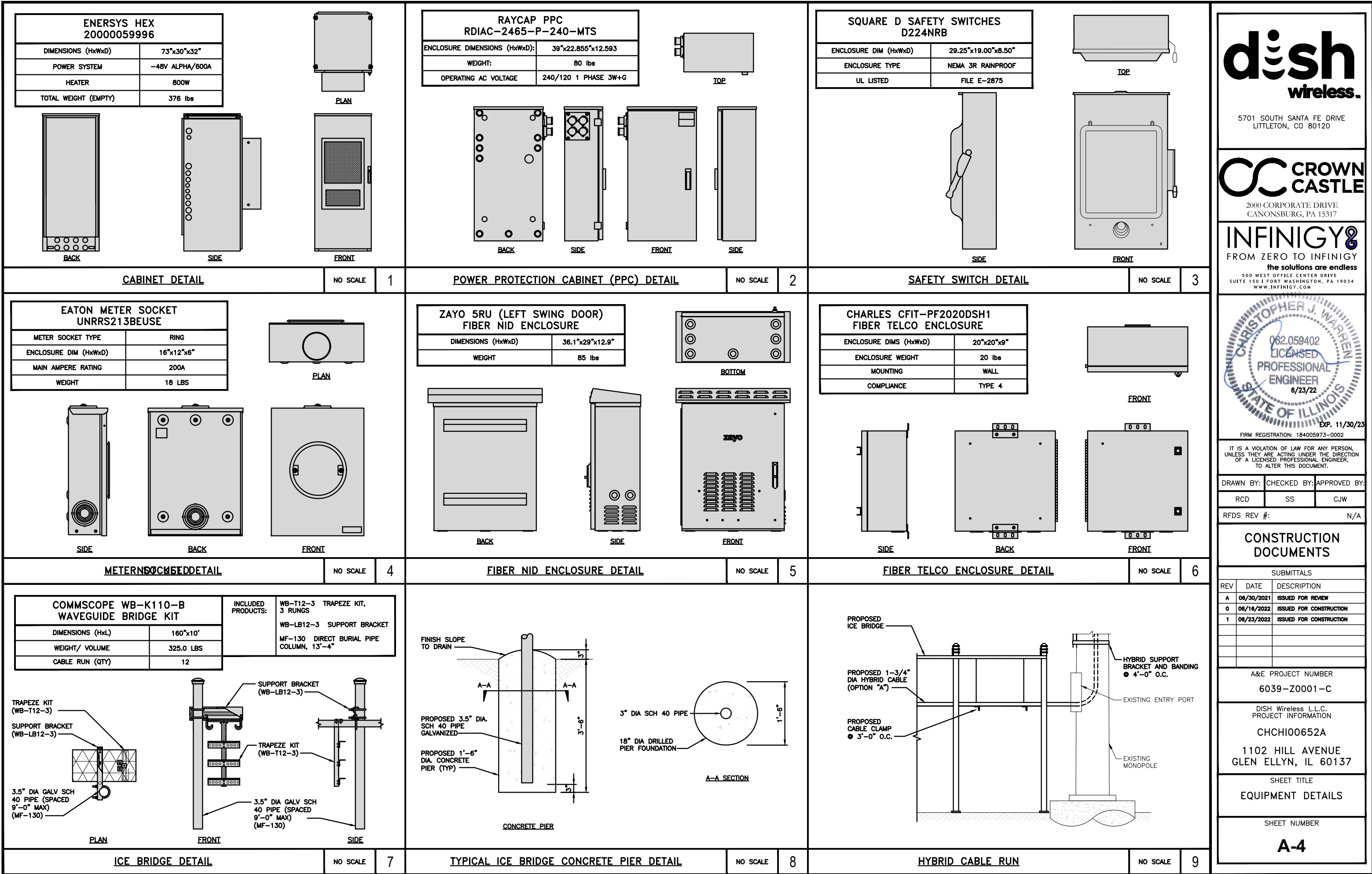
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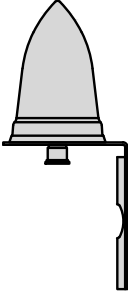
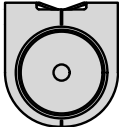
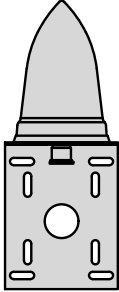
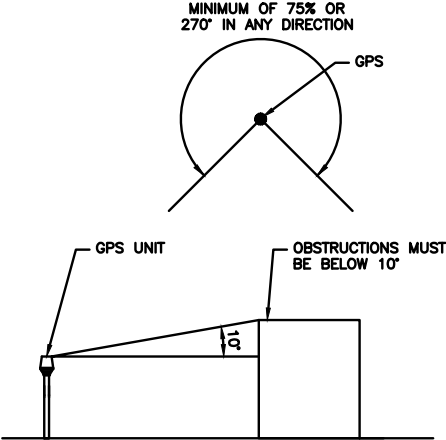
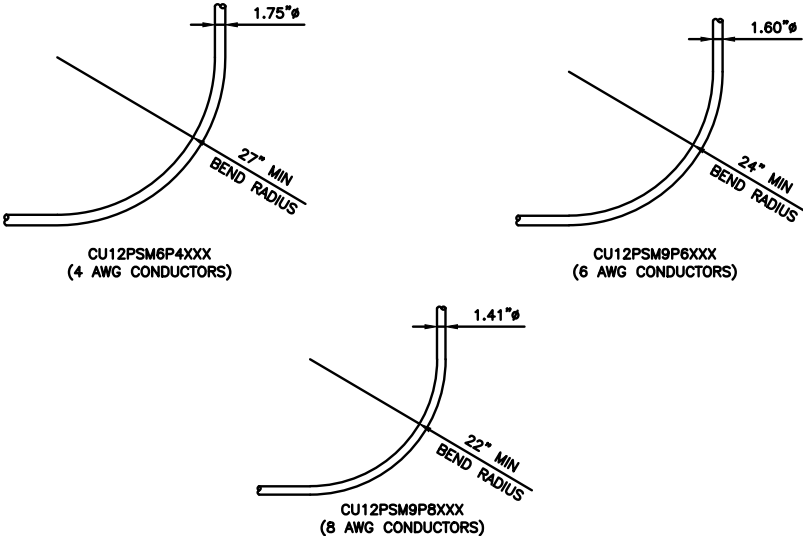
1102 HILL AVENUE
GLEN ELLYN, IL 60137

SHEET TITLE
EQUIPMENT PLATFORM AND
H-FRAME DETAILS

SHEET NUMBER

A-3



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FREQUENCY RANGE	1590 ± 30MHz																									
GPS DETAIL			NO SCALE			1			GPS MINIMUM SKY VIEW REQUIREMENTS			NO SCALE			2			CABLES UNLIMITED HYBRID CABLE MINIMUM BEND RADIUSES			NO SCALE			3		
NOT USED			NO SCALE			4			NOT USED			NO SCALE			5			NOT USED			NO SCALE			6		
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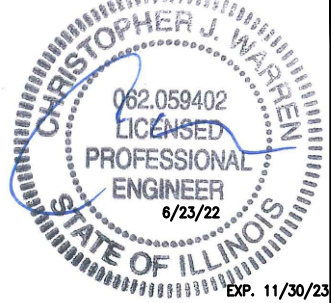
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EXP. 11/30/23
FIRM REGISTRATION: 184005973-0002

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DRAWN BY:	CHECKED BY:	APPROVED BY:
RCD	SS	CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

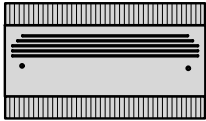
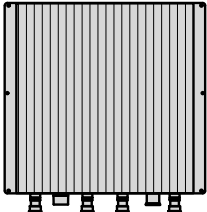
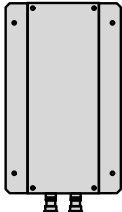
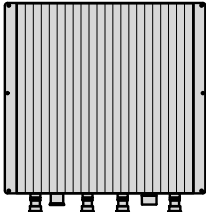
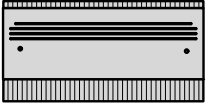
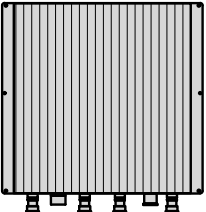
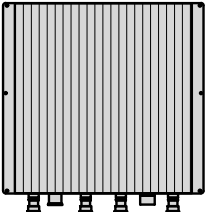
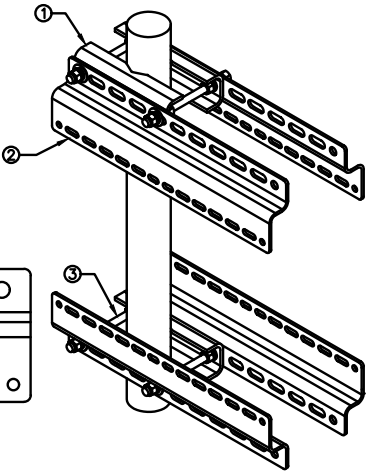
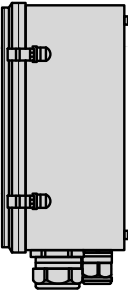
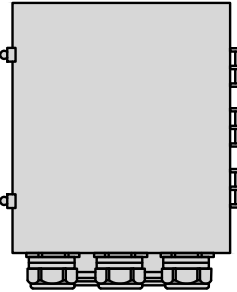
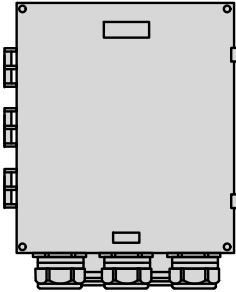
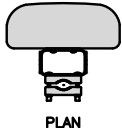
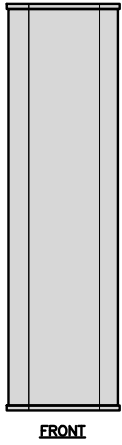
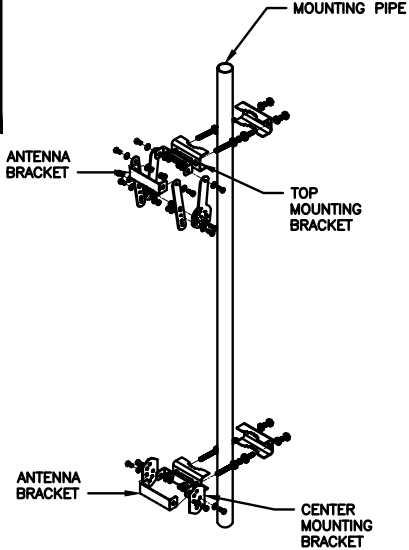
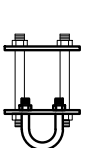
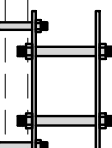
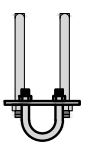
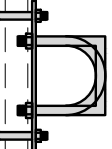
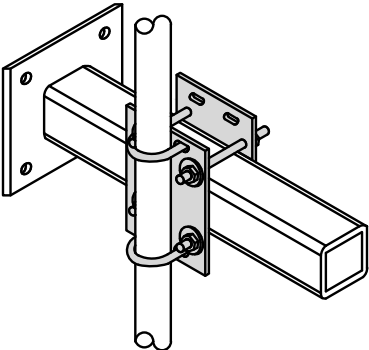
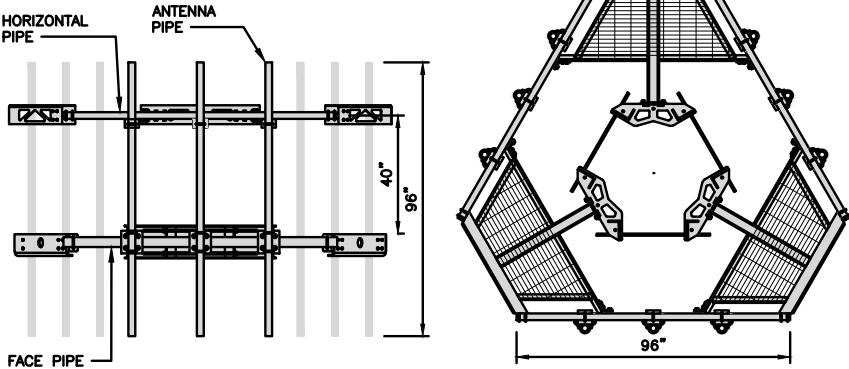
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A&E PROJECT NUMBER
6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION
CHCHI00652A
1102 HILL AVENUE
GLEN ELLYN, IL 60137

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-5

<table><tr><td colspan="2">FUJITSU TRIPLE BAND TA08025-B605</td></tr><tr><td>DIMENSIONS (HxWxD)</td><td>14.9"x15.7"x9"</td></tr><tr><td>WEIGHT</td><td>74.95 lbs</td></tr><tr><td>CONNECTOR TYPE</td><td>4.3-10 RF CONNECTOR</td></tr><tr><td>POWER SUPPLY</td><td>DC -58~-36V</td></tr></table>  PLAN  BACK  SIDE  FRONT	FUJITSU TRIPLE BAND TA08025-B605		DIMENSIONS (HxWxD)	14.9"x15.7"x9"	WEIGHT	74.95 lbs	CONNECTOR TYPE	4.3-10 RF CONNECTOR	POWER SUPPLY	DC -58~-36V	FUJITSU DUAL BAND TA08025-B604		<table><tr><td colspan="2">FUJITSU DUAL BAND TA08025-B604</td></tr><tr><td>DIMENSIONS (HxWxD)</td><td>14.9"x15.7"x7.8"</td></tr><tr><td>WEIGHT</td><td>63.9 lbs</td></tr><tr><td>CONNECTOR TYPE</td><td>4.3-10 RF CONNECTOR</td></tr><tr><td>POWER SUPPLY</td><td>DC -58~-36V</td></tr></table>  PLAN  BACK  SIDE  FRONT	FUJITSU DUAL BAND TA08025-B604		DIMENSIONS (HxWxD)	14.9"x15.7"x7.8"	WEIGHT	63.9 lbs	CONNECTOR TYPE	4.3-10 RF CONNECTOR	POWER SUPPLY	DC -58~-36V	<table><tr><td colspan="2">SABRE DOUBLE Z-BRACKET C10123155</td></tr><tr><td>DIMENSIONS (HxWxD) (1 BRACKET)</td><td>5"x20"x1-13/16"</td></tr><tr><td>WEIGHT (FULL ASSEMBLY)</td><td>35.79 lbs</td></tr><tr><td>PACKAGE QUANTITY</td><td>4</td></tr></table> <table><tr><th>#</th><th>DESCRIPTION</th></tr><tr><td>1</td><td>PLATE, CHANNEL BRACKET</td></tr><tr><td>2</td><td>RRH Z BRACKET, 3/16"</td></tr><tr><td>3</td><td>THREADED ROD ASSEMBLY 1/2"x12"</td></tr></table>  NOTE: OR DISH Wireless L.L.C. APPROVED EQUIVALENT	SABRE DOUBLE Z-BRACKET C10123155		DIMENSIONS (HxWxD) (1 BRACKET)	5"x20"x1-13/16"	WEIGHT (FULL ASSEMBLY)	35.79 lbs	PACKAGE QUANTITY	4	#	DESCRIPTION	1	PLATE, CHANNEL BRACKET	2	RRH Z BRACKET, 3/16"	3	THREADED ROD ASSEMBLY 1/2"x12"	<table><tr><td colspan="2">RRH DETAIL</td><td>NO SCALE</td><td>1</td></tr></table>		RRH DETAIL		NO SCALE	1	<table><tr><td colspan="2">RRH DETAIL</td><td>NO SCALE</td><td>2</td></tr></table>		RRH DETAIL		NO SCALE	2	<table><tr><td colspan="2">RRH MOUNT DETAIL</td><td>NO SCALE</td><td>3</td></tr></table>		RRH MOUNT DETAIL		NO SCALE	3
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5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



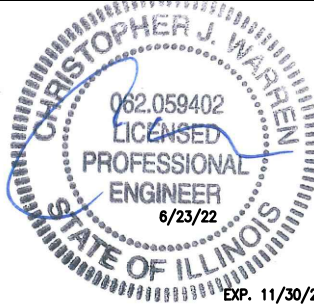
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UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

RCD SS CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	06/30/2021	ISSUED FOR REVIEW
0	06/16/2022	ISSUED FOR CONSTRUCTION
1	06/23/2022	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER

6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION

CHCH100652A

1102 HILL AVENUE
GLEN ELLYN, IL 60137

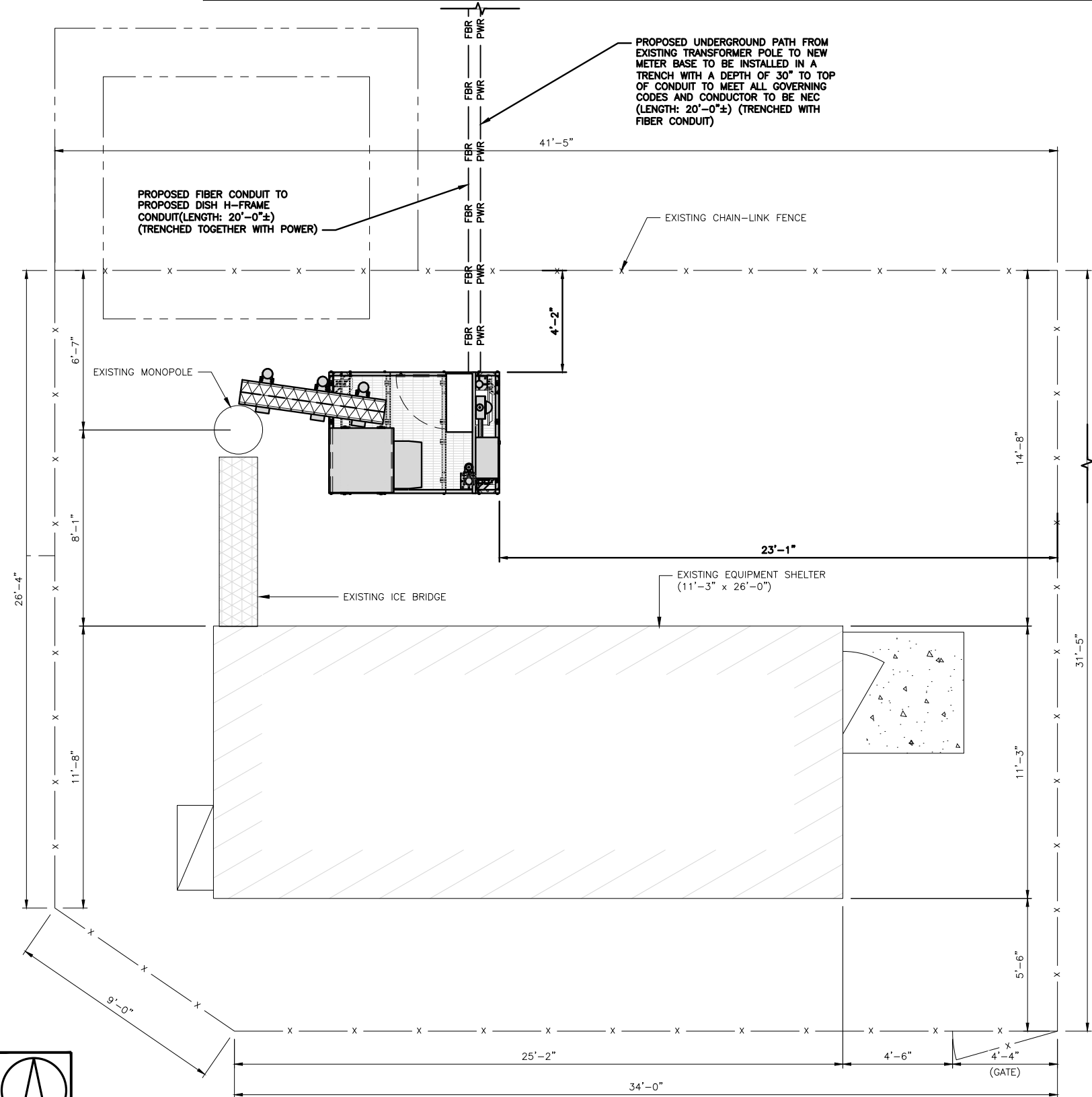
SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER

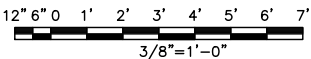
A-6

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.
3. DUE TO UTILITY EASEMENT RIGHTS SPECIFIED IN THE GROUND LEASE, CUSTOMER MAY INSTALL EQUIPMENT WITHIN SPECIFIED UTILITY EASEMENT AREA. "PWR" AND "FBR" PATH DEPICTED ON A-1 AND E-1 REPRESENT PLANNED ROUTING BASED ON BEST AVAILABLE INFORMATION INCLUDING BUT NOT LIMITED TO A SURVEY, EXHIBITS, METES AND BOUNDS OF THE UTILITY EASEMENT, FIELD VERIFICATION, PRIOR PROJECT DOCUMENTATION AND OTHER REAL PROPERTY RIGHTS DOCUMENTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH. IF EXISTING PATH IS MATERIALLY INCONSISTENT WITH "PWR" AND "FBR" PATH DEPICTED ON A-1 AND E-1 AND SAID VARIANCE IS NOT NOTED ON CDa, PLEASE NOTIFY TOWER OWNER AS FURTHER COORDINATION MAY BE NEEDED.



UTILITY ROUTE PLAN



1

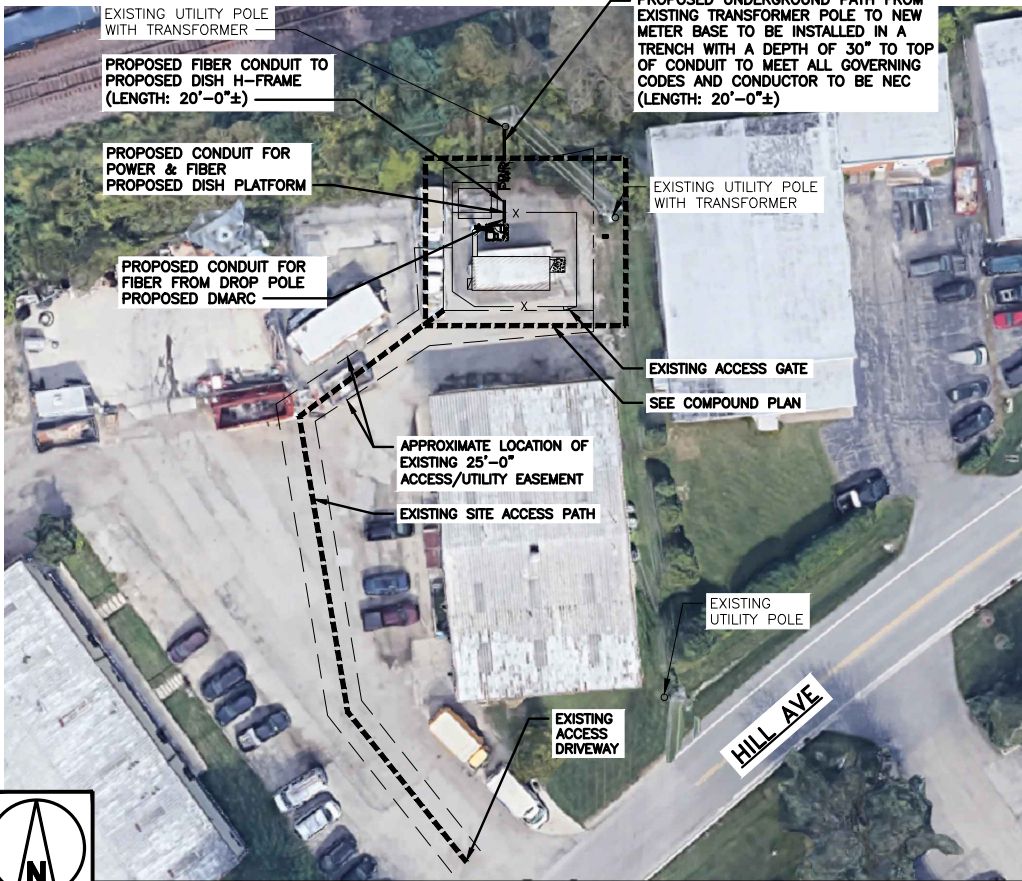
DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND -48V CONDUCTORS. RED MARKINGS SHALL IDENTIFY +24V AND BLUE MARKINGS SHALL IDENTIFY -48V.

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. ALL TRENCHES IN COMPOUND TO BE HAND DUG

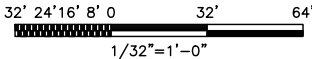
ELECTRICAL NOTES

NO SCALE

2



OVERALL UTILITY ROUTE PLAN



3

dish
wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

CROWN
CASTLE

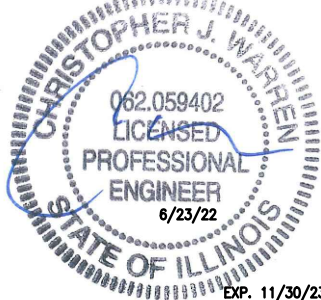
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DRAWN BY: CHECKED BY: APPROVED BY:

RCD

SS

CJW

RFDS REV #: N/A

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A&E PROJECT NUMBER

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DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00652A

1102 HILL AVENUE
GLEN ELLYN, IL 60137

SHEET TITLE
ELECTRICAL/FIBER ROUTE
PLAN AND NOTES

SHEET NUMBER

E-1

RECEIVED

JUL 14 2022

VILLAGE OF GLEN ELLYN



MORRISON HERSHFIELD

Morrison Hershfield
1455 Lincoln Parkway, Suite 500
Atlanta, GA 30346
(770) 379-8500

Date: August 19, 2021

Subject: Structural Analysis Report

Carrier Designation: DISH Network Co-Locate
Site Number: CHCHI00652A
Site Name: IL-CCI-T-817173

Crown Castle Designation: BU Number: 817173
Site Name: LOMBARD
JDE Job Number: 669731
Work Order Number: 1981651
Order Number: 570902 Rev. 2

Engineering Firm Designation: Morrison Hershfield Project Number: CN0-915R2 / 2101398

Site Data: 1102 Hill Avenue, Glen Elly, DuPage County, IL 60137
Latitude 41° 52' 59.17", Longitude -88° 2' 16.85"
70 Foot – Valmont Monopole Tower

Morrison Hershfield is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Proposed Equipment Configuration

Sufficient Capacity

This analysis utilizes an ultimate 3-second gust wind speed of 115 mph as required by the 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Respectfully submitted by:

Yan Wang, S.E. (IL License No.081-007465)
Senior Engineer



Digitally signed by Yan Wang
Date: 2022.08.08 15:43:22 -04'00'

LICENSE EXPIRES: 11/30/2022

TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

- Table 1 - Proposed Equipment Configuration
- Table 2 – Non-Carrier Equipment To Be Removed
- Table 3 – Other Considered Equipment

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- 3.1) Analysis Method
- 3.2) Assumptions

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- Table 6 – Tower Component Stresses vs. Capacity – LC5
- 4.1) Recommendations

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- tnxTower Output

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- Base Level Drawing

7) APPENDIX C

- Additional Calculations

1) INTRODUCTION

This tower is a 70 ft monopole tower designed by Valmont and mapped by P & D Antenna Seri in June of 2004.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	115 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	40 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
65.0	65.0	3	fujitsu	TA08025-B604	1	1-3/4
		3	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
		1	-	Commscope MC-PK8-DSH		

Table 2 - Non-Carrier Equipment To Be Removed

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
67.0	67.0	1	-	Platform Mount [LP 604-1]	-	-

Table 3 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
67.0	67.0	-	-	-	1	1-5/8

3) ANALYSIS PROCEDURE

Table 4 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	335704	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	340906	CCISITES
4-TOWER MANUFACTURER DRAWINGS	334706	CCISITES
4-TOWER ELEVATION DRAWINGS	1013239	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

3.2) Assumptions

- 1) Tower and structures were maintained in accordance with the TIA-222 Standard.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
- 3) Yield strengths of 50 ksi for the monopole shaft, 60 ksi for the base plate, and 50 ksi for the anchor bolts have been assumed based on experience with similar towers and are considered to be correct.
- 4) Necessary soil properties are not available in the geotechnical report. Presumptive soil parameters were taken from the Annex F of TIA-222-H, in combination with the referenced geotechnical report and is considered to be accurate.

This analysis may be affected if any assumptions are not valid or have been made in error. Morrison Hershfield should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P _{allow} (K)	% Capacity	Pass / Fail
L1	70 - 31.5	Pole	TP21.77x15.55x0.25	1	-5.54	802.19	25.9	Pass
L2	31.5 - 0	Pole	TP26.12x20.8403x0.25	2	-8.83	984.00	46.8	Pass
							Summary	
						Pole (L2)	46.8	Pass
						Rating =	46.8	Pass

Table 6 - Tower Component Stresses vs. Capacity – LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	60.1	Pass
1	Base Plate		28.7	Pass
1	Base Foundation (Structure)	0	31.8	Pass
1	Base Foundation (Soil Interaction)		55.9	Pass

Structure Rating (max from all components) =	60.1%
---	--------------

Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
- 2) *Rating per TIA-222-H, Section 15.5.

4.1) Recommendations

Once the equipment in Table 2 is removed, the tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

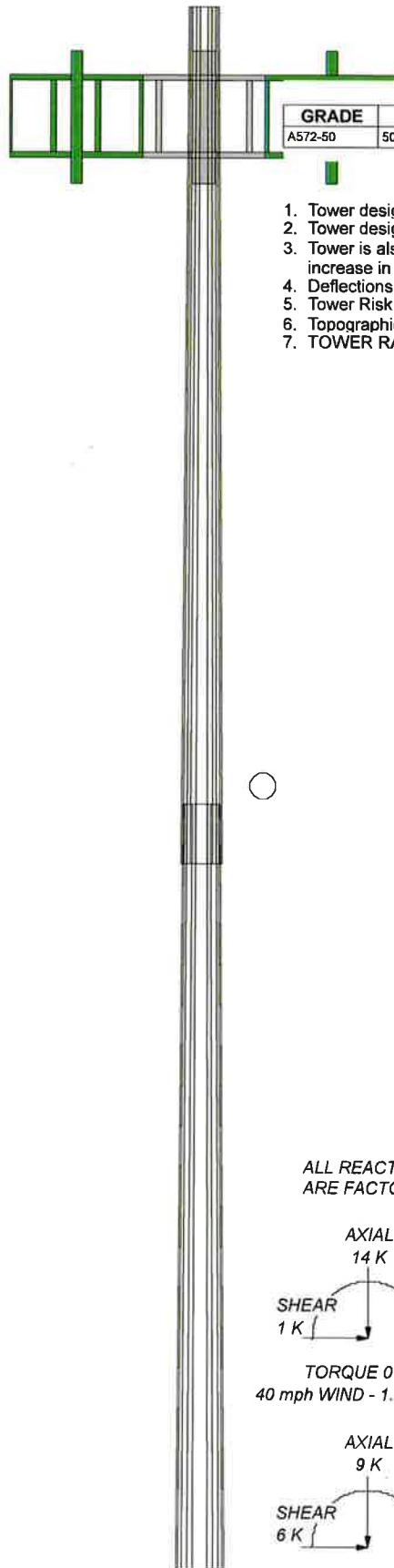
APPENDIX A
TNXTOWER OUTPUT

0.0 ft

Length (ft)	38.50
Number of Sides	12
Thickness (in)	0.2500
Socket Length (ft)	2.66
Top Dia (in)	15.5500
Bot Dia (in)	21.7700
Grade	A572-50
Weight (K)	1.9

31.5 ft

0.0 ft



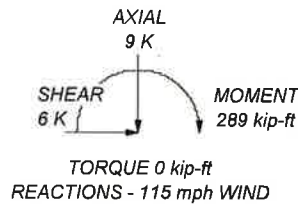
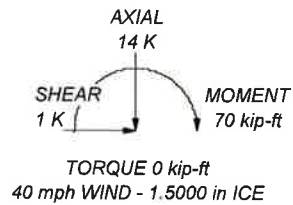
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 115 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 40 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 46.8%

ALL REACTIONS
ARE FACTORED



Consulting Engineers

Morrison Hershfield
1455 Lincoln Parkway, Suite 500
Atlanta, GA 30346
Phone: (770) 379-8500
FAX: (770) 379-8501

Job: **CN0-915R2 / 2101398**

Project: **817173 / LOMBARD**

Client: **Crown Castle USA**

Code: **TIA-222-H**

Path:

Drawn by: **MK**

Date: **08/19/21**

App'd:

Scale:

Drawn by:

5G: The next generation of wireless connectivity.

5G represents nothing short of a wireless revolution. It will usher in new technologies, new mobile experiences, and has the potential to fundamentally change the way we interact with each other—and the world. With the right infrastructure and technology in place, 5G will connect 100X more devices at up to 100X faster speeds¹—opening new possibilities for wearables, machine-to-machine communications, and internet of things technologies.

5G will make our communities smarter, safer, and more efficient.

A safer, healthier community.

Faster, improved communications will bring new efficiencies to diagnosing and treating illnesses and will make responding to emergencies more effective.

More efficient, faster-moving cities.

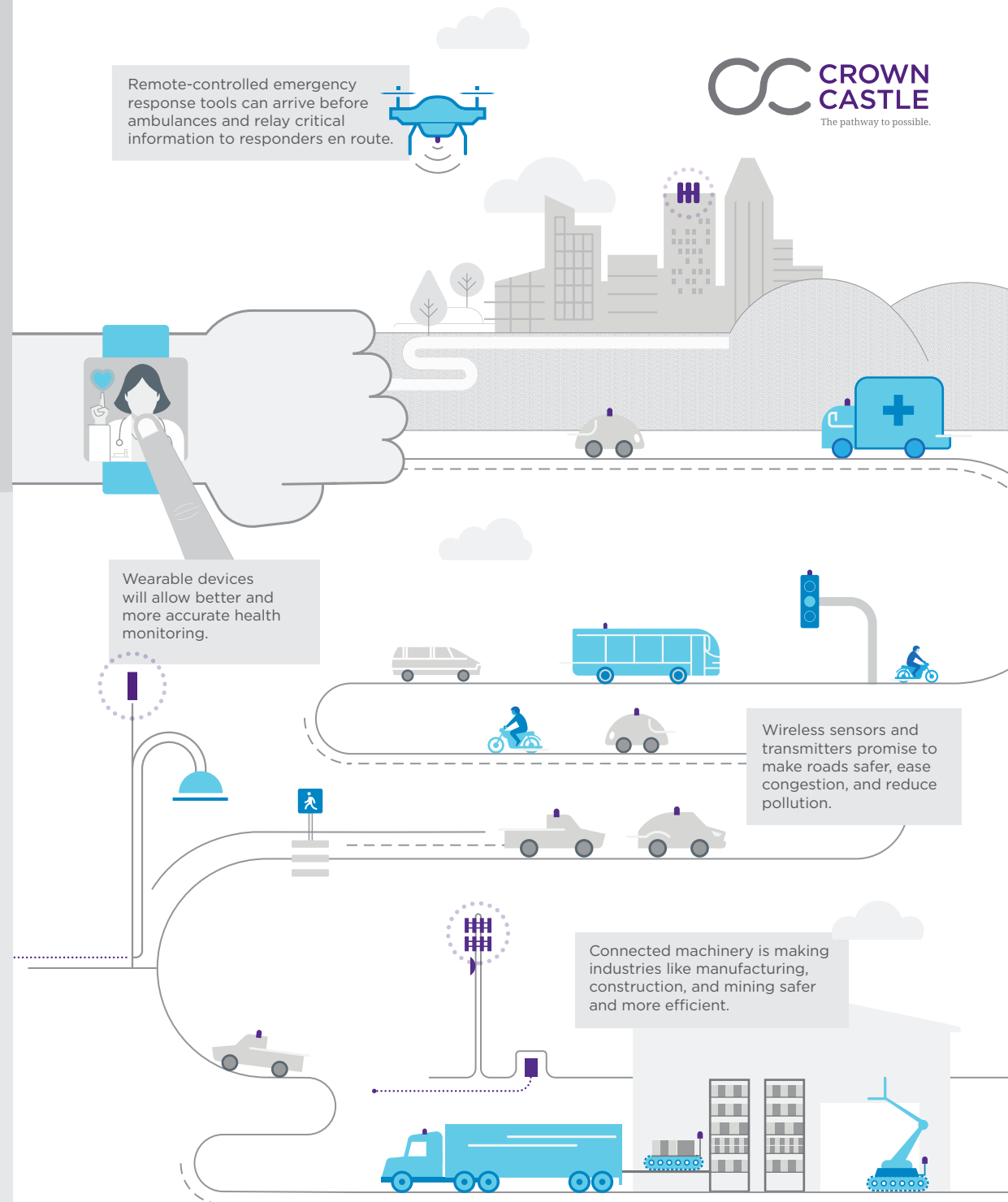
5G will support smart city technologies that allow traffic to move smoothly and efficiently, while responding to changing conditions.

New opportunities in business and commerce.

Advanced augmented reality and virtual reality technologies will support new and existing industries while changing the way we interact with the world.

To learn more about what 5G will bring, visit CrownCastle.com/5G

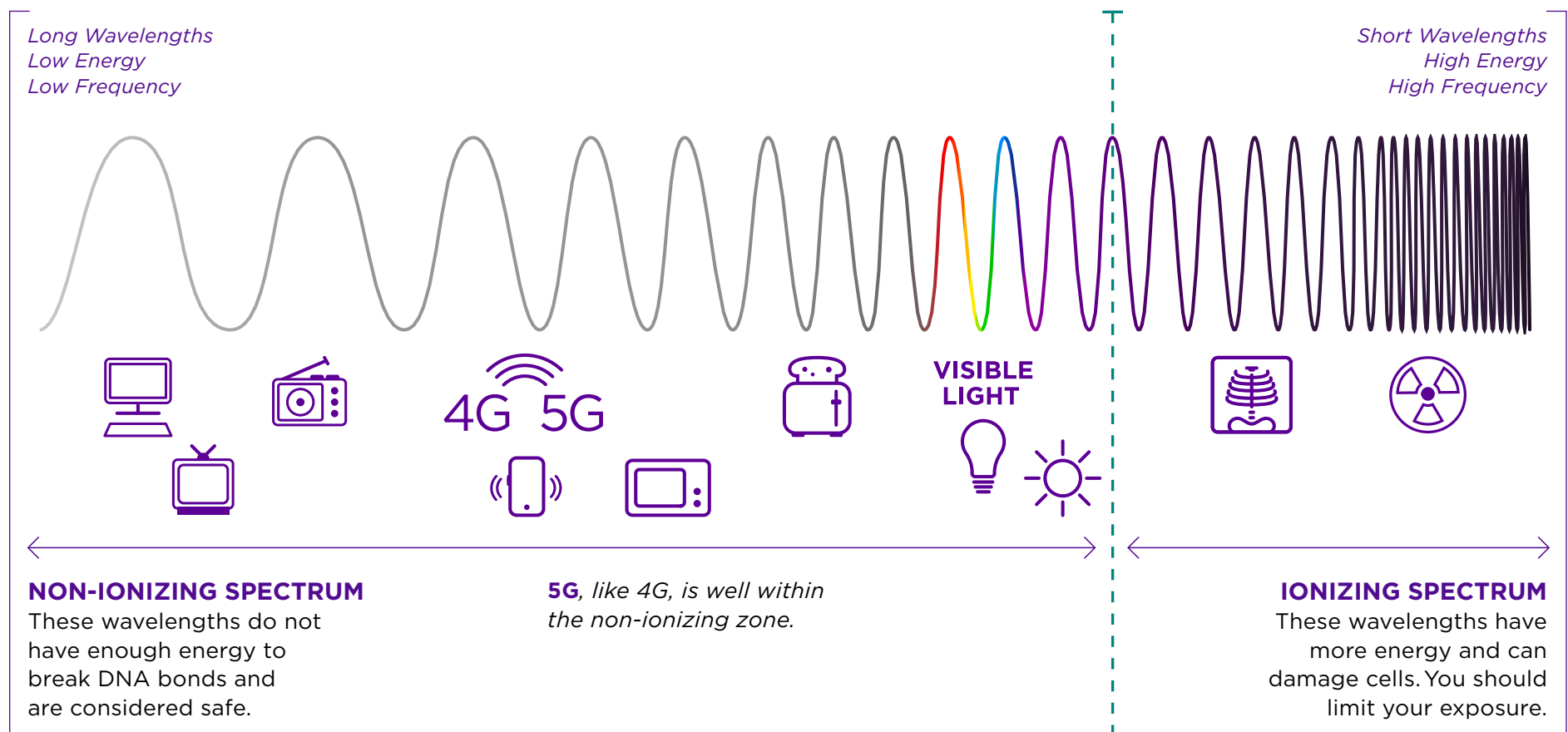
1. What is 5G: A Brief Explainer, CTIA, 2018.



Understanding the safety of 5G.

You've probably heard a lot about new 5G networks, and it's only natural to wonder about their safety. Much like the signals for your TV, radio or wi-fi router, 5G travels to your device using electromagnetic energy—one of the most ubiquitous and well-studied phenomena in the universe.

Where 5G fits on the electromagnetic spectrum.



5G builds on 4G.

5G is the next generation of wireless technology, but it works pretty much the same as current 4G networks. To expand 5G throughout the country, carriers are working hard to expand small cells and fiber. The good news is that over **154,000 small cells are already deployed**¹ throughout the US—powering many of the 4G and LTE networks in use today.

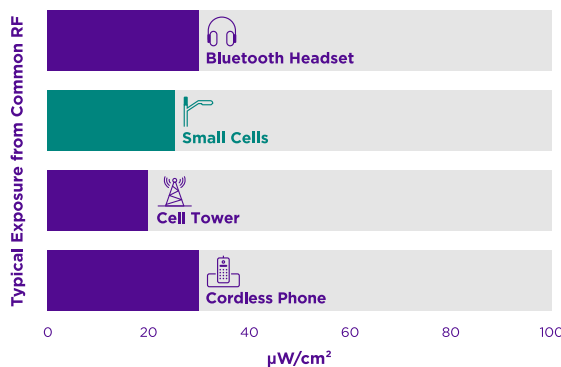


Small cells are low-powered, fiber-connected nodes that are usually located on existing structures like streetlights and utility poles.

[Read More →](#)

Low power minimizes exposure.

We're constantly surrounded by electromagnetic energy. Whether you're talking about 5G, 4G or your Bluetooth headset, the physics are the same, and the body's response is essentially identical. You can see in this chart how emission levels from small cells compare to other common radio frequencies (RF)—all many times below what the FCC considers safe.



Source: © 2018 Andrew H. Thatcher, Board Certified Health Physicist.

We encourage you to take a deeper dive if you'd like to know more.

The 5G Health Hazard That Isn't.

The *New York Times* shows how misinformation about wireless technologies has spread. [Read More →](#)

5G and Your Health.

A scientist who sets global guidelines for 5G explains how we know it's safe. [Read More →](#)

Key takeaways.

- 1 Studies show that cellular signals—including 5G—are safe.
- 2 5G is the next generation of cellular networks and builds on 4G.
- 3 5G emissions are similar to those from everyday technologies like TV, radio, wi-fi—even your toaster.

“The light produced by a light bulb is a form of electromagnetic radiation with energy and frequency that is approximately 17,000 greater than that of the highest frequencies used by 5G.”

Dr. Jerrold Bushberg,
Vice Chair of COMAR and Clinical Professor,
Radiology & Radiation Oncology, University
of California, Davis School of Medicine

¹<https://www.ctia.org/infrastructure-channel>

Commercial Area Policies

The Community-Wide Plan designates five types of commercial and business areas: 1) Downtown, 2) service commercial, 3) office, and 4) neighborhood commercial, and 5) light industry.

Generalized recommendations for commercial and business areas are presented in Figure 5. More specific improvement and development recommendations for Downtown, Roosevelt Road and Five Corners are presented in Section 3 of this Plan report.

Improvement Guidelines:

Each of Glen Ellyn's existing commercial and business areas should be strengthened and upgraded. Viable existing stores and businesses should be improved and enhanced. New uses, particularly retail and convenience commercial uses that serve the needs of local residents, should be promoted.

New commercial, business and mixed-use development should be of a size and scale compatible with the established image and character of Glen Ellyn. Commercial and business development should be characterized by the highest possible standards of design and construction.

Since commercial and business areas are located along important traffic routes, access to individual properties should be carefully controlled to minimize conflicts with through traffic. The consolidation of access drives for adjacent properties should be encouraged.

Adequate off-street parking should be provided within all commercial and business areas. The consolidation of parking facilities for two or more businesses should be encouraged. Parking lots should be attractively landscaped, particularly along major streets.

The image and appearance of commercial and business areas should also be upgraded. Projects should be undertaken to improve the appearance of the public rights-of-way, including landscaping, lighting, signage, sidewalks, crosswalks and pedestrian amenities. Enhancements to private properties should include façade, parking lot and signage improvements.

Commercial and business areas should not adversely impact adjacent neighborhoods. Screening and buffering should be promoted between commercial and residential areas, including landscaping and attractive fencing. Commercial traffic and parking should not be allowed to "spill over" into the neighborhoods. Noise, safety and grounds maintenance should also be carefully monitored within commercial areas.

Downtown Glen Ellyn:

Glen Ellyn's Downtown is the traditional commercial and service focal point for the Village. It not only contains a range of retail, service, office and housing uses, but is also the site of several important public and institutional buildings.

The Plan strives to strengthen and enhance the historic character and traditional role of Downtown. It should be maintained as Glen Ellyn's multi-purpose commercial and service focal point. While other commercial and office areas will have important functional roles as well, Downtown should remain unique in terms of its pedestrian orientation and the range of businesses, services and other activities it offers to the community.

Compatible and high-quality new retail, service and mixed-use development and redevelopment should be promoted in selected locations within the Downtown, as described in Section 3.

Service Commercial Areas:

Service commercial areas, including Roosevelt Road and small clusters along Butterfield Road in unincorporated Glen Ellyn, should contain a range of retail, service, office and business activities that serve the community and surrounding region.

The Roosevelt Road corridor should continue to accommodate retail, convenience and auto-oriented commercial uses. The redevelopment and replacement of older, obsolete and marginal commercial properties should be promoted, as described in Section 3.

The clustering or grouping of commercial buildings within the same block should be promoted to allow for

shared access drives, parking areas and pedestrian amenities.

Since the size of most lots along commercial corridors is limited, the consolidation of two or more smaller parcels should be encouraged to enable somewhat larger developments with improved access, parking, building placement, and overall design and appearance.

Glen Ellyn should explore the possibility and desirability of annexing the unincorporated commercial areas along Butterfield Road, Hill Avenue and North Avenue/Swift Road in order to supplement the local tax base and establish Village control over future development in these areas.

Office and Industrial Areas:

Office development has been increasing within Glen Ellyn in recent years. Most existing office development is located within or near the Downtown, along Roosevelt Road, and in smaller locations along Butterfield Road. Quality new office development should continue to be promoted.

The small cluster of industrial and business uses located along Hill Avenue just outside the Village is designated in the Plan as "light industrial." This area should be improved and upgraded as a limited and self-contained business area.

Compatible new light industrial and high-tech uses would also be appropriate within Glen Ellyn's office areas.

Neighborhood Commercial Area:

"Five Corners" should be revitalized as a neighborhood service area, a showcase for local history, and an attractive gateway to the Glen Ellyn community. The southwest quadrant of the intersection of Main Street and St. Charles Road should be promoted as a local Historical Center centered on Stacy's Tavern and other historic buildings. Traffic operational improvements should be undertaken, and the overall image and appearance of the area should also be enhanced. See Section 3 for more detailed recommendations.



Mixed Use

This category includes buildings with two or more distinct uses vertically stacked. Developments usually contain commercial on the ground floor and residential or office uses above. All mixed use developments are currently located within the Downtown. Higher-density mixed use development that complements the architecture of existing buildings should continue to be encouraged within Downtown to support street-level commercial activity while providing residential or office space above.



Office

This category consists of buildings dedicated to professional office spaces, including corporate headquarters, legal firms, and professional service providers. Medical establishments are also included in this land use category, including family physicians, eye care professionals, and medical campuses. Office uses should continue to be concentrated within Downtown and the Roosevelt Road Corridor, particularly along Taft Avenue, while encouraging the consolidation and comprehensive redevelopment of out-of-date office properties.



Public/Semi-Public

This category consists of institutions and community facilities that serve the residents of Glen Ellyn and contribute to quality of life and local culture. This includes the Village's highly-esteemed schools, Glen Ellyn Public Library, government buildings, police and fire facilities, historic centers, religious institutions, and non-profit organizations. Public/semi-public land use and policies are discussed in more detail in *Chapter 6: Community Facilities*.



Parks & Open Space

This category includes designated park spaces, nature reserves, golf courses, cemeteries, trails, playgrounds, and land used for sports recreation. The Village should continue to coordinate with local park districts and other partner organizations to preserve the community's large inventory of dedicated parks and open space and pursue opportunities to expand recreational amenities including trails and smaller neighborhood parks to ensure access for all residents. Components of the parks and open space category and relevant environmental features are discussed in *Chapter 7: Parks & Open Space*.



Light Industrial

This category includes light industrial businesses that have minimal impacts on adjacent uses. There are few light industrial uses in Glen Ellyn, the most prominent being Nicor Gas located off of Finley Road, and on Hill Avenue near Interstate 355. This category should continue to be maintained to support the Village's industrial base, while enhancing sites by providing proper screening from adjacent residential uses.



Utility & Transportation

This category focuses on land dedicated to transportation infrastructure or the production, storage, and maintenance of utilities, including the Union Pacific railroad right-of-way that passes through the center of Glen Ellyn. The Village should continue to ensure utility services meet the needs of the community. Unattractive facilities should be screened from neighboring uses to enhance the Village's appearance. Utilities and transportation are discussed in more detail in *Chapter 5: Transportation* and *Chapter 6: Community Facilities*.



Parking

This category includes land used for the parking of automobiles, including surface parking, parking structures, and garages. Properties identified within this category provide stand-alone parking and are not tied to a specific business or residence. Additional discussion of policies impacting parking areas, including areas of focus for the expansion of public parking and improvements to screening and landscaping, is located in *Chapter 4: Subarea Plans*.

APPLICATION FOR SPECIAL USE PERMIT

CLEAR PAGE

The undersigned petitions the President and Village Board of Trustees of the Village of Glen Ellyn, Illinois, to consider the Special Use described in this application.

Date Filed: _____ Application No: _____

TONY PHILLIPS - FULLERTON ENGINEERING CONSULTANTS, LLC

Name of Applicant: **OBO CROWN CASTLE USA INC & DISH WIRELESS LLC**

Address of Applicant: **1100 E WOODFIELD RD., SUITE 500, SCHAUMBURG, IL 60173**

Business Phone: **847-331-3659** Fax: **N/A**

Home Phone: **N/A** Mobile Phone: **847-331-3659**

Email: **tphillips@fullertonengineering.com**

Property Interest of Applicant: **AGENT FOR CROWN CASTLE USA INC / DISH WIRELESS LLC**

(Owner, Contract Purchaser, Owner Representative)

Name of Owner: **JAC PROPERTIES GE LLC**

Address of Owner: **4554 E ECO INDUSTRIAL PLACE, TUCSON, AZ 85756**

Business Phone: _____ Fax: _____

Home Phone: _____ Mobile Phone: _____

Email: _____

Property Address: **1102 HILL AVENUE, GLEN ELLYN, IL 60137**

Legal Description of Property:

PENDING LEGAL DESC

Permanent Index No. (PIN): **0512207033** Zoning: **I-1 INDUSTRIAL**

Lot Dimensions: **265'x227'x202'x104'** Lot Area: **.85 ACRES**

Present Use:

WIRELESS FACILITIES & WAREHOUSE

Requested Use/Construction:

NO CHANGE IN USE

Estimated Date to Begin New Use/Construction: **TBD**

Name(s), Address(es) and Phone No(s). of Experts (architects, engineers, etc.):

CLEAR PAGE

SITE DESIGNER:

CHRISTOPHER J. WARREN P.E.

INFINIGY

2500 W. HIGGINS RD. SUITE 500

HOFFMAN ESTATES, IL 60169

847-648-4068

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 10-10-14 of the Zoning Code:

The proposed addition of new DISH Wireless antennas and ground equipment to the existing Wireless Facility is considered a Minor Modification and a preferred siting option for new wireless equipment. There will be no noise, glare, odor, fumes, or vibration that might effect adjoining properties. It will be unmanned and have no effect on traffic.

Responses to Paragraph E Section 10-10-14 of Zoning Code below.

Describe How the Special Use:

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:

Wireless Communications have been designated Critical Infrastructure by the Federal Government and should be considered Essential Services in all Comprehensive Plans. Adding a New Carrier to an existing wireless support structure in the Industrial Zoning District should be near the top of the siting hierarchy.

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:

The proposed addition of DISH Wireless antennas to an existing support structure without adding to the height of the structure, along with the addition of the proposed DISH Wireless ground support equipment within an existing equipment compound behind an industrial building adjacent to Railroad Tracks will not change the character and be harmonious.

3. Will not be hazardous or disturbing to existing or future neighborhood uses:

The proposed addition of the DISH Wireless equipment will not be hazardous or disturb future uses.

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:

The proposed use will be unmanned and only require Power and Fiber connections that are already existing at the site. No other public services will be required or impacted.

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:

As mentioned above, this will be an unmanned facility and will not be detrimental to the economic welfare of the Village.

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:

The proposed use will not be detrimental to any persons, property, or general welfare and will not create traffic, noise, smoke, fumes, glare, or odors.

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:

The proposed use will be unmanned and not create interference to traffic. It will be serviced via an existing driveway by a single technician approximately once a month.

8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief:

The proposed use will not change the topography of the site or create any measurable run off. There will be absolutely zero increase in the potential for flooding.

9. Will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community:

The proposed addition of the DISH Wireless equipment to an existing support structure within an existing equipment compound in a Industrial District behind a warehouse adjacent to railroad tracks will not result in destruction, loss, or damage of natural, scenic or historic features of major importance to the community.

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 until and upon payment of transcribing fees.

4/2/2022	TONY PHILLIPS-FULLERTON	Tony Phillips Digitally signed by Tony Phillips DN: cn=Tony Phillips, o=Fullerton Engineering, ou=Zoning & Permitting, email=tony@fullertonengineering.com, c=US Date: 2022.04.02 20:54:43 -05'00'
Date	Print Name	Signature of Applicant
_____	_____	_____
Date	Print Name	Signature of Applicant
_____	_____	_____
Date	Print Name	Signature of Applicant
_____	_____	_____

**THE BEST INTERESTS OF THE APPLICANT WILL BE SERVED
BY COMPLETING THIS APPLICATION IN DETAIL**

AFFIDAVIT OF AUTHORIZATION

I, Jesika Streit, Crown Castle owner of the property described as

1102 HILL AVENUE, GLEN ELLYN, IL 60137

verify that FULLERTON ENGINEERING CONSULTANTS, LLC

is 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.


OWNER SIGNATURE

Subscribed and sworn to before me this

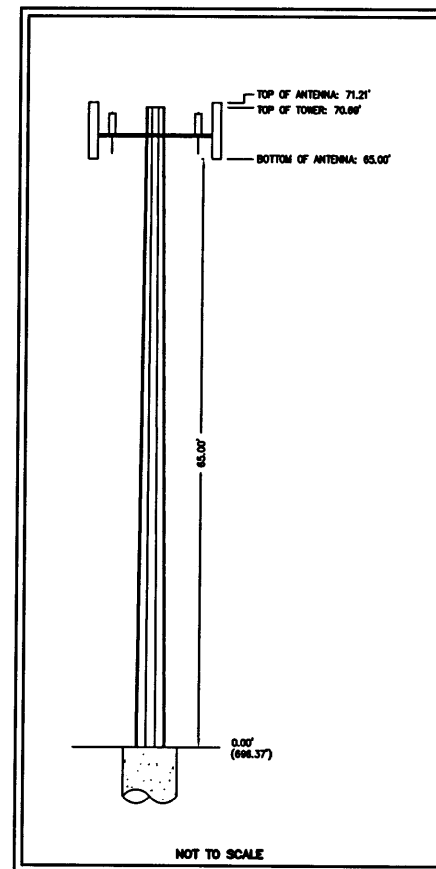
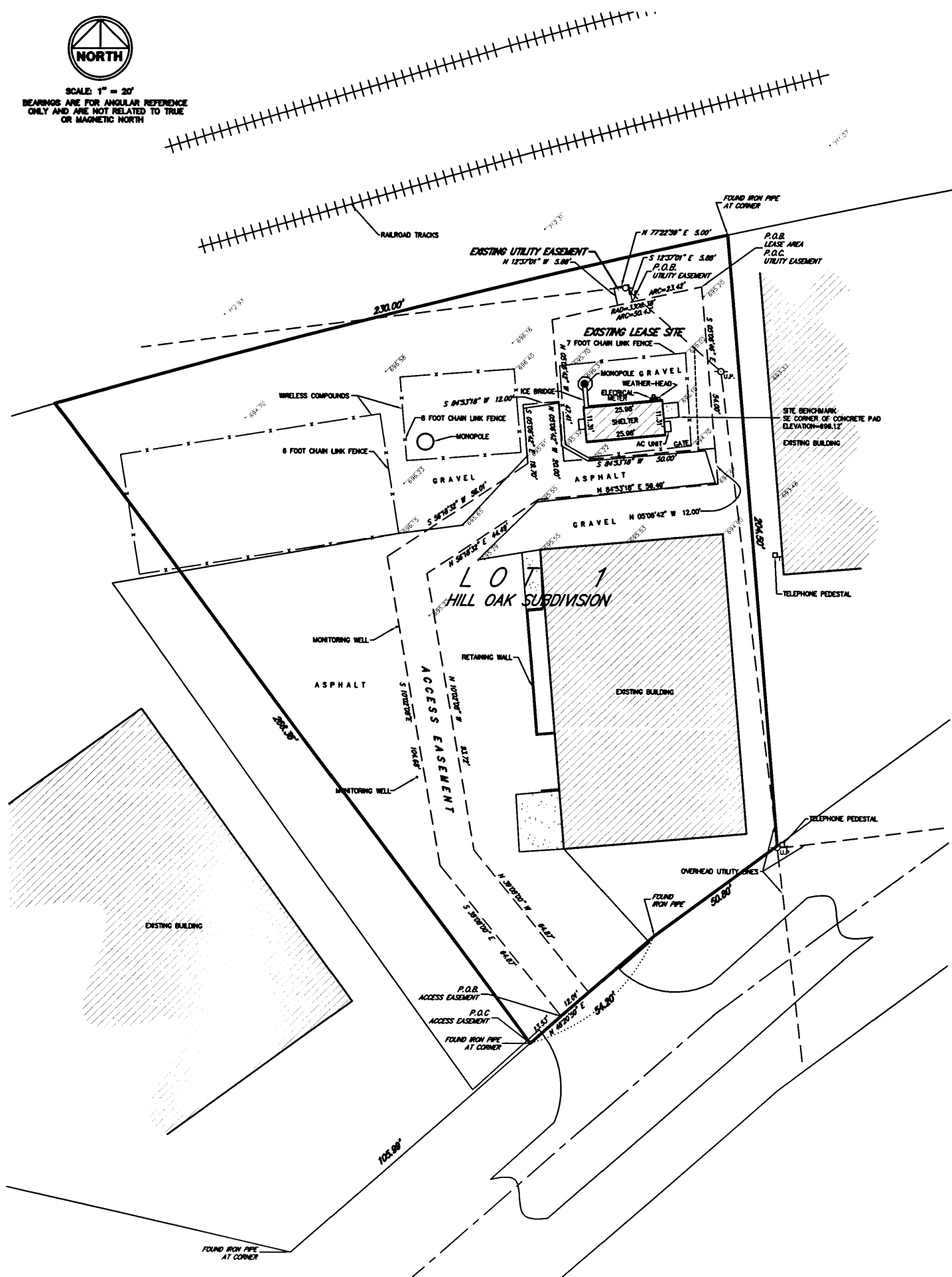
26th day of May, 2022
Clarice S. Gauer

Notary Public





SCALE: 1" = 20'
BEARINGS ARE FOR ANGULAR REFERENCE
ONLY AND ARE NOT RELATED TO TRUE
OR MAGNETIC NORTH



PLAT OF SURVEY

EXISTING AMCI LEASE SITE DESCRIPTION

A PARCEL OF LAND FOR AMCI LEASE SITE PURPOSES LOCATED WITHIN HEREON SAID LOT 1 IN HILL OAK SUBDIVISION BEING A PART OF LOT 12 OF THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY IN ASSESSMENT DIVISION OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAT OF SAID HILL OAK SUBDIVISION RECORDED MAY 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION, RECORDED MAY 21, 1970 AS DOCUMENT R70-15844. BEGINNING AT A POINT OF INTERSECTION OF A LINE DRAWN 10.00 FEET WESTERLY OF THE EAST LINE OF SAID LOT 1 WITH A CURVED LINE DRAWN 15.00 FEET SOUTHERLY OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 1; THENCE SOUTH 05 DEGREES 06 MINUTES 42 SECONDS EAST PARALLEL WITH AND 10.00 FEET WESTERLY OF AS MEASURED PERPENDICULAR TO THE EAST LINE OF SAID LOT 1, A DISTANCE OF 54.00 FEET; THENCE SOUTH 84 DEGREES 53 MINUTES 18 SECONDS WEST, A DISTANCE OF 50.00 FEET; THENCE NORTH 05 DEGREES 06 MINUTES 42 SECONDS WEST, A DISTANCE OF 47.41 FEET; THENCE ALONG A NON-TANGENTIAL CURVE TO THE RIGHT HAVING A RADIUS OF 3306.38 FEET FOR A DISTANCE OF 50.43 FEET FORMING A CHORD BEARING OF NORTH 77 DEGREES 22 MINUTES 59 SECONDS EAST TO THE PLACE OF BEGINNING, CONTAINING 2538.55 SQUARE FEET ALL IN DUPAGE COUNTY, ILLINOIS.

EXISTING AMCI UTILITY EASEMENT DESCRIPTION

A PARCEL OF LAND FOR AMCI UTILITY PURPOSES LOCATED WITHIN HEREON SAID LOT 1 IN HILL OAK SUBDIVISION BEING A PART OF LOT 12 OF THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY IN ASSESSMENT DIVISION OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAT OF SAID HILL OAK SUBDIVISION RECORDED MAY 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION, RECORDED MAY 21, 1970 AS DOCUMENT R70-15844. COMMENCING AT A POINT OF INTERSECTION OF A LINE DRAWN 10.00 FEET WESTERLY OF THE EAST LINE OF SAID LOT 1 WITH A CURVED LINE DRAWN 15.00 FEET SOUTHERLY OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 1; THENCE SOUTHEASTERLY ALONG SAID CURVE TO THE LEFT HAVING A RADIUS OF 3306.38 FEET FOR A DISTANCE OF 50.43 FEET FOR A POINT OF BEGINNING; THENCE CONTAINING ALONG SAID ARC OF A CURVE TO THE LEFT FOR A DISTANCE OF 5.00 FEET; THENCE NORTH 12 DEGREES 37 MINUTES 01 SECONDS WEST, A DISTANCE OF 5.88 FEET; THENCE NORTH 77 DEGREES 22 MINUTES 59 SECONDS EAST, A DISTANCE OF 5.00 FEET; THENCE SOUTH 12 DEGREES 37 MINUTES 01 SECONDS EAST, A DISTANCE OF 5.88 FEET TO THE PLACE OF BEGINNING, CONTAINING 29.38 SQUARE FEET ALL IN DUPAGE COUNTY, ILLINOIS.

EXISTING AMCI ACCESS EASEMENT DESCRIPTION

COMMENCING AT THE SOUTHWEST CORNER OF SAID LOT 1; THENCE NORTH 48 DEGREES 20 MINUTES 50 SECONDS EAST ALONG THE SOUTHERLY LINE OF SAID LOT 1, A DISTANCE OF 13.53 FEET FOR A PLACE OF BEGINNING; THENCE CONTINUING ALONG THE PROLONGATION OF THE LAST DESCRIBED COURSE, A DISTANCE OF 12.01 FEET; THENCE NORTH 39 DEGREES 08 MINUTES 00 SECONDS WEST, A DISTANCE OF 61.24 FEET; THENCE NORTH 10 DEGREES 02 MINUTES 08 SECONDS WEST, A DISTANCE OF 93.72 FEET; THENCE NORTH 56 DEGREES 18 MINUTES 32 SECONDS EAST, A DISTANCE OF 44.49 FEET; THENCE NORTH 84 DEGREES 53 MINUTES 18 SECONDS EAST, A DISTANCE OF 59.49 FEET; THENCE NORTH 05 DEGREES 06 MINUTES 42 SECONDS WEST, A DISTANCE OF 12.00 FEET; THENCE SOUTH 84 DEGREES 53 MINUTES 18 SECONDS WEST, A DISTANCE OF 50.00 FEET; THENCE NORTH 05 DEGREES 06 MINUTES 42 SECONDS WEST, A DISTANCE OF 20.00 FEET; THENCE SOUTH 84 DEGREES 53 MINUTES 18 SECONDS WEST, A DISTANCE OF 12.00 FEET; THENCE SOUTH 05 DEGREES 06 MINUTES 42 SECONDS EAST, A DISTANCE OF 19.70 FEET; THENCE SOUTH 56 DEGREES 18 MINUTES 32 SECONDS WEST, A DISTANCE OF 56.01 FEET; THENCE SOUTH 10 DEGREES 02 MINUTES 08 SECONDS EAST, A DISTANCE OF 104.68 FEET; THENCE SOUTH 39 DEGREES 08 MINUTES 00 SECONDS EAST, A DISTANCE OF 64.87 FEET TO THE PLACE OF BEGINNING, CONTAINING 3518.59 SQUARE FEET ALL IN DUPAGE COUNTY, ILLINOIS.

NOTES

1. BENCHMARK: ∇ SOUTHEAST CORNER OF THE CONCRETE PAD AT THE ENTRANCE TO THE EXISTING EQUIPMENT SHELTER. ELEVATION=696.12'
2. PERMANENT INDEX NUMBER - 05-12-207-033
3. LATITUDE: N 41°32'59.17" (NAD83) LONGITUDE: W 088°02'16.85" (NAD83)
4. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION AND VISIBLE MARKINGS ONLY.
5. FIELD COMPLETED ON 5/31/05
6. THIS SURVEY WAS PREPARED FOR THE INSTALLATION OF WIRELESS COMMUNICATION EQUIPMENT ONLY.
7. THIS SURVEY WAS PREPARED WITHOUT THE AID OF A TITLE COMMITMENT. PLEASE REFER TO A CURRENT TITLE FOR ANY EASEMENTS, SETBACKS OR RESTRICTIONS NOT SHOWN HEREON.

LEGEND		
PROPERTY LINE	TYPICAL IRON PLUMB DIB SECTION	TELEPHONE VAULT
CENTER LINE	CLOSED MANHOLE	GUARDRAIL
EASEMENT LINE	OPEN GRATE MANHOLE	CITY WIRE ANCHOR
BUILDING SETBACK	REPAIR GRATE MANHOLE	CONTOUR LINE
MEASURED DATA	EDGE GRATE/STONE	TREE LINE / WEDGE LINE
RECORD DATA	VALVE VAULT	EDGE GRATE/STONE
CALCULATED DATA	TIME INVERT	FENCE LINE
OF 1/2" (CENTRAL DIA) 1/4" (PERIMETER DIA)	8-BOX / SERVICE VALVE	STORM SEWER
CONCRETE	POST LIGHT, GROUND LIGHT	SANITARY SEWER
EVERGREEN/STAND. TREE	AREA LIGHT	COMBO SEWER
SHRUB	STREET LIGHT	WATER SERVICE LINE
MONITOR WELL	TRAFFIC SIGNAL	OVERHEAD ELDED LINE
GAS VALVE	POLE ARM SIGNAL	OVERHEAD TEELED LINE
	MANHOLE (electric/traffic)	GAS LINE
	GAS METER	U.A. TELECO LINE
	ELECTRIC METER	U.A. ELECTRIC LINE
	PEDESTAL (water, electric, gas)	UTILITY MARKING
	UTILITY POLE	(WATER, GAS, ELEC, ETC.)

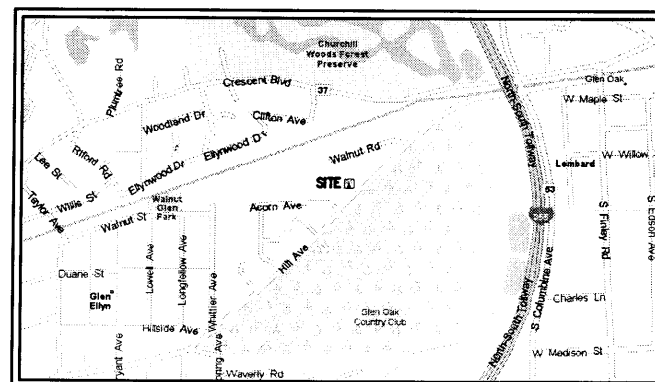
W-T LAND SURVEYING, INC.
LAND AND CONSTRUCTION SURVEYORS
30 EAST SCULLY DRIVE
SCHAMBURG, ILLINOIS 60193
PH. (847) 895-3640 FAX. (847) 895-1854
IL LICENSE NO. 184-001108 EXPIRES 4/30/07

STATE OF ILLINOIS
COUNTY OF COOK

WE, W-T LAND SURVEYING, INC. DO HEREBY DECLARE THAT WE HAVE SURVEYED THE ABOVE DESCRIBED LEASE AND CONVEYED THE SAME TO THE CLIENT. THIS PLAT IS A CORRECT REPRESENTATION OF THE SURVEY.
35-3556

GIVEN UNDER OUR HAND AND SEAL THIS 7th DAY OF JUNE, A.D. 2005.
AT SCHAMBURG, ILLINOIS.

W-T LAND SURVEYING, INC.
SCHAMBURG, ILLINOIS
ILLINOIS PROFESSIONAL DESIGN CORPORATION NO. 184-001108



LOCATION MAP

Crown Castle
USA Inc.
Great Lakes Area

9450 W. Bryn Mawr Avenue
Suite 340
Rosemont, IL 60018

APPROVALS
LANDLORD _____
LEASING _____
R.F. DESIGN _____
ZONING _____
CONSTRUCTION _____
CONSTRUCTION _____
CELL SITE ENG. _____
OPERATION _____

DRAWINGS PREPARED FOR:
W-T
W-T COMMUNICATION
DESIGN GROUP, LLC
2500 W. HIGGINS RD., SUITE 965
HOFFMAN ESTATES, IL 60195
PH. (847) 490-8275 FAX. (847) 895-9955
WWW.WTENGINEERING.COM

PROJECT NO: 805184

DRAWN BY: KCB/MWO

CHECKED BY: FIM

FIELD WORK BY: BSA

817173
LOMBARD 2
21 W 180 HILL AVENUE
GLEN ELLYN, ILLINOIS

SHEET TITLE
LAND SURVEY

SHEET NUMBER
LS-1

Revised 6/29/92

ORDINANCE NO. 3565

**AN ORDINANCE GRANTING A CONDITIONAL USE FOR AN 87 FOOT TALL
MONOPOLE ANTENNA PURSUANT TO SUBSECTION F-2 (c) (2)
IN SECTION 3 OF THE LOMBARD ZONING ORDINANCE, NO. 3274**

(PC 92-14: 714 West Hill Avenue, Lombard, IL)

WHEREAS, the President and Board of Trustees of the Village of Lombard have heretofore adopted the Lombard Zoning Ordinance, otherwise known as Ordinance No. 3274; and,

WHEREAS, the subject property is zoned I Limited Industrial District; and,

WHEREAS, an application has been filed requesting approval of a Conditional Use to provide for the construction of an 87 foot tall monopole antenna on the property described in Section 2 below; and,

WHEREAS, a public hearing on such application has been conducted by the Village of Lombard Plan Commission on June 10, 1992 pursuant to appropriate and legal notice; and,

WHEREAS, THE President and Board of Trustees approve and adopt the findings and recommendations of the Plan Commission and incorporate such findings and recommendations herein by reference as if they were fully set forth herein;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

Section 1: That a Conditional Use is hereby granted for the property described in Section 2 below and pursuant to Subsection F-2 (c) (2) in Section 3 of the Village of Lombard Zoning Ordinance No. 3274 so as to allow said property to be used for the construction of an 87 foot tall monopole antenna within an I Limited Industrial District .

Section 2: That this ordinance is limited and restricted to the property generally located at 714 West Hill Avenue, Lombard, Illinois and legally described as follows:

Lot 1 in Hill Oak Subdivision of that part of Lot 12 lying northerly of the northerly line of Hill Avenue and southerly of the Chicago and Northwestern Railroad Right-of-way in Assessment Division of Section 12, Township 39 North, Range 10, East of the Third Principal Meridian, according to the plat of said Hill Oak Subdivision recorded May 11, 1970 as Document R70-14300 and Certificate of Correction recorded May 21, 1970 as Document R70-15844, in DuPage County, Illinois.

Parcel No. 05-12-207-033

Section 3: This ordinance shall be granted subject to compliance with the following conditions:

1. All site development shall generally comply with the site plan prepared by PAL Popowych Associates, LTD received by the Department of Community Development on May 7, 1992.
2. This conditional use shall be null and void unless a building permit is obtained within one year and a Certificate of Occupancy is obtained within 18 months of the approval of this ordinance.
3. Landscaping is subject to the approval of the Director of Community Development.

Ordinance No. 3565
Re: PC 92-14
Page 2

Section 4: This ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law.

Passed on first reading this _____ day of _____, 1992.

First reading waived by action of the Board of Trustees this 25th day of June, 1992.

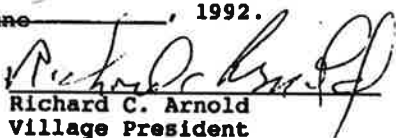
Passed on second reading this 25th day of June, 1992.

Ayes: TRUSTEES KRISCH, VAZQUEZ, BIRD, GATZ, MACKETT

Nayes: TRUSTEE TROSS

Absent: NONE

Approved this 25th day of June, 1992.


Richard C. Arnold
Village President

ATTEST:


Lorraine G. Gerhardt
Village Clerk

APPROVAL AS TO FORM:

Thomas P. Bayer
Village Attorney

Published by me in pamphlet form this 1st day of July, 1991.

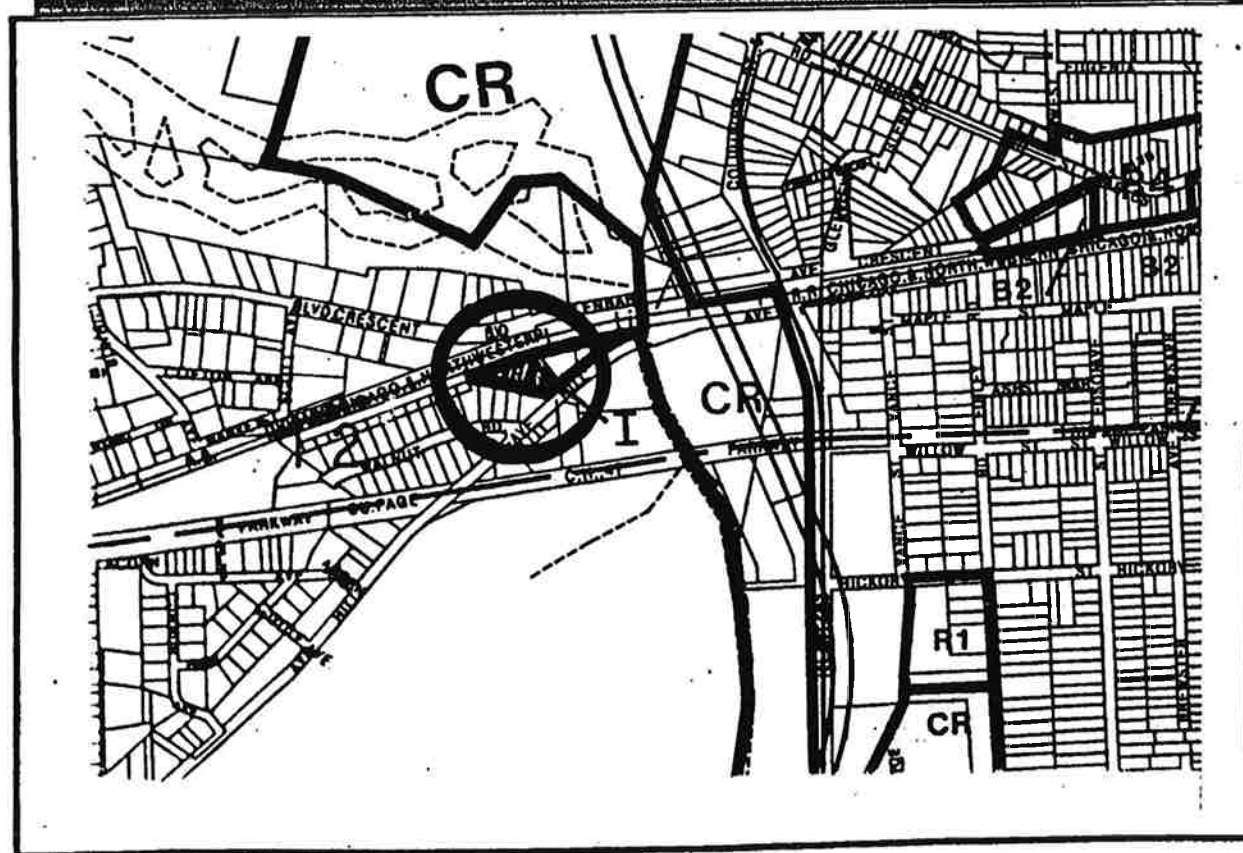

Lorraine G. Gerhardt
Village Clerk

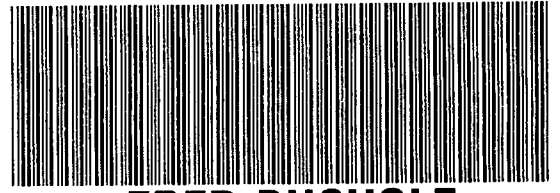
N



Scale **1" = 1000'**

220 West Hill Avenue: Requests a conditional use to provide for an 87 foot tall monopole antenna tower.





FRED BUCHOLZ

DUPAGE COUNTY RECORDER

OCT. 30, 2013

10:56 AM

OTHER

05-12-207-032

035 PAGES

R2013-149932

Village of Glen Ellyn

Ordinance No. 6164

An Ordinance Approving Annexation Agreements for
Properties Located at 21W180 Hill Avenue and 21W200 Hill Avenue
Glen Ellyn, IL 60137

Adopted by the
President and Board of Trustees of the
Village of Glen Ellyn,
DuPage County, Illinois
This 9th Day of September, 2013

Published in pamphlet form by the authority of the
President and Board of Trustees of the Village of
Glen Ellyn, DuPage County, Illinois, this 10th
day of September, 2013

PREPARED BY AND MAIL TO:
VILLAGE OF GLEN ELLYN
ATTN: VILLAGE CLERK
535 Duane Street
Glen Ellyn, IL 60137

Ordinance No. 6164

**An Ordinance Approving Annexation Agreements for
Properties Located at 21W180 Hill Avenue and 21W200 Hill Avenue
Glen Ellyn, IL 60137**

Whereas, Vincent Cuyler, owner of property located at 21W200 Hill Avenue and Lynnea Herlien, daughter of Jean Noorlag owner of 21W180 Hill Avenue, and acting under the authority granted to her by power of attorney, have agreed to enter into annexation agreements with the Village of Glen Ellyn for the aforementioned properties located on the north side of Hill Avenue between Route 53 and Walnut Road; and

Whereas, the subject properties are not located within the corporate limits of any municipality, are contiguous to the corporate limits of the Village of Glen Ellyn and are legally described as follows:

21W180 Hill Avenue

LOTS 1 AND 2 IN HILL OAK SUBDIVISION, BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT NUMBER R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT NUMBER R70-15844 IN DUPAGE COUNTY, ILLINOIS.

P.I.N.s: 05-12-207-032 and 05-12-207-033; and

21W200 HILL AVENUE

PARCEL 1: LOT 1 IN VILLA PARK KITCHENS RESUBDIVISION BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323, ALL IN DUPAGE COUNTY, ILLINOIS,

AND ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT-OF-WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LYING NORTH OF AND ABUTTING LOT 1 IN VILLAGE PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 2 OF SAID VILLAGE PARK KITCHENS RESUBDIVISION AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREES 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHEAST CORNER OF SAID LOT 1 FOR THE POINT OF BEGINNING; RUNNING THENCE WESTERLY ALONG THE NORTH LINE OF SAID LOT , BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3321.38 FEET AND A CENTRAL ANGLE OF 02 DEGREES 04 MINUTES 19 SECONDS, AN ARC DISTANCE OF 120.10 FEET (MEAS., REC.=120.12') THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE, A DISTANCE OF 12.79 FEET; THENCE EASTERLY A DISTANCE OF 69.97 FEET TO A POINT THAT IS 16.00 FEET NORTHERLY OF (MEASURED RADially THERETO) THE NORTH LINE OF VILLA PARK KITCHENS RESUBDIVISION AS AFORESAID; THENCE CONTINUING EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38'=CALC.), A CENTRAL ANGLE OF 00 DEGREES 52 MINUTES 17 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, AN ARC DISTANCE OF 50.75 FEET; THENCE SOUTHEASTERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N. 05-12-207-037

PARCEL 2:

LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323 IN DUPAGE COUNTY, ILLINOIS,

AND, ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT OF WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LAYING NORTH OF AND ABUTTING LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 2 AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREE 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHWEST CORNER OF SAID LOT 2; THENCE NORTHERLY RADIAL TO THE LAST

DESCRIBED CURVE A DISTANCE OF 16.00 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38=CALC.), A CENTRAL ANGLE OF 01 DEGREE 16 MINUTES 50 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 74.60 FEET; THENCE EASTERLY ALONG A LINE THAT IS 16.00 FEET NORTH OF AND PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 176.18 FEET (DEED, 176.22'=MEAS.) TO A POINT THAT IS 16.00 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO SAID NORTH LINE, THE NORTHEAST CORNER OF LOT 2, AFORESAID; THENCE SOUTHERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-12-207-038; and

Whereas, the Village has issued, delivered and published all statutorily required notices regarding the consideration of the proposed annexation agreements; and

Whereas, in accordance with all statutorily required notices, on September 9, 2013, the Village Board conducted a public hearing on the proposed annexation agreements; and

Whereas, after due investigation and consideration and pursuant to the aforesaid public hearing, the President and Board of Trustees deem it in the best interest of the Village of Glen Ellyn to enter into the annexation agreements, attached hereto as *Exhibits "A "* and *"B"*.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The foregoing recitals and the preambles in the annexation agreements attached hereto as *Exhibits "A"* and *"B"* shall be, and are hereby, incorporated into and made a part of this Ordinance as if fully set forth in this Section One.

Section Two: The Village President and Village Clerk are hereby authorized and directed to execute and attest the annexation agreements for 21W180 Hill Avenue and 21W200 Hill Avenue, attached hereto as *Exhibits "A"* and *"B"* on behalf of the Village of Glen Ellyn.

Section Three: The Village Clerk is hereby authorized and directed to cause said annexation

agreements to be recorded with the Recorder of Deeds of DuPage County, upon the proper execution of the same on behalf of all of the parties, together with a certified copy of this Ordinance approving the execution of the annexation agreements on behalf of the Village of Glen Ellyn.

Section Four: This Ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form.

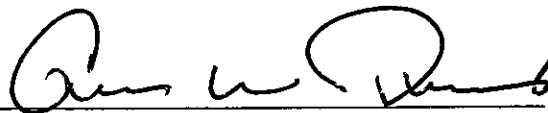
Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this 9th day of September, 2013.

Ayes: Trustees Clark, Elliott, Thedberg, Sadare and McKinley

Nays: 0

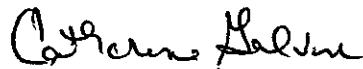
Absent: Trustee O'Shea

Approved by the Village President of the Village of Glen Ellyn, Illinois, this 9th day of September, 2013.



Village President of the
Village of Glen Ellyn, Illinois

Attest:



Village Clerk of the
Village of Glen Ellyn, Illinois

(Published in pamphlet form and posted on the 10th day of September 2013)

X:\Plandev\PLANNING\ANNEXATIONS\Hill Avenue\Ordinance Approving AA.doc



CERTIFICATION

I, Catherine Galvin, duly elected Village Clerk of the Village of Glen Ellyn, Illinois, do hereby certify that the attached is a true and correct copy of Ordinance No. 6164, passed by the Board of Trustees of the Village of Glen Ellyn, Illinois, at the Regular Board Meeting of said Board held on the 9th day of September 2013, and that the same was signed and approved by the President of said Village on the 9th day of September 2013.

I do further certify that the original, of which the attached is a true and correct copy, is entrusted to me as Village Clerk of said Village for safekeeping and that I am the lawful custodian and keeper of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Glen Ellyn, Illinois, this 9th day of September, 2013.

Catherine Galvin

Village Clerk

CORPORATE SEAL

ANNEXATION AGREEMENT

This Annexation Agreement ("Agreement") is made and entered into this 9th day of September, 2013, by and between the VILLAGE OF GLEN ELLYN, an Illinois municipal corporation having its principal office in DuPage County, Illinois ("Village"), and WEST SUBURBAN BANK LAND TRUST NO. 3344 BY NOORLAG REAL ESTATE GROUP, LLC BY LYNEA R. HERLIEN, MANAGER ("Owner"). The Village and Owner are collectively referred to as ("Parties").

RECITALS

A. The Owner is the Owner of record of two adjacent parcels of land totaling 2.82 acres commonly known as 21W180 Hill Avenue. The Property is located on the north side of Hill Avenue between Illinois Route 53 and Walnut Road and is not currently contiguous to the Village of Glen Ellyn. The subject Property is legally described on *Exhibit "A"* attached hereto and is identified for real estate purposes with P.I.N.s of 05-12-207-032 and 05-12-207-033 ("Property"). The Property is currently improved.

B. The Village is an Illinois home rule municipal corporation, having its principal office at 535 Duane Street, Glen Ellyn, Illinois.

C. The Owner desires to annex the Property to the Village, as soon as reasonably practicable following the establishment of contiguity between the corporate boundaries of the Village and the Property, pursuant to and in accordance with Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8, and agrees to do all things necessary to assist in that process when the Village so requests, including the execution and delivery to the Village Clerk of a notarized annexation petition, which petition shall strictly conform to *Exhibit "B"* to this Agreement ("*Annexation Petition*").

D. Each parcel of the Property is currently being served by water from the Village of Lombard.

E. The Owner desires to disconnect the Property from the Lombard water system and connect the Property to the Village of Glen Ellyn water system upon Glen Ellyn water becoming available to the Property.

F. Each parcel of the Property is currently served by Village of Lombard sanitary sewer.

G. The Owner desires to disconnect the Property from the Lombard sanitary sewer system and connect the Property to the Village of Glen Ellyn sanitary sewer system upon Glen Ellyn sanitary sewer becoming available to the Property.

H. A public hearing to consider this Agreement was noticed in the Daily Herald on AUGUST 22, 2013 and was held by the Village President and Board of Trustees on SEPTEMBER 9, 2013.

I. The Village has published all notices as required by the Illinois Municipal Code 65 ILCS 5/11-15.1-3 *et seq.*

I. The annexation of the Property shall extend the corporate limits of the Village to the far side of any adjacent highway not heretofore annexed to any other municipality.

K. All other matters, in addition to those specifically referred to above, which are included in this Agreement, have been considered by the Parties, and the annexation of the Property will inure to the benefit and improvement of the Village by increasing the taxable value of the real property within the Village's corporate limits, extending the corporate limits and jurisdiction of the Village to the limits of the Property, promoting the sound planning and development of the Village, and otherwise enhancing and promoting the general welfare of the Village residents and taxpayers.

NOW, THEREFORE, the Owner and Village, in consideration of the mutual covenants herein contained, agree as follows:

1. Incorporation of Recitals. The recitals above are hereby incorporated by reference into this Agreement.

2. Legal Conformance with Law. This Agreement is made pursuant to and in accordance with the provisions of the Village of Glen Ellyn Village Code, and its home rule powers, as established in the Illinois Revised Statutes and the Illinois Constitution.

3. Annexation. Upon notification by the Village that the Property has become, in the opinion of the Village, adjacent and contiguous to the Village, the Owner (if still holding title to any portion of the Property) and each grantee(s) shall within 30 days (a) file a fully executed Annexation Petition in a form approved by the Village Attorney and substantially in accordance with the form of *Exhibit "B"* attached to this agreement and (b) provide Owner's proof of Ownership of the Property. A Plat of Annexation for the Property shall also be prepared by the Village. Upon, but not before the Village's receipt of the Annexation Petition, the Owner's proof of Ownership, and preparation of a Plat of Annexation, the Village's Corporate Authorities may adopt a valid and binding Annexation Ordinance providing for the annexation of the Property and any adjacent rights-of-way to the Village pursuant to Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8. The Village Clerk shall then promptly cause the Annexation Ordinance, Plat of Annexation, and related documents, to be recorded in the Office of the DuPage County Recorder.

Alternatively, at the option of the Village, within 30 days after notice from the Village to do so, and subject to the provisions of 65 ILCS 5/7-1-2 *et. seq.*, or 65 ILCS 5/7-1-11, as amended, the Owner and/or her successors and assigns shall join in, and properly execute, An Annexation Petition to be filed with the Circuit Court of the Eighteenth Judicial Circuit, DuPage County, Illinois, and shall cooperate with the prosecution of the Petition before said court, provided, however, that the costs of any such litigation shall not be the responsibility of the Owner.

If all or a portion of the Property is conveyed prior to the annexation of the Property to the Village, whether by the Owner or other subsequent grantor, any contract for sale or other agreement relating to each and every such conveyance shall contain an acknowledgement by the grantee of the existence of this Agreement and the requirement that upon the Property becoming, in the opinion of the Village, adjacent and contiguous to the Village, the Property will be annexed to the Village. In addition, each such contract or other agreement shall contain an agreement by the grantee(s) to do all things necessary or appropriate to cause the Property to be duly and validly annexed to the Village, including, but not limited to, execution of an Annexation Petition.

Should a court of competent jurisdiction determine that annexation of the Property was defective because of the failure of the Parties to follow a procedural requirement constituting a valid precondition to proper annexation of the Property, the Parties, including the successors and assigns of the Owner, agree to promptly cause the Property to be reannexed to the Village in a manner that satisfies all procedural requirements.

Should a court of competent jurisdiction determine that annexation of the Property by the Village was without lawful authority (i.e., lack of contiguity), the Parties agree that this Agreement shall be deemed a Pre-Annexation Agreement authorized pursuant to 65 ILCS 5/11-15.1-1, as amended, and shall remain in full force and effect to the extent permitted by law. Thereafter, should the Property become contiguous to the Village, the Parties, including the successors and assigns of the Owner, agree to promptly take all necessary steps as may then be provided by law to perfect the annexation of the Property to the Village.

4. Zoning. Within six (6) months of the approval of this Agreement, the Village will hold a public hearing and create a new light industrial zoning district. The Owner will receive advance notice of all public meetings and hearings of the Glen Ellyn Plan Commission at which the new light industrial zoning district is discussed. Because the parties to this Agreement desire to move quickly to cause the execution of this Annexation Agreement, the public hearing, before the Plan Commission required by law to take place before the Village Board can definitely act upon the light industrial zoning district, will not have yet taken place prior to the adoption of this Agreement. For this reason, in the event that the Village does not within six (6) months of the date of the execution of this Agreement, approve a new light industrial zoning district, the Agreement shall be void and all the promises and obligations of the Owner shall be terminated. If, however, as is anticipated, the Village does adopt the aforementioned light industrial zoning district, it shall, upon the annexation of the subject Property, grant the light industrial zoning district to the subject Property.

Any existing use or condition of the Property, upon annexation, that does not comply with the requirements of Glen Ellyn's Zoning Code may continue and will be considered a permitted nonconforming use. The Owner's most current plat of survey documenting the existing conditions of the Property shall be submitted to the Village within thirty (30) days of approval of this Agreement and used in conjunction with aerial photographs and other plans, plats and similar documents to evidence the current uses and conditions of the site. Notwithstanding anything herein to the contrary, following annexation, any new tenants occupying the building shall conform to the use regulations of the applicable Village zoning district.

5. Water Service. Each parcel of the Property is currently served by water from the Village of Lombard and the Owner desires to connect to the Glen Ellyn water system upon it becoming available to the Property. The Owner agrees to allow the Village to disconnect the Property from the Lombard water system and connect the Property to the Glen Ellyn water system upon Glen Ellyn water becoming available to the Property. The Owner shall meet all applicable ordinance requirements pertaining to such connections, including upgrades and other necessities. The Owner shall not be required to pay their proportionate share of any water main extension by the Village. The Village further agrees to waive all permit fees, connection fees and building permit deposits related to connecting the Owner's private service line to the Village's water main.

At the time that the Glen Ellyn water system is available to the Property, the Village of Glen Ellyn shall make a good faith effort to connect the Property as part of the water main extension project. If improvements are needed to correct deficiencies or Owner responsible upgrades are required to make a connection, the Owner agrees to hire a contractor and to pay up to \$5000 of the private costs and charges associated with the connection of a private water service line to the Village of Glen Ellyn's water main with the Village paying any amount over \$5000. Any water service connections shall be inspected by Village staff to ensure that they are constructed in accordance with Village standards.

In the event that the Owner fails to petition Glen Ellyn for annexation in accordance with Section 3 above or fails to comply with any other provision of this Annexation Agreement, Glen Ellyn may, at its sole option, discontinue water service to the property and enforce this Agreement in a court of appropriate jurisdiction by specific performance.

6. Sanitary Sewer Service. Each parcel of the Property is currently receiving sanitary sewer service from the Village of Lombard and the Owner desires to connect to the Glen Ellyn sanitary sewer system upon it becoming available to the Property. The Owner agrees to allow the Village to disconnect the Property from the Lombard sanitary sewer system and connect the Property to the Glen Ellyn sanitary sewer system upon Glen Ellyn sanitary sewer becoming available to the Property. The Owner shall meet all applicable ordinance requirements pertaining to such connections, including upgrades and other necessities. The Owner shall not be required to pay their proportionate share of any sanitary sewer main extension by the Village. The Village further agrees to waive all permit fees, connection fees and building permit deposits related to connecting the Owner's private service line to the Village's sanitary sewer main.

At the time that the Glen Ellyn sanitary sewer system is available to the Property, the Village of Glen Ellyn shall make a good faith effort to connect the Property as part of the sanitary sewer extension project. If improvements are needed to correct deficiencies or Owner responsible upgrades are required to make a connection, the Owner agrees to hire a contractor and to pay up to \$5000 of the private costs and charges associated with the connection of a private sanitary sewer service line to the Village of Glen Ellyn sanitary sewer main with the Village paying any amount over \$5000. Any sanitary sewer connections shall be inspected by Village staff to ensure that they are constructed in accordance with Village standards.

In the event that the Owner fails to petition Glen Ellyn for annexation in accordance with Section 3 above or fails to comply with any other provision of this Annexation Agreement, Glen Ellyn may, at its sole option, discontinue sanitary sewer services to the Property and enforce this Agreement in a court of appropriate jurisdiction by specific performance.

7. Rates for Water and Sanitary Sewer Service. Until such time as the Property is annexed to Glen Ellyn, the Owner agrees to pay the usual and customary charges for water and sanitary sewer service for customers outside of Glen Ellyn's corporate limits, as may be established from time-to-time by the corporate authorities of Glen Ellyn. Upon annexation, the Owner shall pay the same rates for water and sanitary sewer services charged to customers inside the Village limits.

8. Fire Protection. The Property is currently served by the Village of Lombard Fire Department. Upon approval of this annexation agreement, the property will be disconnected from the Lombard Fire District and fire service will be provided by the Glen Ellyn Volunteer Fire Company. The Owners agree to pay their proportionate share of the cost of fire service by either becoming part of a Special Service Area approved by the Village on November 23, 2009 by the adoption of Ordinance 5822 and recorded with the DuPage County Recorder of Deeds as document number R2009-191157 which imposes a special tax on unincorporated properties for fire protection services provided by the Glen Ellyn Volunteer Fire Company (hereinafter "Fire SSA") or upon receiving an invoice, pay an annual amount equal to what would be charged against the Property, if the Property were included in the Fire SSA. Payments to support the Glen Ellyn Voluntary Fire Company will continue to be collected annually until such time as the Property is annexed to Glen Ellyn. Following annexation, the Village shall reimburse the Owners the proportional amount for any payments for fire service following the date of annexation and remove the Property from the Fire SSA, if appropriate.

In accordance with existing state law, the Lombard Fire District may require the Village to pay it an amount of money which, over a period of years, equals three (3) years of lost Fire Protection District taxes. If the Village is requested and obligated by law to pay lost real estate tax revenue to the Lombard Fire District, the Owner shall reimburse the Village for the actual amounts which the Village is required to pay.

9. Utility Easements. The Owner agrees to grant the Village at no cost utility easements to allow the Village to extend water and sanitary sewer mains across the Property which will allow the Village to connect the water and sanitary sewer systems in the area from Crescent Boulevard to Hill Avenue. The areas of the easements to be established are identified on *Exhibits "C1" and "C2"* attached hereto. The Village will at its own cost, prepare all plats, agreements and other easement documentation related to the easement for execution by the Owner. The easement documentation will state, among other matters that any construction will be performed with minimal disruption to the Owner and any tenants on the Property, that the easement parcel will not materially conflict with any existing easements, and that the Property will be placed in at least as good a condition as existing prior to construction. The Owner shall not delay execution of these documents and shall sign them within 30 days of approval of the documents.

10. Village Codes. While the Property remains in unincorporated DuPage County, it shall be developed pursuant to the building and zoning regulations of DuPage County, except as otherwise provided herein. From and after the date of annexation of the Property to the Village, the property shall be maintained in accordance with and pursuant to the Village Code of Glen Ellyn, including the building, subdivision, and zoning regulations contained therein, except as otherwise noted in Section 4 of this Agreement. Notwithstanding anything above to contrary, the Owner shall abide, prior to annexation, with all ordinances and regulations of the Village that relate to water and sanitary sewer service. In addition, the Owner shall with regard to new construction, renovation or expansion, be required to follow the Village Ordinances regarding sprinkler systems prior to and after annexation.

11. Hill Avenue. Hill Avenue shall be maintained by the Village of Lombard until such time as the Property is annexed to Glen Ellyn or Hill Avenue is otherwise incorporated into Glen Ellyn as part of any agreement between Glen Ellyn and Lombard or the property on the south side of Hill Avenue is annexed to Glen Ellyn.

12. Village Address. Upon annexation to the Village, the Village will assign the appropriate Village addresses to the Property.

13. Waiver of Annexation Fee. The Village agrees to waive its usual and customary annexation fee for the Property upon annexation to the Village.

14. Term. The term of this Agreement will be 20 years from the date of execution hereof, which will be deemed to become effective on the date hereof.

15. Annexation Agreement Extension. At the option of the Village, the Village may extend this Annexation Agreement, at its conclusion, for an additional period of up to 20 years for a portion or all of the Property. If the Village wishes to exercise this option, it shall do so in writing not earlier than two years before the expiration of the Annexation Agreement, nor later than three months prior to this Agreement's initial termination date. Notice shall be sent in writing to (i) that entity that has paid the real estate property taxes during one of the last two years for the Property or that portion of the Property for which the Village wishes to extend this Agreement or (ii) to the record title holder of the Property or that portion of the Property for which the Village wishes to extend this Agreement. If the Village decides in its sole and absolute opinion to extend the term of this Agreement, the Village may do so whether or not the Property, or any portion of the Property, has been annexed to the Village. The Village may only extend the term of this Agreement once. In the event that the Village has not exercised the option to extend the term of this Agreement pursuant to this Section, and if the Property has not been annexed to the Village at this Agreement's initial termination date, the Village and the Owner may enter into a new Annexation Agreement in the manner provided by law. If the Village has been providing utility services to the non-annexed Property or any non-annexed portions of the Property pursuant to this Agreement, it may terminate such utility service at the conclusion of this Agreement; provided, however, that the Village provide not less than one year prior written notice of such termination to (i) that entity that has paid the real estate property taxes during one of the last two years for the Property or that portion of the Property for which the Village desires to terminate any such utility service or (ii) to the record title holder of the

Property or any portion of the Property for which the Village desires to terminate any such utility service.

16. General Provisions.

A. Severability. In the event that any portion of this Annexation Agreement will be found to be invalid by any court of competent jurisdiction, such finding of invalidity as to that portion will not affect the validity or enforceability of the balance of this Agreement.

B. Remedies. In addition to all rights and remedies specified in this Agreement, the Village will have the authority to pursue any and all rights and remedies, at law or in equity, to which it is entitled in order to enforce the terms of this Agreement. In the event that the Owner fails to comply, the Village may institute an action for specific performance along with other civil and quasi-criminal actions as permitted by law, and the Village may disconnect the water and sanitary sewer services. The Owner will be further liable for any attorney fees, court costs and other costs incurred by the Village as a consequence of the Village's enforcement of this provision.

C. Amendment. This Agreement may be amended from time to time with the consent of the parties, pursuant to Statute.

D. Conflict Regulations. The provisions of this Agreement shall supersede the provision of any Village Codes and Ordinances that may be in conflict with the provisions of this Agreement.

E. Enforcement. This Agreement shall be enforceable in any court of competent jurisdiction by either the Owner or the Village, and their respective successors and assigns, by an appropriate action at law or in equity, to secure the performance of the promises, obligations, and covenants in this Agreement, including the specific performance of this Agreement. The laws of the State of Illinois shall govern this Agreement. Any lawsuit enforcement filed against the Village of Glen Ellyn, or its officers, employees or independent contractors may only seek injunction, mandamus or specific performance for the enforcement of the agreement and may not seek damages.

F. Successors and Assigns and Ownership. This Agreement shall inure to the benefit of and be binding upon the Owner and Village and their respective successors and assigns. No conveyance, transfer or assignment of fee title in the Property or of this Agreement shall serve to release the Owner of her duties and obligations already undertaken under this Agreement. Both parties acknowledge by their signature to this Agreement that the statements made in this Annexation Agreement are true and that they have the authority to execute the Agreement and to bind the Village or the Owner.

G. Application of Ordinances. Upon annexation, the Property and its use will be subject to all Village ordinances generally applicable throughout the Village except as herein set forth.

H. Recording. The Village Clerk is hereby directed to cause this Agreement to be recorded with the Recorder of Deeds of DuPage County, following its execution and approval by the Village Board.

I. No Disconnection. Once the Property subject to this Annexation Agreement has been annexed to the Village, the Owner shall not petition the Circuit court to take any other action to cause the Property to be disconnected from the Village during the term of this Annexation Agreement or any extension to that term. In addition, the Owner may not during the term of this Annexation Agreement petition any other municipality or a court to permit annexation to another municipality.

J. Recitals and Exhibits. The recitals set forth in the beginning of this Agreement, and the exhibits attached hereto, are incorporated herein by this reference and shall constitute substantive provisions to this Agreement.

K. Captions and Paragraph Headings. The captions and paragraph headings used herein are for convenience only and shall not be used in construing any term or provision of this Agreement.

17. Notice. Any notice or communication required or permitted to be given under this Agreement shall be in writing and shall be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid, (iv) by facsimile, or (v) by electronic internet mail ("*e-mail*"). Facsimile notices shall be deemed valid only to the extent that they are (a) actually received by the individual to whom addressed and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. E-mail notices shall be deemed valid only to the extent that they are (a) opened by the recipient on a business day at the address set forth below, and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. Unless otherwise provided in this Agreement, notices shall be deemed received after the first to occur of (a) the date of actual receipt; or (b) the date that is one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) the date that is three business days after deposit in the U.S. mail, as evidenced by a return receipt. By notice complying with the requirements of this Section each party to this Agreement shall have the right to change the address or the addressee, or both, for all future notices and communications to them, but no notice of a change of addressee or address shall be effective until actually received.

Notices and communications to the Village shall be addressed to, and delivered at, the following address:

Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137
Attn: Planning and Development Director

Notices and communications to the Owner shall be addressed to, and delivered at, the following address:

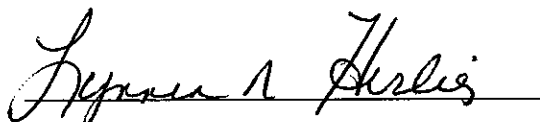
IN WITNESS WHEREOF, the parties have caused this Annexation Agreement to be executed by their duly authorized officers or individually, as the case may be, on _____, 2013.

VILLAGE OF GLEN ELLYN
A Municipal Corporation:

Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137

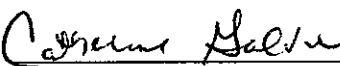
BY: 
Village President

OWNER:

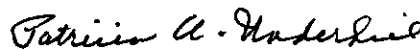


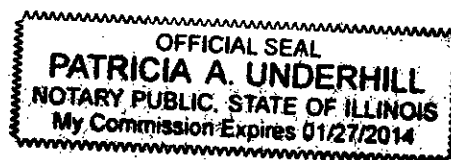
BY: _____

ATTEST:

BY: 
Village Clerk

SUBSCRIBED AND SWORN to
before me this 13th day of
AUGUST, 2013.


Notary Public



STATE OF ILLINOIS)
) SS
COUNTY OF DU PAGE)

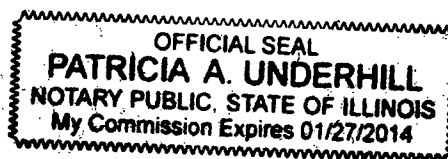
I, the undersigned, a Notary Public, in and for the County and State aforesaid, DO HEREBY CERTIFY, that ALEXANDER W. DEMOS personally known to me to be the President of the Village of Glen Ellyn, an Illinois municipal corporation, and CATHERINE CALVIN, personally known to me to be the Clerk of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such President and Clerk, they signed said instrument as the President and the Clerk of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Trustees of said corporation as their free and voluntary act, and as the free and voluntary act of said corporation, for the uses and purposes therein set forth.

Given under my hand and official seal, this 10th day of SEPTEMBER, 2013.

Patricia A. Underhill

Notary Public

My Commission Expires: 01/27/2014



STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for the County of DuPage, Illinois, DO HEREBY CERTIFY that LYNNEA R. HERLIEN, personally known to me to be the same person whose name is subscribed in the foregoing instrument, appeared before me this day in person, and acknowledged that he signed, sealed and delivered said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and official seal this 13th day of AUGUST, 2013.

Patricia A. Underhill
Notary Public

My Commission Expires: 01/27/2014



**EXHIBIT A
LEGAL DESCRIPTION**

LOTS 1 AND 2 IN HILL OAK SUBDIVISION, BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT NUMBER R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT NUMBER R70-15844 IN DUPAGE COUNTY, ILLINOIS.

P.I.N.s: 05-12-207-032 and 05-12-207-033

Commonly known as 21W180 Hill Avenue

X:\Plandev\PLANNING\ANNEXATIONS\Hill Avenue\Draft Agreement Noorlag 083010.doc

EXHIBIT B

**PETITION FOR ANNEXATION
VILLAGE OF GLEN ELLYN, ILLINOIS**

TO THE GLEN ELLYN VILLAGE BOARD:

Petitioners on oath state as follows:

1. That the undersigned are the sole Owner of record of all of the property described in Attachment A and commonly known as 21W180 Hill Avenue with P.I.N.s: of 05-12-207-032 and 05-12-207-033 (Subject Realty).
2. That this petition is executed by all of the owner(s) of record of the Subject Realty.
3. That no electors reside on the Subject Realty or, in the alternative, at least fifty-one percent (51%) of the electors residing on the Subject Realty have executed this petition.
4. That no portion of the property is within the corporate limits of any municipality.
5. That the Subject Property is either contiguous to the Village of Glen Ellyn, will be at the time of annexation, or may be contiguous when combined with other property annexing to the Village of Glen Ellyn.
6. That the property which the Petitioners desire to have annexed to the Village of Glen Ellyn is the property that is described in Attachment A attached hereto and made a part hereof.
7. That this Petition shall be in full force and effect from and after the date hereof and until the property is annexed to the Village of Glen Ellyn in agreement with State Law.

WHEREFORE, the applicants' petition that the property be annexed by ordinance to the Village of Glen Ellyn, Illinois, is in accordance with the appropriate statutes.

The undersigned, on oath, state that the undersigned have read the foregoing Petition for Annexation, have knowledge of the allegations contained therein, and that said allegations are true and correct to the best of the Petitioners' knowledge.

Owner of Record of Subject Property:

Signature: _____

Print Name: _____

Date: _____

Subscribed and sworn to before me this
_____ day of _____, 20__

NOTARY PUBLIC

Signature: _____

Print Name: _____

Date: _____

Subscribed and sworn to before me this
_____ day of _____, 20__

NOTARY PUBLIC

The diagram illustrates a land survey with the following features:

- LOT 1 TRACT - A**: A central rectangular area.
- TRACT - B**: Located at the top left, featuring a "PERPETUAL EASEMENT" and dimensions of "5' AND 25' X 20'".
- TRACT - C**: A diagonal strip running from the bottom left towards the center, labeled "20' TEMPORARY CONSTRUCTION EASEMENT".
- Easements**:
 - "EXISTING 15' UTILITIES EASEMENT PER DOC. NO. R70-15844 & R65-50505" along the top boundary.
 - "EXISTING 10' UTILITIES EASEMENT PER DOC. NO. R70-15844 & R65-50505" along the right boundary.
 - "5' AND 25' X 20' PERPETUAL EASEMENT TRACT-B" along the left boundary.
- Other Features**:
 - A "DRAIN LINE FENCE" indicated by a dashed line with crosses.
 - A "CULVERT" shown as a hatched rectangular structure.
 - A "ROAD" or "ALLEY" shown as a hatched area at the bottom right.
 - A "NORTH ARROW" pointing towards the top right.
 - Various other labels like "BL", "DOC", and "W" indicating specific points or documents.

SHEET	1
OF	2

PLAT TO ACCOMPANY EASEMENT TO THE
VILLAGE OF GLEN ELLYN
LOT 1 OF HILL OAK SUBDIVISION

LEGAL DESCRIPTIONS

TRACT A (PARENT TRACT):

LOT 1 OF HILL OAK SUBDIVISION BEING A SUBDIVISION IN THE NORTHEAST $\frac{1}{4}$ OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPLE MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT R70-15844 IN DUPAGE COUNTY, ILLINOIS.

TRACT B (PERPETUAL EASEMENT):

THE SOUTH WESTERLY 15 FEET AND THE NORTH EASTERLY 10 FEET OF THE SOUTH WESTERLY 25 FEET OF THE NORTH WESTERLY 20 FEET OF LOT 1 OF HILL OAK SUBDIVISION BEING A SUBDIVISION IN THE NORTHEAST $\frac{1}{4}$ OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPLE MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT R70-15844 IN DUPAGE COUNTY, ILLINOIS (AS MEASURED AT RIGHT ANGLES TO THE SOUTH WESTERLY AND NORTH WESTERLY LINES THEREOF).

TRACT C (TEMPORARY CONSTRUCTION EASEMENT):

THE NORTHEASTERLY 20 FEET OF THE SOUTHWESTERLY 35 FEET OF LOT 1 OF HILL OAK SUBDIVISION BEING A SUBDIVISION IN THE NORTHEAST $\frac{1}{4}$ OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPLE MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT R70-15844 IN DUPAGE COUNTY, ILLINOIS (AS MEASURED AT RIGHT ANGLES TO THE SOUTH WESTERLY LINE THEREOF).

STATE OF ILLINOIS
COUNTY OF DUPAGE

THIS IS TO CERTIFY THAT THE PLAT HEREON DRAWN WAS PREPARED BY WALTER E. DEUCHLER ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL LAND SURVEYING CORPORATION, FOR THE PURPOSE OF DELINEATING THE LIMITS OF AN EASEMENT. IT IS FURTHER CERTIFIED THAT SAID PLAT WAS PREPARED FROM EXISTING RECORDS AND THAT NO FIELD LAND SURVEY WAS PERFORMED.

DATED AT AURORA, ILLINOIS, THIS _____ DAY OF _____, 2009.

ILLINOIS PROFESSIONAL DESIGN
CORPORATION NO. 1830

PREPARED BY AND RETURN TO: WALTER E. DEUCHLER ASSOCIATES, INC.
230 WOODLAWN AVENUE
AURORA, IL 60506

WALTER E. DEUCHLER ASSOCIATES, INC.
Consulting Engineers - Aurora, Illinois

SHEET	2
OF	2

VISIONS			
CAD DWG:\GE\05036\EASEMENTS.DWG			
SIGNED LAM	APPROVED JWF	BOOK XXX	JOB NUMBER
DRAWN LAM	DATE 08/05/09	SCALE NA	200-05036-00

PLAT TO ACCOMPANY EASEMENT TO THE
VILLAGE OF GLEN ELLYN
LOT 1 OF HILL OAK SUBDIVISION

ANNEXATION AGREEMENT

This Annexation Agreement ("Agreement") is made and entered into this 9th day of SEPTEMBER, 2013, by and between the VILLAGE OF GLEN ELLYN, an Illinois municipal corporation having its principal office in DuPage County, Illinois ("Village"), and G. VINCENT CUYLER AND BARBARA J. CUYLER ("Owners"). The Village and Owners are collectively referred to as ("Parties").

RECITALS

A. The Owners are the Owners of record of two adjacent parcels of land totaling 1.08 acres commonly known as 21W200 Hill Avenue. The Property is located on the north side of Hill Avenue between Illinois Route 53 and Walnut Road and is not currently contiguous to the Village of Glen Ellyn. The subject Property is legally described on *Exhibit "A"* attached hereto and is identified for real estate purposes with P.I.N.s of 05-12-207-037 and 05-12-207-038 ("Property"). The Property is currently improved.

B. The Village is an Illinois home rule municipal corporation, having its principal office at 535 Duane Street, Glen Ellyn, Illinois.

C. The Owners desire to annex the Property to the Village, as soon as reasonably practicable following the establishment of contiguity between the corporate boundaries of the Village and the Property, pursuant to and in accordance with Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8, and agree to do all things necessary to assist in that process when the Village so requests, including the execution and delivery to the Village Clerk of a notarized annexation petition, which petition shall strictly conform to *Exhibit "B"* to this Agreement ("*Annexation Petition*").

D. The building on the western parcel is currently served by well water and the building on the eastern parcel is currently served by water from the Village of Lombard.

E. The Owners desire to disconnect the eastern parcel from the Lombard water system and connect it to the Village of Glen Ellyn water system upon Glen Ellyn water becoming available and to also connect the western parcel to the Village of Glen Ellyn water system.

F. The western parcel is currently served by a septic system and the eastern parcel is currently served by Village of Lombard sanitary sewer.

G. The Owners desire to disconnect the eastern parcel from the Lombard sanitary sewer system and connect the eastern parcel to the Village of Glen Ellyn sanitary sewer system upon Glen Ellyn sanitary sewer becoming available to the Property and to also connect the western parcel to the Village of Glen Ellyn sanitary sewer system.

H. A public hearing to consider this Agreement was noticed in the Daily Herald on AUGUST 22, 2013 and was held by the Village President and Board of Trustees on SEPTEMBER 9th, 2013.

I. The Village has published all notices as required by the Illinois Municipal Code 65 ILCS 5/11-15.1-3 *et seq.*

I. The annexation of the Property shall extend the corporate limits of the Village to the far side of any adjacent highway not heretofore annexed to any other municipality.

K. All other matters, in addition to those specifically referred to above, which are included in this Agreement, have been considered by the Parties, and the annexation of the Property will inure to the benefit and improvement of the Village by increasing the taxable value of the real property within the Village's corporate limits, extending the corporate limits and jurisdiction of the Village to the limits of the Property, promoting the sound planning and development of the Village, and otherwise enhancing and promoting the general welfare of the Village residents and taxpayers.

NOW, THEREFORE, the Owners and Village, in consideration of the mutual covenants herein contained, agree as follows:

1. Incorporation of Recitals. The recitals above are hereby incorporated by reference into this Agreement.

2. Legal Conformance with Law. This Agreement is made pursuant to and in accordance with the provisions of the Village of Glen Ellyn Village Code, and its home rule powers, as established in the Illinois Revised Statutes and the Illinois Constitution.

3. Annexation. Upon notification by the Village that the Property has become, in the opinion of the Village, adjacent and contiguous to the Village, the Owners (if still holding title to any portion of the Property) and each grantee(s) shall within 30 days (a) file a fully executed Annexation Petition in a form approved by the Village Attorney and substantially in accordance with the form of *Exhibit "B"* attached to this agreement and (b) provide Owners' proof of Ownership of the Property. A Plat of Annexation for the Property shall also be prepared by the Village. Upon, but not before the Village's receipt of the Annexation Petition, the Owners' proof of Ownership, and preparation of a Plat of Annexation, the Village's Corporate Authorities may adopt a valid and binding Annexation Ordinance providing for the annexation of the Property and any adjacent rights-of-way to the Village pursuant to Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8. The Village Clerk shall then promptly cause the Annexation Ordinance, Plat of Annexation, and related documents, to be recorded in the Office of the DuPage County Recorder.

Alternatively, at the option of the Village, within 30 days after notice from the Village to do so, and subject to the provisions of 65 ILCS 5/7-1-2 *et. seq.*, or 65 ILCS 5/7-1-11, as amended, the Owners and/or their successors and assigns shall join in, and properly execute, an Annexation Petition to be filed with the Circuit Court of the Eighteenth Judicial Circuit, DuPage County, Illinois, and shall cooperate with the prosecution of the Petition before said court, provided, however, that the costs of any such litigation shall not be the responsibility of the Owners.

If all or a portion of the Property is conveyed prior to the annexation of the Property to the Village, whether by the Owners or other subsequent grantor, any contract for sale or other agreement relating to each and every such conveyance shall contain an acknowledgement by the grantee of the existence of this Agreement and the requirement that upon the Property becoming, in the opinion of the Village, adjacent and contiguous to the Village, the Property will be annexed to the Village. In addition, each such contract or other agreement shall contain an agreement by the grantee(s) to do all things necessary or appropriate to cause the Property to be duly and validly annexed to the Village, including, but not limited to, execution of an Annexation Petition.

Should a court of competent jurisdiction determine that annexation of the Property was defective because of the failure of the Parties to follow a procedural requirement constituting a valid precondition to proper annexation of the Property, the Parties, including the successors and assigns of the Owners, agree to promptly cause the Property to be reannexed to the Village in a manner that satisfies all procedural requirements.

Should a court of competent jurisdiction determine that annexation of the Property by the Village was without lawful authority (i.e., lack of contiguity), the Parties agree that this Agreement shall be deemed a Pre-Annexation Agreement authorized pursuant to 65 ILCS 5/11-15.1-1, as amended, and shall remain in full force and effect to the extent permitted by law. Thereafter, should the Property become contiguous to the Village, the Parties, including the successors and assigns of the Owners, agree to promptly take all necessary steps as may then be provided by law to perfect the annexation of the Property to the Village.

4. Zoning. Within six (6) months of the approval of this Agreement, the Village will hold a public hearing and create a new light industrial zoning district. The Owners will receive advance notice of all public meetings and hearings of the Glen Ellyn Plan Commission at which the new light industrial zoning district is discussed. Because the parties to this Agreement desire to move quickly to cause the execution of this Annexation Agreement, the public hearing, before the Plan Commission required by law to take place before the Village Board can definitely act upon the light industrial zoning district, will not have yet taken place prior to the execution of this Agreement. For this reason, in the event that the Village does not within six (6) months of the date of the execution of this Agreement, approve a new light industrial zoning district, the Agreement shall be void and all the promises and obligations of the Owners shall be terminated. If, however, as is anticipated, the Village does adopt the aforementioned light industrial zoning district, it shall, upon the annexation of the subject Property, grant the light industrial zoning district to the subject Property.

Any existing use or condition of the Property, upon annexation, that does not comply with the requirements of Glen Ellyn's Zoning Code may continue and will be considered a permitted nonconforming use. The Owner's most current plat of survey documenting the existing conditions of the Property shall be submitted to the Village within thirty (30) days of approval of this Agreement and used in conjunction with aerial photographs and other plans, plats and similar documents to evidence the current uses and conditions of the site. Notwithstanding anything herein to the contrary, following annexation, any new tenants occupying the building shall conform to the use regulations of the applicable Village zoning district.

5. Water Service. The Owners desire to connect the eastern parcel to the Glen Ellyn water system upon Glen Ellyn water becoming available to the Property. The Owners agree to allow the Village to disconnect the eastern parcel from the Lombard water system and connect the eastern parcel to the Glen Ellyn water system upon Glen Ellyn water becoming available to the Property. The Owners further agree to connect the western parcel to the Glen Ellyn water system within five (5) years of Glen Ellyn water becoming available to the Property. The Owners shall meet all applicable ordinance requirements pertaining to such connections, including upgrades and other necessities. The Owners shall not be required to pay their proportionate share of any water main extension by the Village. The Village further agrees to waive all permit fees, connection fees and building permit deposits related to connecting the Owners' private service line from the eastern parcel to the Village's water main. The Owners shall pay all applicable permit fees, connection fees and building permit deposits at the time the western parcel is connected to the Glen Ellyn water system.

At the time that the Glen Ellyn water system is available to the Property, the Village of Glen Ellyn shall make a good faith effort to connect the eastern parcel and provide a suitably sized water service line connection terminating at a valve or B-box for future connection of the western parcel by the Owners. If improvements are needed to correct deficiencies or Owner responsible upgrades are required to make the connection to the eastern parcel, the Owner agrees to hire a contractor and to pay up to \$5000 of the private costs and charges associated with the connection of a private water service line to the Village of Glen Ellyn's water main with the Village paying any amount over \$5000. The Owners agree to hire a contractor and to pay all private costs and all charges associated with the connection of a private water service line to the Village of Glen Ellyn's water main for the western parcel. Any water service connections shall be inspected by Village staff to ensure that they are constructed in accordance with Village standards.

In the event that the Owners fail to petition Glen Ellyn for annexation in accordance with Section 3 above or fail to comply with any other provision of this Annexation Agreement, Glen Ellyn may, at its sole option, discontinue water service to the property and enforce this Agreement in a court of appropriate jurisdiction by specific performance.

6. Sanitary Sewer Service. The Owners desire to connect the Property to the Glen Ellyn sanitary sewer system upon Glen Ellyn sanitary sewer becoming available to the Property. The Owners agree to allow the Village to disconnect the eastern parcel from the Lombard sanitary sewer system and connect the eastern parcel to the Glen Ellyn sanitary sewer system upon Glen Ellyn sanitary sewer becoming available to the Property. The Owners further agree to connect the western parcel to the Glen Ellyn sanitary sewer system within five (5) years of Glen Ellyn sanitary sewer becoming available to the Property. The Owners shall meet all applicable ordinance requirements pertaining to such connections, including upgrades and other necessities. The Owners shall not be required to pay their proportionate share of any sanitary sewer extension by the Village. The Village agrees to waive all permit fees, connection fees and building permit deposits related to connecting the Owners' private service line from the eastern parcel to the Village's sanitary sewer main. The Owners shall pay all applicable permit and connection fees and building permit deposits at the time that the western parcel is connected to the Glen Ellyn sanitary sewer main.

At the time that the Glen Ellyn sanitary sewer system is available to the Property, the Village of Glen Ellyn shall make a good faith effort to connect the eastern parcel and provide a suitably sized sanitary sewer service line connection terminating at a clean out for future connection of the western parcel by the Owners. If improvements are needed to correct deficiencies or Owner responsible upgrades are required to make the connection to the eastern parcel, the Owner agrees to hire a contractor and to pay up to \$5000 of the private costs and charges associated with the connection of a private water service line to the Village of Glen Ellyn's water main with the Village paying any amount over \$5000. The Owners agree to hire a contractor and to pay all private costs and all charges associated with the connection of a private sanitary sewer service line to the Village of Glen Ellyn sanitary sewer main for the western parcel. Any sanitary sewer connections shall be inspected by Village staff to ensure that they are constructed in accordance with Village standards.

In the event that Owners fail to petition Glen Ellyn for annexation in accordance with Section 3 above or fail to comply with any other provision of this Annexation Agreement, Glen Ellyn may, at its sole option, discontinue sanitary sewer services to the Property and enforce this Agreement in a court of appropriate jurisdiction by specific performance.

7. Rates for Water and Sanitary Sewer Service. Until such time as the Property is annexed to Glen Ellyn, Owners agree to pay the usual and customary charges for water and sanitary sewer service for customers outside of Glen Ellyn's corporate limits, as may be established from time-to-time by the corporate authorities of Glen Ellyn. Upon annexation, the Owners shall pay the same rates for water and sanitary sewer services charged to customers inside the Village limits.

8. Fire Protection. The Property is currently served by the Village of Lombard Fire Department. Upon approval of this annexation agreement, the property will be disconnected from the Lombard Fire District and fire service will be provided by the Glen Ellyn Volunteer Fire Company. The Owners agree to pay their proportionate share of the cost of fire service by either becoming part of a Special Service Area approved by the Village on November 23, 2009 by the adoption of Ordinance 5822 and recorded with the DuPage County Recorder of Deeds as document number R2009-191157 which imposes a special tax on unincorporated properties for fire protection services provided by the Glen Ellyn Volunteer Fire Company (hereinafter "Fire SSA") or upon receiving an annual invoice, pay an amount equal to what would be charged against the Property, if the Property were included in the Fire SSA. Payments to support the Glen Ellyn Voluntary Fire Company will continue to be collected until such time as the Property is annexed to Glen Ellyn. Following annexation, the Village shall reimburse the Owners the proportional amount paid for fire service following the date of annexation and remove the Property from the Fire SSA, if appropriate.

In accordance with existing state law, the Lombard Fire District may require the Village to pay it an amount of money which, over a period of years, equals three (3) years of lost Fire Protection District taxes. If the Village is requested and obligated by law to pay lost real estate tax revenue to the Lombard Fire District, the Owner shall reimburse the Village for the actual amounts which the Village is required to pay.

9. Grading Easement. The Owners agree to negotiate in good faith an agreement granting the Village a grading easement on the east end of the Property as necessary in order to accommodate the reconstruction of the Hill Avenue bridge.

10. Village Codes. While the Property remains in unincorporated DuPage County, it shall be developed pursuant to the building and zoning regulations of DuPage County, except as otherwise provided herein. From and after the date of annexation of the Property to the Village, the Property shall be maintained in accordance with and pursuant to the Village Code of Glen Ellyn, including the building, subdivision, and zoning regulations contained therein, except as otherwise noted in Section 4 of this Agreement. Notwithstanding anything above to contrary, the Owners shall abide, prior to annexation, with all ordinance and regulations of the Village that relate to sanitary sewer service. In addition, the Owners shall with regard to new construction, renovation or expansion, be required to follow the Village Ordinances regarding sprinkler systems prior to and after annexation.

11. Hill Avenue. Hill Avenue shall continue to be maintained by the Village of Lombard until such time as the Property is annexed to Glen Ellyn or Hill Avenue is otherwise incorporated into Glen Ellyn as part of any agreement between Glen Ellyn and Lombard or the property on the south side of Hill Avenue is annexed to Glen Ellyn.

12. Village Address. Upon annexation to the Village, the Village will assign the appropriate Village addresses to the Property.

13. Waiver of Annexation Fee. The Village agrees to waive its usual and customary annexation fee for the Property upon annexation to the Village.

14. Term. The term of this Agreement will be 20 years from the date of execution hereof, which will be deemed to become effective on the date hereof.

15. Annexation Agreement Extension. At the option of the Village, the Village may extend this Annexation Agreement, at its conclusion, for an additional period of up to 20 years for a portion or all of the Property. If the Village wishes to exercise this option, it shall do so in writing not earlier than two years before the expiration of the Annexation Agreement, nor later than three months prior to this Agreement's initial termination date. Notice shall be sent in writing to (i) that entity that has paid the real estate property taxes during one of the last two years for the Property or that portion of the Property for which the Village wishes to extend this Agreement or (ii) to the record title holder of the Property or that portion of the Property for which the Village wishes to extend this Agreement. If the Village decides in its sole and absolute opinion to extend the term of this Agreement, the Village may do so whether or not the Property, or any portion of the Property, has been annexed to the Village. The Village may only extend the term of this Agreement once. In the event that the Village has not exercised the option to extend the term of this Agreement pursuant to this Section, and if the Property has not been annexed to the Village at this Agreement's initial termination date, the Village and the Owners may enter into a new Annexation Agreement in the manner provided by law. If the Village has been providing utility services to the non-annexed Property or any non-annexed

portions of the Property pursuant to this Agreement, it may terminate such utility service at the conclusion of this Agreement; provided, however, that the Village provide not less than one year prior written notice of such termination to (i) that entity that has paid the real estate property taxes during one of the last two years for the Property or that portion of the Property for which the Village desires to terminate any such utility service or (ii) to the record title holder of the Property or any portion of the Property for which the Village desires to terminate any such utility service.

16. General Provisions.

A. Severability. In the event that any portion of this Annexation Agreement will be found to be invalid by any court of competent jurisdiction, such finding of invalidity as to that portion will not affect the validity or enforceability of the balance of this Agreement.

B. Remedies. In addition to all rights and remedies specified in this Agreement, the Village will have the authority to pursue any and all rights and remedies, at law or in equity, to which it is entitled in order to enforce the terms of this Agreement. In the event that the Owners fail to comply, the Village may institute an action for specific performance along with other civil and quasi-criminal actions as permitted by law, and the Village may disconnect the water service. The Owners will be further liable for any attorney fees, court costs and other costs incurred by the Village as a consequence of the Village's enforcement of this provision.

C. Amendment. This Agreement may be amended from time to time with the consent of the parties, pursuant to Statute.

D. Conflict Regulations. The provisions of this Agreement shall supersede the provision of any Village Codes and Ordinances that may be in conflict with the provisions of this Agreement.

E. Enforcement. This Agreement shall be enforceable in any court of competent jurisdiction by either the Owners or the Village, and their respective successors and assigns, by an appropriate action at law or in equity, to secure the performance of the promises, obligations, and covenants in this Agreement, including the specific performance of this Agreement. The laws of the State of Illinois shall govern this Agreement. Any lawsuit enforcement filed against the Village of Glen Ellyn, or its officers, employees or independent contractors may only seek injunction, mandamus or specific performance for the enforcement of the agreement and may not seek damages.

F. Successors and Assigns and Ownership. This Agreement shall inure to the benefit of and be binding upon the Owners and Village and their respective successors and assigns. No conveyance, transfer or assignment of fee title in the Property or of this Agreement shall serve to release the Owners of their duties and obligations already undertaken under this Agreement. Both parties acknowledge by their signature to this Agreement that the statements made in this Annexation Agreement are true and that they have the authority to execute the Agreement and to bind the Village or the Owners.

G. Application of Ordinances. Upon annexation, the Property and its use will be subject to all Village ordinances generally applicable throughout the Village except as herein set forth.

H. Recording. The Village Clerk is hereby directed to cause this Agreement to be recorded with the Recorder of Deeds of DuPage County, following its execution and approval by the Village Board.

I. No Disconnection. Once the Property subject to this Annexation Agreement has been annexed to the Village, the Owners shall not petition the Circuit court to take any other action to cause the Property to be disconnected from the Village during the term of this Annexation Agreement or any extension to that term. In addition, the Owners may not during the term of this Annexation Agreement petition any other municipality or a court to permit annexation to another municipality.

J. Recitals and Exhibits. The recitals set forth in the beginning of this Agreement, and the exhibits attached hereto, are incorporated herein by this reference and shall constitute substantive provisions to this Agreement.

K. Captions and Paragraph Headings. The captions and paragraph headings used herein are for convenience only and shall not be used in construing any term or provision of this Agreement.

17. Notice. Any notice or communication required or permitted to be given under this Agreement shall be in writing and shall be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid, (iv) by facsimile, or (v) by electronic internet mail ("*e-mail*"). Facsimile notices shall be deemed valid only to the extent that they are (a) actually received by the individual to whom addressed and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. E-mail notices shall be deemed valid only to the extent that they are (a) opened by the recipient on a business day at the address set forth below, and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. Unless otherwise provided in this Agreement, notices shall be deemed received after the first to occur of (a) the date of actual receipt; or (b) the date that is one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) the date that is three business days after deposit in the U.S. mail, as evidenced by a return receipt. By notice complying with the requirements of this Section each party to this Agreement shall have the right to change the address or the addressee, or both, for all future notices and communications to them, but no notice of a change of addressee or address shall be effective until actually received.

Notices and communications to the Village shall be addressed to, and delivered at, the following address:

Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137
Attn: Planning and Development Director

Notices and communications to the Owners shall be addressed to, and delivered at, the following address:

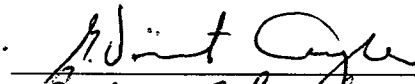
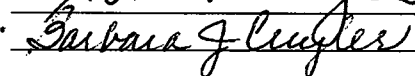
IN WITNESS WHEREOF, the parties have caused this Annexation Agreement to be executed by their duly authorized officers or individually, as the case may be, on _____, 2013.

VILLAGE OF GLEN ELLYN
A Municipal Corporation:

Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137

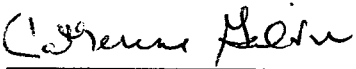
BY: 
Village President

OWNERS:

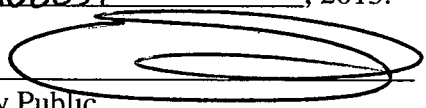



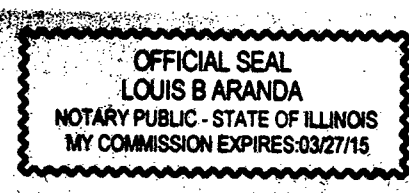
BY: _____

ATTEST:

BY: 
Village Clerk

SUBSCRIBED AND SWORN to
before me this 9TH day of
AUGUST, 2013.


Notary Public



STATE OF ILLINOIS)
) SS
COUNTY OF DU PAGE)

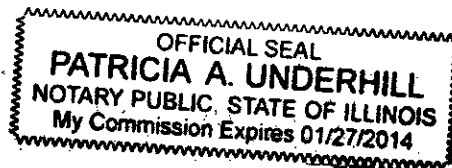
I, the undersigned, a Notary Public, in and for the County and State aforesaid, DO
HEREBY CERTIFY, that ALEXANDER W. DEMOS personally known to me to be the
President of the Village of Glen Ellyn, an Illinois municipal corporation, and
CATHERINE CALVIN, personally known to me to be the Clerk of said corporation, and
personally known to me to be the same persons whose names are subscribed to the foregoing
instrument, appeared before me this day in person and severally acknowledged that as such
President and Clerk, they signed said instrument as the President and the Clerk of said
corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to
authority, given by the Board of Trustees of said corporation as their free and voluntary act, and
as the free and voluntary act of said corporation, for the uses and purposes therein set forth.

Given under my hand and official seal, this 10th day of SEPTEMBER, 2013.

Patricia A. Underhill

Notary Public

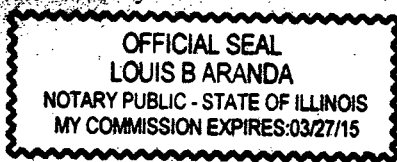
My Commission Expires: 01/27/2014

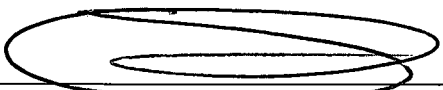


STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for the County of DuPage, Illinois, DO HEREBY CERTIFY that G. VINCENT CUYLER, personally known to me to be the same person whose name is subscribed in the foregoing instrument, appeared before me this day in person, and acknowledged that he signed, sealed and delivered said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and official seal this 9TH day of AUGUST, 2013.





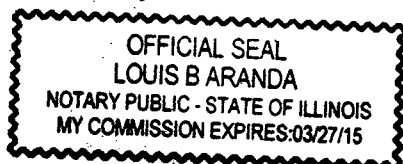
Notary Public

My Commission Expires: 3/27/15

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for the County of DuPage, Illinois, DO HEREBY CERTIFY that BARBARA J. CUYLER, personally known to me to be the same person whose name is subscribed in the foregoing instrument, appeared before me this day in person, and acknowledged that she signed, sealed and delivered said instrument as her free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and official seal this 9TH day of AUGUST, 2013.





Notary Public

My Commission Expires: 3/27/15

**EXHIBIT A
LEGAL DESCRIPTION**

PARCEL 1: LOT 1 IN VILLA PARK KITCHENS RESUBDIVISION BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323, ALL IN DUPAGE COUNTY, ILLINOIS,

AND ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT-OF-WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LYING NORTH OF AND ABUTTING LOT 1 IN VILLAGE PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 2 OF SAID VILLAGE PARK KITCHENS RESUBDIVISION AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREES 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHEAST CORNER OF SAID LOT 1 FOR THE POINT OF BEGINNING; RUNNING THENCE WESTERLY ALONG THE NORTH LINE OF SAID LOT , BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3321.38 FEET AND A CENTRAL ANGLE OF 02 DEGREES 04 MINUTES 19 SECONDS, AN ARC DISTANCE OF 120.10 FEET (MEAS., REC.=120.12') THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE, A DISTANCE OF 12.79 FEET; THENCE EASTERLY A DISTANCE OF 69.97 FEET TO A POINT THAT IS 16.00 FEET NORTHERLY OF (MEASURED RADIALLY THERETO) THE NORTH LINE OF VILLA PARK KITCHENS RESUBDIVISION AS AFORESAID; THENCE CONTINUING EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38'=CALC.), A CENTRAL ANGLE OF 00 DEGREES 52 MINUTES 17 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, AN ARC DISTANCE OF 50.75 FEET; THENCE SOUTHEASTERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N. 05-12-207-037

PARCEL 2:

LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323 IN DUPAGE COUNTY, ILLINOIS,

AND, ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT OF WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LAYING NORTH OF AND ABUTTING LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION AFORESAID, MORE

PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 2 AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREE 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHWEST CORNER OF SAID LOT 2; THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE A DISTANCE OF 16.00 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38=CALC.), A CENTRAL ANGLE OF 01 DEGREE 16 MINUTES 50 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 74.60 FEET; THENCE EASTERLY ALONG A LINE THAT IS 16.00 FEET NORTH OF AND PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 176.18 FEET (DEED, 176.22'=MEAS.) TO A POINT THAT IS 16.00 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO SAID NORTH LINE, THE NORTHEAST CORNER OF LOT 2, AFORESAID; THENCE SOUTHERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-12-207-038

COMMONLY KNOWN AS 21W200 HILL AVENUE

X:\Plandev\PLANNING\ANNEXATIONS\Hill Avenue\Draft Agreement Culer 072010.doc

EXHIBIT B

**PETITION FOR ANNEXATION
VILLAGE OF GLEN ELLYN, ILLINOIS**

TO THE GLEN ELLYN VILLAGE BOARD:

Petitioners on oath state as follows:

1. That the undersigned are the sole owners of record of all of the property described in Attachment A and commonly known as 21W200 Hill Avenue with P.I.N.s: of 05-12-207-037 and 05-12-207-038 (Subject Realty).
2. That this petition is executed by all of the owner(s) of record of the Subject Realty.
3. That no electors reside on the Subject Realty or, in the alternative, at least fifty-one percent (51%) of the electors residing on the Subject Realty have executed this petition.
4. That no portion of the property is within the corporate limits of any municipality.
5. That the Subject Property is either contiguous to the Village of Glen Ellyn, will be at the time of annexation, or may be contiguous when combined with other property annexing to the Village of Glen Ellyn.
6. That the property which the Petitioners desire to have annexed to the Village of Glen Ellyn is the property that is described in Attachment A attached hereto and made a part hereof.
7. That this Petition shall be in full force and effect from and after the date hereof and until the property is annexed to the Village of Glen Ellyn in agreement with State Law.

WHEREFORE, the applicants' petition that the property be annexed by ordinance to the Village of Glen Ellyn, Illinois, is in accordance with the appropriate statutes.

The undersigned, on oath, state that the undersigned have read the foregoing Petition for Annexation, have knowledge of the allegations contained therein, and that said allegations are true and correct to the best of the Petitioners' knowledge.

Owners of Record of Subject Property:

Signature: _____

Print Name: _____

Date: _____

Signature: _____

Print Name: _____

Date: _____

Subscribed and sworn to before me this
_____ day of _____, 20__

NOTARY PUBLIC

Subscribed and sworn to before me this
_____ day of _____, 20__

NOTARY PUBLIC

Village of Glen Ellyn

Ordinance No. 6207 VC

**An Ordinance Approving Zoning Code Text Amendments
to Create a New I1 Light Industrial Zoning District**

**Adopted by the
President and the Board of Trustees
of the**

**Village of Glen Ellyn
DuPage County, Illinois**

This 13th Day of January, 2014.

Published in pamphlet form by the authority of the
President and Board of Trustees of the Village of
Glen Ellyn, DuPage County, Illinois, this 14th
day of January 14th, 2014.

Ordinance No. 6207-VC

**An Ordinance Approving Zoning Code Text Amendments
to Create a New I1 Light Industrial Zoning District**

Whereas, the Village of Glen Ellyn recently entered into annexation agreements with properties commonly known as 21W180 and 21W200 Hill Avenue; and

Whereas, the aforementioned properties were previously located in the Village of Lombard and zoned to Lombard's light industrial district; and

Whereas, said properties were disconnected from Lombard and are currently located in DuPage County and zoned to DuPage County's I-1 Light Industrial district; and

Whereas, the annexation agreements for 21W180 and 21W200 Hill Avenue require the Village of Glen Ellyn to create a new light industrial zoning district to be applied to these properties upon annexation to Glen Ellyn; and

Whereas, in accordance with this provision, following due and proper publication of notice in the Daily Herald not less than fifteen (15) nor more than thirty (30) days prior thereto, the Plan Commission of the Village of Glen Ellyn conducted a public hearing on December 12, 2013, at which hearing the Plan Commission considered a variety of zoning code text amendments related to the creation of a new light industrial zoning district; and

Whereas, no persons spoke at the public hearing either in favor of or in opposition to the proposed amendments; and

Whereas, after having considered the evidence, testimony and exhibits presented at the December 12, 2013 Plan Commission public hearing, by a vote of six (6) "yes" and zero (0) "no", the Plan Commission recommended approval of the proposed zoning code text amendments as set forth in the minutes of their December 12, 2013 meeting, a draft of which is attached hereto as

Exhibit "A"; and

Whereas, the President and Board of Trustees of the Village of Glen Ellyn have reviewed the evidence and testimony presented at the December 12, 2013 Plan Commission hearing and find that the proposed zoning code text amendments are consistent the Glen Ellyn's 2001 comprehensive plan and would promote the public health, safety, and general welfare of the Village and, therefore, deem it in the best interest of the Village to accept the recommendation of the Plan Commission and to amend the Glen Ellyn Zoning Code to create a new I1 light industrial zoning district classification.

Now, Therefore be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The draft minutes from the December 12, 2013 Glen Ellyn Plan Commission meeting, a copy of which is attached hereto as Exhibit "A", is hereby accepted by the Village Board, and the findings of fact and conclusions set forth therein and in the preambles above are hereby adopted by the President and Board of Trustees.

Section Two: The Glen Ellyn Zoning Code is hereby amended as set forth in Exhibits "B" attached hereto.

Section Three: The Director of Planning and Development is hereby directed to cause the text of the Glen Ellyn Zoning Code to be amended as approved by this Ordinance. Said amendments shall be inserted in proper order into the Zoning Code, and said Zoning Code and shall be published and made available for inspection and purchase by the general public.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this 13th day of January, 2014.

Ayes: Trustees Burkett, Clark, Elliott, Ladesio, McHenry and O'Shea

Nays: Ø

Absent: Ø

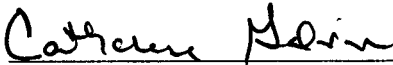
Approved by the Village President of the Village of Glen Ellyn, Illinois, this 13th day of

January, 2014.



Village President of the
Village of Glen Ellyn, Illinois

Attest:



Village Clerk of the
Village of Glen Ellyn, Illinois

(Published in pamphlet form and posted on the 14th day of January, 2014).

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EXHIBIT "A"

Plan Commission

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December 12, 2013

workers. Ms. Stegall responded to Plan Commissioner Lannen that an item, if appropriate, can be forwarded to the Planning and Development Director for her authority to determine that a use is similar to other uses that are allowed in a district in terms of the impacts they would have and to allow those uses. Ms. Stegall responded to Plan Commissioner Allen that the country club would most likely be zoned to the Conservation Recreation District. Plan Commissioner Whalen suggested adding "indoor" to the salt storage facility item (no. 23) and Ms. Stegall agreed.

Persons in Favor of or in Opposition to the Proposed Request

No persons spoke in favor of or in opposition to the proposed request.

Plan Commissioner Heming-Littwin moved, seconded by Plan Commissioner Allen, to close the public hearing. The motion carried unanimously by voice vote.

Motion

Plan Commissioner Heming-Littwin moved, seconded by Plan Commissioner Mansfield, to create a Light Industrial Zoning District Standards with the following changes: Add Micro-Beverage and Food Manufacturing as a permitted Special Use, add "noise" and "odors" as Factors 4 and 5 to the PUD Evaluation Factors, remove No. 6, church and temple, from Special Uses, add "Indoor" to no. 23, Salt Storage Facility, and add Private Utility Substation as a special use.

The motion carried unanimously with six (6) "yes" votes and zero (0) "no" votes as follows: Plan Commissioners Allen, Heming-Littwin, Lannen, Mansfield, Whalen and Vice Chairman Strayer voted yes.

PUBLIC HEARING – ZONING CODE TEXT AMENDMENTS

PUBLIC HEARING REGARDING PROPOSED ZONING CODE TEXT AMENDMENTS RELATED TO SUCH THINGS AS FENCE SPACING AND HEIGHT, GENERATOR SETBACKS, DEVELOPER DONATIONS, OUTDOOR SEATING AND PERMITTED USES.

Plan Commissioner Mansfield moved, seconded by Plan Commissioner Heming-Littwin, to open the public hearing. The motion carried unanimously by voice vote.

Staff Presentation

Village Planner Michele Stegall stated that a variety of Zoning Code text amendments are being presented to the Plan Commission for their consideration. She pointed out some of the changes that have been made to the list of amendments since the Plan Commission received the draft as follows: Ms. Stegall stated that the fence regulations have been amended in response to a comment by a Plan Commissioner who stated that fences often need to be located above ground because the ground slopes, drainage needs to be allowed under the

Plan Commission

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December 12, 2013

fence or the wood would rot if it was allowed to touch the ground. She stated that an allowance has been added to allow the fence to be located up to 4 inches above ground to accommodate those situations and added that the 4 inches is not included in the height calculations. Ms. Stegall also stated that photos were submitted showing the caps on masonry columns located at intervals on fences that are located a foot or two above the height of the fence. She added that in an effort to allow creativity, no limitation has been created to limit the height of those columns.

Questions/Comments from the Plan Commission

Plan Commissioner Whalen asked that staff research whether or not there should be a limitation on the height and spacing of masonry fence caps. Plan Commissioner Mansfield suggested leaving the height at 8 feet and having staff research this item and return with a text amendment, if necessary. He added that there should be a height limitation regarding caps, and Plan Commissioner Heming-Littwin suggested that the height of a cap located on top of a masonry column should be no higher than the height of the masonry column up to the height of the post or no more than a total of 9 feet. The Plan Commissioners agreed with that recommendation. Ms. Stegall also stated that a proposed change was previously made to allow a fence to be 33 percent open as opposed to 50 percent open for the front and corner side yard, and she displayed some photographs of various types of fence spacing. Ms. Stegall responded to Vice Chairman Strayer that an additional 6 inches is allowed for a fence of any size but she was unsure how long the 50 percent open fence has been in effect in the Village. Plan Commissioner Whalen pointed out that in b. Height: 3), 6 feet should be the maximum for a fence located no closer to the street than the principal structure on a lot, and Ms. Stegall agreed that should be corrected. Ms. Stegall also stated that a change has been proposed to allow generators as a permitted use in a required side yard and corner side yard. She added that generators would need to be screened from view from the public way. Ms. Stegall responded to Plan Commissioner Whalen that as proposed generator testing could be done between 9:00 a.m. and 5:00 p.m. seven (7) days per week. Ms. Stegall also stated that staff would like to withdraw No. 8 Developer Donations at this time as many communities only apply developer's donations to PUDs and subdivisions.

Plan Commissioner Whalen requested that generators be allowed a minimum of 2 feet 6 inches (perhaps 2 feet) off of the lot line for all lots and that, if necessary, generators be allowed in the front yard with a review per staff. He explained that on a 50-foot wide lot, most manufacturers

require a generator to be 18 inches from the home and the units are approximately 27 inches wide; therefore the unit would be a couple of inches into the 3-foot setback. Ms. Stegall explained for Plan Commissioner Heming-Littwin that accessory structure setback requirements, in general, are 5 percent of the lot width. She also stated that air conditioners are allowed in front yards. Plan Commissioner Whalen also requested that the Planning and Development Director be allowed to permit a generator in a front yard if there is no other viable location on the lot. Vice Chairman Strayer was not in favor of generators in the Plan Commission

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December 12, 2013

front yard although the other Plan Commissioners were supportive of generators in the front yard. Ms. Stegall responded to Plan Commissioner Allen that sump pump discharge is covered in the Stormwater Ordinance.

Persons in Favor of or in Opposition to the Proposed Request

No persons spoke in favor of or in opposition to the proposed amendments.

Plan Commissioner Heming-Littwin moved, seconded by Plan Commissioner Allen, to close the public hearing. The motion carried unanimously by voice vote.

Motion

Plan Commissioner Heming-Littwin moved, seconded by Plan Commissioner Mansfield, to amend the Zoning Code as follows: Remove Section 8, change fence height in 11b.3) to a maximum of 6 feet, change fence in C3 to include no more than the height of the column or a maximum of 9 feet, to change 21B to not less than 2.5 feet from the side or rear property line provided it is tested only between the hours of 9:00 a.m. and 5 p.m. once per week for a maximum of 30 minutes, if time allows prior to this item being presented to the Village Board that staff research masonry columns from a design standpoint, and to allow the Planning and Development Director authority to allow generators in front yards.

The motion carried unanimously with six (6) "yes" votes and zero (0) "no" votes as follows: Plan Commissioners Heming-Littwin, Mansfield, Allen, Lannen, Whalen and Vice Chairman Strayer voted yes.

Staff Report

Ms. Stegall reminded the Plan Commissioners about the holiday party next Thursday evening at 7:30 p.m.

There being no further business before the Plan Commission, the meeting was adjourned at 9:19 p.m.

Respectfully submitted,

Michele Stegall
Village Planner

Barbara Utterback
Recording Secretary

PROPOSED LIGHT INDUSTRIAL ZONING DISTRICT STANDARDS
12/31/13

Bold = New Text

~~Strike Through~~ = Deleted Text

10-3-1: INTENT

Insert new Section 10-3-1(Q) to read as follows:

(Q) **I1 – Light Industrial Zoning District: The I1 District is intended to provide an environment suitable for industrial activities that do not create appreciable nuisance or hazards and which can be located harmoniously on the same lot with office uses and in relatively close proximity to residential areas.**

10-2-2: DEFINITIONS:

Add a new definition for “Animal Day Care” to read as follows:

Animal Day Care: A facility that provides same day short-term keeping, boarding or maintaining of animals that do not require medical treatment and which does not include overnight boarding.

Micro Food and Beverage Manufacturing: An establishment not exceeding 5,000 square feet in floor area where food, beverages, and/or alcohol are processed or otherwise prepared and which may include the distribution of such items.

Private Utility Use or Facility. Utilities that are not subject to Village acceptance for operation or maintenance. For purposes of this Code, private utilities may include such things as natural gas lines or facilities, power lines and plants, communication lines and facilities (with the exception of telecommunication uses) and similar uses and facilities.

i

Insert a new Section 10-4-19 to read as follows:

10-4-19: I1 – LIGHT INDUSTRIAL DISTRICT

(A) **PERMITTED USES***

1. **Artist Studio**
2. **Automobile car wash**
3. **Automobile repair and service**
4. **Automotive vehicle rental**

5. Building material sales establishment; plumbing, heating, ventilating and electrical equipment and fixture service and repair; machinery and equipment sales, service and rental; household appliance repair; cabinet making and custom woodworking uses
6. Business, medical or professional office, including contractor's offices
7. Commercial or trade school
8. Community support services uses such as: mail order store, newspaper office, office supply, catering, laundry retail and mortuary
9. Compounding of cosmetics, toiletries, dyes and pharmaceuticals
10. Dry cleaning and/or commercial laundry establishments including dry cleaning plants and operations primarily serving satellite drop-off dry cleaning establishments in other districts
11. Engraving, printing, publishing, lithography, blue printing, film processing and photocopying establishments
12. Exterminating services
13. Furniture upholstery
14. Greenhouse, including retail and wholesale sale of plants
15. Ice sales and storage
16. Light manufacturing assembly of previously manufactured parts, fabricating, cleaning, testing, assembling, repairing and servicing
17. Overnight and weekend parking
18. Radio and television: service, repair and studios
19. Research laboratory
20. Indoor self storage facility
21. Sheet metal shop
22. Veterinarian and animal hospital
23. Antenna attachments to existing antenna towers, buildings or other structures which do not exceed the permitted height in the zoning district or the height established by special use permit
24. Accessory retail use associated with another permitted use where the floor area taken up by retail does not exceed 25%.

(B) SPECIAL USES*

No enumerated Special Use shall be considered to be an accessory use to any other permitted or Special Use, and a separate permit shall be required for each separate Special Use.

1. Animal day care
2. Cartage, express or parcel delivery
3. Church, temple or other religious institution
4. Club or lodge – private, fraternal or religious
5. Compost collection facility
6. Concrete and cast stone fabrication and molding, including monument establishments
7. Contractor's yard for storage of vehicles and materials
8. Glass products production
9. Indoor amusement

10. Indoor recreation facility
11. Kennel or cattery
12. Micro Food and Beverage Manufacturing
13. Outdoor storage
14. Private utility use or facility
15. Public use
16. Public utility and public service use
17. Recycling collection center
18. Television and radio tower, antenna support structure, water and fire tower, cooling tower, etc which exceed the maximum height
19. Vehicle storage yard
20. Warehouse
21. Wholesale merchandising and storage warehousing

*All (A) Permitted and (B) Special Uses must also comply with all applicable requirements contained in the "Supplemental District Regulations" as well as all other pertinent regulations in this Code.

(C) ACCESSORY BUILDINGS, STRUCTURES AND USES

See Section 10-5-4 "ACCESSORY STRUCTURES AND USES" and 10-5-5 "YARDS".

(D) MINIMUM YARD AND LOT REQUIREMENTS*

1. Front or corner side yard: 30' in depth. The front 10' shall be landscaped.
2. Rear yard: 20' in depth. The rear 10' shall be landscaped if adjacent to a residential zone or use or property located in the CR zoning district.
3. Side yard: 20', such yard shall be landscaped if adjacent to a residential zone or use.
4. Lot area: 20,000 sq. ft.
5. Lot width: 100 ft.
6. Lot depth: 200 ft.

(E) MAXIMUM HEIGHT

1. 45'
2. Churches and temples may be erected to a height not exceeding 75', if the building is set back from each yard line at least 2' for each foot of additional building height above the height limit otherwise permitted in the district;

3. The height of a television or radio tower, antenna support structure, church spire, belfry, monument, tank, water and fire tower, stage tower or scenery loft, cooling tower, ornamental tower, and spire, chimney, elevator bulkhead, conveyor and flag pole shall be specified in the ordinance granting a special use permit.

(F) SIGNS AND FENCES

1. Signs as per Sign Ordinance.
2. Screening required pursuant to Section 10-5-13(L).
3. See Section 10-5-5: YARDS.

(G) PARKING AND LOADING REQUIREMENTS

1. All buildings except those specified below: One space for each 250 sq. ft. of floor area.
2. Car wash: One space for each 2 employees, plus reservoir parking space or stack space equal to 5 times the maximum capacity of the washing unit.
3. Club and lodge: One space for each 300 sq. ft. of gross floor area.
4. Commercial or trade school: Once space for each 2 students based on design capacity.
5. Additional off-street parking and loading requirements are found in the "Supplementary District Regulations."

Amend Section 10-5-13 of the Supplemental Regulations to read as follows:

10-5-13: PERFORMANCE STANDARDS AND OTHER REQUIREMENTS FOR **INDUSTRIAL USES**, COMMERCIAL USES, PLANNED UNIT DEVELOPMENTS, SPECIAL USES, AND NON-RESIDENTIAL USES IN RESIDENTIAL ZONING DISTRICTS:

The following standards shall apply to **industrial uses**, commercial uses, planned unit developments, special uses (excluding single family residences) and non-residential uses in residential zoning districts. The property owner shall be responsible for submitting documentation prepared by a professional in the applicable area of expertise upon written request of the Village to verify that any standard has been satisfied.²⁰

Amend the follows Sections in Chapter 7 "Planned Unit Developments" to read as follows:

10-7-2: PROVISIONS GOVERNING ALL PLANNED UNIT DEVELOPMENTS:

- (A) Planned Unit Developments may be authorized as a Special Use within the R1 through R4 and C2 through C5 ~~Zoning Districts~~ **and I1 Zoning Districts**. All unimproved land, redevelopments or additions to existing structures in the C5 District shall be developed only by the Planned Unit Development procedures. Any development within the R5 and C6 Zoning Districts shall be accomplished only by Planned Unit Development procedures;

10-7-7: EVALUATION FACTORS:

The Planned Unit Development may be authorized as a Special Use, provided that it fulfills the intentions of the following factors, which shall be considered by the Plan Commission and the Village Board, among other factors, when evaluating a Special Use for Planned Unit Development:

- (A) Factors Affecting the Community as a Whole, including:

1. Uses or use;
2. Intensity of use; and
3. Traffic;
4. **Noise and odors;**

- (B) Factors Affecting the Neighborhood:

1. Heights;
2. Front, side and rear yard definitions and uses where they occur at the development periphery;

- (C) Factors Affecting the Development Itself:

1. Bulk;
2. Gross residential, ~~and/or~~ commercial, **and/or industrial** building areas; . .

10-7-9: COMMERCIAL **AND INDUSTRIAL** PLANNED UNIT DEVELOPMENT STANDARDS:

- (A) Allowable Uses: Within the C2 through C6 **and I1** Zoning Districts, uses within commercial, ~~and/or~~ office, **and/or industrial** planned developments may only

include any of the permitted or Special Uses allowed in the district in which the planned development is located;

(B) Arrangement of Commercial and Industrial Uses:

1. Commercial **and industrial** buildings and establishments shall be planned as groups having common parking areas and common ingress and egress points in order to reduce the number of potential accident locations at intersections with thoroughfares. Planting screens or fences shall be provided on the sides of the development abutting areas occupied or likely to be occupied by residences;
2. The plan of the project shall provide for the integrated and harmonious design of buildings, and for adequate and properly arranged facilities for internal traffic circulation, landscaping and such other features and facilities as may be necessary to make the project attractive and efficient from the standpoint of the adjoining and surrounding existing or potential development;

(C) Designated Open Areas: Except within the C5 **and I1** Zoning Districts, at least ten percent (10%) of the land area of the development designated as common open area shall be developed for open plazas, pedestrian malls, tot lots, passive or active recreational facilities, trails and other quasi-public spaces and uses with adequate arrangement, design and planting;

(D) Intensity of Use: The coverage of all principal and accessory buildings and structures shall not exceed fifty percent (50%) of the lot area, except that the percentage of coverage may be increased two percent (2%) for each ten percent (10%) of required off-street parking which is located either below grade or in a parking structure, up to a maximum lot coverage of sixty-five percent (65%).

FILED
NOV 16 2018

Paul Harris DuPage County Clerk



FRED BUCHOLZ

DUPAGE COUNTY RECORDER

NOV. 16, 2018

11:38 AM

PLAT

\$48.00 05-12-207-032

PLAT PAGE COUNT: 1

010 PAGES R2018-107029

Village of Glen Ellyn

Ordinance No. 6631

An Ordinance Annexing
Property Located at 21W180 Hill Avenue
(Proposed Addresses: 1096 Hill Avenue and 1102 Hill Avenue) and
21W200 Hill Avenue (Proposed Addresses: 1108 Hill Avenue and 1118 Hill Avenue)
Glen Ellyn, IL 60137

Adopted by the
President and the Board of Trustees
Of the Village of Glen Ellyn
DuPage County, Illinois
This 8 Day of Oct, 2018.

Published in pamphlet form by the authority
of the President and Board of Trustees of the
Village of Glen Ellyn, DuPage County, Illinois,
this 9 day of Oct, 2018.

PREPARED BY AND MAIL TO:
(VILLAGE OF GLEN ELLYN)
ATTN: VILLAGE CLERK
535 DUANE STREET
GLEN ELLYN, IL 60137

Ordinance No. 6631

**An Ordinance Annexing
Property Located at 21W180 Hill Avenue
(Proposed Addresses: 1096 Hill Avenue and 1102 Hill Avenue) and
21W200 Hill Avenue (Proposed Addresses: 1108 Hill Avenue and 1118 Hill Avenue)
Glen Ellyn, IL 60137**

Whereas, Joseph A. Coghill, III, manager of JAC Properties GE, LLC, owner of 21W180 Hill Avenue, and G. Vincent and Barbara Cuyler, owners of 21W200 Hill Avenue, entered into annexation agreements with the Village of Glen Ellyn on September 9, 2013 pursuant to Ordinance No. 6164; and

Whereas, the owners each submitted a petition to annex the aforementioned properties to the Village of Glen Ellyn pursuant to and in accordance with Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8; and

Whereas, these annexation petitions, signed by the owners of record of the property hereinafter described, have been filed with the Village Clerk of the Village of Glen Ellyn, DuPage County, Illinois, copies of which are attached hereto as Exhibit "A"; and

Whereas, said properties are not within the corporate limits of any municipality but are contiguous to the Village of Glen Ellyn; and

Whereas, the properties to be annexed, commonly known as 21W180 Hill Avenue (with proposed new addresses of 1096 Hill Avenue and 1102 Hill Avenue) and 21W200 Hill Avenue (with proposed new addresses of 1108 Hill Avenue and 1118 Hill Avenue) are legally described as follows:

21W180 Hill Avenue

LOTS 1 AND 2 IN HILL OAK SUBDIVISION, BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT NUMBER R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT NUMBER R70-15844 IN DUPAGE COUNTY, ILLINOIS.

P.I.N.s: 05-12-207-032 and 05-12-207-033

21W200 Hill Avenue

PARCEL 1: LOT 1 IN VILLA PARK KITCHENS RESUBDIVISION BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323, ALL IN DUPAGE COUNTY, ILLINOIS,

AND ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT-OF-WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LYING NORTH OF AND ABUTTING LOT 1 IN VILLAGE PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 2 OF SAID VILLAGE PARK KITCHENS RESUBDIVISION AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREES 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHEAST CORNER OF SAID LOT 1 FOR THE POINT OF BEGINNING; RUNNING THENCE WESTERLY ALONG THE NORTH LINE OF SAID LOT , BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3321.38 FEET AND A CENTRAL ANGLE OF 02 DEGREES 04 MINUTES 19 SECONDS, AN ARC DISTANCE OF 120.10 FEET (MEAS., REC.=120.12') THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE, A DISTANCE OF 12.79 FEET; THENCE EASTERLY A DISTANCE OF 69.97 FEET TO A POINT THAT IS 16.00 FEET NORTHERLY OF (MEASURED RADIALLY THERETO) THE NORTH LINE OF VILLA PARK KITCHENS RESUBDIVISION AS AFORESAID; THENCE CONTINUING EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38'=CALC.), A CENTRAL ANGLE OF 00 DEGREES 52 MINUTES 17 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, AN ARC DISTANCE OF 50.75 FEET; THENCE SOUTHEASTERLY 16.00 FEET TO THE POINT OF

BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N. 05-12-207-037

PARCEL 2:

LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323 IN DUPAGE COUNTY, ILLINOIS,

AND, ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT OF WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LAYING NORTH OF AND ABUTTING LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 2 AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREE 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHWEST CORNER OF SAID LOT 2; THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE A DISTANCE OF 16.00 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38=CALC.), A CENTRAL ANGLE OF 01 DEGREE 16 MINUTES 50 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 74.60 FEET; THENCE EASTERLY ALONG A LINE THAT IS 16.00 FEET NORTH OF AND PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 176.18 FEET (DEED, 176.22'=MEAS.) TO A POINT THAT IS 16.00 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO SAID NORTH LINE, THE NORTHEAST CORNER OF LOT 2, AFORESAID; THENCE SOUTHERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-12-207-038

Whereas, the properties to be annexed are identified on the Plat of Annexation, a reduced copy of which is attached hereto as Exhibit "B"; and

Whereas, legal notices regarding the intention of the Village to annex the properties have been sent to all persons and public bodies required to receive such notice by State statute; and

Whereas, all petitions, documents, and other necessary legal requirements are in full compliance with the statutes of the State of Illinois, specifically Chapter 65, Sections 5/7-1-1 and 5/7-1-2 of the Illinois Compiled Statutes; and

Whereas, it is deemed to be in the best interest of the Village of Glen Ellyn that said properties be annexed thereto.

Now, Therefore, Be It Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The findings of fact set forth hereinabove in the recitals are hereby adopted by the President and Board of Trustees of the Village of Glen Ellyn.

Section Two: Pursuant to Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8, the subject properties, legally described herein above, and the adjacent right-of-way are hereby annexed to the Village of Glen Ellyn, DuPage County, Illinois.

Section Three: The Village President and Village Clerk are hereby authorized to execute the Plat of Annexation for the properties, a reduced copy of which is attached hereto as Exhibit "B".

Section Four: The Village of Glen Ellyn Zoning Map shall be and is hereby amended to show the properties as incorporated within the Village limits.

Section Five: The Village Clerk shall be and is hereby authorized and directed to cause a certified copy of this Ordinance and the Plat of Annexation to be recorded in the Office of the DuPage County Recorder.

Section Six: This Ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form, each in the manner provided by law.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois this

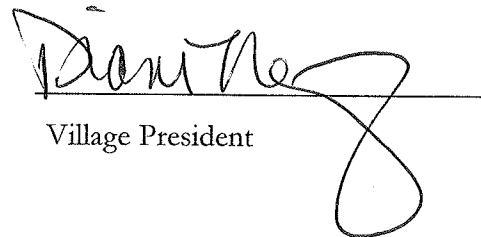
8 day of Oct 18.

Ayes: ☐ Diane McGinley ☒ Pete Ladesic ☒ Mark Senak
☒ Craig Pryde ☒ Bill Enright ☒ Gary Fasules
☒ John Kenwood

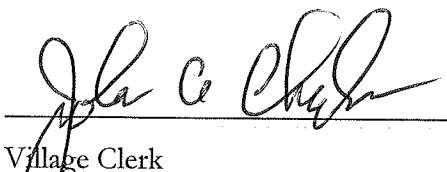
Nays: ☐ Diane McGinley ☐ Pete Ladesic ☐ Mark Senak
☐ Craig Pryde ☐ Bill Enright ☐ Gary Fasules
☐ John Kenwood

Absent: ☐ Diane McGinley ☐ Pete Ladesic ☐ Mark Senak
☐ Craig Pryde ☐ Bill Enright ☐ Gary Fasules
☐ John Kenwood

Approved by the Village President of the Village of Glen Ellyn, Illinois this 8 day of Oct 2018.


Village President

Attest:

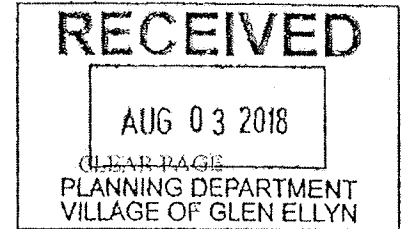

Village Clerk

AFFIX VILLAGE SEAL

(Published in pamphlet form and posted on the 9 day of Oct, 2018.)

EXHIBIT "A"

PETITION FOR ANNEXATION VILLAGE OF GLEN ELLYN, ILLINOIS



TO THE GLEN ELLYN VILLAGE BOARD:

Petitioners on oath state as follows:

1. That the undersigned are the sole owners of record of all of the property described in Attachment A and commonly known as:
21W200 Hill Avenue
and P.I.N. 05-12-207-038 (Subject Realty).
2. That this petition is executed by all of the owner(s) of record of the Subject Realty.
3. That no electors reside on the Subject Realty or, in the alternative, at least fifty-one percent (51%) of the electors residing on the Subject Realty have executed this petition.
4. That no portion of the property is within the corporate limits of any municipality.
5. That the Subject Property is either contiguous to the Village of Glen Ellyn, will be at the time of annexation, or may be contiguous when combined with other property annexing to the Village of Glen Ellyn.
6. That the property which the Petitioners desire to have annexed to the Village of Glen Ellyn is the property that is described in Attachment A attached hereto and made a part hereof.
7. That this Petition shall be in full force and effect from and after the date hereof and until the property is annexed to the Village of Glen Ellyn in agreement with State Law.

WHEREFORE, the applicants' petition that the property be annexed by ordinance to the Village of Glen Ellyn, Illinois, is in accordance with the appropriate statutes.

The undersigned, on oath, state that the undersigned have read the foregoing Petition for Annexation, have knowledge of the allegations contained therein, and that said allegations are true and correct to the best of the Petitioners' knowledge.

Owners of Record of Subject Property:

Signature: G. Vincent Cuyler
Print Name: G. Vincent Cuyler
Date: August 3, 2018

Signature: Barbara J. Cuyler
Print Name: Barbara J. Cuyler
Date: August 3, 2018

Signature: _____
Print Name: _____
Date: _____

Subscribed and sworn to before me this
3 day of August, 2018

NOTARY PUBLIC

Subscribed and sworn to before me this
3 day of August, 2018

NOTARY PUBLIC

Subscribed and sworn to before me this
____ day of _____, 20____

NOTARY PUBLIC

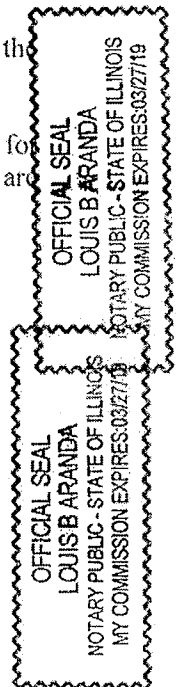
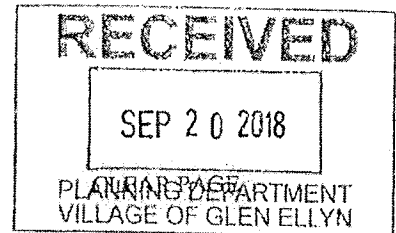


EXHIBIT "A"

PETITION FOR ANNEXATION VILLAGE OF GLEN ELLYN, ILLINOIS



TO THE GLEN ELLYN VILLAGE BOARD:

Petitioners on oath state as follows:

1. That the undersigned are the sole owners of record of all of the property described in Attachment A and commonly known as:
21W180 Hill Ave.
and P.I.N. **05-12-207-032; -033** (Subject Realty).
2. That this petition is executed by all of the owner(s) of record of the Subject Realty.
3. That no electors reside on the Subject Realty or, in the alternative, at least fifty-one percent (51%) of the electors residing on the Subject Realty have executed this petition.
4. That no portion of the property is within the corporate limits of any municipality.
5. That the Subject Property is either contiguous to the Village of Glen Ellyn, will be at the time of annexation, or may be contiguous when combined with other property annexing to the Village of Glen Ellyn.
6. That the property which the Petitioners desire to have annexed to the Village of Glen Ellyn is the property that is described in Attachment A attached hereto and made a part hereof.
7. That this Petition shall be in full force and effect from and after the date hereof and until the property is annexed to the Village of Glen Ellyn in agreement with State Law.

WHEREFORE, the applicants' petition that the property be annexed by ordinance to the Village of Glen Ellyn, Illinois, is in accordance with the appropriate statutes.

The undersigned, on oath, state that the undersigned have read the foregoing Petition for Annexation, have knowledge of the allegations contained therein, and that said allegations are true and correct to the best of the Petitioners' knowledge.

Owners of Record of Subject Property:

Signature: [Signature] Member
Print Name: JAC Properties GE, LLC
Date: September 19, 2018

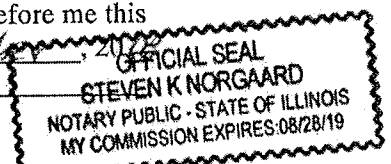
Signature: _____
Print Name: _____
Date: _____

Signature: _____
Print Name: _____
Date: _____

Subscribed and sworn to before me this

19th day of September, 2018

[Signature]
NOTARY PUBLIC



Subscribed and sworn to before me this

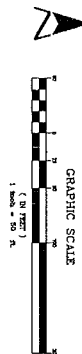
_____ day of _____, 20__

NOTARY PUBLIC

Subscribed and sworn to before me this

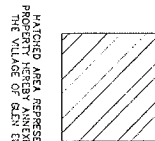
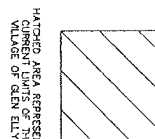
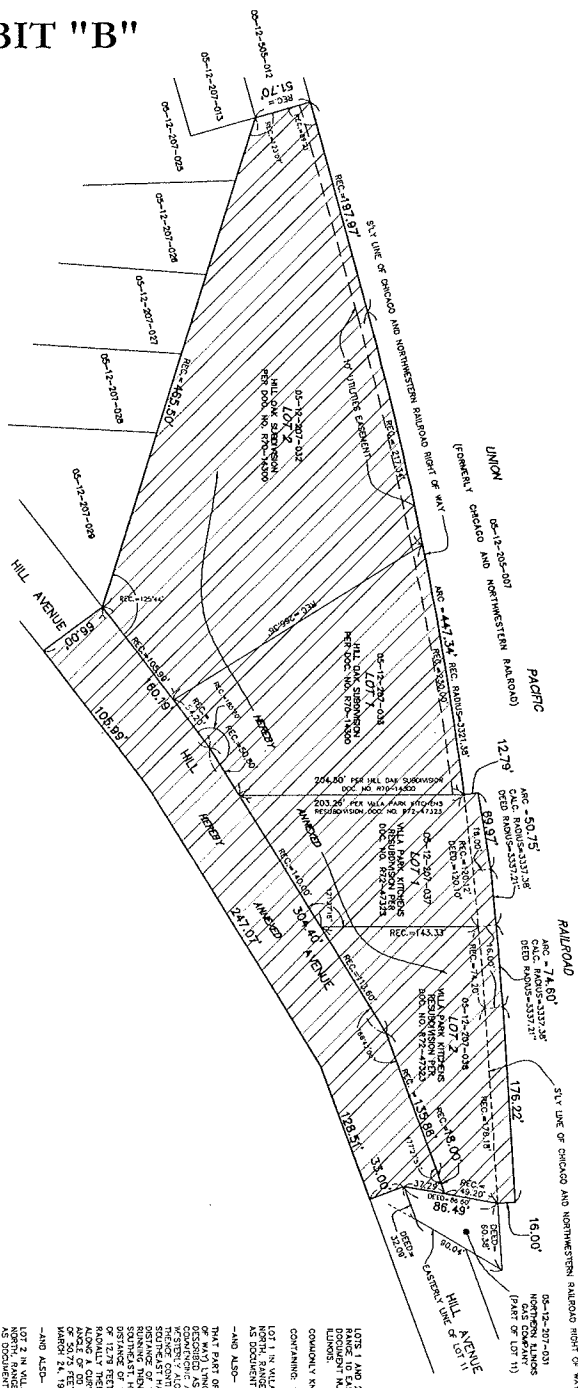
_____ day of _____, 20__

NOTARY PUBLIC



PLAT OF ANNEXATION
TO THE VILLAGE OF GLEN ELM, ILLINOIS

PLN 5 05-12-207-032
05-12-207-033
05-12-207-037
05-12-207-038
05-12-205-007



LOCAL DESCRIPTION OF PROPERTY BEING ANNEXED

LOT 1 AND 2 IN VIL. PARK KITCHENS RESUBDIVISION, BEING PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 33 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1975-1346, IN DUPAGE COUNTY, ILLINOIS, AS DOCUMENT NUMBER 872-0732A, IN DUPAGE COUNTY, ILLINOIS.

CONTRAINS: 123,445.50 SQ. FT., 2.83 AC.

LOT 1 IN VIL. PARK KITCHENS RESUBDIVISION, BEING PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 33 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1975-1346, IN DUPAGE COUNTY, ILLINOIS, AS DOCUMENT NUMBER 872-0732A, IN DUPAGE COUNTY, ILLINOIS.

CONTRAINS: 123,445.50 SQ. FT., 2.83 AC.

LOT 2 IN VIL. PARK KITCHENS RESUBDIVISION, BEING PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 33 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1975-1346, IN DUPAGE COUNTY, ILLINOIS, AS DOCUMENT NUMBER 872-0732A, IN DUPAGE COUNTY, ILLINOIS.

CONTRAINS: 123,445.50 SQ. FT., 2.83 AC.

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT OF WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LOTS 1 AND 2 IN VIL. PARK KITCHENS RESUBDIVISION, BEING PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 33 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1975-1346, IN DUPAGE COUNTY, ILLINOIS, AS DOCUMENT NUMBER 872-0732A, IN DUPAGE COUNTY, ILLINOIS.

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CONTRAINS: 123,445.50 SQ. FT., 2.83 AC.

LOT 2 IN VIL. PARK KITCHENS RESUBDIVISION, BEING PART OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 33 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1975-1346, IN DUPAGE COUNTY, ILLINOIS, AS DOCUMENT NUMBER 872-0732A, IN DUPAGE COUNTY, ILLINOIS.

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CONVILLE & ASSOCIATES, INC.
SURVEILLANCE AND ENGINEERING
350 E. F. DAVIS BLVD.
CHICAGO, ILLINOIS 60601
PHONE (312) 555-5555

ORDERED BY: VILLAGE OF GLEN ELM
STATE OF ILLINOIS
COUNTY OF DUPAGE } S.S.
THIS INSTRUMENT NUMBER _____
WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF
DUPAGE COUNTY, ILLINOIS, ON THE _____ DAY OF _____, A.D. 20____
AT _____ O'CLOCK _____ A.M.
DUPAGE COUNTY RECORDER OF DEEDS _____

VILLAGE CLERK
STATE OF ILLINOIS
COUNTY OF DUPAGE } S.S.
THIS IS TO CERTIFY THAT THE PLAT OF ANNEXATION WAS PRESENTED TO AND
BY ORDNANCE ONLY APPROVED BY THE GLEN ELM VILLAGE BOARD AT THE
MEETING HELD ON _____ A.D. 20____

VILLAGE CLERK
STATE OF ILLINOIS
COUNTY OF DUPAGE } S.S.
THIS INSTRUMENT NUMBER _____
WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF
DUPAGE COUNTY, ILLINOIS, ON THE _____ DAY OF _____, A.D. 20____
AT _____ O'CLOCK _____ A.M.
DUPAGE COUNTY RECORDER OF DEEDS _____

BY: _____
VILLAGE CLERK
STATE OF ILLINOIS
COUNTY OF DUPAGE } S.S.
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WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF
DUPAGE COUNTY, ILLINOIS, ON THE _____ DAY OF _____, A.D. 20____
AT _____ O'CLOCK _____ A.M.
DUPAGE COUNTY RECORDER OF DEEDS _____

CERTIFICATION

I, John Chereskin, duly elected Village Clerk of the Village of Glen Ellyn, Illinois, do hereby certify that the attached is a true and correct copy of Ordinance No. 6631, passed by the Board of Trustees of the Village of Glen Ellyn, Illinois, at the Regular Meeting of said Board held on the 8 day of October 2018, and that the same was signed and approved by the President of said Village on the 8 day of October 2018.

I do further certify that the original, of which the attached is a true and correct copy, is entrusted to me as Village Clerk of said Village for safekeeping and that I am the lawful custodian and keeper of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Glen Ellyn, Illinois, this 8 day of October, 2018.


Village Clerk

CORPORATE SEAL



FRED BUCHOLZ

DUPAGE COUNTY RECORDER

NOV. 16, 2018

11:38 AM

OTHER

\$42.00 05-12-207-032



016 PAGES R2018-107030

Village of Glen Ellyn

Ordinance No. 6632

**An Ordinance Approving
A Zoning Map Amendment for
1096 Hill Avenue, 1102 Hill Avenue,
1108 Hill Avenue and 1118 Hill Avenue
Glen Ellyn, Illinois 60137**

**Adopted by the
President and the Board of Trustees
Of the Village of Glen Ellyn
DuPage County, Illinois
This 8 Day of Oct, 2018.**

Published in pamphlet form by the authority
of the President and Board of Trustees of the
Village of Glen Ellyn, DuPage County, Illinois,
this 9 day of Oct, 2018.

**PREPARED BY AND MAIL TO:
(VILLAGE OF GLEN ELLYN)
ATTN: VILLAGE CLERK
535 DUANE STREET
GLEN ELLYN, IL 60137**

Ordinance No. 6632

**An Ordinance Approving
A Zoning Map Amendment for
1096 Hill Avenue, 1102 Hill Avenue,
1108 Hill Avenue and 1118 Hill Avenue
Glen Ellyn, Illinois 60137**

Whereas, Joseph A. Coghill, III, manager of JAC Properties GE, LLC, owner of 1096 Hill Avenue and 1102 Hill Avenue, and G. Vincent and Barbara Cuyler, owners of 1108 Hill Avenue and 1118 Hill Avenue, have petitioned the Village President and Board of Trustees for approval of a Zoning Map Amendment in accordance with Section 10-10-13 of the Glen Ellyn Zoning Code to rezone the subject properties to I1 Industrial District; and

Whereas, the subject properties are located on the north side of Hill Avenue between I-355 and Walnut Road; and

Whereas, the subject properties are legally described as follows:

1096 Hill Avenue and 1102 Hill Avenue

LOTS 1 AND 2 IN HILL OAK SUBDIVISION, BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 11, 1970 AS DOCUMENT NUMBER R70-14300 AND CERTIFICATE OF CORRECTION RECORDED MAY 21, 1970 AS DOCUMENT NUMBER R70-15844 IN DUPAGE COUNTY, ILLINOIS.

P.I.N.s: 05-12-207-032 and 05-12-207-033

1108 Hill Avenue

LOT 1 IN VILLA PARK KITCHENS RESUBDIVISION BEING PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323, ALL IN DUPAGE COUNTY, ILLINOIS,

AND ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT-OF-WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LYING NORTH OF AND ABUTTING LOT 1 IN VILLAGE PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 2 OF SAID VILLAGE PARK KITCHENS RESUBDIVISION AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18 FEET TO A POINT OF CURVE IN SAID NORTH LINE; THENCE CONTINUING WESTERLY ALONG THE NORTH LINE OF SAID LOT 2, BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREES 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHEAST CORNER OF SAID LOT 1 FOR THE POINT OF BEGINNING; RUNNING THENCE WESTERLY ALONG THE NORTH LINE OF SAID LOT , BEING THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3321.38 FEET AND A CENTRAL ANGLE OF 02 DEGREES 04 MINUTES 19 SECONDS, AN ARC DISTANCE OF 120.10 FEET (MEAS., REC.=120.12") THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE, A DISTANCE OF 12.79 FEET; THENCE EASTERLY A DISTANCE OF 69.97 FEET TO A POINT THAT IS 16.00 FEET NORTHERLY OF (MEASURED RADIALY THERETO) THE NORTH LINE OF VILLA PARK KITCHENS RESUBDIVISION AS AFORESAID; THENCE CONTINUING EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED, 3,337.38"=CALC.), A CENTRAL ANGLE OF 00 DEGREES 52 MINUTES 17 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, AN ARC DISTANCE OF 50.75 FEET; THENCE SOUTHEASTERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N. 05-12-207-037

1118 Hill Avenue

LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION, BEING A PART OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 11, 1972 AS DOCUMENT NUMBER R72-47323 IN DUPAGE COUNTY, ILLINOIS,

AND, ALSO:

THAT PART OF THE UNION PACIFIC RAILROAD RIGHT OF WAY (FORMERLY THE CHICAGO AND NORTHWESTERN RAILROAD RIGHT OF WAY) LAYING NORTH OF AND ABUTTING LOT 2 IN VILLA PARK KITCHENS RESUBDIVISION AFORESAID, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 2 AND RUNNING THENCE WESTERLY ALONG THE NORTH LINE THEREOF, A DISTANCE OF 176.18

CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3321.38 FEET, WHOSE CENTRAL ANGLE IS 01 DEGREE 16 MINUTES 48 SECONDS, A DISTANCE OF 74.20 FEET (REC. & MEAS.) TO THE NORTHWEST CORNER OF SAID LOT 2; THENCE NORTHERLY RADIAL TO THE LAST DESCRIBED CURVE A DISTANCE OF 16.00 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 3,337.21 FEET (DEED,3,337.38=CALC.), A CENTRAL ANGLE OF 01 DEGREE 16 MINUTES 50 SECONDS, AND BEING NORMALLY PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 74.60 FEET; THENCE EASTERLY ALONG A LINE THAT IS 16.00 FEET NORTH OF AND PARALLEL WITH SAID NORTH LINE, A DISTANCE OF 176.18 FEET (DEED, 176.22'=MEAS.) TO A POINT THAT IS 16.00 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO SAID NORTH LINE, THE NORTHEAST CORNER OF LOT 2, AFORESAID; THENCE SOUTHERLY 16.00 FEET TO THE POINT OF BEGINNING, ACCORDING TO DOCUMENT RECORDED MARCH 24, 1995, AS NUMBER R95-034450, ALL IN DUPAGE COUNTY, ILLINOIS.

P.I.N: 05-12-207-038

Whereas, the petitioners heretofore each entered into a valid and binding annexation agreement for the subject properties, and said annexation agreements were approved by the President and Board of Trustees pursuant to Ordinance No. 6164 on September 9, 2013; and

Whereas, the annexation agreements required the Village to create a new light industrial zoning district for the subject properties to be zoned upon annexation; and

Whereas, the Village created a new light industrial zoning district on January 13, 2014 pursuant to Ordinance 6207; and

Whereas, the Properties have been annexed by the Village Board by Ordinance No. 6631 on October 8, 2018; and

Whereas, following due and proper publication of notice in The Daily Herald not less than fifteen (15) nor more than thirty (30) days prior thereto, the Plan Commission of the Village of Glen Ellyn conducted a public hearing on September 13, 2018 at which hearing the Plan Commission considered the petitioners' request for a Zoning Map Amendment to I1 Industrial; and

Whereas, at the September 13, 2018 public hearing of the Plan Commission, the petitioners presented evidence, testimony, and exhibits in support of the request and no one spoke in favor of

Whereas, at the September 13, 2018 public hearing of the Plan Commission, the petitioners presented evidence, testimony, and exhibits in support of the request and no one spoke in favor of or in opposition to the request and one (1) person asked general questions about the request for a Zoning Map Amendment to I1 Industrial; and

Whereas, after having considered the evidence presented, including the exhibits and materials submitted, the Plan Commission made its findings of fact and recommendations and by a vote of six (6) “yes” and zero (0) “no”, the Plan Commission recommended approval of the request for a Zoning Map Amendment to I1 Industrial as set forth in the September 13, 2018 minutes of the Plan Commission, a draft of which is attached hereto as Exhibit “A”; and

Whereas, the Village President and Board of Trustees have reviewed the evidence, exhibits, and materials presented at the September 13, 2018 Plan Commission public hearing and have considered the recommendations of the Plan Commission; and

Whereas, the President and Board of Trustees hereby make the following findings of fact in regard to the request for a Zoning Map Amendment to I1 Industrial for the properties:

1. The existing uses within the general area of the subject properties consist of industrial to the south, the Union Pacific Railroad, residential, and the Churchill Woods Forest Preserve to the north, residential to the west and the Glenbard Wastewater Authority plant to the east.
2. The zoning classification to the south is I-1 Industrial in unincorporated DuPage County, Conservation Recreation to the north in Glen Ellyn and R-4 Residential in Unincorporated DuPage County, R-4 Residential to the west in Unincorporated DuPage County, and Conservation Recreation to the east in the Village of Lombard.
3. The subject properties are suitable for the I1 Industrial District. These properties have been in use as industrial for many years and were previously zoned as industrial when located within the Village of Lombard.
4. The property immediately to the south is zoned and used for industrial purposes in unincorporated DuPage County. The property to the east is industrial in nature as the Glenbard Wastewater Authority plant. The Union Pacific railroad is adjacent to the north.

5. The Comprehensive Plan designates these properties for light industrial and recommends the area be improved and upgraded as a limited self-contained business area.
6. The properties are not vacant and have been improved with industrial uses for several years. The use of the properties will remain as industrial with the new zoning classification.
7. The properties will not be diminished based on the particular zoning restrictions. When the Village adopted a new I1 Industrial zoning district, the existing uses and conditions on the properties were taken into account as well as the industrial provisions contained in the Village of Lombard and DuPage County's zoning codes.

Whereas, based on the aforementioned findings of fact, the President and Board of Trustees have determined that granting the requested Zoning Map Amendment is consistent with the goals of the Glen Ellyn Comprehensive Plan and the Glen Ellyn Zoning Code and find it to be in the best interest of the Village to approve the request for a Zoning Map Amendment to I1 Industrial.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The draft minutes from the September 13, 2018 Plan Commission public hearing, attached hereto as Exhibit "A", and the findings of fact therein, as well as in the preambles above, are hereby adopted as the findings of fact of the Village President and Board of Trustees based upon their review of the evidence, exhibits, and materials presented at the September 13, 2018 public hearing of the Plan Commission.

Section Two: Based upon the findings of fact and recommendation of the Plan Commission, as adopted herein, and the findings of fact and conclusions set forth in the preambles above, the Village President and Board of Trustees hereby approve the request for a Zoning Map Amendment to I1 Industrial for the properties located at 1096 Hill Avenue, 1102 Hill Avenue, 1108 Hill Avenue, and 1118 Hill Avenue.

Section Three: The Village Clerk is hereby authorized and directed to cause a copy of this Ordinance approving the request for a Zoning Map Amendment to I1 Industrial to be recorded with the DuPage County Recorder of Deeds.

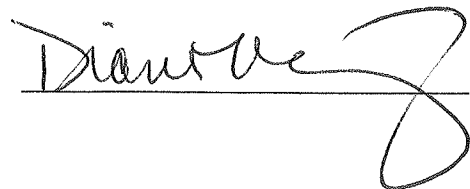
Section Four: The Director of the Planning and Development Department shall cause the Zoning District Map of the Village of Glen Ellyn to be amended to place the Properties in the I1 Industrial District. A map indicating the location of the properties is attached hereto and identified as Exhibit "B".

Section Five: This Ordinance shall be in full force and effect from and after the passage, approval, and publication in pamphlet form.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois this 8 day of Oct 2018.

Ayes:	☐ Diane McGinley	☒ Pete Ladesic	☒ Mark Senak
	☒ Craig Pryde	☒ Bill Enright	☒ Gary Fasules
	☒ John Kenwood		
Nays:	☐ Diane McGinley	☐ Pete Ladesic	☐ Mark Senak
	☐ Craig Pryde	☐ Bill Enright	☐ Gary Fasules
	☐ John Kenwood		
Absent:	☐ Diane McGinley	☐ Pete Ladesic	☐ Mark Senak
	☐ Craig Pryde	☐ Bill Enright	☐ Gary Fasules
	☐ John Kenwood		

Approved by the Village President of the Village of Glen Ellyn, Illinois this 8 day of Oct 2018.



Village President

Attest:



Village Clerk

AFFIX VILLAGE SEAL

(Published in pamphlet form and posted on the 9 day of OCT, 2018.)

EXHIBIT “A”

DRAFT MINUTES REGULAR PLAN COMMISSION MEETING SEPTEMBER 13, 2018

Call to Order

The regular meeting of the Plan Commission was called to order by Chairperson Mary Loch at 7:00 p.m. Plan Commissioners Angela Fanella, Phillip Hartweg, David Rodemann, Mohammed Saeed and Jamie Vondruska were present. Plan Commissioners Tracy Heming-Littwin, John Mulherin and Bob Vavra were excused. Also present were Village Planner John Sterrett, Recording Secretary Debbie Solomon and Village Trustee Craig Pryde.

A quorum was present.

Public Comment

No general comments on non-agenda items were made by the public at this Plan Commission meeting.

Approval of Plan Commission Draft Minutes

1. Commissioner Vondruska, seconded by Commissioner Rodemann, to approve the minutes of the June 14, 2018 Plan Commission meeting. The motion carried with six (6) yes votes as follows: Plan Commissioners Fanella, Hartweg, Rodemann, Saeed, Vondruska and Chairperson Loch voted “yes.”
2. Commissioner Fanella, seconded by Commissioner Vondruska, to approve the minutes of the August 9, 2018 Plan Commission meeting. The motion carried with six (6) yes votes as follows: Plan Commissioners Fanella, Hartweg, Rodemann, Saeed, Vondruska and Chairperson Loch voted “yes.”

Public Hearing – 21W180 Hill Avenue and 21W200 Hill Avenue - Zoning Map Amendment to I1 Light Industrial

On the agenda was a public hearing to consider the application for a Zoning Map Amendment for 21W180 Hill Avenue and 21W200 Hill Avenue.

PUBLIC HEARING – 21W180 HILL AVENUE AND 21W200 HILL AVENUE - ZONING MAP
AMENDMENT TO I1 LIGHT INDUSTRIAL

PUBLIC HEARING WITH DISCUSSION, CONSIDERATION, AND RECOMMENDATION REGARDING A REQUEST FOR APPROVAL OF A ZONING MAP AMENDMENT TO I1 LIGHT INDUSTRIAL FOR THE PROPERTIES AT 21W180 HILL AVENUE AND 21W200 HILL AVENUE.

Commissioner Fanella, seconded by Commissioner Vondruska, to open the public hearing at 7:01 p.m. The motion carried unanimously by voice vote.

Staff Introduction

Village Planner Sterrett was sworn in and showed an overview map of the properties. Village Planner Sterrett stated the subject properties are located on the north side of Hill Avenue, west of I-355 and east of Walnut Road. Village Planner Sterrett stated the properties are currently in unincorporated DuPage County zoned as R-4 Single Family Residential and are proposed to be annexed into the Village. Village Planner Sterrett stated the surrounding zoning and land use are CR Conservation Recreation to the north and east, I1 Light Industrial to the south and R4 Single Family Residential to the west.

Village Planner Sterrett stated notice of the public hearing was published in the August 10, 2018 edition of the Daily Herald. Village Planner Sterrett stated property owners within 250 feet of the subject properties were notified by mail of the public hearing and a placard was placed on each of the properties.

Village Planner Sterrett stated the petitioners are G. Vincent and Barbara Cuyler, owners of 21W200 Hill Avenue, and West Suburban Bank Land Trust No. 3344 by Noorlag Real Estate Group, LLC by Lynea R. Herlien, Manager, Noorlag Real Estate Group, LLC, owner of 21W180 Hill Avenue.

Village Planner Sterrett stated the properties were previously within the Village of Lombard until 2009 when Lombard approved a disconnection of the properties. Village Planner Sterrett stated since that time, the properties remain outside the corporate limits of any municipality. Village Planner Sterrett stated on September 9, 2013 the Village Board approved annexation agreements for each of the properties. Village Planner Sterrett stated each agreement contains stipulation that the Village Board must approve a text amendment to the Village Zoning Code to create a light industrial zoning district within six (6) months of the execution of the Annexation Agreements, or they would be deemed null and void. Village Planner Sterrett stated each agreement also states that the properties will be zoned to this Light Industrial district upon annexation.

Village Planner Sterrett stated the Plan Commission met on December 12, 2013 to hold a public hearing on the Zoning Text Amendment for the creation of a light industrial zoning district. Village Planner Sterrett stated the proposed I1 district was created specifically to accommodate the subject properties. Village Planner Sterrett stated following the Public Hearing the I1 Light Industrial Zoning District was adopted by the Village Board on January 13, 2014.

Village Planner Sterrett stated the annexation agreements stipulate that once the properties become contiguous to the Village, the owners are required to submit a petition for annexation upon notice by the Village. Village Planner Sterrett stated a portion of the Churchill Woods property to the north was annexed by the Village in June of 2018 and created contiguity with the subject properties. Village Planner Sterrett stated the petitioners have each submitted a petition for annexation. Village Planner Sterrett stated prior to the Village Board taking action on annexing the properties, the petitioners are seeking a Zoning Map Amendment to zone the properties I1 immediately after annexation, which was the intent of annexing those properties. Village Planner Sterrett stated before the Village Board takes action on the Annexation and Zoning Map Amendment, the Plan Commission is being asked to conduct a Public Hearing for the Zoning Map Amendment.

Petitioner's Presentation

There was no presentation from the Petitioner.

Questions from the Plan Commission

There were no questions from the Plan Commissioners

Persons in Favor of or in Opposition to the Request

Jeffrey Svien, who resides at 14 Walnut Road, stated he is in unincorporated Glen Ellyn and is an interested party in this. Mr. Svien stated Walnut Road is now surrounded by annexed properties and asked when Walnut Road might be annexed into the Village. Chairperson Loch stated the Plan Commission does not handle this so Mr. Svien would need to talk to the Village Board and the Glen Ellyn Planning and Development Department about this.

Mr. Svien stated there are cars parked along Walnut Road often and asked if the parking would be lessened once there are be different ordinances after the annexation. Village Planner Sterrett stated this is maintained by the Village of Lombard currently, and once the properties are annexed into Glen Ellyn, the Village's parking requirements would apply. Village Planner Sterrett stated once these properties are annexed, the existing uses, the condition of the

properties and the building setbacks are considered non-conforming; however, any other laws or nuisance ordinances would now apply.

Commissioner Fanella moved, seconded by Commissioner Vondruska, to close the public hearing at 7:08 p.m. The motion carried unanimously by voice vote.

Comments from the Plan Commission

Commissioner Vondruska stated he has no issues with this as it seems straight forward. The other Plan Commissioners agreed with this.

Motion

Commissioner Fanella moved, seconded by Commissioner Vondruska to recommend the following:

After conducting a public hearing and deliberating on the appropriate zoning classification to apply to the properties at 21W180 Hill Avenue, owned by West Suburban Bank Land Trust No. 3344 by Noorlag Real Estate Group, LLC by Lynea R. Herlien, Manager, Noorlag Real Estate Group, LLC and 21W200 Hill Avenue, owned by G. Vincent and Barbara Cuyler, the Plan Commission hereby recommends I1 Industrial zoning of the properties in accordance with Section 10-10-13 of the Zoning Code based on the following findings of fact:

1. The existing uses within the general area of the subject properties consist of industrial to the south, the Union Pacific Railroad, residential, and the Churchill Woods Forest Preserve to the north, residential to the west and the Glenbard Wastewater Authority plant to the east.
2. The zoning classification to the south is I-1 Industrial in unincorporated DuPage County, Conservation Recreation to the north in Glen Ellyn and R-4 Residential in Unincorporated DuPage County, R-4 Residential to the west in Unincorporated DuPage County, and Conservation Recreation to the east in the Village of Lombard.
3. The subject properties are suitable for the I1 Industrial District. These properties have been in use as industrial for many years and were previously zoned as industrial when located within the Village of Lombard.
4. The property immediately to the south is zoned and used for industrial purposes in unincorporated DuPage County. The property to the east is industrial in nature as the Glenbard Wastewater Authority plant. The Union Pacific railroad is adjacent to the north.

5. The Comprehensive Plan designates these properties for light industrial and recommends the area be improved and upgraded as a limited self-contained business area.
6. The properties are not vacant and have been improved with industrial uses for several years. The use of the properties will remain as industrial with the new zoning classification.
7. The properties will not be diminished based on the particular zoning restrictions. When the Village adopted a new I1 Industrial zoning district, the existing uses and conditions on the properties were taken into account as well as the industrial provisions contained in the Village of Lombard and DuPage County's zoning codes.

The motion carried with six (6) yes votes and zero no votes as follows: Plan Commissioners Fanella, Vondruska, Hartweg, Rodemann, Saeed and Chairperson Loch voted "yes."

Trustee's Report

Village Trustee Pryde stated the Village Board did the First Reading of the 1.5% food and beverage tax which there are no major objections to. Village Trustee Pryde stated the majority of the Village Board is in favor of this tax which will go toward future Capital Projects, such as the Central Business District Streetscape, a Parking Garage, HVAC improvements at the Civic Center, improvements on Roosevelt Road and a possible update at the Train Station with a Pedestrian Underpass.

Chairperson's Report

None

Staff Report

Village Planner Sterrett stated in October or November, the Plan Commission will consider an application for the former Giesche property. Village Planner Sterrett stated there will also be the first public meeting regarding an update to the Village's Comprehensive Plan. Village Planner Sterrett stated the goal is to have the Comprehensive Plan updated by March 2019.

Other Business

None

Adjournment

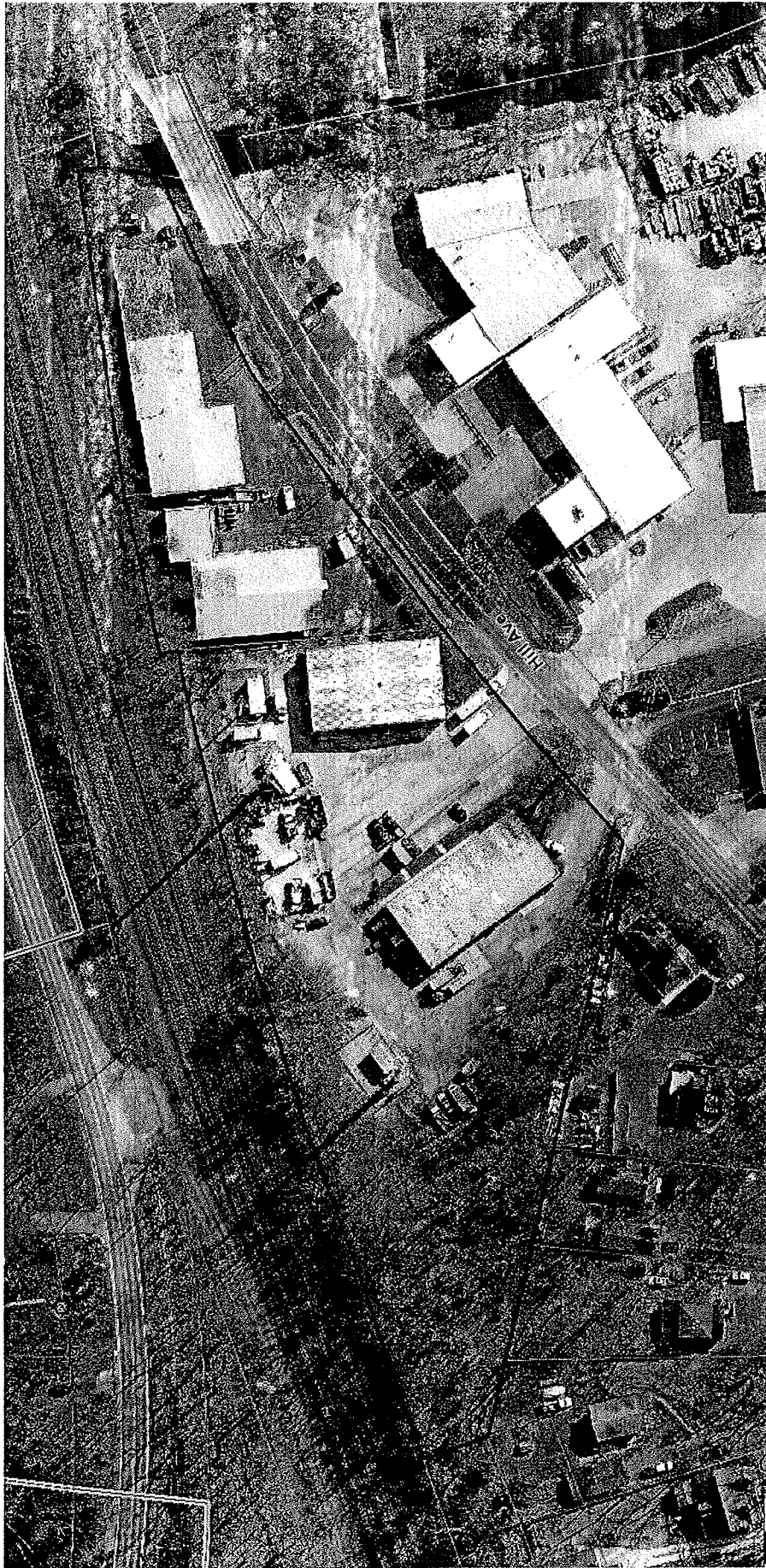
Commissioner Hartweg moved, seconded by Commissioner Fanella, to adjourn the meeting at 7:14 p.m. The motion carried unanimously by voice vote.

Respectfully Submitted,

Debbie Solomon
Recording Secretary

EXHIBIT "B"

Map of 1096 Hill Avenue, 1102 Hill Avenue, 1108 Hill Avenue and 1118 Hill Avenue

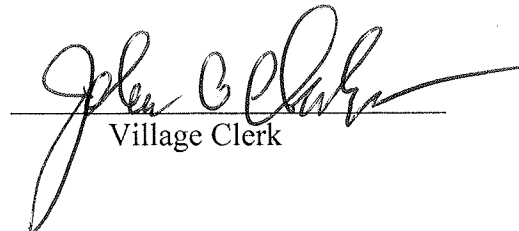


CERTIFICATION

I, John Chereskin, duly elected Village Clerk of the Village of Glen Ellyn, Illinois, do hereby certify that the attached is a true and correct copy of Ordinance No. 6632, passed by the Board of Trustees of the Village of Glen Ellyn, Illinois, at the Regular Meeting of said Board held on the 8 day of October 2018, and that the same was signed and approved by the President of said Village on the 8 day of October 2018.

I do further certify that the original, of which the attached is a true and correct copy, is entrusted to me as Village Clerk of said Village for safekeeping and that I am the lawful custodian and keeper of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Glen Ellyn, Illinois, this 8 day of October, 2018.


Village Clerk

CORPORATE SEAL

DRAFT MINUTES
REGULAR PLAN COMMISSION MEETING
December 8, 2022

Call to Order and Roll Call

Chairman Tim Loftus called the meeting to order at 7:00 p.m., and explained the Plan Commission's advisory function and operating procedure relative to its deliberation. He went over protocol for public comment, announced that the meeting would be recorded, and introduced Village Board Trustee Liaison Steve Thompson, Director of Community Development Marty Scott, Associate Planner Taylor Gendel, Senior Planner Atrian Fard and Recording Secretary Barbara Dutton-Thomas. Roll was called. Chairperson Loftus, Plan Commissioners Arango, Brown, Cooper, Dawson, Kreuzer, Saeed and Thakkar announced their presence, while Commissioner Wyant joined the meeting later.

Public Comment Non-Agenda Items

None.

Approval of Minutes

Commissioner Kreuzer moved to approve the draft minutes of the November 10, 2022 Plan Commission meeting; seconded by Commissioner Saeed, the motion passed by voice vote.

Commissioner Cooper moved to open the Public Hearing to consider a Special Use Permit (SUP) to allow an addition of DISH Wireless antennas and support equipment to existing cellular tower. Seconded by Commissioner Dawson, the motion passed by voice vote.

Public Hearing – 1102 Hill Avenue

Staff Introduction

Sworn in, Taylor Gendel, Associate Planner, 535 Duane, stated that the Petitioners, Crown Castle and DISH Wireless, represented by Tony Phillips of Fullerton Engineering, as licensee of a portion of the property located at 1102 Hill Avenue request approval of a SUP to allow an addition of DISH Wireless antennas and support equipment to the existing cell tower. The subject structure is located on the north side of Hill Avenue between Route 53 and Walnut Road in the I1 Light Industrial District, explained Associate Planner Gendel, who noted that the surrounding zoning and land uses are CR Conservation Recreation, Union Pacific Railroad and R-4 Unincorporated (DuPage), and Light Industrial. Ms. Gendel reviewed annexation/zoning history of the subject property, noting that the current cellular tower is height is 70 ft., which exceeds the maximum allowable height of 45 feet for structures located in the I1 Light Industrial District. As no Special Use Permit has been granted by the Village, she explained, the cellular tower is considered legal nonconforming. At this time, continued Associate Planner Gendel, the Petitioners are proposing to replace the existing vacant carrier antennas and associated equipment on the existing cellular tower with new DISH Wireless entry port, antenna and ground equipment.

The new antenna will be installed on top of the pole at approximately 67-ft. high, she said, adding that television and radio towers and antenna support structures that exceed district's maximum height will require a SUP. Given the maximum allowable height of 45 f.t in the I1 District, the proposed antenna will require approval of a SUP, she explained, adding that Code also specifies that the "lawfully existing, nonconforming use of part or all of a building or structure, all or substantially all of which building or structure is designed or intended for a use permitted in the district in which it is located, may be continued" subject to the provision stating the "nonconforming use of part of a building or structure shall not be expanded or extended." Given the legally nonconforming height and operation of the existing tower, she said, the proposed work and expansion triggers a need for a SUP. Ms. Gendel stated that the proposed addition of new DISH Wireless antennas will not add to the height of the existing structure, will be unmanned and will only require power and fiber connections that already exist on the site, and will require service by a technician approximately once a month. She listed Commission action.

Commissioner Questions

Chairperson Loftus asked what the Petitioner is broadcasting over the equipment; Ms. Gendel deferred to the Petitioner. Commissioner Brown asked if the tower is servicing any users; Ms. Gendel thought not.

Petitioner's Presentation

Sworn in, Ariel Stouder, Fullerton Engineering, 3648 W. Belle Plaine Ave., Chicago, Ill., stated that there are no carriers up there and that any equipment will be dismantled and replaced. She said that the proposed is a buildout of the DISH network and will be bringing 5G. Chairperson Loftus asked why the equipment is being installed outside the hut. The Petitioner responded that consideration is more on the leasing side, and said she's not entirely aware of whose is located in the shelter. The Chairperson asked if there are plans to fix the fencing around the site. The Petitioner replied that she is not aware of any, but is happy to make a note of it for potential address. Commissioner Brown asked the Petitioner if there were issues with presenting the proposed as a 5G tower instead of as a DISH tower. Ms. Stouder replied that the tower is tall enough to accommodate multiple carriers, and that Crown Castle is the owner and will be able to support all services, 5G just being the newest technology that's being built out. While admitting that she might have missed mention of 5G in the packet, Commissioner Brown expressed concern in that 5G is "a touchy subject." Ms. Stouder stated that the 5G frequency about which there were issues at the airport is not one they'll be utilizing. Chairperson Loftus asked if it would be possible to add other carriers below the existing, to which the Petitioner replied, "Absolutely." Mr. Loftus asked if per Code another carrier would be mounted below the existing, to which Ms. Gendel replied that the special use is just for the height of the monopole (but that one below wouldn't need a special use). Sworn in, Atrian Fard, Sr. Planner 535 Duane, explained that if other equipment will be there above 45 ft., another special use would be required. Commissioner Thakkar observed that the proposed doesn't look that different from the current set-up. Commissioner Kreuzer moved to close the Public Hearing; seconded by Commissioner Arango, the motion passed by voice vote.

Discussion

Perceiving a replacement of abandoned antennas with newer, Chairperson Loftus said he doesn't see any reason the application should be denied. Commissioner Arango asked if 70 ft. was determined to provide greater coverage and better reception than 45 ft. Commissioner Cooper observed that cell service has become an issue of infrastructure – in the same way as cable or electric lines – and that citizens expect cellular coverage, hence a reason for expanding the use. Commissioner Arango asked whether then the 45 ft. zoning is a detriment. Commissioner Cooper said he doesn't think the Commission has heard evidence to that one way or the other, while Chairperson Loftus noted that tower height is dependent upon location (e.g., terrain) and coverage area. Commissioner Thakkar, who said his initial thought was whether there are any safety concerns, sees the proposed as reuse of an existing unused structure. Commissioner Brown said she is concerned about the range of public notification of the meeting, as neighbors outside the 350-ft. legally-obligated buffer might not know what is happening, and that some people might have questions about the 5G. She said that if the Commission recommends approval she'd like to see the Village, prior to the Board meeting for which the subject is slated for discussion, specify that this is a 5G tower. Commissioner Kreuzer noted that the community does have a population concerned about 5G and its environmental and health effects. He said 5G was "completely omitted" from the notice and the package, and that hopefully the Board will be aware of this and improve notice. Chairperson Loftus said he understands the remark, but noted that the Village didn't do anything different for this petition than others. Commissioner Kreuzer argued, however, that exposure goes beyond the notice requirement, saying the technology is "more pervasive." Commissioner Cooper moved for the following:

After conducting a public hearing and deliberating on the request of the petitioner, Tony Phillips of Fullerton Engineers Consultants LLC, on behalf of Crown Castle USA Inc. and DISH Wireless LLC, for approval of a Special Use Permit to allow an addition of DISH Wireless antennas and support equipment to the existing cellular tower at 1102 Hill Avenue in the I1 Light Industrial District, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on December 8, 2022, 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 new DISH Wireless antenna added to the existing cellular tower be operated in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees.
2. That it be stated to the Village Board of Trustees that a purpose of the installation is for 5G.

Seconded by Commissioner Thakkar, the motion passed with Plan Commissioners Cooper, Thakkar, Arango, Dawson, Kreuzer and Saeed and Chairperson Loftus voting, "Yes," and Commissioner Brown voting, "No." (Commissioner Wyant had yet to join the meeting.)

Pre-Application – 750 Roosevelt Road

Staff Introduction

Senior Planner Fard explained that a pre-application meeting is requested to discuss the redevelopment of the property at 750 Roosevelt to construct of a Popeye's restaurant. The Petitioner, she said, is Woolpert Company on behalf of Aby Groups, represented by Jake Cooke and Ryan Walter. The Petitioner is in the process of negotiating a contract for the purchase of the property, she noted. The proposed project consists of the demolition of the existing 3,831SF building, and the construction of a new one-story-3,050SF Popeye's restaurant building with a drive-through, explained Ms. Fard. The project also calls for the redevelopment of the parking lot and undergrounding public utilities, she said, adding that the subject site is located on the northwest corner of Roosevelt Road and Taylor Avenue, approximately 145 ft. east of Roosevelt Road's intersection with Nicoll Avenue.

The subject site is currently located in the C4 Office District, which does not allow restaurants and drive-through facilities by right or by way of a Special Use Permit, continued Ms. Fard. Hence, she explained, the Petitioner is requesting approval of a Zoning Map Amendment to rezone the subject property to the C3 Service Commercial District, which allows for a range of uses including restaurants permitted by right and drive-through facilities by way of special use permits. The senior planner noted that Danby's Station Café has been operating at this location for many years as a legal nonconforming use. Since the majority of properties fronting on Roosevelt Road, between the Wheaton border and IL Route 53, are currently zoned C3 Service Commercial, including the properties immediately south of the subject property, and given the long history of the site being used as commercial, she said, Staff is supportive of this request and believes that C3 District is the most appropriate zoning for the site. The new building is compliant with all setback requirements of the C3 District, she stated. The Zoning Code requires 10-ft. landscape setbacks along Roosevelt Road and Taylor Avenue and an impervious surface setback of approximately 6.74 ft. around all four sides of the property, stated Ms. Fard. Although the project will not increase the amount of impervious area on the lot, to meet the current Code, Ms. Fard predicted, the Petitioner will be requesting approval of variations from landscape and impervious surface setbacks. It is important to note, she said, that the Development Committee requested the existing concrete sidewalk across the main frontage be moved further away from the Roosevelt Road's edge of the curb to enhance the safety of the pedestrians. To address this issue, the sidewalk needs to be placed within the limits of the property, leading to variations from the required landscape and impervious surface setbacks along the south property line. Sr. Planner Fard related that there will be a drive-through wrapping around the north side of the building, related Ms. Fard, who said that the new drive-through contains two lanes for ordering, merging into one lane at the service area on the west side of the building. Code, she said, requires five stacking spaces per drive-through lane for restaurants. While it seems approximately eight to nine cars would fit on this drive-through, which does not meet the minimum number of 10 stacking spaces required, she said, a variation will probably be required based on the current design. Under the Development Committee's direction, the petitioner modified the layout by shifting the building north and widening the one-way drive aisle to the south of the building to accommodate drive-through queue

and prevent conflicts with cars entering the parking lot. There will be a one-way escape lane around the drive-through, to allow internal circulation and exit from the drive-through. A SUP is required for a drive-through in the C3 Zoning District. Currently, access to the site is provided via a two-way drive on Roosevelt Road and a cross access from the US Bank site and Nicoll Avenue. The Petitioner, reported Ms. Fard, plans to utilize the existing access points and add a new two-way drive on Taylor Avenue. The main Roosevelt Road access drive will be restricted to a right-in/right-out only, which will need Illinois Department of Transportation (IDOT) approval for the location and design of the access drive. Verification should be made of the cross access, potential easement, and agreement between the two lots to allow future traffic travel from or to Nicoll Avenue. As part of the formal application process, stated Ms. Fard, the Petitioner will be required to submit a traffic study. Code, indicated Ms. Fard, requires that a driveway approach be separated from an adjacent intersection of a major arterial street with another arterial or collector street either 200 ft., or length of full left turn storage on the arterial (in this case 330 ft.), whichever is greater. Approval of a Zoning variation will be required to allow the Roosevelt Road access drive to be located approximately 170 ft. from the adjacent intersection of Roosevelt Road and Nicoll Avenue to the west, she said. The proposed restaurant will be served by 12 parking stalls, including one accessible parking space proposed on the south side of the parking lot in front of the building entrance. The Site Plan indicates that the restaurant would have 36 seats, which satisfies the minimum requirement of one space for every three seats, said Ms. Fard, who added that although compliant with the Village minimum parking requirement, Staff believes additional parking would be needed due to the high demand for the Popeye's restaurant. The plans show landscape islands at the end of every parking row, except the northernmost end, where the trash enclosure will be placed. Also, said Ms. Fard, the size of the landscape islands along north-south parking row is less than the size of the parking spaces. Code requires landscaped islands to be provided at the end of every row of parking stalls with a minimum width and length equal to the size of the parking spaces in the subject lot. The Plan Commission may wish to encourage the Petitioner to amend the plans to provide landscape islands that are at least equal to the size of the parking spaces on the property as required by Code. A new trash enclosure and refuse area will be placed at the north end of the north-south parking row, within the required 30-foot corner side yard setback. Trash enclosures are not permitted obstructions in a corner side yard, she said, therefore, a variation will be needed. Ms. Fard said the Petitioner has indicated that all existing overhead utility lines located within the property limits will be undergrounded as part of the project. The proposed sign package incorporates the Popeye's corporate brand identity throughout, she said, which consists of six wall signs, one monument sign, three traffic directional signs, and two drive-through (clearance) canopy information signs. Ms. Fard described the wall signs: an internally illuminated orange one on the south elevation (fronting Roosevelt Road), reading "Popeye's Louisiana Kitchen;" one on the west elevation in corporate orange color; one mounted to the east elevation, reading "Louisiana Kitchen" and business establishment date of "1972," accompanied by a chicken logo; also a halo-lit wall sign on the south elevation displaying a vinyl walnut-toned chicken logo outlined by a white LED color; and a non-illuminated wall sign mounted to the east elevation and one to the west elevation, featuring white acrylic text in the corporate font.

Corner lots with single-tenant non-residential establishments in C3 District are allowed to have a maximum of two wall signs, explained Sr. Planner Fard: one mounted on the front and one on the corner side building elevations. The maximum sign area shall be limited to 1SF per linear ft. of establishment frontage for each sign, she said, adding that the proposed Popeye's establishment will have a 39.2- and 83-linear-ft. of establishment frontage on Roosevelt Road and Taylor Avenue, respectively. The proposal calls for six wall signs, one of which exceeds the maximum allowable sign area calculated based on the linear footage of the establishment, she continued, and said therefore, two variations for the maximum number and area of wall signs will be required. The proposed monument sign features an internally illuminated (LED) vertical box consisting of two sign cabinets, explained Ms. Fard. The base features walnut-toned, wood-grain skin with raised white channel letters reading "Popeye's," and exceeds the maximum allowable base height of 5 ft., she said, concluding that a variation will be required. The top sign cabinet displays a logo on a corporate orange background. The Sign Code restricts the total combined area of all signs on a corner lot improved with a nonresidential single tenant building to be 150SF, said Ms. Fard. The total area calculation takes into account all wall, freestanding and awning signs. As proposed, there will be approximately 277SF of wall and freestanding signage on the lot, which exceeds the requirement. Therefore, a variation will be required. She noted also proposed are three non-illuminated rectangular double-faced traffic directional signs, and two drive-through canopy informational signs that she said are excluded from the total sign area calculation. The proposal calls for several architectural elements, including decorative shutters, a partially covered entrance canopy, a trellis structure, and a partially covered drive-through awning, she noted. The project, stated Sr. Planner Fard, will not likely require any new stormwater detention or Post-Construction Best Management Practices measures because the site is largely comprised of impervious surfaces today. However, she added, the regulatory FEMA floodplain associated with the detention pond north of the site extends across the north half of the existing site. The proposed development calls for re-grading the site to properly elevate the new building and parking lot above the floodplain as required, she noted. The developers are required to provide compensatory floodplain storage, and if they are relocating the floodplain storage to the northernmost portion of the site; a floodplain volume in the amount of 150 percent of the existing floodplain volume will need to be provided, concluded Ms. Fard, who outlined Plan Commission action to be taken in response to this pre-application case.

Commissioner Discussion

Chairperson Loftus asked why the site was never (at least since 1988) a C3 district. Ms. Fard said she doesn't know. Mr. Loftus asked whether the project could move forward without the rezoning, to which Ms. Fard replied that it could not. Mr. Loftus asked about easement history vis-à-vis the US Bank property. Ms. Fard said a temporary easement was granted to Danby's Station many years ago, but further research will ensue with upon project application. Mr. Loftus asked the reason for the third entrance (off of Taylor, which he said is not designed for regular traffic). Ms. Fard said it is to ease traffic on the site and thinks it could be an exit only. Mr. Loftus said perhaps it could be a right-turn-only out.

The Chairperson asked if the parking plan takes into account any employee parking, to which Ms. Fard indicated it's not required in C3. Observing that westbound traffic can come over the hill "pretty quickly," Commissioner Kreuzer thought the proposed might create a safety concern. Commissioner Cooper asked the number of parking spaces the Village would recommend, to which Ms. Fard replied that it depends on the traffic impact study, but said she believes an additional two or three would do. Commissioner Brown observed that Raising Cane's (another chicken meal proprietor) has 32 parking spaces; Ms. Fard said its development was before her time with the Village, so she doesn't have information about it. Ms. Brown wondered about operating hours' impact on lighting, to which Ms. Fard said the Village doesn't regulate hours of operation for restaurants, but that conditions of approval could govern lighting. Commissioner Saeed articulated limitations of consideration sans a traffic study. Saying she fears creating "a Starbuck's situation" with traffic, Commissioner Arango expressed concern about a dangerous Roosevelt entrance with traffic backing up into 5 o'clock commuter traffic. Mr. Cooper wondered if entrances off of Nicoll and Taylor but not Roosevelt might help address the situation while making room for more parking. Chairperson Loftus advised that this could be recommended based on traffic studies. Commissioner Arango urged this, while Commissioner Saeed pressed for measures to alleviate stormwater risk. Ms. Fard disclosed that she'd conservatively reviewed the stacking configuration for what she anticipates will be a busy restaurant and concludes that the layout, in general, isn't bad.

Though he complimented the building's "beautiful design," Commissioner Kreuzer expressed concern about the lighting – particularly the lack of bulb shielding – calling the drive-through a "white nightmare." He encouraged less color temperature in line with Village standards, to which Ms. Fard said lighting would be examined. Roosevelt Road, Chairperson Loftus speculated about moving the eastern entrance south should the entrance from Roosevelt be scrapped, to which Ms. Fard said a speed limit requirement would dictate the distance to the drive approach, and suggested that the Village Engineer would need to evaluate this scenario, if proposed. To a suggestion from Commissioner Kreuzer to reduce the westbound speed limit on Roosevelt, Sr. Planner Fard responded that the road is not under Village jurisdiction, but rather IDOT's, which would evaluate impacts. Chairperson Loftus asked if the property owner would need to grant an easement to put in sidewalk. Ms. Fard replied, "Probably, yes." Endorsing "less is more," Commissioner Dawson opined the proposed has too much illuminated signage.

Petitioner's Presentation

Jacob Cook, Brian Walter (with Woolpert) and Chris Ludwig introduced themselves. Mr. Cook related that IDOT was consulted and deemed the right-in/right-out access way acceptable. He also said the dumpster could be relocated to the northeast corner, accommodating another parking stall or two. He reported that the sign vendor has already revised their plan per Code, which will be reflected in the submittal. Wondering about the size and location of the monument signs, Chairperson Loftus asked expressed concern about signage blocking the view of a driver trying to pull out of the lot, to which Mr. Cook replied that this will be taken into consideration. Noting the existing site is not compliant with

respect to the impervious area and landscape setbacks, Mr. Walter said the Petitioner is increasing the green space.

Mr. Ludwig said the building lighting is part of a value engineering effort eliminating the “hockey sticks” at the drive-through being. Commissioner Kreuzer advocated for “moody” amber lighting, expressing the hope that the globe lights will be better shielded. Mr. Ludwig explained that the globes represent the current brand standard expressing a “Mardi Gras” aesthetic, but said the Petitioner could see if there is an alternative. Commissioner said he’s walked Louisiana, observing more of an amber color in New Orleans. Senior Planner Fard said the Village requires shielding. Saying that she doesn’t want the dumpster in the northeast corner, Commissioner Brown said she’d prefer the space be converted to a walking path. Chairperson Loftus asked if the Petitioner had done due diligence on easements, to which Mr. Walter said it performed the survey but didn’t see such notation. Though advising the Petitioner tone down the lighting and reduce the size of signage, the Chairperson commented that the modern architecture seems to blend in, and that the food and beverage tax would benefit the town. Mr. Walter said that the Petitioner could find extra parking stalls, but that 80 percent of the business is drive-through. Citing safety concerns, Commissioner Cooper asked if the restaurant could operate without a Roosevelt exit/entrance. Mr. Walter indicated that this could be explored in coordination with IDOT. Chairperson Loftus said the Commission doesn’t like to do spot zoning, and asked if an easement granted from the bank would get rezoned. Sr. Planner Fard said there’d be no change. Commissioner Kreuzer said he has no problem with rezoning the property, saying it’s long overdue. To a query from Commissioner Brown, Mr. Ludwig said mobile ordering is not part of the program. Commissioner Wyant asked if the business owner will also own the real estate, to which Mr. Ludwig replied, “Yes.”

Public Comment

Norris Eber, 701 Kingsbrook, said that while he doesn’t anticipate lighting problems, he lamented losing a breakfast option in the Village. He said he agrees with the proposed “right in-right out” design, saying it will take pressure off Nicoll, since use of Taylor Avenue is merely a “nice fantasy.”

Public Hearing – 375 Roosevelt Road & 401 Taft Avenue

Commissioner Brown moved to open the Public Hearing to consider approval of Amendments to the Preliminary Planned Unit Development with deviations, Final Planned Unit Development (PUD), a Zoning Code Text Amendment, Special Use Permits, and variations from the Sign Code to accommodate the redevelopment and operation of a new car wash at 375 Roosevelt Road and an accessory parking lot equipped with vacuum stalls at 401 Taft Avenue – Lots 4 and 5 of the 375-395 Roosevelt Road Subdivision. Seconded by Commissioner Thakkar, the motion passed by voice vote.

Staff Introduction

Sworn in, Atrian Fard, Senior Planner, 535 Duane, stated that the Petitioner, JB Development represented by Dave Dalesandro, Sam Youssef, and Professional Engineer Lauren Kucinski from Veenstra & Kimm. Ms. Fard explained that the subject property is comprised of two lots for a total area of

75,111SF and is part of the five-lot commercial development at 375-395 Roosevelt Road located between Lambert Road and Main Street. To proceed with the project, she continued, the Petitioner will need approval of a Zoning Text Amendment, amendments to a preliminary PUD for Lots 4 and 5 with zoning deviations, approval of Final PUD, a special use permit for Lot 4 to allow a car wash, a special use permit for Lot 5 to allow automobile services, and variations from the sign code. She noted that a preliminary PUD for the entire site expired in November 2021, and as part of the entitlement process, a deviation needs to be granted by the Village Board. The Petitioner will also need exterior appearance approval from the AAC, which is to meet next week. The entire development site is made up of 4.19 acres, which was formerly used for Leslie Car Wash and Enterprise Rent-A-Car rental service, related the senior planner. In November 2017, she said, the Village Board granted approval for a Major Subdivision to re-subdivide the property to create five new lots and a Preliminary PUD to redevelop three restaurant establishments on Lots 1-3 and an office building on Lot 5. The western parcel on the site, Lot 4, was occupied by Leslie Car Wash at the time and intended to remain as an ongoing business until its redevelopment, she related. Now, she continued, the Petitioner is proposing to demolish the existing car wash on Lot 4 to construct a new 5,200SF one-story car wash with vacuum stations, automated pay stations and designated stacking lanes. The proposal also calls for improvement of the existing parking lot on Lot 5, to accommodate a new parking lot with additional offsite vacuum stalls and employee parking spaces.

The northern parcel at 375 Roosevelt in the C3 Service Commercial District and the southern parcel at 401 Taft is in the C4 District, said Ms. Fard. Lot 4 in C3 will be used for a car wash, which is allowed in the C3 District with the approval of a Special Use Permit. Supplementary vacuum stalls will be proposed on Lot 5 located in the C4 District. As C4 District does not regulate automobile services such as vacuum stalls, a text amendment to the list of special uses in the C4 District will be required to accommodate the standalone vacuum operations on Lot 5. The proposed car wash facility and associated vacuum stalls would operate from 7:00 a.m. to 9:00 p.m. seven days a week. The facility would be staffed at any given time with two to three employees. At maximum capacity, the facility would serve up to five cars. It is estimated that the car wash and pay stations could service 140 cars per hour. Sr. Planner Fard explained that customers will enter the car wash establishment on Lot 4 from the three north-south lanes proposed on the west side of the building, where three separate pay booth stations are located under a canopy. Once payment is completed, staff will guide customers onto the car wash entrance on the south side of the building. The Jet Brite facility will offer an express wash that allows customers to remain in their vehicles as cars enter a 150-ft.-long conveyORIZED car wash tunnel, where cars are cleaned and heat dried. Cleaned vehicles will exit the tunnel from the north end of the building, where customers can turn left and leave the site or turn right to either go to Lot 3 (Buona Beef) or loop around to the east side of the car wash building to use the available vacuum stations. The vacuum station on Lot 4 will be sourced from a central vacuum system located inside the car wash building. If all vacuum stalls on Lot 4 were in use, she said, customers would be directed south across Taft Avenue to use the additional vacuums available on Lot 5. Lot 5 vacuum stations on will be serviced by enclosed freestanding vacuum stations

on-site. While Lot 4 complies with the minimum lot requirements in the C3 District, Lot 5, with a depth of 132 ft., is considered shallow and does not comply with the C4 District's minimum lot depth requirement of 140 ft. Therefore, explained Sr. Planner Fard, a deviation from the C4 District's lot depth regulation will be required to allow improvements on a nonconforming lot.

Accessory structures serving Lot 4 include three pay booth stations west of the car wash building with an arched canopy, an arched vacuum canopy east of the building, and a combined vending/trash enclosure at the southeast corner of the building. There will be no principal building on Lot 5 but three arched vacuum canopies: at the center of the lot; along the south property line; and along the east property line. Also planned, she indicated, is a combined vending/vacuum mechanical enclosure on the central island, a vacuum mechanical enclosure on the south of the lot, and a combined trash/vacuum/electrical enclosure on the southeast of the lot. Per Code, related Ms. Fard, an accessory structure shall be located no closer to the front property line than the principal building. Lot 4 is considered a through lot with two front yards fronting Roosevelt Road and Taft Avenue. According to the PUD Plans, the pay booths, their canopy, and the vending/trash enclosure on Lot 4 will be located closer to Taft Avenue than the car wash building. Therefore, deviations will be required. Furthermore, the trash enclosure encroaches 15 ft. into the required front yard setback of 40 ft., where trash enclosures are not permitted obstructions in the required front yard, hence an additional deviation will be required for the location of the trash enclosure on Lot 4. The proposed car wash building on Lot 4 and accessory structures on Lot 5 comply with the setback requirements, stated Ms. Fard. The Zoning Code requires an impervious surface setback of 7.44 ft. around all sides of Lot 4. The Petitioner is requesting approval of a zoning deviation to allow an impervious surface setback of as little as 1 ft. from the western property line to allow for as much vehicular maneuvering area as possible.

The Petitioner is also requesting a deviation to allow an impervious surface setback of 11 ft. along the southern property line on Lot 5 in lieu of the minimum 13.87 ft. of requirement. The C4 District further requires a minimum of a 10-ft. landscape setback along any adjacent roadway. An 8.5-foot setback is proposed along Taft Avenue that will require approval of a deviation. Given Lot 5's limited, or nonconforming, lot depth, explained Ms. Fard, the Petitioner had to modify the plans several times to achieve compliant drive isle and parking space dimensions, resulting in a reduction of southern impervious surface setback and northern landscape setback. The Zoning Code requires one space for each two employees, plus reservoir parking space or stacking space equal to five times the maximum capacity of the washing unit. According to the Petitioner, the maximum capacity of the washing unit is four cars, translating to a 20 parking spaces requirement, plus two spaces needed for car wash employees. The Petitioner plans to construct 10 parking spaces on Lot 4 and 42 on Lot 5, totaling 52 parking spaces on the subject property, said Ms. Fard, which exceeds the minimum 22 required. Unlike Lots 1-3, she noted, the car wash will not share parking with the other uses in the development. Ms. Fard added that 49 of 52 parking spaces will be covered by canopies and equipped with vacuums, including two accessible parking spaces on each lot, and said that three regular employee parking spaces will be located on Lot 5.

The net area of the principal building on Lot 4 requires one 12 ft. by 50 ft. loading area, continued the senior planner. The Petitioner is proposing a loading space at the northwest corner of the car wash building on Lot 4. The proposed loading space will comply with the number, size and setback requirements, but a deviation will be required as the loading zone will be visible from the public right-of-way (Roosevelt Road). Loading will take place outside of operational hours, she noted. Access to Lot 4 will be provided via full three-lane access off Roosevelt Road and outbound-only access to Taft Avenue in addition to one cross-access connection to Lot 3. The IDOT has jurisdiction over Roosevelt Road, and any redevelopments in the IDOT Right-of-Way will require a Permit from the agency. The Plan Commission may wish to consider a condition requiring IDOT approval of the proposed Roosevelt Road access prior to issuing any building permit for Lot 4. No new points of access are proposed for Lot 5, and the two existing access drives along Taft Avenue will be redeveloped and continue to operate as full access drives. According to the traffic impact study, the impact of the proposed car wash on the roadway network is small and levels of service at the nearby intersections of Roosevelt with Lambert, Main, Hillcrest and Greenwood, as well as Taft's intersection with Lambert and Main, will remain acceptable and adequately accommodate the projected traffic volume. The study states that the use of Lot 5 as a supplemental space for the car wash vacuums will result in various routes for ingress and egress, minimize turning movement conflicts, and further disperse traffic, which limits the development's impact on the area. Ms. Fard added that the Village's Traffic Consultant does not have any issues with the study's analysis.

Sr. Planner Fard related that the Petitioner is requesting approval of a Zoning deviation to allow the Roosevelt Road access drive to have approximately 153 ft. and 150 ft. of spacing from the adjacent drives to the east and west, respectively, in lieu of the 180 ft. required between driveway approaches located on arterials with 35 mph speed limit. Three queueing lanes to the car wash will be located on the west side of the building, with three pay booth stations at the southwest corner of the building. The proposed drive-through and stacking spaces will be compliant with the Code and will not interfere with internal circulation of the site. The Petitioner, continued Ms. Fard, is requesting approval of a deviation to allow the absence of a landscape island at the southern end of the parking row on Lot 4, where a landscaped island shall be provided at the end of every row of parking stalls with a minimum width and length equal to the size of the parking spaces in the subject lot. Other landscaped islands proposed throughout the subject site will comply with the Zoning Code, she noted. The Petitioner is providing a significant amount of landscaping throughout Lots 4 and 5 with a mixture of shrubs, ornamental trees, deciduous plants, and evergreens, stated Ms. Fard. The proposed landscaping complies with all regulations of the Zoning Code, she said, adding that further review of the Landscape Plan will be done by the Architectural Appearance Commission (AAC). The Petitioners have submitted a photometric plan indicating that the maximum illumination levels at all property lines will be compliant with Code. She added that all light fixtures will be fully shielded and the height of light poles will be less than the overall height of the building and in accordance with Code.

PUD regulations, explained Ms. Fard, require 15 percent of the total development area be dedicated to open space. Of the 15 percent being provided as open space, 10 percent must be provided for quasi-public open space. The Petitioner is providing a total of 25.1 percent open space on Lot 4, with 40.2 percent of the quasi-public open space on Lot 4. As a public amenity in the quasi-public open space, related Ms. Fard, the Petitioner is proposing a patio northeast of the building and two separate public sitting areas on the northeast and southwest corners of the lot. The Village Stormwater Engineer, related Ms. Fard, reviewed the plans and indicated that the Petitioner should be able to comply with the Stormwater Ordinance and that they are comfortable addressing any outstanding engineering issues as part of the building permit process. (A condition requiring all remaining engineering issues be finalized and approved prior to the issuance of any building permit might be considered, advised Ms. Fard.) Several signs are proposed for the car wash on Lots 4 and 5, including two internally illuminated wall signs on the building, said Sr. Planner Fard, who described these as a 104.8SF one on the north elevation, slightly tilted with yellow lettering; and a secondary wall sign on the east elevation that is 93.6SF in area and require a variation due to the building size. Another variation, she stated, will be needed to allow a total combined sign area of 198.4SF on Lot 4, where the total square footage of signage permitted on the site is 120SF. One double-faced, internally illuminated, freestanding monument sign is proposed at the northeast corner of Lot 5, continued Ms. Fard, who said its 1.4-ft. base will be constructed with the same material and color to match the accessory structures and retaining wall on Lot 5. The freestanding sign will meet all requirements, including number, setback, height, base height, and landscaping around the base, she stated, and added that three compliant, illuminated directional signs are also proposed. Ms. Fard outlined Plan Commission action and potential conditions to attach.

Commissioner Questions

Commissioner Cooper asked about the need for the number of parking spaces specified, to which Ms. Fard explained that Code doesn't distinguish between express car washes and those at which customers might park their cars for staff clean them. Commissioner Brown asked if Lot 5 will be separately staffed, to which Ms. Fard replied, "No." Expressing concern about potential loitering, the Commissioner then asked if Lot 5 would be safety surveilled, to which Ms. Fard deferred to the Petitioner. Chairperson Loftus asked if the business would be considered retail, to which Ms. Fard said it is considered a service, the definition of which was contemplated by Commission members. Commissioner Arango asked if detailing would be offered as a service, a query the Chairperson suggested be directed to the Petitioner.

Petitioner's Presentation

Sworn in, Dave Dalesandro, 590 Killdeer Drive, Bolingbrook, Ill., expressed pride in his business and its focus on maintenance and cleanliness. He said Lot 5 would be staffed, and named three employee functions at his car washes – customer guidance; cleaning and sweeping the vacuum area; and safety and traffic – stating that the Petitioner never wants traffic to back up onto the main street. Mr. Dalesandro explained that the entrance would be closed off (intermittently) on busy days to avoid backups, and noted that traffic can exit out to Taft. He said signs will direct folks to Taft vacuums.

When Commissioner Cooper asked how many vacuum stalls the Petitioner would install if there were no space constraints; citing competitive advantage, Mr. Dalesandro replied, "As many as we can." Mr. Wyant asked if the Petitioner's model (i.e., value proposition vs. high-touch) would resonate in affluent Glen Ellyn. "Absolutely!" replied Mr. Dalesandro, who said, "People like a great value." Citing golfer concerns about a "vacuum farm" up against The Links, Chairperson Loftus asked if the canopy configuration could help abate noise. While he said canopy angle has nothing to do with sound, Mr. Dalesandro insisted that the Petitioner doesn't want sound to spill on to the golf course. He said the new vacuums are quiet and will be in a bricked area, and any nozzle suction noise problem will be addressed. Commissioner Kreuzer perceived Jet Brite had been purchased by car wash enterprise, Zips. Mr. Dalesandro described the arrangement as an equity partnership allowing Jet Brite to retain operational control and branding. Commissioner Kreuzer asked if lights uniform with the town had been considered, and inquired about after-hour lighting. Mr. Dalesandro said lights have been toned down for this project, and for security, lighting would be kept at a minimum outside business hours (which are based on customer needs and preferences). Chairperson Loftus asked if the Petitioner would be willing to reduce the sign size on Lot 4, to which Mr. Dalesandro said the branding is smaller than on their other buildings, and here there is no front sign. Commissioner Dawson asked if there was a time limit on vacuum use and asked if customers could stick around post-wash to detail their cars. Mr. Dalesandro said there is no time limit, but the car wash is "not set up" for self-detailing. Chairperson Loftus asked if people vacuum cars without purchasing a wash. Mr. Dalesandro responded affirmatively, but the assumption is they got a car wash previously. Commissioner Brown asked how far people travel to Jet Brite washes. Not sure, Mr. Dalesandro said with more Jet Brite sites, customers don't have to go as far. Commissioner Cooper asked if the Police were concerned about cars shuttling across Taft. Ms. Fard said she believes such concerns would have been addressed in the Development Committee review.

Public comment

Sworn in, Tom Van Winkle, 28w677 Trillium Drive, Winfield, stated that he owns the property at 415 Taft – the property to the east of Lot 5 – operating the business, "Sign Identity." He said he is concerned that changing the Code from "Office" to "Automotive Repair" opens up other uses for that property besides vacuuming – conceivably, tire changing and other work. He also cited as a concern movement of traffic across the street to the vacuum areas. Sr. Planner Fard explained that only that being proposed is up for approval. Commissioner Brown asked if the Petitioner plans to expand services, to which Mr. Dalesandro replied, "No," citing staffing challenges in attaining a marketable price point.

A motion to close the Public Hearing was made by Commissioner Saeed; seconded by Commissioner Arango, the motion passed by voice vote.

Commissioner Discussion

With no opposition voiced to what Staff has recommended Commissioner Kreuzer moved for the following:

After conducting a public hearing and deliberating on the requests of the petitioner, JB Development, Inc. on behalf of MIKI Properties, LLC – Roselle, for approval of Amendments to the Preliminary Planned Unit Development with deviations, Final Planned Unit Development, a Zoning Code Text Amendment, Special Use Permits, and variations from the Sign Code to accommodate the redevelopment and operation of a new car wash at 375 Roosevelt Road and an accessory parking lot equipped with vacuum stalls at 401 Taft Avenue – Lots 4 and 5 of the 375-395 Roosevelt Road Subdivision, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on December 8, 2022, 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 Village Board approves an ordinance extending the expiration date of Ordinance No. 6546 and 6771 to November 13, 2023.
3. That no work on the project should commence until an IDOT right-of-way permit has been issued for the project.
4. That a stormwater management information and Stormwater Certification Application shall be submitted with permit plans for the project.

Seconded by Commissioner Brown, the motion passed by roll call vote, with Plan Commission members Kreuzer, Brown, Arango, Cooper, Dawson, Saeed, Thakkar, Wyant and Loftus voting, “Yes.”

Staff Report

Sr. Planner Fard said that currently no business is in sight for a January meeting.

Chairperson’s Report

Mr. Loftus confirmed that Plan Commission meetings will be going from two scheduled per month to one (which, he said, could run longer, though noted that special meetings could be set).

Trustee’s Report

Trustee Thompson reported that the budget and the levy were approved.

Adjournment

After wishing all a Merry Christmas, Chairman Loftus adjourned the meeting at 10:28 p.m., following voice vote passage of a motion by Commissioner Cooper and seconded by Commissioner Saeed.

Respectfully submitted,

Barbara Dutton-Thomas, *Recording Secretary*



Minutes
Village of Glen Ellyn
Regular Village Board Meeting
Monday, February 13, 2023
7:00 PM
Glen Ellyn Civic Center, Galligan Board Room

A. Call to Order – 7:00 PM

B. Pledge of Allegiance

C. Roll Call

Upon roll call by Clerk Cosby, President Senak and Trustees Christiansen, Fasules, Gould, and Thompson answered “Present.” Trustee Payne was absent.
Trustee Kalinich arrived after roll call.

Also in attendance: Village Manager Franz, Assistant Village Manager Rodman, Village Attorney Mathews, Public Works Director Buckley, Finance Director Noller, Community Development Director Scott, General Manager Vesevick, Deputy Chief of Police Vavra, and Fire Chief Clark.

D. Audience Participation

Billy Joe Mills, Village resident representing the group, Hen Ellyn, spoke on wanting to be able to raise chickens within the Village. His reason for wanting this is to connect his children with the land. He wants the opportunity to teach his children where food comes from and feel the hens are a great way to teach this.

Will Weicher, Village resident representing Hen Ellyn, spoke on the proposal to allow chickens within the Village. He pointed out that the group, Hen Ellyn, is a diverse group with a common goal. He emphasized that keeping hens helps reduce waste as they eat food scrapes.

Emily Henkels, Village resident representing Hen Ellyn, gave her views on allowing henkeeping in the Village. She also read another supporter’s reasons for wanting the Village to permit raising chickens.

Mary Eileen Gaudette, Village resident representing Hen Ellyn, gave her perspective of why hen keeping would be a positive activity for the Village, especially in teaching children about the real world. She emphasized the desire to add life cycle lessons to her children’s education. Her son Paul spoke about wanting fresh eggs and how fun it would be to keep chickens.

David Firchau, Village resident, gave his views on affordable housing on the Roosevelt/Taft property. He spoke unfavorably about his experience growing up near the now-closed hotel and felt that the space should remain retail or commercial.

Nicolas Nelson presented a petition to keep the entire Roosevelt/Taft site commercially developed. He gave several reasons for the petitioners' belief that commercial is the best use of the site, highlighting increased funding for District 89. Among other points, he reiterated that Roosevelt Road is not zoned for residential and should be treated as the gateway to Glen Ellyn.

Renie Atchison, Village resident, believes that IDD housing and group homes need to be added to the comprehensive plan. She also explained what this type of housing is and who it involves. She believes the community would support this type of housing.

Patrick Vantiem, Village resident, gave his thoughts on the redevelopment of the Roosevelt/Taft property and his belief it should be a commercial development for the tax revenue.

Pete Ladesic, Village resident, submitted an on-line comment regarding the development of the Roosevelt/Taft property and the importance of the site for tax revenue.

E. Consent Agenda - The following items are considered routine business by the Village Board and will be approved in a single vote in the form listed below:

RESULTS:	APPROVED [5 to 0]
MOVER:	Trustee Thompson [Items 1 – 4]
SECONDER:	Trustee Kalinich
AYES:	Thompson, Kalinich, Fasules, Christiansen, Gould
NAYS:	

Motion to approve the following items including Payroll and Vouchers totaling \$3,440,429.65. These agenda items have been reviewed by the Management Team and Village Attorney and are consistent with the Village's purchasing policy (Trustee Thompson).

- 1) Total Expenditures (Payroll and Vouchers) - \$3,440,429.65
- 2) Motion to Approve the Recommendation of Village President Mark Senak for the Appointment of Nancy McKee as a Commissioner to the Community Relations Commission for a term ending July 31, 2025
- 3) Motion to Approve Ordinance No. 7020, An Ordinance Amending (Liquor Control Code) Chapter 19 of Title 3, Section 11 (Classification of Licenses) of the Village Code of Glen Ellyn, Illinois, by Amending the Class B-7 Liquor License Classification and Amending Chapter 19 of Title 3, Section 3-19-11 (B) (Village Attorney Mathews)

Trustee Fasules asked General Manager Vesevick about allowing people to bring in liquor when alcohol is its best revenue stream at Reserve 22. General Manager Vesevick replied it was just to allow BYOB is January and February when sales are slow.

Trustee Gould asked a follow-up for clarification.

President Senak asked if this allowance would be at the discretion of General

Manager Vesevick as to who can bring in alcohol. General Manager Vesevick replied.

- 4) Motion to Approve a Plat of Easement for the Purpose of Stormwater Management - Glen Oak Country Club, 21W451 Hill Avenue, Glen Ellyn, IL (Community Development Director Scott)

F. Special Use Permit – Dish Wireless (Community Development Director Scott) (Trustee Thompson) **PERMIT NOT APPROVED**

RESULTS:	APPROVED [4 to 2] Re-Notice/Public Hearing/Plan Commission/ Board Review
MOVER:	Trustee Thompson
SECONDER:	Trustee Gould
AYES:	Thompson, Gould, Christiansen, President Senak
NAYS:	Fasules, Kalinich

- 1) Motion to Approve Ordinance No. 7021, An Ordinance Granting Approval of a Special Use Permit to Allow an Addition of DISH Wireless Antennas and Support Equipment to the Existing Cellular Tower at 1102 Hill Avenue, Glen Ellyn, IL

Community Development Director Scott gave an overview of the proposal and details of the special use. He gave a brief history of the need for a special use permit. Ariel Stouder from Fullerton Engineering was available to answer questions.

President Senak asked how the installation is configured to protect the safety of the residents from 5G. Ms. Stouder replied, explaining the science of 5G and how to keep 5G safe for the public.

Trustee Thompson asked if there were existing 5G antennas in the Village. Community Development Director Scott replied.

Trustee Thompson asked about the legal reports necessary for 5G and if they have been completed. Attorney Mathews replied, explaining the legal logistics of frequencies under TelCom rules and regulations and the Village’s responsibilities.

Trustee Gould asked about what first phase is for this application. Attorney Mathews replied. Ms. Stouder explained how the height of the tower limits the number of towers needed as well as the difference between small cell and the tower.

Trustee Kalinich asked if residents had come forward either in favor or against. Scott replied, “no.”

Trustee Gould asked if this was because the notice wasn’t detailed and distributed widely enough for people to know about it. Attorney Mathews replied.

Trustee Fasules commented that it's just spot coverage to fill coverage in this area, not to stream massive amounts of information.

Trustee Thompson asked if it was for cellular products. Ms. Stouder replied.

President Senak added that because it's an existing tower the physical dimension does not change, the Board may have no jurisdiction to regulate the special use.

Nancy Perlman, Village resident and expert of wireless service, urged the Board to not allow this special permit, or at least to table it, to research 5G, and its effect of the community, more thoroughly before making any decisions. She was concerned it would encourage the operators to add more carriers to the tower.

Trustee Thompson asked if a NEPA review should be required. Attorney Mathews replied to it and gave details about why it is not required.

Ms. Stouder gave her views on the NEPA review and that its purpose is to protect the environment and historic areas.

President Senak reiterated that he wanted his question answered about jurisdiction as to whether tabling for more information would matter in this case. Attorney Mathews replied.

Ms. Perlman added that no one has proved that 5G is safe. She added that the reasons for needing it should be researched to confirm the current service is necessary.

Ms. Stouder replied with more information about Dish Cellular.

President Senak asked Ms. Stouder if a further statement about the special use as a condition of the permit being issued.

Trustee Gould suggested getting the statement, reviewing it, and then debating the approval – in other words, re-notice and remanded back to the Plan Commission.

President Senak noticed requirements seem inadequate and should be extended to give more people a chance to voice their opinions.

Assistant Village Manager Rodman asked what the notice radius should be for the re-notice. Village Manager Franz suggested using the distance that is used in practice - 350 feet. The Board agreed with this distance, provided that the notice specifically referenced that this was a 5G installation.

Ms. Stouder added that it is just an evolution of the technology, from 4G... LTE... and now 5G.

In an unrelated issue, Trustee Gould asked for a Workshop to reconsider the zoning of vape stores in the Roosevelt Road corridor.

G. Reminders

- 1) Village Board Special Workshop, Thursday, February 16, 2023 - 7:00 pm
- 2) Village Board Workshop, Tuesday, February 21, 2023 - 7:00 pm
- 3) Village Board Meeting, Monday, February 27, 2023 - 7:00 pm

H. Motion to adjourn for Closed Executive Session to discuss the setting of a price for sale or lease of property owned by the public body, pursuant to 5 ILCS 120/2 (c)(6), and collective negotiating matters between the public body and its employees or their representatives, or deliberations concerning salary schedules for one or more classes of employees, pursuant to 5 ILCS 120/2(c)(2), and the appointment, employment, compensation, discipline, performance, or dismissal of specific employees of the public body or legal counsel for the public body, including hearing testimony on a complaint lodged against an employee of the public body or against legal counsel for the public body to determine its validity pursuant to 5 ILCS 120/2 (c)(1), without returning to open session thereafter

RESULTS:	APPROVED [5 to 0]
MOVER:	Trustee Kalinich
SECONDER:	Trustee Gould
AYES:	Kalinich, Gould, Thompson, Fasules, Christiansen
NAYS:	

Adjourned – 8:32 PM

**(DRAFT) FINDINGS OF FACT TO SUPPORT A MOTION TO RECOMMEND
APPROVAL OF A SPECIAL USE PERMIT TO ALLOW AN ADDITION OF DISH
WIRELESS 5G CAPABLE ANTENNAS AND SUPPORT EQUIPMENT TO THE
EXISTING CELLULAR TOWER AT 1102 HILL AVENUE**

(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, because the cellular tower is existing and is a compatible use within the Light Industrial District in which it's located. Wireless communications including 5G have been designated critical infrastructure by the federal government and the expansion of a new carrier to an existing wireless support structure supports this.
2. The proposed use 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 because the DISH Wireless antennas construction will be consistent with the existing cellular tower at the site and therefore will remain harmonious and appropriate with the existing character of the vicinity. DISH Wireless's antennas and ground equipment will not increase the height or footprint of the existing structure.
3. The proposed use will not be hazardous or disturbing to existing or future neighborhood uses of the property because the addition will be similar to the carriers previously operating at the site. The location of the existing tower also provides the adequate buffer from surrounding neighborhood uses and therefore poses no hazard or disturbance. The installation of the new DISH Wireless will comply with all applicable Building and Electrical Codes. The DISH Wireless and 5G technologies will also meet all the FCC rules regarding interference to other radio services and human exposure to radio frequency energy.
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 because as constructed the existing tower is currently covered by local emergency services and does not require any sewer, water, refuse disposal or school services. The expansion will change neither the nature of this facility nor its public services requirements.
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 as noted in the above response, this proposal will not significantly change the use and nature of the existing tower and therefore will not create excessive additional requirements at a public cost. The new 5G technologies will meet all the FCC rules regarding interference to other radio services and human exposure to radio frequency energy.

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 facility and new Wireless DISH with 5G will not generate any noise, smoke, fumes, glare, or odors and all FCC rules and regulations will be met. It will generate nominal traffic for scheduled maintenance visits.
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 the existing cellular tower is and will continue to be unmanned and will be serviced via the existing driveway by a single technician approximately once a month.
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 expansion of equipment will not change footprint which will pose no increase in potential for flood damage to adjacent property. Nor will it require additional public expenses 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 no major changes proposed to the structure or the site that would cause any damage to the character, environment, or community resources. As part of installation of 5G technology, all FCC requirements will be met.

**(DRAFT) MOTION TO RECOMMEND APPROVAL OF A SPECIAL USE PERMIT TO
ALLOW AN ADDITION OF DISH WIRELESS ANTENNAS 5G CAPABLE AND
SUPPORT EQUIPMENT TO THE EXISTING CELLULAR TOWER AT 1102 HILL AVE.**

After conducting a public hearing and deliberating on the request of the petitioner, Tony Phillips of Fullerton Engineers Consultants LLC, on behalf of Crown Castle USA Inc. and DISH Wireless LLC, for approval of a Special Use Permit to allow an addition of DISH Wireless antennas 5G capable and support equipment to the existing cellular tower at 1102 Hill Avenue in the I1 Light Industrial District, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on April 27, 2023, 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 new DISH Wireless antenna with 5G technology added to the existing cellular tower be operated in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees.

Motion by: _____ Seconded by: _____

**(DRAFT) MOTION TO RECOMMEND DENIAL OF A SPECIAL USE PERMIT TO
ALLOW AN ADDITION OF DISH WIRELESS ANTENNAS 5G CAPABLE AND
SUPPORT EQUIPMENT TO THE EXISTING CELLULAR TOWER AT 1102 HILL AVE.**

After conducting a public hearing and deliberating on the request of the petitioner, Tony Phillips of Fullerton Engineers Consultants LLC, on behalf of Crown Castle USA Inc. and DISH Wireless LLC, for approval of a Special Use to allow an addition of DISH Wireless antennas 5G capable and support equipment to the existing cellular tower at 1102 Hill Avenue in the I1 Light Industrial District, the Plan Commission hereby recommends denial of the request based on the following findings of fact.

In regard to the requested Special Use Permit the Plan Commission finds that (*only one negative finding needs to be made*):

1. The proposed use will not be harmonious and in accordance with the general objectives, or within a specific objective of the Comprehensive Plan and/or Zoning Code because_____
_____.
2. The proposed use is not designed and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and will change the essential character of the area because_____
_____.
3. The proposed use will be hazardous or disturbing to existing or future neighborhood uses of the property because _____
_____.
4. The proposed use will not be served adequately by existing 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 not be able to provide adequately any such services because _____
_____.
5. The proposed use could create excessive additional requirements at public cost for public services because _____
_____.
6. The use will involve activities, processes, materials, equipment and/or conditions of operation that are detrimental to any persons, property or the general welfare by reason of the excessive production of traffic, noise, smoke, fumes, glare and odors because_____
_____.
7. The proposed use will not have vehicular approaches to the property which are so designed as not to create an undue interference with traffic on surrounding public streets or roads because_____
_____.

8. The proposed use will increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief because _____

_____.

9. The proposed use will result in the destruction, loss or damage of natural, scenic or historic features of major importance to the community because _____

_____.

Motion by: _____ Seconded by: _____



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

Meeting 4/27/2023 7:00 PM
Department: Community Development
Department Head:
Category: Discussion Item
Prepared By:

**AGENDA ITEM (ID
2023-474)**

DOC ID: 2023-474

Public Hearing – 415 Taft Avenue: Special Use Permit to allow the addition of DISH Wireless 5G capable antennas and support equipment to an existing cellular tower.

Statement of the Issue:

Please see the Staff report attached.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. PC Staff Report 415 Taft SUP - 4-27-23
2. Narrative Statement 415 Taft
3. Cover Letter 415 Taft
4. SUP Application 415 Taft
5. RF Letter 415 Taft
6. Notice of Eligible Facilities Request 415 Taft
7. Constuction Drawings 415 Taft Submitted 2.10.23
8. Boundary Survey 415 Taft
9. Plat of Survey 415 Taft
10. Structural Calcs 415 Taft
11. Narrative on 5G Concerns 415 Taft-SUP 2-9-23
12. Certificate of Publication 415 Taft sup
13. Public Hearing Notice - 415 Taft
14. Public Hearing Notice - 415 Taft -amend to include 5G notice
15. Buffer Map
16. Draft Findings of Fact
17. Draft Motion to Approve

18. Draft Motion to Deny



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

Meeting 4/27/2023 7:00 PM
Department: Community Development
Department Head:
Category: Discussion Item
Prepared By:

**AGENDA ITEM (ID
2023-474)**

DOC ID: 2023-474

Public Hearing – 415 Taft Avenue: Special Use Permit to allow the addition of DISH Wireless 5G capable antennas and support equipment to an existing cellular tower.

Statement of the Issue:

Please see the Staff report attached.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. PC Staff Report 415 Taft SUP - 4-27-23
2. Narrative Statement 415 Taft
3. Cover Letter 415 Taft
4. SUP Application 415 Taft
5. RF Letter 415 Taft
6. Notice of Eligible Facilities Request 415 Taft
7. Constuction Drawings 415 Taft Submitted 2.10.23
8. Boundary Survey 415 Taft
9. Plat of Survey 415 Taft
10. Structural Calcs 415 Taft
11. Narrative on 5G Concerns 415 Taft-SUP 2-9-23
12. Certificate of Publication 415 Taft sup
13. Public Hearing Notice - 415 Taft
14. Public Hearing Notice - 415 Taft -amend to include 5G notice
15. Buffer Map
16. Draft Findings of Fact
17. Draft Motion to Approve

18. Draft Motion to Deny

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Marty Scott, Director of Community Development

DATE: April 21, 2023

FOR: April 27, 2023 Plan Commission Meeting

SUBJECT: OBO Crown Castle USA Inc. & DISH Wireless LLC – 415 Taft Avenue – Special Use Permit

PETITIONER: The petitioners are Crown Castle and DISH Wireless, represented by Tony Phillips and Ariel Stouder of Fullerton Engineering, as licensee of a portion of the property located at 415 Taft Avenue.

REQUEST: Crown Castle and DISH Wireless are requesting approval of a Special Use Permit in accordance with Sections 10-4-16(E)2 and 10-8-8 of the Glen Ellyn Zoning Code to allow an addition of DISH Wireless 5G capable antennas and support equipment to the existing cellular tower.

PUBLIC NOTICE: Notice of the public hearing was published in the April 12, 2023 edition of The Daily Herald advertising a public hearing to be held on Thursday, April 27, 2023. Notices were mailed to property owners within 350 feet of the subject property as shown in the attached Public Hearing Notification/Buffer Map. (A second amended notice, not required by law, was mailed to include the fact that the proposed antenna would be 5G capable). A placard was also placed on the site.

**LOCATION/
SURROUNDING
USES:**

The subject structure is located on the south side of Taft Avenue between Lambert Rd. and Main St. in the C4 Office District. The existing establishment on the site is currently occupied by Sign Identity, a sign manufacturer. The surrounding zoning and land uses are as follows:

Surrounding Land Uses:

North: Commercial (Restaurants)

South: Recreation (Links GC)

East: Vacant

West: Vacant (Future car wash/vacuums)

Surrounding Zoning:

C3 Service Commercial Dist.

CR Conservation/Recreation

C4 Office District

C4 Office District

COMP

PLANS: According to the 2001 Glen Ellyn Comprehensive Plan, the subject property is designated as an office use.

**PROJECT
HISTORY:**

According to Department records, cellular service providers (or their representatives) have petitioned for modifications to the existing tower in the past. As technology has evolved, it is not uncommon for towers of this style to be updated with structural improvements and incremental changes to antennas and support equipment. From 2012 to the present there have been upgrades to the existing tower including concrete tower base, antenna upgrades, and shelter and support equipment modifications.

**PROJECT
SUMMARY:**

At this time, the petitioners are proposing to install an additional carrier antennas and associated equipment on the existing cellular (lattice) tower. (A good portion of this summary and Plan Commission action section are identical to the 1102 Hill special use request). The proposed additions will neither increase the height of the tower nor the existing leased ground footprint. The proposed DISH Wireless antennas will be unmanned and will only require power and fiber connections that already exist on the site. It will require service by a technician approximately once a month.

In addition to the above-mentioned services, the proposed antenna equipment would support 5G technology. The petitioner has provided a Radio Frequency (RF) interference statement provided by DISH RF Engineers to confirm that all frequencies utilized by DISH Wireless shall follow guidelines enforced by the Federal Communications Commission (FCC). The FCC grants licenses for the use of certain radio frequencies exclusively by wireless service providers, including DISH Wireless, which shall use certain frequencies (channels) on which to transmit and receive radio signals. Pursuant to these licenses, DISH is authorized to provide wireless service nationwide. Per petitioner's narrative statement, the proposed DISH antennas will comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy and will not present any detrimental effect to the community public safety, health and/or welfare, even with the 5G technology capability.

The proposed antenna will be installed near the upper portion of the tower at approximately 126 feet high. According to the petitioner, the cellular tower at 415 Taft Avenue has been selected to fill a gap in the DISH Wireless network as the tower's height and location are important factors in determining how network coverage can be expanded. The petitioner adds that the higher the structure is the farther the coverage will extend.

Per Section 10-4-16(B)13, television and radio towers and antenna support structures that exceed district's maximum height, will require a Special Use Permit. Given the maximum allowable height of 55 feet in C3 District, the proposed antenna will require approval of a Special Use Permit. Section 10-4-16(E)2 confirms the requirement for a Special Use Permit stating that "the height of a television or radio tower, antenna support structure... shall be specified in the ordinance granting a special use permit".

Zoning Code Section 10-8-7 also states that the "lawfully existing, nonconforming use of part or all of a building or structure, all or substantially all of which building or structure is designed or intended for a use permitted in the district in which it is located, may be continued" subject to the provision stating the "nonconforming use of part of a building or structure shall not be expanded or extended". Given the legally nonconforming height and operation of the existing tower, the proposed work therefore triggers a need for a Special Use Permit, as the intended work expands upon the existing nonconforming use.

PLAN COMMISSION ACTION:

The Plan Commission is asked to consider the petitioner's request for a Special Use Permit to allow an addition of DISH Wireless 5G capable antennas to the existing cellular tower and the addition of support equipment at the base of the tower in a licensed area.

The Plan Commission may make a recommendation to the Village Board for approval, approval with conditions, or denial of the request. The Village has consulted with Adam B. Simon of Ancel Glink Professional Corporation, regarding the certain factors the Plan Commission may consider in reviewing the current Special Use Permit proposal (please see Ancel Glink's Memorandum attached). Accordingly, the Plan Commission is legally directed to base its decision on the evidence limited to facts that tend to either support or undermine satisfaction of the criteria for granting approval of a Special Use Permit as set forth in Section 10-10-14 of the Glen Ellyn Zoning Code. Some permissible bases for decisions include height, setbacks, structural aspects, property value concerns, and community character. So long as the petitioner verifies that the FCC regulations for limiting RF emissions will be met, the Plan Commission is not authorized to further inquire about the general impact from radio frequency (RF) emissions or place further conditions on its Zoning decision.

Additional review and commentary related to the proposed antenna and associated equipment will be provided prior to the meeting by Stuart

Chapman, President of Municipal Services Associates, Inc. Mr. Chapman's firm specializes in the evaluation of telecommunications matters impacting municipalities. Mr. Chapman will also attend the Plan Commission meeting and be available for questions.

Staff has prepared draft findings of fact for a recommendation of approval of the Special Use (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 the request 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.

ATTACHMENTS:

cc: Tony Phillips, Fullerton Engineering Consultants
Ariel Stouder, Fullerton Engineering Consultants

X:\Plandev\PLANNING\DEVELOPMENT PROJECTS\Taft\Taft 415, SUP\Meetings\PC 4-27-23\PC Staff Report 415 Taft SUP - 4-27-23.doc



3025 Highland Pkwy Suite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

February 9, 2023

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

Re: Narrative on 5G Concerns for Special Use Permit to allow the Installation and Operation of New DISH Wireless

Network Equipment to the Existing Tower at 415 Taft Ave
DISH Site CHCHI00216A / Crown Site 873681

To Whom It May Concern,

Fullerton Engineering on behalf of DISH Wireless, and Tower Owner Crown Castle, submit for review and approval, a Special Use Application for the proposed addition of DISH Wireless Antennas and Support Equipment to the telecommunications tower at 415 Taft Ave. DISH Wireless is proposing to install their telecommunication equipment on the tower and on the ground within a leased space. Crown Castle is the owner of the telecommunications tower located at this referenced tower location. Currently, there are (3) other carriers located on the tower.

DISH Wireless would install their equipment on the third space on the tower from the top for operation. This centerline for installation is located on the tower at the 126' high mark. The antenna equipment that DISH is proposing to install on the tower would support 5G technology. This is a key offering that their network would provide to their consumers. The proposed new co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G capable technology that the equipment would bring to the community.

DISH Wireless is a division of the company we all know to be the satellite television provider. In recent years, DISH has become one of the major wireless carriers. Their focus will be providing 5G wireless connectivity to power the Smart Cities of the future. Smart Homes, Factories, Driverless Cars, and Artificial Intelligence...in addition to the millions of wearables, sensors, devices, and robots that will support them. Additional information regarding the DISH Story is available on their web site at <https://about.dish.com/company-info>.

Wireless Communications have been designated Critical Infrastructure by the Federal Government and should be considered Essential Services in all Comprehensive Plans. As DISH Wireless is constructing this new network, every new facility in the network is essential to the seamless operation. This Crown Castle tower,

The Foundation for a Wireless World

CrownCastle.com



3025 Highland Pkwy Suite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

located at 415 Taft Ave, was selected to fill a gap in the DISH Wireless network. The tower height and location are important factors in determining how network coverage can be expanded. Structure height is key in extending that coverage. The higher the structure the farther the coverage will extend.

On the Crown Castle tower, DISH Wireless would be installing their antennas, radio equipment, and associated cabling at top location on the tower. At the base of the tower, within the fenced compound area, DISH would install an ice bridge, a 5' x 7' metal platform, and an equipment cabinet. The proposed addition of DISH Wireless's equipment will not cause an increase in the height of the tower or in the existing leased ground space.

The new antenna equipment would support 5G technology. This would be in addition to other technologies that would the DISH network would offer to consumers. As an example, another technology supported by this antenna would be 4G. There is no hazard emission that is produced from the use of 5G technology. Consumers would only be able to utilize this 5G network if they should purchase a cellular device that has 5G capable technologies.

Submitted with the Special Use Permit Application, we have included a radio frequency interference statement provided by DISH RF Engineers confirming that all frequencies utilized by DISH Wireless will follow guidelines enforced by the Federal Communications Commission. This is further confirmation the proposed new Co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G technology capability provided by the new antennas.

It is also worth mentioning that the antenna equipment DISH Wireless is utilizing would be of similar make and models that other carriers are installing on their telecommunication towers to support their network. As technology improves for cellular networks there will always be the need for future equipment upgrades to DISH Wireless's network. This need would be the same for any carrier in the cellular market.

In the coming years, DISH Wireless will continue to expand their network. As mentioned previously, every new facility in the DISH network is essential to the seamless operation of this new network. This Crown Castle tower, located at 415 Taft Avenue, was selected to fill a gap in the DISH Wireless network.

The proposed addition of the DISH Wireless equipment at this location, even with the 5G technology offered by the antennas, this tower will not be hazardous to the community surrounding this property. As confirmed in the radio frequency statement provided by the DISH RF Engineering Manager, DISH Wireless shall comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy.



3025 Highland Pkwy Suite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

If there are still any outstanding questions or concerns, please feel free to reach out using any of my contact information listed below in my signature. Addressing all concerns for this project is of utmost importance to myself, and Crown Castle.

Best regards,

Ariel Stouder
Senior Zoning and Permitting Specialist
Fullerton Engineering, on behalf of Crown Castle
M: 574-849-8420
Email: astouder@fullertonengineering.com



February 7, 2023

RECEIVED

FEB 10 2023

VILLAGE OF GLEN ELLYN

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

Re: Application for Special Use Permit to allow the Installation and Operation of New DISH Wireless Network Equipment to the Existing Tower at 415 Taft Ave / DISH Site CHCHI00216A / Crown Site 873681

Dear Zoning Officials,

Fullerton Engineering on behalf of DISH Wireless, and Tower Owner Crown Castle, submit for review and approval, a Special Use Application for the proposed addition of DISH Wireless Antennas and Support Equipment to the tower at the above referenced location. Please note, that the equipment proposed for installation will be able to support 5G technology.

In support of the application, please find the enclosed documentation:

- Special Use Permit Application
- Project Narrative
- 6409A Notice of Eligible Facilities Request
- (3) sets Plat of Survey
- Escrow Check for \$1,000
- RF Interference Statement
- (3) sets of Construction Drawings
- (3) sets of Structural Calculations

Please contact me at astouder@fullertonengineering.com or 574-849-8420 if you have questions.

Thank you very much in advance.

Sincerely,

Ariel Stouder

Ariel Stouder

Senior Zoning & Permitting Specialist
Fullerton Engineering
574-849-8420
astouder@fullertonengineering.com

RECEIVED

FEB 10 2023

VILLAGE OF GLEN ELLYN



VILLAGE OF GLEN ELLYN

Special Use Permit Application Packet

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

**SPECIAL USE PERMIT PROCEDURE
OUTLINE**

1. Pre-application meeting with Planning and Development Department;
2. Preparation of application packet;
3. Review of packet by Planning and Development Department staff (recommended);
4. Formal application (submission of packets and fee);
5. Notice in newspaper, notice by letter to surrounding property owners, sign on site;
6. Review by Plan Commission at a public hearing;
7. Preparation of public hearing transcripts or minutes;
8. Review by Village Board at workshop;
9. Action by Village Board at meeting;
10. Adoption of ordinance.

SPECIAL USE PERMIT PROCEDURE

1. **Pre-Application Meeting:** The petitioner should meet with the Village Planner or Director of Planning and Development for a pre-application meeting to informally discuss the proposed Special Use prior to filling out a formal application. At the pre-application meeting, the petitioner should provide general information that describes or outlines the existing conditions of the site and the proposed Special Use. A request to informally discuss the proposed Special Use with the Plan Commission may be made at this time. The Planning and Development Department staff will also review the types of required submittals (see item #2), the number of copies required and the approximate length of review time required by the Village.

The petitioner is encouraged to become familiar with the appropriate provisions of the Zoning Code.

2. **Required Submittals:** The petitioner shall prepare the following items for submittal to Village staff:
 - a. **Application:** Completed application for Special Use Permit (form attached and associated fee);
 - b. **Reimbursement of Fees Agreement:** Signed agreement consenting to reimburse the Village for out of pocket expenses incurred in processing the application.
 - c. **Plat of Survey:** A current Plat of Survey of the property, prepared by a land surveyor registered with the State of Illinois, with contour lines depicting the existing grade and a statement that the property is or is not in the floodplain;
 - d. **Site Plan:** A plan or plat drawn to scale, including a north arrow, address of the site, name of the preparer and date, showing:
 1. Lot line dimensions and lot area;
 2. Existing or proposed grades with contour intervals not in excess of two feet;
 3. Location of any existing and proposed structures on the lot;
 4. Street locations, right-of-way widths and pavement widths;
 5. Location, width and materials of sidewalks, curb cuts and driveways;
 6. Location and size of any sanitary sewer and water lines or septic systems and wells, location of storm sewers;
 7. Location and width of easements;
 8. Location of parking areas, type of surface, dimension of parking spaces and drive aisles;
 9. Location of loading areas, types of surface, dimensions, striping and signing, type of screening;
 10. On-site traffic access and circulation delineated by directional arrows and signs;
 11. Open spaces;
 12. Location of existing and proposed signs;
 13. Location, height and type of existing and proposed lighting;
 14. Location, size and species of existing and proposed landscaping;

- 15. Zoning of subject property and adjacent properties;
 - 16. Other data that may be necessary for the review of the application, as determined by the Planning and Development staff;
- d. **Proof of Ownership:** A copy of a Guarantee Title Policy or other proof of ownership as approved by the Planning and Development Department staff;
 - e. **Disclosure of Interest:** If the subject property is held in a trust, a complete disclosure of interest of the ownership, including the names of trustees and beneficial owners, shall be provided. If the subject property is owned by a corporation, a disclosure of the shareholders, including the names of the officers and directors, should be provided (form attached);
 - f. **Affidavit of Authorization:** A document signed by the owner of the subject property which authorizes the petitioner to represent them for the Special Use request shall be provided (form attached);
 - g. **Narrative Statement:** A description of the existing and proposed use(s) of all structures and land. The statement should evaluate the economic effects of the proposed Special Use and the impacts of such elements as noise, glare, odor, fumes, and vibration on adjoining property. The statement should discuss the general compatibility with existing and proposed uses in the general vicinity and with the recommendations of the Comprehensive Plan; and
 - h. **Land Use Opinion:** A Land Use Opinion from the Kane DuPage Soil and Water Conservation District Board, if required.

NOTE: Waiver of the required documentary evidence can be granted by the Director of Planning and Development provided staff determines that the information is insignificant or unnecessary.

NOTE: If the plans accompanying the Special Use application are required to be recorded with the DuPage County Recorder of Deeds, the petitioner should have the surveyor sign a Letter of Authorization (form attached) which designates a representative from the Village of Glen Ellyn as the agent to record the plan.

NOTE: The petitioner should be aware that the requirements outlined herein are the minimum requirements for processing an application for Special Use and that, from time to time, the Plan Commission may require such other information that it deems necessary to determine if the proposed Special Use meets the intent and requirements of the Zoning Code.

- 3. **Preliminary Staff Review:** When the petitioner has plans in substantially completed form, it is recommended that a draft copy of all application documents shall be submitted for preliminary review by the Planning and Development staff. Staff will review the project for compliance with all applicable Village ordinances and will raise any concerns or issues with the proposal. Following review by staff, the petitioner may wish to modify the proposal to respond to staff comments.
- 4. **Escrow Account for Consultants:** The Village utilizes consultants for engineering, legal and Plan Commission secretarial services. Prior to involving these individuals in the

review of a proposed Special Use Permit, the Village requires a petitioner to establish an escrow account to pay the Village consultant costs. The minimum amount of an escrow account is five hundred dollars (\$500). The Director of Planning and Development may set a higher minimum based on an evaluation of the size of the project and likely expenses associated with the review process. Once the escrow account is established, the Village involves its consultants in the review process as necessary. When invoices are received from the consultants, the Village draws on the account. The developer receives a monthly accounting of the invoices and is requested to replenish the escrow account back to the original amount, when the balance is less than five hundred dollars (\$500). The escrow account is maintained throughout the review and building processes. Once the project is complete, any remaining funds in the escrow account are returned to the petitioner.

5. **Formal Application:**

- a. Special Use requests require an application fee. Staff will identify the amount of the fee, as determined by the Village Board, at the pre-application meeting. This fee is applied toward project review costs. The fee is payable when formal application is made for a Special Use Permit;
- b. Upon receipt of the required number of copies of all of the items enumerated above and the application fee, the Planning and Development staff shall set a date for a public hearing before the Plan Commission on the application for Special Use Permit. The application must be received a minimum of 21 days in advance of the proposed public hearing date;
- c. Not more than 30 days nor less than 15 days before the public hearing before the Plan Commission, the Planning and Development staff will place a legal notice in The Glen Ellyn News which will describe the petitioner's request, location of the subject property and the time, date, and location of the public hearing. The staff will also mail a notice of the Special Use request to property owners within 250 feet of the subject property and will cause a sign to be placed on the subject property not less than 15 days prior to the public hearing which announces that a public hearing regarding the subject property will be held. The sign shall remain until completion of the public hearing, after which it will be removed. Jurisdiction of the Plan Commission to hold the public hearing shall not be affected by the absence of a sign, if such absence is not the result of the petitioner; and
- d. The Director of Planning and Development, if he/she considers it necessary, may call upon any Village department or official for their review of the proposed Special Use prior to any public hearing. Such review shall be in writing and take no more than ten days.

6. **Staff Review:** The Village Planner or Director of Planning and Development will review the request for compliance with the provisions of the Comprehensive Plan, Zoning Code and other applicable codes. Staff will also visit the subject property. A staff report, which summarizes the request and presents staff concerns, will be prepared and submitted to the Plan Commission. The petitioner will be provided a copy of the staff report and the agenda of the Plan Commission meeting.

7. **Public Hearing:**

- a. The Planning and Development staff will submit the application, staff report and any other supporting documents to the Plan Commission to conduct the public hearing thereon. The Plan Commission meets on the second and fourth Thursday of each month, at 7:00 p.m. in the Glen Ellyn Civic Center, 535 Duane Street;
- b. The petitioner or his/her representative must attend the public hearing. It is the responsibility of the petitioner to present an argument supporting the request for a Special Use Permit in a complete and logical manner and to have available all evidence necessary to support the request. It is advisable, but not required, for the petitioner to prepare color versions of the plans (site plan, landscaping, building drawings), mounted for presentation purposes;
- c. The Plan Commission may make a decision at one meeting or choose to continue the public hearing to another date for a variety of reasons, including but not limited to: additional information is deemed necessary; Plan Commissioners desire an opportunity to visit the site or request staff to conduct further research; or insufficient time remains on the night of the public hearing to conclude the hearing. If the hearing is continued, no additional public notice is required to be published, however the sign remains on the subject property;
- d. At the close of the public hearing, the Plan Commission will take a roll call vote on the requested Special Use. The Plan Commission may recommend approval, approval with conditions, or denial. In making its recommendation, the Plan Commission must find that the requested Special Use:
 1. Will be harmonious with and in accordance with the general objectives, or within a specific objective of the Comprehensive Plan or the Zoning Code;
 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;
 3. Will not be hazardous or disturbing to existing or future neighborhood uses;
 4. Will be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structure, refuse disposal, water, sewers and schools, or that the persons or agencies responsible for the establishment of the proposed Special Use shall be able to provide adequately any such services;
 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;
 6. Will not involve uses, activities, processes, materials, equipment 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;

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;
8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief; and
9. Will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community.

8. **Final Action:**

- a. Within 90 days after the close of the public hearing, the Plan Commission will submit to the Village Board the minutes or transcripts which contain the Commission's recommendations to the Village Board and summarize what occurred at the public hearing, the exhibits presented and the citizens and witnesses heard;

NOTE: Before the Village Board takes final action and votes on the request, the petitioner must have the escrow account balance brought back to the original amount.

- b. After receiving the minutes or transcripts and supporting documents, the Village Board will schedule the request on a Village Board agenda. The Village Board meets on the 2nd, 3rd, and 4th Monday of each month. The third Monday is a workshop, and the second and fourth Mondays are formal meetings. There is a pre-board meeting before the formal meeting on the 2nd Monday. At the workshop and pre-board meetings, the Village Board discusses and decides what action will be taken on the agenda items for the formal meeting. The petitioner will be informed by Planning and Development staff at which Village Board workshop or pre-board meeting and formal meeting they are scheduled to be heard. The petitioner or his/her representative must be in attendance at these meetings.
- c. The meeting of the Village Board is not a public hearing. The Village Board may decide to approve, approve with conditions, or deny the requested Special Use. Any proposed Special Use that fails to receive the approval of the Plan Commission may be approved by a favorable vote of two-thirds of the Village Board. If a proposed Special Use receives the approval of the Plan Commission, a favorable vote of the majority of the members of the Village Board is sufficient to grant the Special Use. Conditions or restrictions may be required to reduce or minimize injurious effects of Special Uses on other property or to implement the general purpose and intent of the Zoning Code. Action on the requested Special Use will be by an ordinance which is adopted by the Village Board.
- d. After the Village Board votes on the petition, Director of Planning and Development, Building and Zoning Official and Director of Public Works are informed of the action. If the decision is to approve the Special Use Permit, the

petitioner may seek building permits after the ordinance has been approved and signed. A building permit must be applied for within 18 months from the date of the ordinance or the Special Use Permit will become null and void. The Planning and Development Department will compare plans submitted for permits to the plans that were approved by the Village Board and any conditions applied to the Special Use Permit.

Questions may be directed to the Village Planner at phone number 630-547-5250.

RECEIVED

FEB 10 2023

APPLICATION FOR SPECIAL USE PERMIT

CLEAR PAGE

VILLAGE OF GLEN ELLYN

The undersigned petitions the President and Village Board of Trustees of the Village of Glen Ellyn, Illinois, to consider the Special Use described in this application.

Date Filed: _____ Application No: _____

Name of Applicant: **ARIEL STOUDER - FULLERTON ENGINEERING CONSULTANTS, LLC**
OBO CROWN CASTLE USA INC & DISH WIRELESS LLC

Address of Applicant: **1100 E WOODFIELD RD., SUITE 500, SCHAUMBURG, IL 60173**

Business Phone: **574-849-8420** Fax: **N/A**

Home Phone: **N/A** Mobile Phone: **574-849-8420**

Email: **astouder@fullertonengineering.com**

Property Interest of Applicant: **AGENT FOR CROWN CASTLE USA INC / DISH WIRELESS LLC**

(Owner, Contract Purchaser, Owner Representative)

Name of Owner: **THOMAS L & J VAN WINKLE**

Address of Owner: **415 TAFT AVENUE, GLEN ELLYN, IL 60137**

Business Phone: _____ Fax: _____

Home Phone: _____ Mobile Phone: _____

Email: _____

Property Address: **415 TAFT AVENUE, GLEN ELLYN, IL 60137**

Legal Description of Property:

THE SOUTH 29.92 FEET OF LOT 9 AND THE SOUTH 29.92 FEET OF THE WEST 1/2 OF VACATED ALLEY LYING EAST OF AND ADJOINING SAID LOT 9 AND THE SOUTH 29.92 FEET OF LOT 10 BLOCK 79 IN WHEATON ESTATES, BEING A SUBDIVISION IN SECTION 22 AND SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST, 1925 AS DOCUMENT 197514 IN DUPAGE COUNTY, ILLINOIS.

Permanent Index No. (PIN): **0523102018** Zoning: **C-4 OFFICE DISTRICT**

Lot Dimensions: **117'X132'X117'X132'** Lot Area: **.35 ACRES**

Present Use:

WIRELESS FACILITIES & COMMERCIAL SPACE

Requested Use/Construction:

NO CHANGE IN USE

Estimated Date to Begin New Use/Construction: **TBD**

Name(s), Address(es) and Phone No(s). of Experts (architects, engineers, etc.):

CLEAR PAGE

SITE DESIGNER:

CHRISTOPHER J. WARREN P.E.

INFINIGY

2500 W. HIGGINS RD. SUITE 500

HOFFMAN ESTATES, IL 60169

847-648-4068

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 10-10-14 of the Zoning Code:

**The proposed addition of new DISH Wireless antennas and ground equipment to the existing Wireless Facility is considered a Minor Modification and a preferred siting option for new wireless equipment. There will be no noise, glare, odor, fumes, or vibration that might effect adjoining properties. It will be unmanned and have no effect on traffic.
Responses to Paragraph E Section 10-10-14 of Zoning Code below.**

Describe How the Special Use:

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:

Wireless Communications have been designated Critical Infrastructure by the Federal Government and should be considered Essential Services in all Comprehensive Plans. Installation of a New Carrier to an existing wireless support structure in a commercial district would be preferable to construction of a new tower.

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:

The proposed addition of DISH Wireless antennas to an existing support structure without adding to the height of the structure, along with the addition of the proposed DISH Wireless ground support equipment within an existing equipment compound, behind a commercial building adjacent to a golf course, will not change the character and be harmonious.

3. Will not be hazardous or disturbing to existing or future neighborhood uses:

The proposed addition of the DISH Wireless equipment will not be hazardous or disturb future uses.

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:

The proposed use will be unmanned and only require Power and Fiber connections that are already existing at the site. No other public services will be required or impacted.

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:

As mentioned above, this will be an unmanned facility and will not be detrimental to the economic welfare of the Village.

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:

The proposed use will not be detrimental to any persons, property, or general welfare and will not create traffic, noise, smoke, fumes, glare, or odors.

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:

The proposed use will be unmanned and not create interference to traffic. It will be serviced via an existing driveway by a single technician approximately once a month.

8. Will not increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief:

The proposed use will not change the topography of the site or create any measurable run off. There will be absolutely zero increase in the potential for flooding.

9. Will not result in destruction, loss or damage of natural, scenic or historic features of major importance to the community:

The proposed addition of the DISH Wireless equipment to an existing support structure within an existing equipment compound in an Office District, behind a store, adjacent to a golf course, will not result in destruction, loss, or damage of natural, scenic or historic features of major importance to the community.

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 until and upon payment of transcribing fees.

<u>2/7/2023</u>	<u>ARIEL STOUDE - FULLERTON ENGINEERING</u>	<u></u>
Date	Print Name	Signature of Applicant
 <u> </u>	 <u> </u>	 <u> </u>
Date	Print Name	Signature of Applicant
 <u> </u>	 <u> </u>	 <u> </u>
Date	Print Name	Signature of Applicant

**THE BEST INTERESTS OF THE APPLICANT WILL BE SERVED
BY COMPLETING THIS APPLICATION IN DETAIL**

OWNERSHIP BY A CORPORATION

CLEAR PAGE

Date: _____

Address: **415 TAFT AVE, GLEN ELLYN, IL 60137**

Legal Description:

--

LIST ALL SHAREHOLDERS AND OFFICERS/DIRECTORS (AND % OF INTEREST OWNED IN EXCESS OF 5% OF STOCK)

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

Name: _____ Address: _____ % _____

AFFIDAVIT OF AUTHORIZATION

CLEAR PAGE

I, _____ owner of the property described as

514 TAFT AVE, GLEN ELLYN, IL 60137

verify that **FULLERTON ENGINEERING CONSULTANTS, LLC**

is 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.

OWNER SIGNATURE

Subscribed and sworn to before me this

_____ day of _____, 20____

Notary Public



DISH Wireless L.L.C.
9601 S. Meridian Blvd.
Englewood, CO 80112
303.723.1000

Village of Glen Ellyn, Building Division
535 Duane Street
Glen Ellyn, IL 60137

12/28/2022

RE: Project Description and Location: CHCHI00216A – 415 Taft Av, Glen Ellyn (the "Project")

To whom it may concern:

This letter responds to your request for information about the Project referenced above, specifically the potential to interfere with communication facilities located nearby and conformance with the Federal Communications Commission ("FCC") rules governing human exposure to radio frequency energy (see FCC OET Bulletin 65 guidelines). DISH Wireless L.L.C. ("DISH") shall comply with all FCC rules regarding interference with other radio services and all FCC rules concerning human exposure to radio frequency energy.

The FCC has granted licenses for the use of certain radio frequencies exclusively by wireless service providers, including DISH. Each wireless service provider uses specific frequencies (channels) on which to transmit and receive radio signals. Pursuant to these licenses, DISH is authorized to provide wireless service nationwide.

Wireless transmitters must be type-accepted by the FCC to ensure compliance with technical standards that limit the frequencies, output power, radio frequency emissions, spurious radio noise, and other technical parameters. Wireless licensees like DISH are required to use type-accepted equipment. The assignment of frequencies and the FCC rules keep cellular radio signals from interfering with, or being interfered with by, other radio transmissions and provide guidelines outlining the limits for permissible human radio frequency exposure.

DISH shall comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy. In the unlikely event that interference does occur, DISH agrees to fully cooperate with the entity experiencing interference to identify and correct, to the extent reasonably possible, any issues caused by the DISH installation.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Imran Khan', with a horizontal line drawn underneath it.

Imran Khan

RF Engineering Manager – Chicago



9045 River Rd,
Indianapolis, IN 46240

Phone: (317) 249-2028
www.crowncastle.com

February 7, 2023

IL – Glen Ellyn
Village of Glen Ellyn
Community Development Department
535 Duane Street
Glen Ellyn, IL 60137

RECEIVED

FEB 10 2023

VILLAGE OF GLEN ELLYN

Via Mail

*****NOTICE OF ELIGIBLE FACILITIES REQUEST*****

RE: Request for Minor Modification to Existing Wireless Facility – Section 6409
Site Address: 415 Taft Avenue, Glen Ellyn, IL 60137
Crown Site Number: 873681 / Crown Site Name: Chicago
Customer Site Number: CHCHI00216A / Application Number: 559909

Dear Staff:

On behalf of DISH Wireless L.L.C. ("Dish Wireless" or "Applicant"), Crown Castle USA Inc. ("Crown Castle") is pleased to submit this request to modify the existing wireless facility noted above through the collocation, replacement and/or removal of the Applicant's equipment as an eligible facilities request for a minor modification under Section 6409¹ and the rules of the Federal Communications Commission ("FCC").²

Section 6409 mandates that state and local governments must approve any eligible facilities request for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. Under Section 6409, to toll the review period, if the reviewing authority determines that the application is incomplete, it must provide written notice to the applicant within 30 days, which clearly and specifically delineates all missing documents or information reasonably related to whether the request meets the federal requirements.³ Additionally, if a state or local government, fails to issue any approvals required for this request within 60 days, these approvals are deemed granted. The FCC has clarified that the 30-day and 60-day deadlines begins when an applicant: (1) takes the first step required under state or local law; and (2) submits information sufficient to inform the jurisdiction that this modification qualifies under the federal law⁴. Please note that with the submission of this letter and enclosed items, the thirty and sixty-day review periods have started. Based on this filing, the deadline for written notice of incomplete application is March 10, 2022, and the deadline for issuance of approval is April 14, 2023.

The proposed scope of work for this project includes:

¹ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6409 (2012) (codified at 47 U.S.C. § 1455).

² *Acceleration of Broadband Deployment by Improving Wireless Facility Siting Policies*, 29 FCC Rcd. 12865 (2014) (codified at 47 CFR § 1.6100); and *Implementation of State & Local Governments' Obligation to Approve Certain Wireless Facility Modification Requests Under Section 6409(a) of the Spectrum Act of 2012*, WT Docket No. 19-250 (June 10, 2020).

³ See 47 CFR § 1.6100 (c)(3). ⁴ See 2020 Upgrade Order at paragraph 16.

The Foundation for a Wireless World

CrownCastle.com



9045 River Rd,
Indianapolis, IN 46240

Phone: (317) 249-2028
www.crowncastle.com

Collocation of antennas, ancillary equipment, and ground equipment as per plans for a new carrier on an existing wireless communication facility.

At the end of this letter is a checklist of the applicable substantial change criteria under Section 6409. Additionally, please find enclosed the following information in support of this request:

- (1) Special Use Permit Application;
- (2) Existing Plat of Survey;
- (3) RF Interference Statement;
- (4) Project Narrative;
- (5) \$1,000.00 Escrow;
- (6) Construction Drawings;
- (7) Structural Analysis; and
- (8) Section 6409 Substantial Change Checklist.

As these documents indicate, (i) the modification involves the collocation, removal or replacement of transmission equipment; and (ii) such modification will not substantially change the physical dimensions of such tower or base station. As such, it is an "eligible facilities request" as defined in the FCC's rules to which the 60-day deadline for approval applies. Accordingly, Applicant requests all authorization necessary for this proposed minor modification under Section 6409.

Our goal is to work with you to obtain approvals earlier than the deadline. We will respond promptly to any request for related information you may have in connection with this request. Please let us know how we can work with you to expedite the approval process. We look forward to working with you on this important project, which will improve wireless telecommunication services in your community using collocation on existing infrastructure. If you have any questions, please do not hesitate to contact me.

Regards,

Crown Castle
Agent for Applicant

The Foundation for a Wireless World

CrownCastle.com



9045 River Rd,
Indianapolis, IN 46240

Phone: (317) 249-2028
www.crowncastle.com

Section 6409 Substantial Change Checklist
Towers Outside of the Public Right of Way

The Federal Communications Commission has determined that a modification substantially changes the physical dimension of a wireless tower or base station under 47 U.S.C. § 1455(a) if it meets one of six enumerated criteria under 47 C.F.R. § 1.6100.

Criteria for Towers Outside the Public Rights of Way

YES/NO NO	Does the modification increase the height of the tower by more than the greater of: (a) 10% (b) or, the height of an additional antenna array plus separation of up to 20 feet from the top of the nearest existing antenna?
YES/NO NO	Does the modification add an appurtenance to the body of the tower that would protrude from the edge of the tower more than 20 feet or more than the width of the tower structure at the level of the appurtenance, whichever is greater?
YES/NO NO	Does the modification involve the installation of more than the standard number of new equipment cabinets for the technology involved or add more than four new equipment cabinets?
YES/NO NO	Does the modification entail any excavation or deployment outside the current site by more than 30 feet in any direction, not including any access or utility easements?
YES/NO NO	Does the modification defeat the concealment elements of the eligible support structure?
YES/NO NO	Does the modification violate conditions associated with the siting approval with the prior approval the tower or base station other than as specified in 47 C.F.R. § 1.6100(c)(7)(i) – (iv)?

If all questions in the above section are answered “NO,” then the modification does not constitute a substantial change to the existing tower under 47 C.F.R. § 1.6100.

The Foundation for a Wireless World

CrownCastle.com



DISH Wireless L.L.C. SITE ID:
CHCHI00216A

DISH Wireless L.L.C. SITE ADDRESS:
**415 TAFT AVE
GLEN ELLYN, IL 60137**

ILLINOIS - VILLAGE OF GLEN ELLYN CODE OF COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES

CODE TYPE	CODE
BUILDING	2009 IBC
MECHANICAL	2009 IMC
ELECTRICAL	2011 NEC

SHEET INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
A-1	OVERALL AND ENLARGED SITE PLANS
A-2	ELEVATION, ANTENNA LAYOUT AND SCHEDULE
A-3	EQUIPMENT PLATFORM AND H-FRAME DETAILS
A-4	EQUIPMENT DETAILS
A-5	EQUIPMENT DETAILS
A-6	EQUIPMENT DETAILS
E-1	ELECTRICAL/FIBER ROUTE PLANS AND NOTES
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE
G-1	GROUNDING PLANS AND NOTES
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
RF-1	RF CABLE COLOR CODE
GN-1	LEGEND AND ABBREVIATIONS
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES

REQUIRED INFORMATION

- CONTRACTOR SHALL CONTACT THE "COMMUNITY DEVELOPMENT DEPARTMENT" TO SCHEDULE THE REQUIRED INSPECTIONS WHICH WILL BE LISTED ON THE PERMIT PLACARD. FAILURE TO CALL FOR INSPECTIONS OF WORK MAY RESULT IN THE ISSUANCE OF A CITATION.
- WITHIN 30 DAYS OF THE NEWLY INSTALLED OR MODIFIED COMMUNICATIONS FACILITY'S FIRST RECEIPT OR TRANSMISSION OF COMMUNICATIONS SIGNALS, AND ON A QUARTERLY BASIS THEREAFTER, THE LICENSEE OF THE COMMUNICATIONS FACILITY SHALL SUBMIT TO THE VILLAGE A CERTIFIED WRITTEN REPORT FROM A CONSULTANT APPROVED BY THE VILLAGE OF GLEN ELLYN WHICH INDICATES THAT THE LEVEL OF TOTAL ELECTRONIC TRANSMISSIONS FROM THE COMMUNICATIONS FACILITY DOES NOT EXCEED THE MAXIMUM PERMITTED ELECTRONIC TRANSMISSION EXPOSURE LIMIT FOR GENERAL POPULATION/UNCONTROLLED PERMITTED BY ANY FEDERAL [OR] STATE REGULATORY AGENCY AT THE TIME OF ISSUANCE OF THE PERMIT. PLEASE NOTE THAT THE \$2,000.00 DEPOSIT THAT MUST BE SUBMITTED AT TIME OF ISSUANCE OF PERMIT WILL NOT BE RELEASED BACK TO THE PERMIT APPLICANT UNTIL SUCH TIME AS THE INITIAL RADIOFREQUENCY FIELD TESTING REPORT HAS BEEN REVIEWED AND APPROVED BY THE VILLAGE.

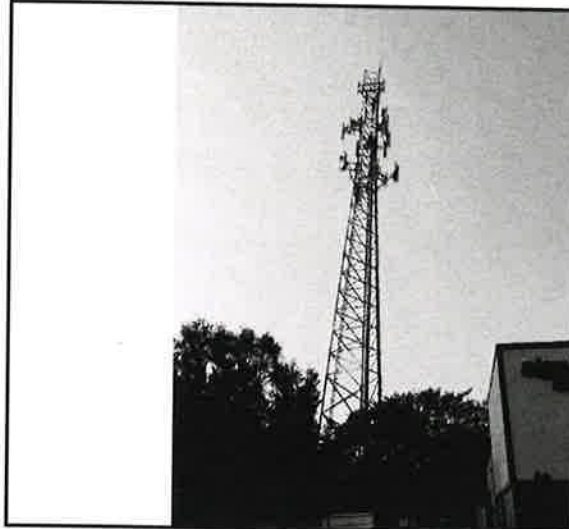
SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- TOWER SCOPE OF WORK:**
- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
 - INSTALL (3) PROPOSED ANTENNA MOUNTS (1 PER SECTOR)
 - INSTALL PROPOSED JUMPERS
 - INSTALL (6) PROPOSED RRU's (2 PER SECTOR)
 - INSTALL (1) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP)
 - INSTALL (1) PROPOSED HYBRID CABLE

- GROUND SCOPE OF WORK:**
- INSTALL (1) PROPOSED METAL PLATFORM
 - INSTALL (1) PROPOSED ICE BRIDGE
 - INSTALL (1) PROPOSED PPC CABINET
 - INSTALL (1) PROPOSED EQUIPMENT CABINET
 - INSTALL (1) PROPOSED POWER CONDUIT
 - INSTALL (1) PROPOSED TELCO CONDUIT
 - INSTALL (1) PROPOSED TELCO-FIBER BOX
 - INSTALL (1) PROPOSED GPS UNIT
 - INSTALL (1) PROPOSED SAFETY SWITCH (IF REQUIRED)
 - INSTALL (1) PROPOSED FIBER NID (IF REQUIRED)
 - EXISTING METER SOCKET ON EXISTING H-FRAME TO BE UTILIZED

SITE PHOTO



UNDERGROUND SERVICE ALERT
UTILITY NOTIFICATION CENTER OF ILLINOIS
(800) 892-0123
WWW.ILLINOIS1CALL.COM

CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION



GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

SITE INFORMATION

PROPERTY OWNER: THOMAS L. & J. VAN WINKLE
ADDRESS: 415 TAFT AVE
GLEN ELLYN, IL 60137

TOWER TYPE: SELF SUPPORT TOWER

TOWER CO SITE ID: 873681

TOWER APP NUMBER: 559909

COUNTY: DUPAGE

LATITUDE (NAD 83): 41° 51' 29.32" N
41.858144 N

LONGITUDE (NAD 83): 88° 4' 18.23" W
88.071731 W

ZONING JURISDICTION: IL - VILLAGE OF GLEN ELLYN 2014

ZONING DISTRICT: C4

PARCEL NUMBER: 05-23-102-018

OCCUPANCY GROUP: U

CONSTRUCTION TYPE: II-B

POWER COMPANY: COMED

TELEPHONE COMPANY: TBD

PROJECT DIRECTORY

APPLICANT: DISH Wireless L.L.C.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

TOWER OWNER: CROWN CASTLE
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
(877) 488-9377

SITE DESIGNER: INFINIGY ENGINEERING, PLLC
2500 W. HIGGINS RD. SUITE 500
HOFFMAN ESTATES, IL 60169
(847) 648-4068

SITE ACQUISITION: SARAH PARSONS
sarah.parsons@crowncastle.com
(317)240-2068

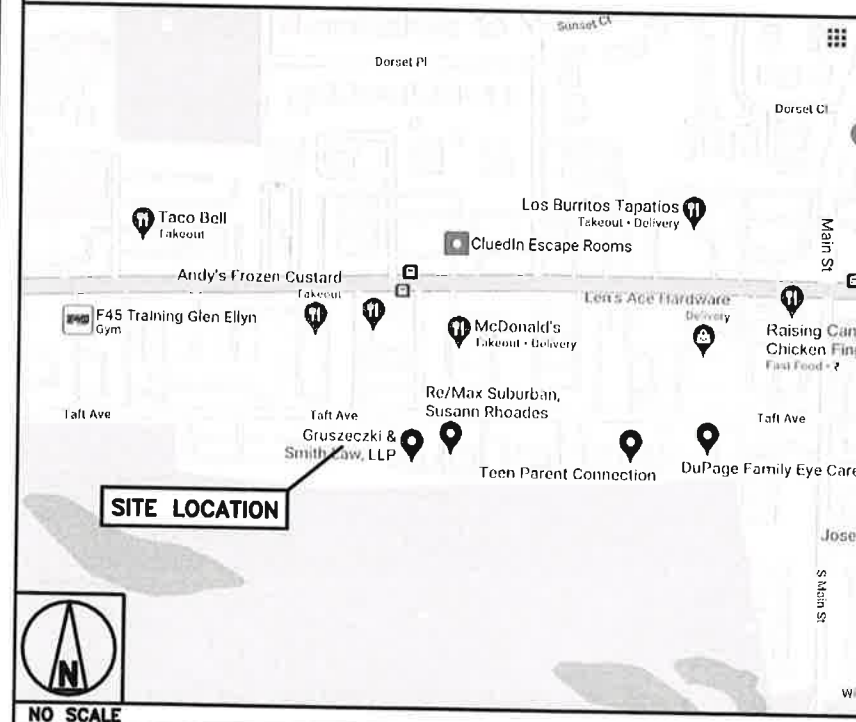
CONSTRUCTION MANAGER: GEORGE DITCHMAN
George.Ditchman@dish.com

RF ENGINEER: KARTHIK MURUGESAN
Karthik.Murugesan@dish.com

DIRECTIONS

DIRECTIONS FROM BOLINGBROOK'S CLOW INTERNATIONAL AIRPORT:
DEPART AND HEAD TOWARD S CLOW INTERNATIONAL PKWY, TURN RIGHT ONTO S CLOW INTERNATIONAL PKWY, TURN LEFT ONTO S WEBER RD, ROAD NAME CHANGES TO N WEBER RD, TURN RIGHT ONTO W BOUGHTON RD, ROAD NAME CHANGES TO E BOUGHTON RD, TURN LEFT ONTO ROAD TOWARD WEST SUBURBS / I-355 SOUTH, TAKE THE RAMP ON THE RIGHT FOR I-355 N / VETERANS MEMORIAL TOLLWAY N, TAKE THE RAMP ON THE RIGHT AND FOLLOW SIGNS FOR IL-38, TURN LEFT ONTO IL-38 / ROOSEVELT RD, TURN LEFT ONTO S MAIN ST, TURN RIGHT ONTO TAFT AVE, ARRIVE AT 415 TAFT AVE, GLEN ELLYN, IL 60137

VICINITY MAP



RECEIVED
FEB 10 2023
VILLAGE OF GLEN ELLYN



INFINIGY ENGINEERING PLLC
LICENSE # 184005973-0002

dish wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

CROWN CASTLE
2000 CORPORATE DRIVE
CANONSBURG, PA 15317

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless
2500 W. HIGGINS RD. SUITE 500
HOFFMAN ESTATES, IL 60169
PHONE: 847-648-4068 | FAX: 318-690-0793
WWW.INFINIGY.COM

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
RCD SS CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

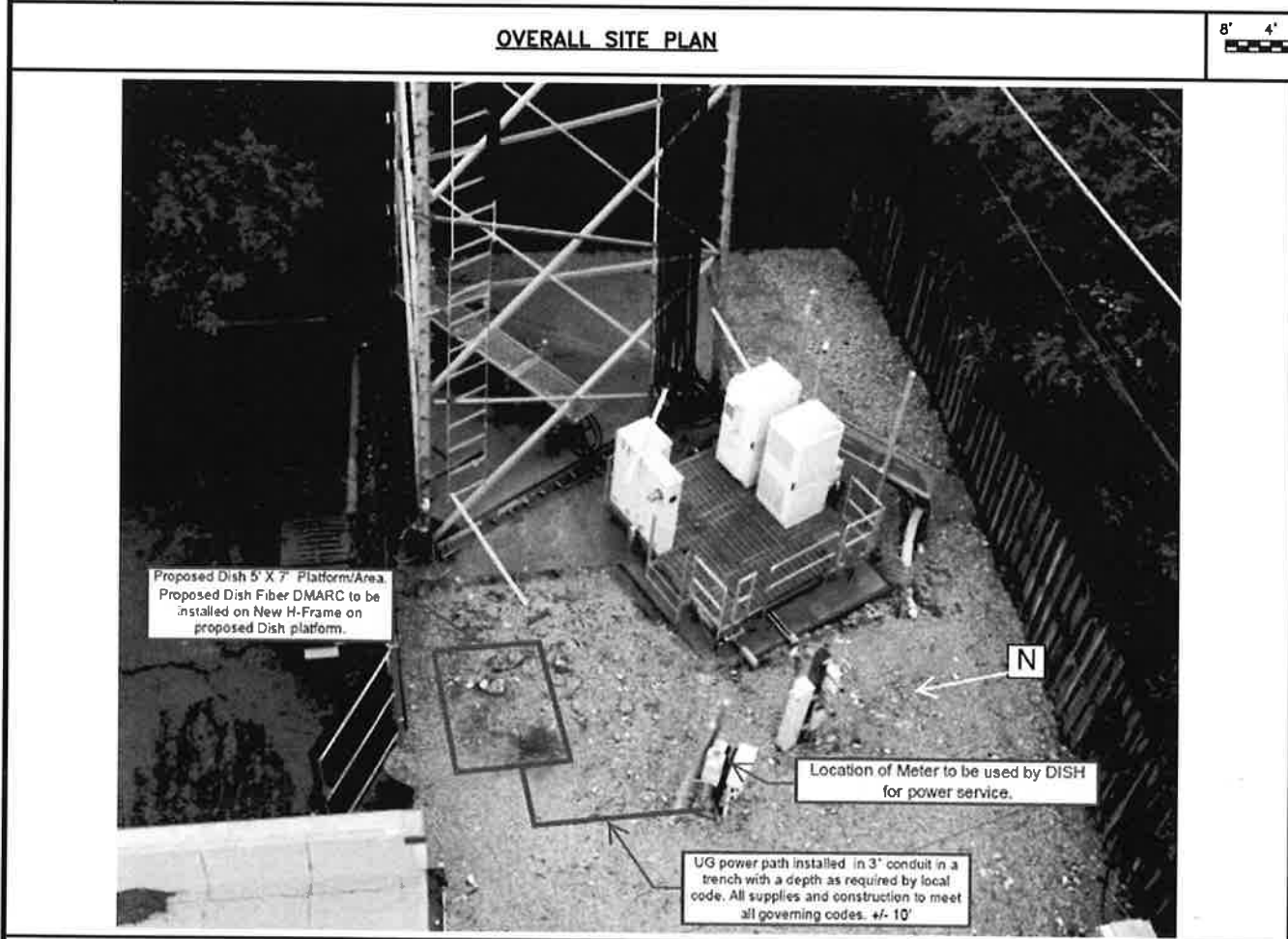
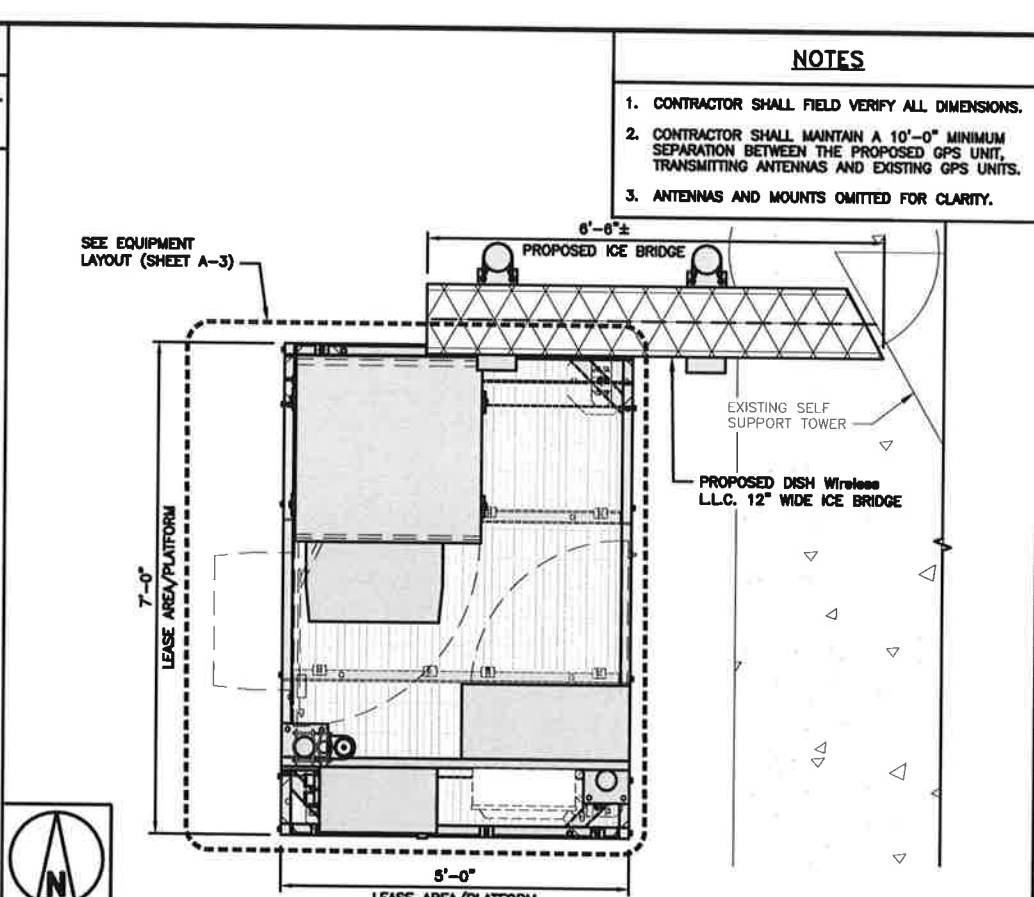
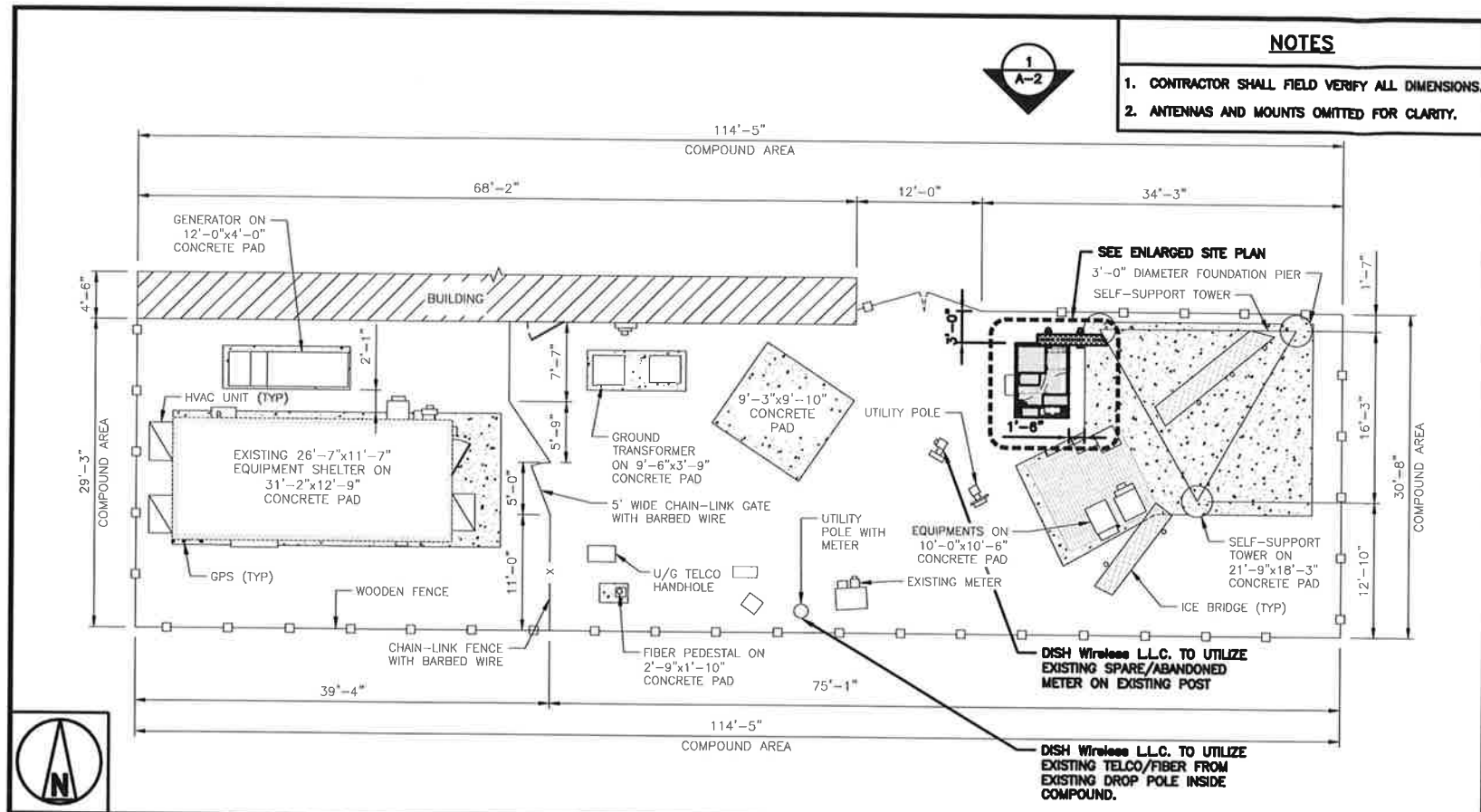
SUBMITTALS		
REV	DATE	DESCRIPTION
A	07/14/2021	ISSUED FOR REVIEW
D	03/04/2022	ISSUED FOR CONSTRUCTION
1	12/12/2022	ISSUED FOR CONSTRUCTION
2	01/30/2023	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
6039-Z0001-C
DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



INFINIGY ENGINEERING PLLC
LICENSE # 184005973-0002

dish wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

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DRAWN BY: CHECKED BY: APPROVED BY:

RCD	SS	CJW
-----	----	-----

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

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A&E PROJECT NUMBER
6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION

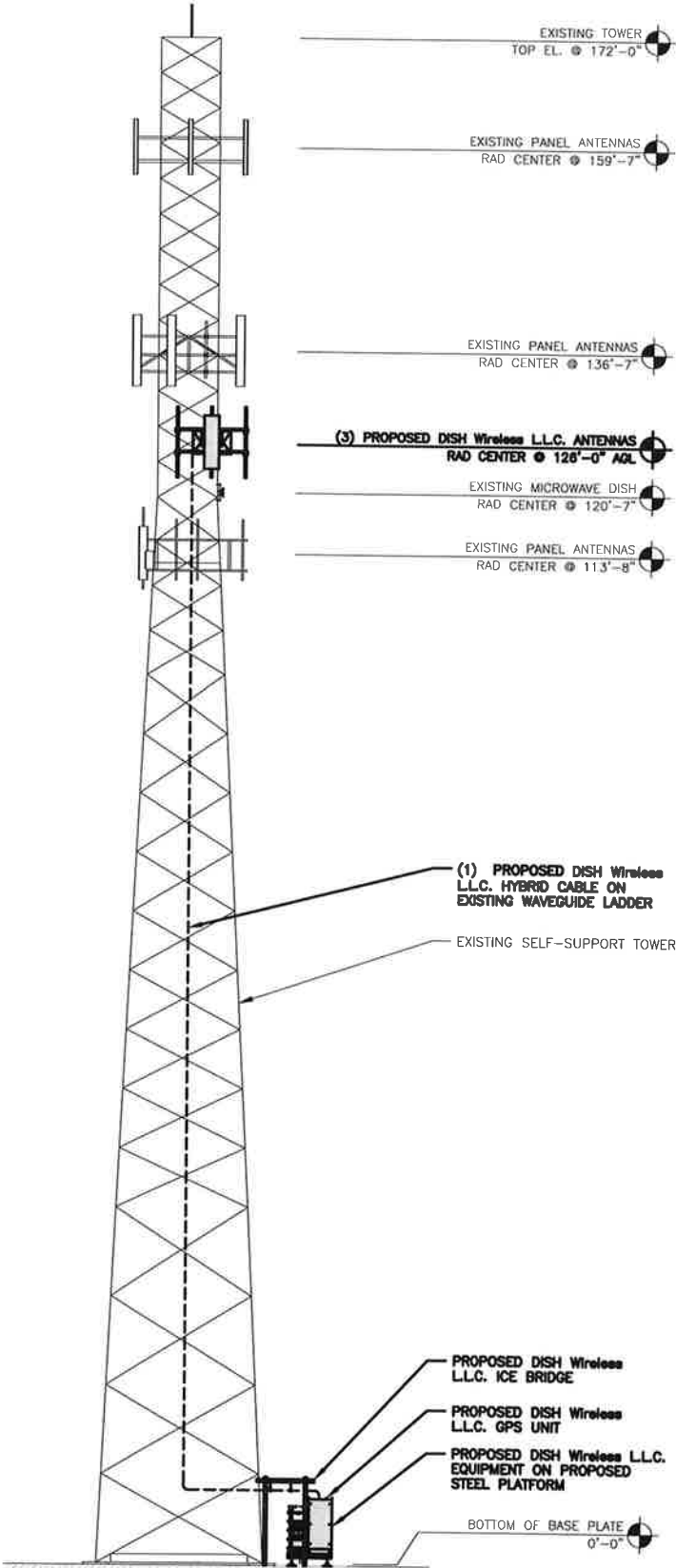
CHCH100216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
OVERALL AND ENLARGED SITE PLANS

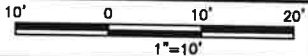
SHEET NUMBER
A-1

NOTES

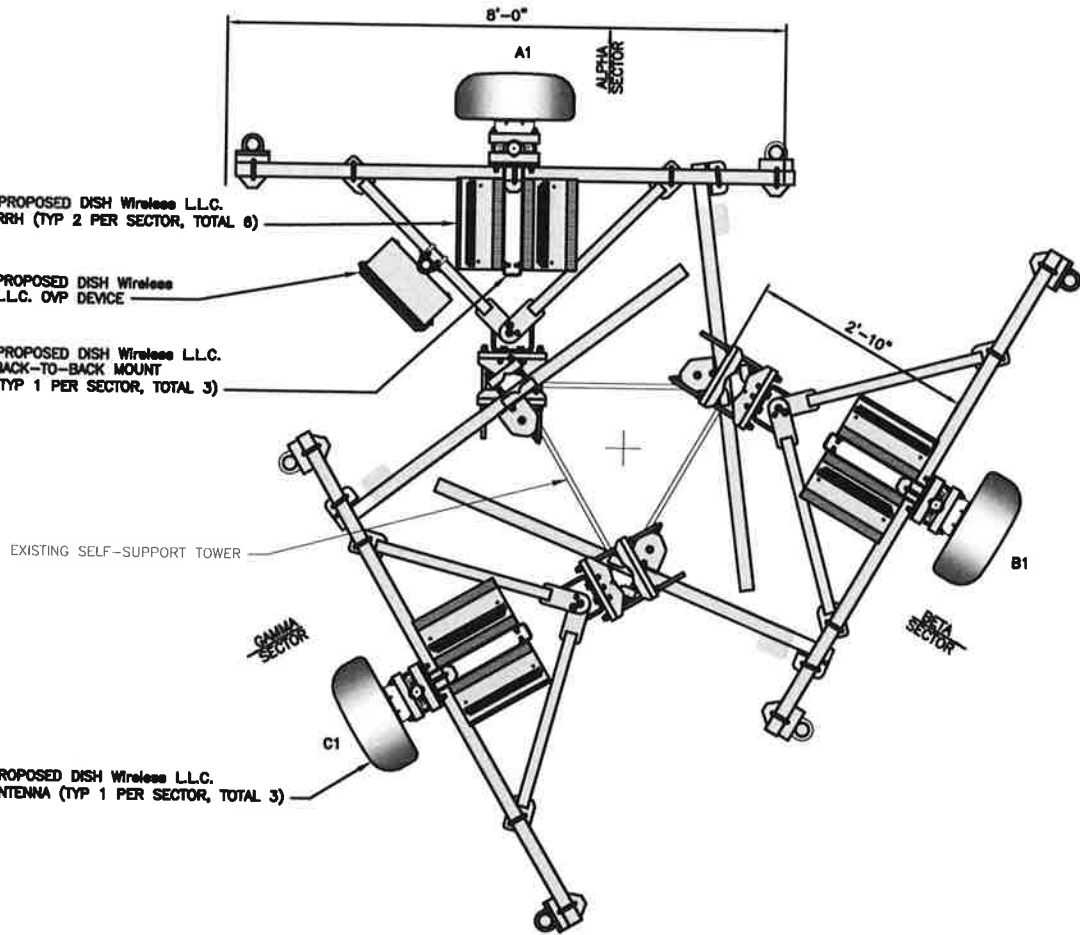
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNA AND MW DISH SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS
3. EXISTING EQUIPMENT AND FENCE OMITTED FOR CLARITY.
4. INFINIGY HAS NOT EVALUATED THE TOWER OR MOUNT STRUCTURE AND ASSUMES NO RESPONSIBILITY FOR THEIR STRUCTURAL INTEGRITY REGARDING PROPOSED LOADINGS. FINAL INSTALLATION SHALL COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSES PERFORMED BY OTHERS.



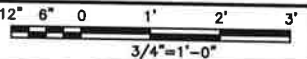
PROPOSED NORTH ELEVATION



1



ANTENNA LAYOUT



2

SECTOR POS.	ANTENNA					TRANSMISSION CABLE		RRH			OVP	
	EXISTING OR PROPOSED	MANUFACTURER - MODEL NUMBER	TECH	AZMUTH	RAD CENTER	FEED LINE TYPE AND LENGTH		MANUFACTURER - MODEL NUMBER	TECH	POS.	MANUFACTURER MODEL	
A1	---	---	---	---	---	(1) HIGH-CAPACITY HYBRID CABLE (174' LONG)		FUJITSU - TA08025-B604	5G	A2	RAYCAP R0DC-9181-PF-48	
A2	PROPOSED	JMAWIRELESS - MX08FRO865-21	5G	0°	126'-0"			FUJITSU - TA08025-B605	5G	A2		
A3	---	---	---	---	---			---	---	---		
B1	---	---	---	---	---	SHARED W/ALPHA		FUJITSU - TA08025-B604	5G	B2	SHARED W/ALPHA	
B2	PROPOSED	JMAWIRELESS - MX08FRO865-21	5G	120°	126'-0"			FUJITSU - TA08025-B605	5G	B2		
B3	---	---	---	---	---			---	---	---		
C1	---	---	---	---	---	SHARED W/ALPHA		FUJITSU - TA08025-B604	5G	C2	SHARED W/ALPHA	
C2	PROPOSED	JMAWIRELESS - MX08FRO865-21	5G	240°	126'-0"			FUJITSU - TA08025-B605	5G	C2		
C3	---	---	---	---	---			---	---	---		

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
2. ANTENNA AND RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE

3



INFINIGY ENGINEERING PLLC
LICENSE # 184005973-0002

dish
wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

CROWN CASTLE
2000 CORPORATE DRIVE
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DRAWN BY: CHECKED BY: APPROVED BY:
RCD SS CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	07/14/2021	ISSUED FOR REVIEW
0	03/04/2022	ISSUED FOR CONSTRUCTION
1	12/12/2022	ISSUED FOR CONSTRUCTION
2	01/30/2023	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
6039-Z0001-C
DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
ELEVATION, ANTENNA
LAYOUT AND SCHEDULE

SHEET NUMBER

A-2

ENERSYS HEX CABINET
2000005996

DIMENSIONS (HxWxD):	73"x30"x32"
WEIGHT EMPTY:	376 lbs
HEATER	800W
POWER SYSTEM	-48V ALPHA/800A

BACK

FRONT

SIDE

PLAN

CABINET DETAIL

NO SCALE

1

RAYCAP PPC
RDIAC-2465-P-240-MTS

ENCLOSURE DIMENSIONS (HxWxD):	39"x22.855"x12.593
WEIGHT:	80 lbs
OPERATING AC VOLTAGE	240/120 1 PHASE 3W+G

BACK

SIDE

FRONT

SIDE

TOP

POWER PROTECTION CABINET (PPC) DETAIL

NO SCALE

2

SQUARE D SAFETY SWITCHES
D224NRB

ENCLOSURE DIM (HxWxD)	29.25"x19.00"x8.50"
ENCLOSURE TYPE	NEMA 3R RAINPROOF
UL LISTED	FILE E-2875

SIDE

FRONT

TOP

SAFETY SWITCH DETAIL

NO SCALE

3

ZAYO 5RU (LEFT SWING DOOR)
FIBER NID ENCLOSURE

DIMENSIONS (HxWxD)	38.1"x29"x12.9"
WEIGHT	85 lbs

BACK

SIDE

FRONT

BOTTOM

FIBER NID ENCLOSURE DETAIL

NO SCALE

5

CHARLES CFIT-PF2020DSH1
FIBER TELCO ENCLOSURE

ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4

SIDE

BACK

FRONT

FIBER TELCO ENCLOSURE DETAIL

NO SCALE

6

COMMSCOPE WB-K110-B
WAVEGUIDE BRIDGE KIT

DIMENSIONS (HxL)	180"x10"
WEIGHT/ VOLUME	325.0 LBS
CABLE RUN (QTY)	12

PLAN

FRONT

SIDE

INCLUDED PRODUCTS:
WB-T12-3 TRAPEZE KIT, 3 RUNGS
WB-LB12-3 SUPPORT BRACKET
MF-130 DIRECT BURIAL PIPE COLUMN, 13'-4"

ICE BRIDGE DETAIL

NO SCALE

7

FINISH SLOPE TO DRAIN

A-A

PROPOSED 3.5" DIA. SCH 40 PIPE GALVANIZED

PROPOSED 1'-6" DIA. CONCRETE PIER (TYP)

CONCRETE PIER

3" DIA SCH 40 PIPE

16" DIA DRILLED PIER FOUNDATION

A-A SECTION

TYPICAL ICE BRIDGE CONCRETE PIER DETAIL

NO SCALE

8

PROPOSED ICE BRIDGE

PROPOSED 1-3/4" DIA HYBRID CABLE

PROPOSED CABLE CLAMP @ 3'-0" O.C.

EXISTING SELF SUPPORT TOWER

HYBRID CABLE RUN

NO SCALE

9

INFINIGY ENGINEERING PLLC
LICENSE # 184005973-0002

Christopher J. Williams
Professional Engineer
State of Illinois

dish
wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

CROWN
CASTLE

2000 CORPORATE DRIVE
CANONSBURG, PA 15317

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WWW.INFINIGY.COM

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DRAWN BY: CHECKED BY: APPROVED BY:

RCD SS CJW

RFDS REV #: N/A

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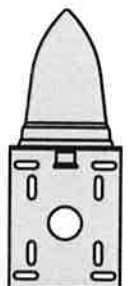
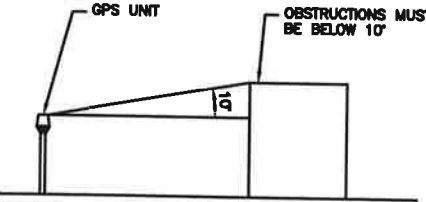
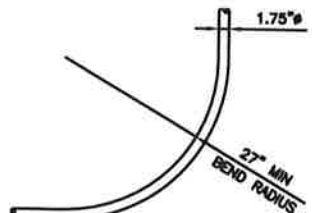
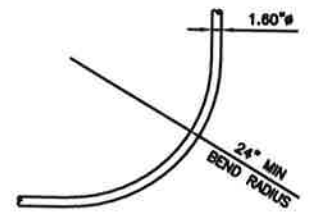
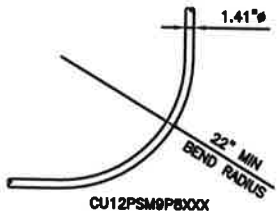
CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-4

DISH Wireless L.L.C. TEMPLATE VERSION 48 - 2/21/2022

Page 441 of 544

<table><tr><td colspan="2">PCTEL GPSGL-TMG-SPI-40NCB</td></tr><tr><td>DIMENSIONS (DiaH) MM/INCH</td><td>81x184mm 3.2"x7.25"</td></tr><tr><td>WEIGHT W/ACCESSORIES</td><td>075 lbs</td></tr><tr><td>CONNECTOR</td><td>N-FEMALE</td></tr><tr><td>FREQUENCY RANGE</td><td>1590 ± 30MHz</td></tr></table>  BACK  TOP  SIDE			PCTEL GPSGL-TMG-SPI-40NCB		DIMENSIONS (DiaH) MM/INCH	81x184mm 3.2"x7.25"	WEIGHT W/ACCESSORIES	075 lbs	CONNECTOR	N-FEMALE	FREQUENCY RANGE	1590 ± 30MHz	 			  		
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GPS DETAILNO SCALE1			GPS MINIMUM SKY VIEW REQUIREMENTSNO SCALE2			CABLES UNLIMITED HYBRID CABLE MINIMUM BEND RADIUSESNO SCALE3												
NOT USEDNO SCALE4			NOT USEDNO SCALE5			NOT USEDNO SCALE6												
NOT USEDNO SCALE7			NOT USEDNO SCALE8			NOT USEDNO SCALE9												



INFINIGY ENGINEERING PLLC
LICENSE # 184005973-0002

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wireless.
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RCD	SS	CJW

RFDS REV #: N/A

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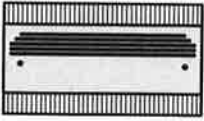
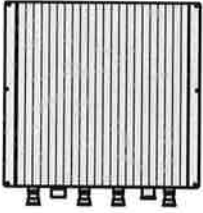
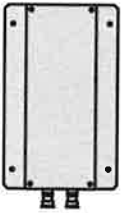
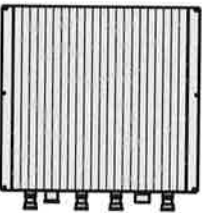
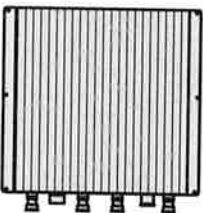
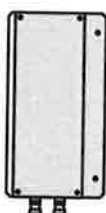
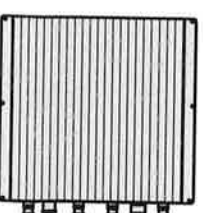
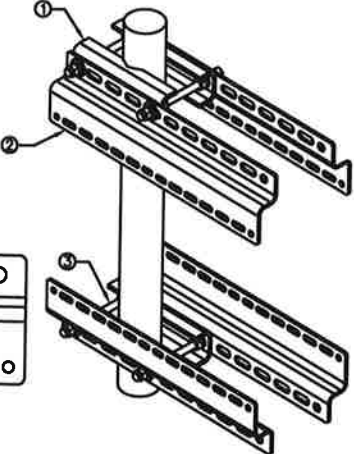
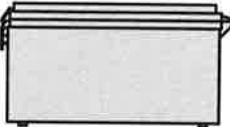
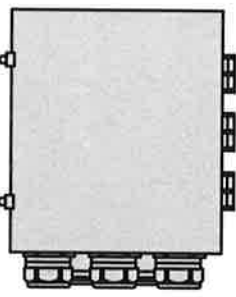
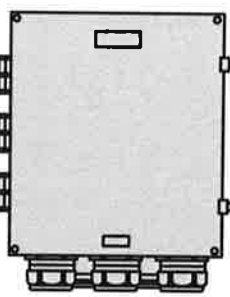
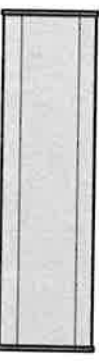
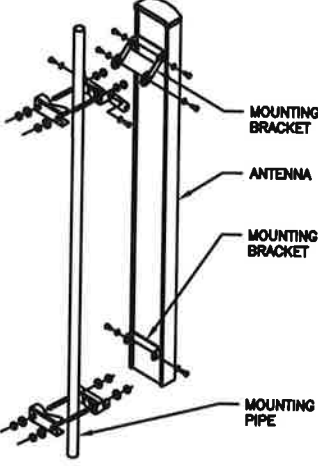
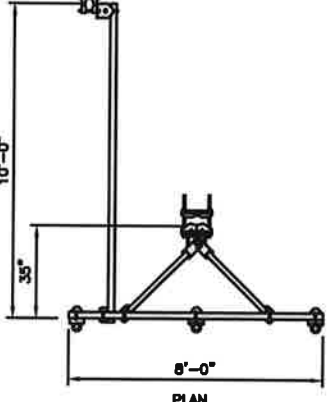
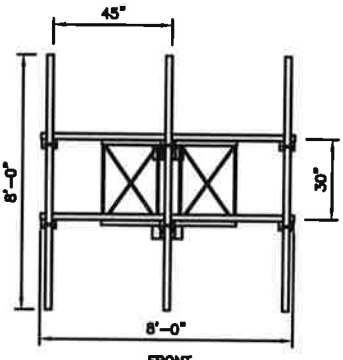
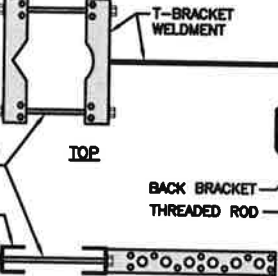
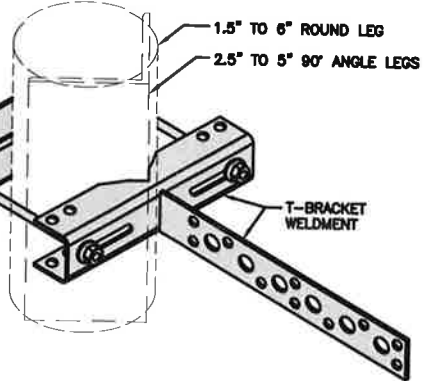
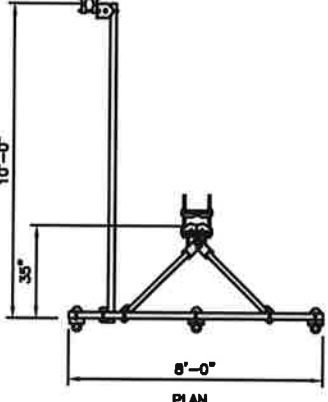
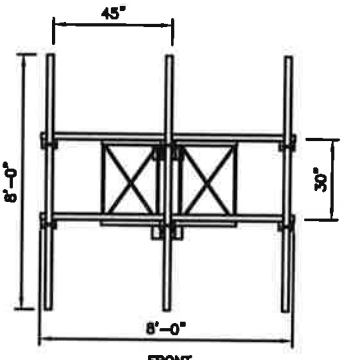
A&E PROJECT NUMBER
6039-Z0001-C
DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER

A-5

<table><tr><td colspan="2">FUJITSU TRIPLE BAND TA08025-B605</td></tr><tr><td>DIMENSIONS (HxWxD)</td><td>14.8"x15.7"x9"</td></tr><tr><td>WEIGHT</td><td>74.95 lbs</td></tr><tr><td>CONNECTOR TYPE</td><td>4.3-10 RF CONNECTOR</td></tr><tr><td>POWER SUPPLY</td><td>DC -58~-36V</td></tr></table>  PLAN  BACK  SIDE  FRONT	FUJITSU TRIPLE BAND TA08025-B605		DIMENSIONS (HxWxD)	14.8"x15.7"x9"	WEIGHT	74.95 lbs	CONNECTOR TYPE	4.3-10 RF CONNECTOR	POWER SUPPLY	DC -58~-36V	<table><tr><td colspan="2">FUJITSU DUAL BAND TA08025-B604</td></tr><tr><td>DIMENSIONS (HxWxD)</td><td>14.8"x15.7"x7.8"</td></tr><tr><td>WEIGHT</td><td>83.9 lbs</td></tr><tr><td>CONNECTOR TYPE</td><td>4.3-10 RF CONNECTOR</td></tr><tr><td>POWER SUPPLY</td><td>DC -58~-36V</td></tr></table>  PLAN  BACK  SIDE  FRONT	FUJITSU DUAL BAND TA08025-B604		DIMENSIONS (HxWxD)	14.8"x15.7"x7.8"	WEIGHT	83.9 lbs	CONNECTOR TYPE	4.3-10 RF CONNECTOR	POWER SUPPLY	DC -58~-36V	<table><tr><td colspan="2">SABRE DOUBLE Z-BRACKET C10123155</td></tr><tr><td>DIMENSIONS (HxWxD) (1 BRACKET)</td><td>5"x20"x1-13/16"</td></tr><tr><td>WEIGHT (FULL ASSEMBLY)</td><td>35.79 lbs</td></tr><tr><td>PACKAGE QUANTITY</td><td>4</td></tr></table> <table><tr><td>#</td><td>DESCRIPTION</td></tr><tr><td>1</td><td>PLATE, CHANNEL BRACKET</td></tr><tr><td>2</td><td>RRH Z BRACKET, 3/16"</td></tr><tr><td>3</td><td>THREADED ROD ASSEMBLY 1/2"x12"</td></tr></table>  NOTE: OR DISH Wireless L.L.C. APPROVED EQUIVALENT	SABRE DOUBLE Z-BRACKET C10123155		DIMENSIONS (HxWxD) (1 BRACKET)	5"x20"x1-13/16"	WEIGHT (FULL ASSEMBLY)	35.79 lbs	PACKAGE QUANTITY	4	#	DESCRIPTION	1	PLATE, CHANNEL BRACKET	2	RRH Z BRACKET, 3/16"	3	THREADED ROD ASSEMBLY 1/2"x12"	 INFINIGY ENGINEERING PLLC LICENSE # 184005973-0002  5701 SOUTH SANTA FE DRIVE LITTLETON, CO 80120  2000 CORPORATE DRIVE CANONSBURG, PA 15317  FROM ZERO TO INFINIGY the solutions are endless 2500 W. HIGGINS RD. SUITE 500 HOFFMAN ESTATES, IL 60169 PHONE: 847-648-4068 FAX: 518-690-0793 WWW.INFINIGY.COM IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT. <table><tr><td>DRAWN BY:</td><td>CHECKED BY:</td><td>APPROVED BY:</td></tr><tr><td>RCD</td><td>SS</td><td>CJW</td></tr></table> RFDS REV #: N/A CONSTRUCTION DOCUMENTS <table><tr><td colspan="3">SUBMITTALS</td></tr><tr><td>REV</td><td>DATE</td><td>DESCRIPTION</td></tr><tr><td>A</td><td>07/14/2021</td><td>ISSUED FOR REVIEW</td></tr><tr><td>0</td><td>03/04/2022</td><td>ISSUED FOR CONSTRUCTION</td></tr><tr><td>1</td><td>12/12/2022</td><td>ISSUED FOR CONSTRUCTION</td></tr><tr><td>2</td><td>01/30/2023</td><td>ISSUED FOR CONSTRUCTION</td></tr></table> A&E PROJECT NUMBER 6039-Z0001-C DISH Wireless L.L.C. PROJECT INFORMATION CHCHI00216A 415 TAFT AVE GLEN ELLYN, IL 60137 SHEET TITLE EQUIPMENT DETAILS SHEET NUMBER A-6	DRAWN BY:	CHECKED BY:	APPROVED BY:	RCD	SS	CJW	SUBMITTALS			REV	DATE	DESCRIPTION	A	07/14/2021	ISSUED FOR REVIEW	0	03/04/2022	ISSUED FOR CONSTRUCTION	1	12/12/2022	ISSUED FOR CONSTRUCTION	2	01/30/2023	ISSUED FOR CONSTRUCTION
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DISH Wireless L.L.C. TEMPLATE VERSION 48 - 2/21/2022

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. ALL TRENCHES IN COMPOUND TO BE HAND DUG



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RFDS REV #: N/A

SUBMITTALS

A&E PROJECT NUMBER
6039-Z0001-C
DISH Wireless L.L.C.
PROJECT INFORMATION

SHEET TITLE
ELECTRICAL/FIBER ROUTE
PLANS AND NOTES

SHEET NUMBER

E-1



CARLON EXPANSION FITTINGS <table><thead><tr><th>COUPLING END PART#</th><th>MALE TERMINAL ADAPTER END PART#</th><th>SIZE</th><th>STD CTN QTY.</th><th>TRAVEL LENGTH</th></tr></thead><tbody><tr><td>E945D</td><td>E945DX</td><td>1/2"</td><td>20</td><td>4"</td></tr><tr><td>E945E</td><td>E945EX</td><td>3/4"</td><td>15</td><td>4"</td></tr><tr><td>E945F</td><td>E945FX</td><td>1"</td><td>10</td><td>4"</td></tr><tr><td>E945G</td><td>E945GX</td><td>1 1/4"</td><td>5</td><td>4"</td></tr><tr><td>E945H</td><td>E945HX</td><td>1 1/2"</td><td>5</td><td>4"</td></tr><tr><td>E945J</td><td>E945JX</td><td>2"</td><td>15</td><td>8"</td></tr><tr><td>E945K</td><td>E945KX</td><td>2 1/2"</td><td>10</td><td>8"</td></tr><tr><td>E945L</td><td>E945LX</td><td>3"</td><td>10</td><td>8"</td></tr><tr><td>E945M</td><td>E945MX</td><td>3 1/2"</td><td>5</td><td>8"</td></tr><tr><td>E945N</td><td>E945NX</td><td>4"</td><td>5</td><td>8"</td></tr><tr><td>E945P</td><td>E945PX</td><td>5"</td><td>1</td><td>8"</td></tr><tr><td>E945R</td><td>E945RX</td><td>6"</td><td>1</td><td>8"</td></tr></tbody></table> VARIES PER PART NUMBER SLIP JOINT (SEE CHART FOR PART NUMBER) NOTE: CONTRACTOR TO INSTALL EXPANSION FITTING SLIP JOINT AT METER CENTER CONDUIT TERMINATION, AS PER LOCAL UTILITY POLICY, ORDINANCE AND/OR SPECIFIED REQUIREMENT.			COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD CTN QTY.	TRAVEL LENGTH	E945D	E945DX	1/2"	20	4"	E945E	E945EX	3/4"	15	4"	E945F	E945FX	1"	10	4"	E945G	E945GX	1 1/4"	5	4"	E945H	E945HX	1 1/2"	5	4"	E945J	E945JX	2"	15	8"	E945K	E945KX	2 1/2"	10	8"	E945L	E945LX	3"	10	8"	E945M	E945MX	3 1/2"	5	8"	E945N	E945NX	4"	5	8"	E945P	E945PX	5"	1	8"	E945R	E945RX	6"	1	8"	TRENCHING NOTES - CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION. - TRENCHING SAFETY, INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS. - ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT. SEE TRENCHING NOTE 1 BACKFILL PER SITE WORK SPECIFICATIONS (SEE GENERAL NOTES) SLOPE TO SUIT SOIL CONDITION IN ACCORDANCE WITH LOCAL REGULATIONS SEE TRENCHING NOTE 2 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER UTILITY WARNING TAPE SAND BEDDING PER SITE WORK SPECIFICATIONS VERTICAL DEPTH SEE TRENCHING NOTE 2 1'-0" 1'-0"			DISH TELCO BOX - INTERIOR WIRING LAYOUT DISH Wireless L.L.C. PROVIDES 12AWG WIRE (6' TAIL) DISH Wireless L.L.C. FIBER DISTRIBUTION PANEL PROPOSED DISH Wireless L.L.C. TELCO FIBER ENCLOSURE PROPOSED DISH Wireless L.L.C. UNISTRUT PROPOSED DISH Wireless L.L.C. 10 AMP DISTRIBUTION BREAKER PROPOSED DISH Wireless L.L.C. 12 AWG WIRE PROPOSED DISH Wireless L.L.C. 1-1/2" POWER FROM CABINET DISH Wireless L.L.C. INSTALLS 1-1/2" CONDUITS FOR POWER AND FIBER TO CABINET DISH Wireless L.L.C. FIBER JUMPER TO CABINET WILL NEED TO BE TERMINATED BY FIBER PROVIDER ON OTHER SIDE OF BULKHEAD/LC TO LC CONNECTOR WHERE CIRCUIT IS TERMINATED. PROPOSED FIBER PROVIDER FIBER LATERAL FROM RIGHT OF WAY TO STREET, TERMINATED TO FDP PROPOSED DISH Wireless L.L.C. 1-1/2" FIBER TO CABINET PROPOSED DISH Wireless L.L.C. 2" CONDUIT FROM COMMERCIAL FIBER VAULT			EXPANSION JOINT DETAIL NO SCALE 1 NOTE: FIBER PROVIDER WILL NEED TO PROVIDE AN ADDITIONAL 5FT UNISTRUT, 2 U-BOLTS WITH 4 NUTS, IN THE EVENT THE BRACKET SPACING DOESN'T LINE UP WITH CURRENT SPACING BELOW PROPOSED DISH Wireless L.L.C. UNISTRUT PROPOSED FIBER PROVIDER 1-1/4" FLEX CONDUITS FIBER PROVIDER TO TERMINATE POWER TO FIBER PROVIDER NID PROPOSED DISH Wireless L.L.C. 12 AWG WIRE (6' TAIL) PROPOSED DISH Wireless L.L.C. 10 AMP DISTRIBUTION BREAKER PROPOSED DISH Wireless L.L.C. 12 AWG WIRE PROPOSED DISH Wireless L.L.C. 1-1/2" POWER FROM CABINET PROPOSED FIBER PROVIDER NID, IF REQUIRED IN IN OUT FIBER PROVIDER TO PUNCH TOP OF TELCO BOX OF NID ENCLOSURE AND INSTALL 1-1/4" LIQUID TIGHT CONNECTORS, UL LISTED, NYLON MATERIAL, WITH O-RING GASKET FIBER PROVIDER TO INSTALL 1-1/4" FLEX CONDUITS BETWEEN FDP TELCO BOX & NID PROPOSED DISH Wireless L.L.C. TELCO FIBER ENCLOSURE PROPOSED DISH Wireless L.L.C. 1-1/2" FIBER TO CABINET PROPOSED DISH Wireless L.L.C. 2" CONDUIT FROM COMMERCIAL FIBER VAULT			TYPICAL UNDERGROUND TRENCH DETAIL NO SCALE 2			LIT TELCO BOX - INTERIOR WIRING LAYOUT (OPTIONAL) NO SCALE 4 PROPOSED DISH Wireless L.L.C. 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RCD	SS	CJW

RFDS REV #: N/A

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	07/14/2021	ISSUED FOR REVIEW
0	03/04/2022	ISSUED FOR CONSTRUCTION
1	12/12/2022	ISSUED FOR CONSTRUCTION
2	01/30/2023	ISSUED FOR CONSTRUCTION

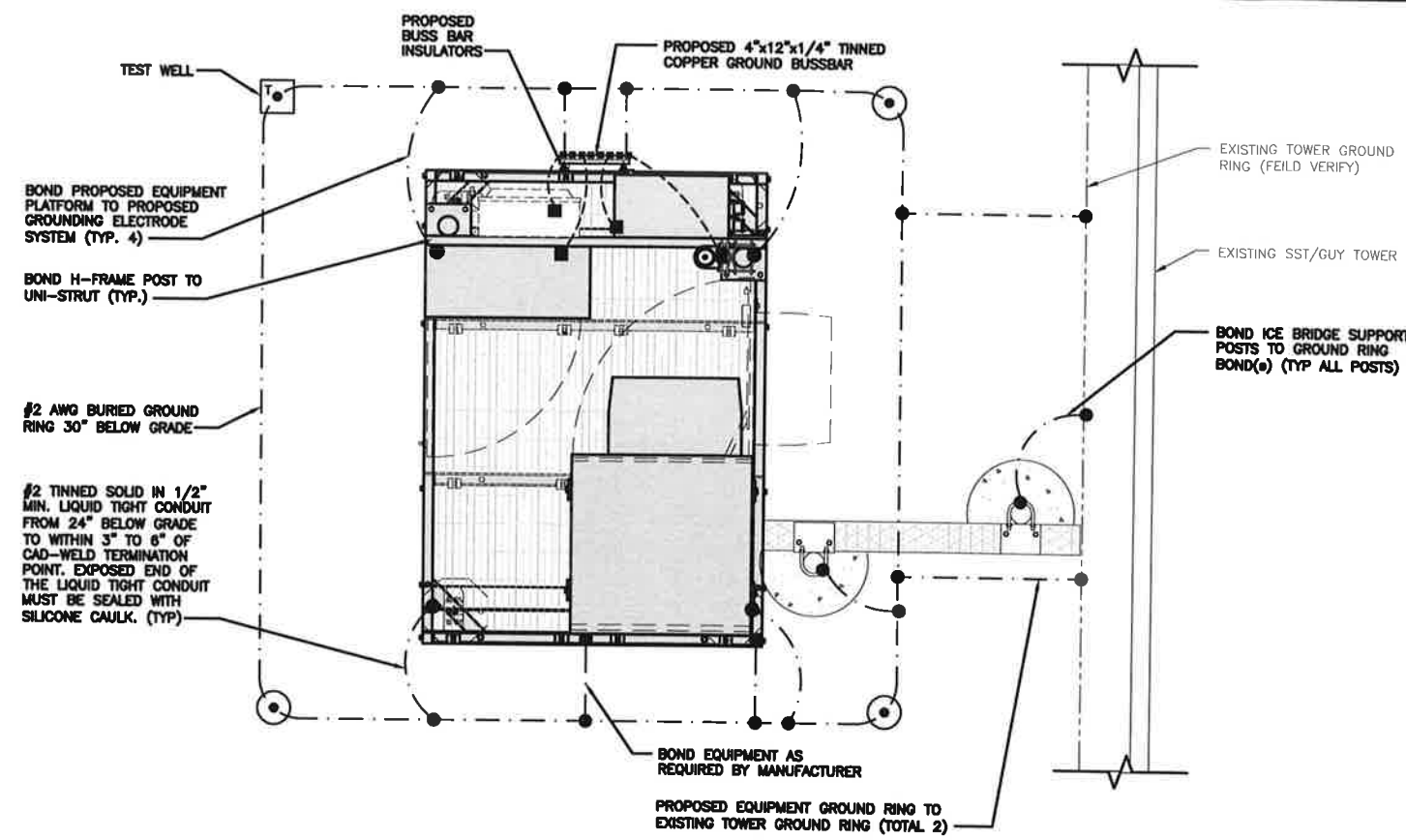
A&E PROJECT NUMBER
6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
ELECTRICAL
DETAILS

SHEET NUMBER
E-2

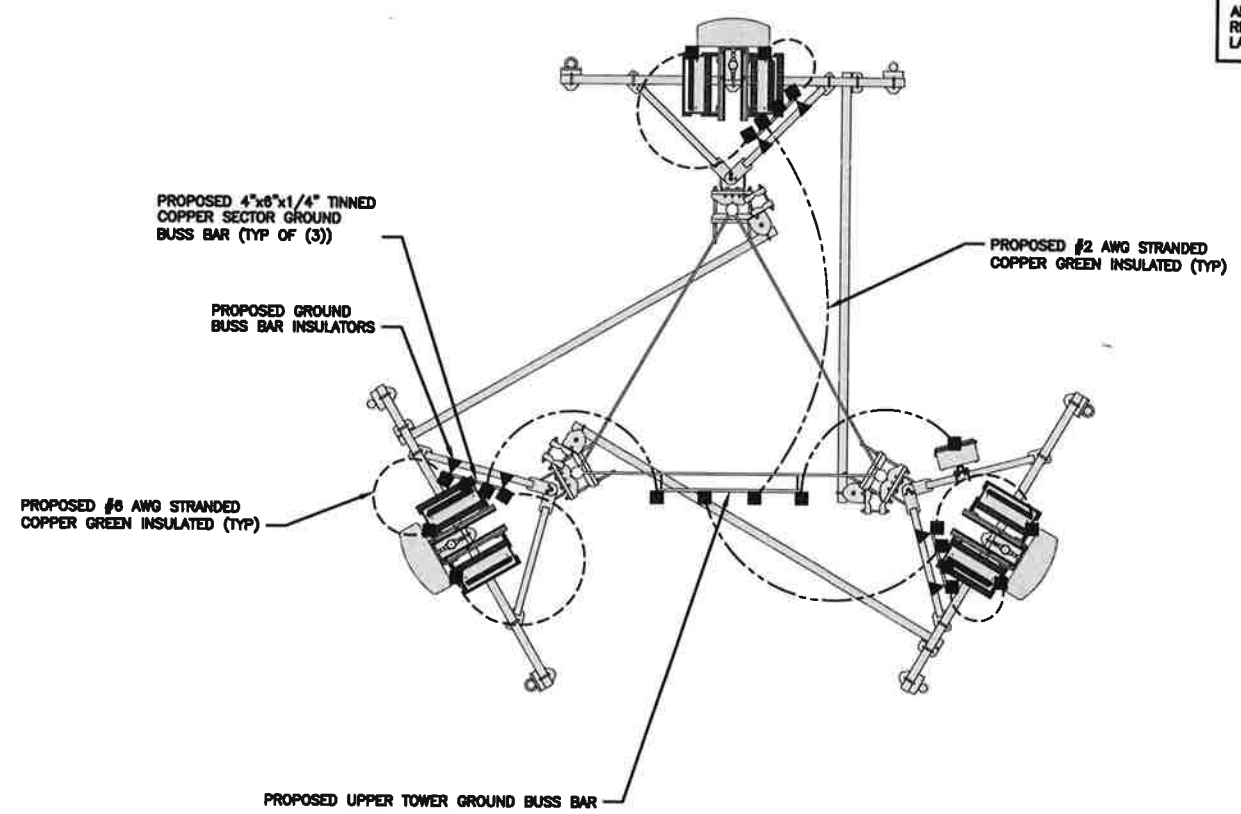


TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE 1

NOTES

ANTENNAS AND OVP SHOWN ARE GENERIC AND NOT REFERENCING TO A SPECIFIC MANUFACTURER. THIS LAYOUT IS FOR REFERENCE PURPOSES ONLY.



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE 2

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- #6 AWG STRANDED & INSULATED
- #2 AWG SOLID COPPER TINNED
- ▲ BUSS BAR INSULATOR
- TEST GROUND ROD WITH INSPECTION SLEEVE
- GROUND BUS BAR
- GROUND ROD

GROUNDING LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND DISH Wireless L.L.C. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

GROUNDING KEY NOTES

- (A) EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING.
- (B) TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.
- (C) INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR.
- (D) BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING.
- (E) GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 1/2" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.
- (F) CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.
- (G) HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS EACH.
- (H) EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE.
- (I) TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR OR EXTERIOR GROUND RING.
- (J) FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENT'S METAL FRAMEWORK.
- (K) INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.
- (L) FENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.
- (M) EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. USING #2 TINNED SOLID COPPER WIRE.
- (N) ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE GROUND RING. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED.
- (O) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR.
- (P) TOWER TOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO TOWER STEEL. REFER TO DISH Wireless L.L.C. GROUNDING NOTES.

GROUNDING KEY NOTES

NO SCALE 3



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A&E PROJECT NUMBER
6039-Z0001-C
DISH Wireless L.L.C.
PROJECT INFORMATION

CHCH100216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
GROUNDING PLANS
AND NOTES
SHEET NUMBER

G-1

1. EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR. ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD. 2. ALL EXTERIOR GROUNDING HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. 3. FOR GROUND BOND TO STEEL ONLY: COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. 4. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUNDING BUS. 5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE. 6. ALL GROUNDING PARTS AND EQUIPMENT TO BE SUPPLIED AND INSTALLED BY CONTRACTOR. 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED. 8. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).			EXTERNAL TOOTHED 3/8" DIA x1 1/2" S/S NUT S/S LOCK WASHER S/S FLAT WASHER S/S FLAT WASHER S/S BOLT (1 OF 2) 1/16" MINIMUM SPACING CLOSED BARREL, FOR ALL EXTERIOR TWO-HOLE CONNECTORS BLACK HEAT SHRINK UV RATED CONDUCTOR INSULATION TO BUTT UP AGAINST THE CONNECTOR BARREL TINNED COPPER GROUNDING BAR			EXTERNAL TOOTHED 3/8" DIA x1 1/2" S/S NUT S/S LOCK WASHER S/S FLAT WASHER S/S FLAT WASHER S/S BOLT (1 OF 2) 1/16" MINIMUM SPACING INSPECTION WINDOW IN BARREL, REQUIRED FOR ALL INTERIOR TWO-HOLE CONNECTORS CLEAR HEAT SHRINK CONDUCTOR INSULATION TO BUTT UP AGAINST THE CONNECTOR BARREL TINNED COPPER GROUNDING BAR		
TYPICAL GROUNDING NOTES			TYPICAL EXTERIOR TWO HOLE LUG			TYPICAL INTERIOR TWO HOLE LUG		
NOTE: MINIMUM OF 3 THREADS TO BE VISIBLE (TYP) 2 HOLE LONG BARREL TINNED SOLID COPPER LUG (TYP) TIN COATED SOLID COPPER BUS BAR CHERRY INSULATOR INSTALLED IF REQUIRED S/S BOLT (TYP) S/S SPLIT WASHER (TYP) S/S FLAT WASHER (TYP) S/S FLAT WASHER (TYP) S/S NUT (TYP)			NOT USED			NOT USED		
LUG DETAIL			NOT USED			NOT USED		
NOT USED			NOT USED			NOT USED		
NOT USED			NOT USED			NOT USED		
NOT USED			NOT USED			NOT USED		

Christopher J. Williams

REGISTERED PROFESSIONAL ENGINEER

STATE OF ILLINOIS

00000000000000000000

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LICENSE # 184005973-0002

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wireless.

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RFDS REV #: N/A

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6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-3

RF JUMPER COLOR CODING				3/4" TAPE WIDTHS WITH 3/4" SPACING											
LOW-BAND RRH - (600MHz N71 BASEBAND) + (850MHz N26 BAND) + (700MHz N29 BAND) - OPTIONAL PER MARKET ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BANDS)				ALPHA RRH				BETA RRH				GAMMA RRH			
				PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT
				RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN
				ORANGE	ORANGE	RED	RED	ORANGE	ORANGE	BLUE	BLUE	ORANGE	ORANGE	GREEN	GREEN
					WHITE (-) PORT	ORANGE	ORANGE		WHITE (-) PORT	ORANGE	ORANGE		WHITE (-) PORT	ORANGE	ORANGE
							WHITE (-) PORT				WHITE (-) PORT				WHITE (-) PORT
MID-BAND RRH - (AWS BANDS N66+N70) ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BANDS)				RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN
				PURPLE	PURPLE	RED	RED	PURPLE	PURPLE	BLUE	BLUE	PURPLE	PURPLE	GREEN	GREEN
					WHITE (-) PORT	PURPLE	PURPLE		WHITE (-) PORT	PURPLE	PURPLE		WHITE (-) PORT	PURPLE	PURPLE
							WHITE (-) PORT				WHITE (-) PORT				WHITE (-) PORT
HYBRID/DISCREET CABLES INCLUDE SECTOR BANDS BEING SUPPORTED ALONG WITH FREQUENCY BANDS EXAMPLE 1 - HYBRID, OR DISCREET, SUPPORTS ALL SECTORS, BOTH LOW-BANDS AND MID-BANDS EXAMPLE 2 - HYBRID, OR DISCREET, SUPPORTS CBRS ONLY, ALL SECTORS				EXAMPLE 1	EXAMPLE 2	EXAMPLE 3									
				RED	RED	RED									
				BLUE	BLUE	ORANGE									
				GREEN	GREEN	PURPLE									
				ORANGE											
				PURPLE	YELLOW										
FIBER JUMPERS TO RRHs LOW-BAND RRH FIBER CABLES HAVE SECTOR STRIPE ONLY				LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH				
				RED	RED	BLUE	BLUE	GREEN	GREEN						
					PURPLE		PURPLE		PURPLE		PURPLE				
POWER CABLES TO RRHs LOW-BAND RRH POWER CABLES HAVE SECTOR STRIPE ONLY				LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH	LOW BAND RRH	HIGH BAND RRH				
				RED	RED	BLUE	BLUE	GREEN	GREEN						
					PURPLE		PURPLE		PURPLE		PURPLE				
RET MOTORS AT ANTENNAS				ANTENNA 1 LOW BAND/ "IN"	ANTENNA 1 HIGH BAND/ "IN"	ANTENNA 1 LOW BAND/ "IN"	ANTENNA 1 HIGH BAND/ "IN"	ANTENNA 1 LOW BAND/ "IN"	ANTENNA 1 HIGH BAND/ "IN"	ANTENNA 1 LOW BAND/ "IN"	ANTENNA 1 HIGH BAND/ "IN"				
				RED	RED	BLUE	BLUE	GREEN	GREEN						
					PURPLE		PURPLE		PURPLE		PURPLE				
MICROWAVE RADIO LINKS LINKS WILL HAVE A 1.5-2 INCH WHITE WRAP WITH THE AZIMUTH COLOR OVERLAPPING IN THE MIDDLE. ADD ADDITIONAL SECTOR COLOR BANDS FOR EACH ADDITIONAL MW RADIO. MICROWAVE CABLES WILL REQUIRE P-TOUCH LABELS INSIDE THE CABINET TO IDENTIFY THE LOCAL AND REMOTE SITE ID'S				FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-360 DEGREES							
				PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY						
				WHITE	WHITE	WHITE	WHITE	WHITE	WHITE						
				RED		BLUE	BLUE	GREEN	GREEN						
				WHITE	WHITE	WHITE	WHITE	WHITE	WHITE						
					WHITE		BLUE		WHITE						
					RED		WHITE		GREEN						
					WHITE		WHITE		WHITE						

RF CABLE COLOR CODES				NO SCALE	1
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LOW BANDS (N71+N26) OPTIONAL - (N29)		AWS (N66+N70+H-BLOCK)	
ORANGE		PURPLE	
CBRS TECH (3 GHz)		NEGATIVE SLANT PORT ON ANT/RRH	
YELLOW		WHITE	
ALPHA SECTOR		BETA SECTOR	
RED		BLUE	
		GAMMA SECTOR	
		GREEN	
COLOR IDENTIFIER		NO SCALE	2
NOT USED		NO SCALE	3
NOT USED		NO SCALE	4



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GLEN ELLYN, IL 60137

SHEET TITLE
RF
CABLE COLOR CODE

SHEET NUMBER
RF-1

EXOTHERMIC CONNECTION
MECHANICAL CONNECTION
BUSS BAR INSULATOR
CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
EXOTHERMIC WITH INSPECTION SLEEVE
GROUNDING BAR
GROUND ROD
TEST GROUND ROD WITH INSPECTION SLEEVE

SINGLE POLE SWITCH

DUPLEX RECEPTACLE

DUPLEX GFCI RECEPTACLE

FLUORESCENT LIGHTING FIXTURE (2) TWO LAMPS 48-T8

SMOKE DETECTION (DC)

EMERGENCY LIGHTING (DC)

SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
LED-1-25A400/51K-SR4-120-PE-DOBTD

CHAIN LINK FENCE

WOOD/WROUGHT IRON FENCE

WALL STRUCTURE

LEASE AREA

PROPERTY LINE (PL)

SETBACKS

ICE BRIDGE

CABLE TRAY

WATER LINE

UNDERGROUND POWER

UNDERGROUND TELCO

OVERHEAD POWER

OVERHEAD TELCO

UNDERGROUND TELCO/POWER

ABOVE GROUND POWER

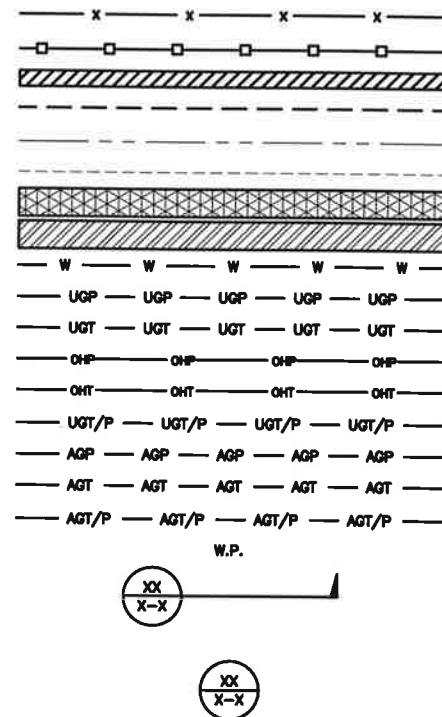
ABOVE GROUND TELCO

ABOVE GROUND TELCO/POWER

WORKPOINT

SECTION REFERENCE

DETAIL REFERENCE



LEGEND

AB ANCHOR BOLT
ABV ABOVE
AC ALTERNATING CURRENT
ADDL ADDITIONAL
AFF ABOVE FINISHED FLOOR
AFG ABOVE FINISHED GRADE
AGL ABOVE GROUND LEVEL
AIC AMPERAGE INTERRUPTION CAPACITY
ALUM ALUMINUM
ALT ALTERNATE
ANT ANTENNA
APPROX APPROXIMATE
ARCH ARCHITECTURAL
ATS AUTOMATIC TRANSFER SWITCH
AWG AMERICAN WIRE GAUGE
BATT BATTERY
BLDG BUILDING
BLK BLOCK
BLKG BLOCKING
BM BEAM
BTC BARE TINNED COPPER CONDUCTOR
BOF BOTTOM OF FOOTING
CAB CABINET
CANT CANTILEVERED
CHG CHARGING
CLG CEILING
CLR CLEAR
COL COLUMN
COMM COMMON
CONC CONCRETE
CONSTR CONSTRUCTION
DBL DOUBLE
DC DIRECT CURRENT
DEPT DEPARTMENT
DF DOUGLAS FIR
DIA DIAMETER
DIAG DIAGONAL
DIM DIMENSION
DWG DRAWING
DWL DOWEL
EA EACH
EC ELECTRICAL CONDUCTOR
EL ELEVATION
ELEC ELECTRICAL
EMT ELECTRICAL METALLIC TUBING
ENG ENGINEER
EQ EQUAL
EXP EXPANSION
EXT EXTERIOR
EW EACH WAY
FAB FABRICATION
FF FINISH FLOOR
FG FINISH GRADE
FIF FACILITY INTERFACE FRAME
FIN FINISH(ED)
FLR FLOOR
FDN FOUNDATION
FOC FACE OF CONCRETE
FOM FACE OF MASONRY
FOS FACE OF STUD
FOW FACE OF WALL
FS FINISH SURFACE
FT FOOT
FTG FOOTING
GA GAUGE
GEN GENERATOR
GFCI GROUND FAULT CIRCUIT INTERRUPTER
GLB GLUE LAMINATED BEAM
GLV GALVANIZED
GPS GLOBAL POSITIONING SYSTEM
GND GROUND
GSM GLOBAL SYSTEM FOR MOBILE
HDG HOT DIPPED GALVANIZED
HDR HEADER
HGR HANGER
HVAC HEAT/VENTILATION/AIR CONDITIONING
HT HEIGHT
IGR INTERIOR GROUND RING

IN INCH
INT INTERIOR
LB(S) POUND(S)
LF LINEAR FEET
LTE LONG TERM EVOLUTION
MAS MASONRY
MAX MAXIMUM
MB MACHINE BOLT
MECH MECHANICAL
MFR MANUFACTURER
MGB MASTER GROUND BAR
MIN MINIMUM
MISC MISCELLANEOUS
MTL METAL
MTS MANUAL TRANSFER SWITCH
MW MICROWAVE
NEC NATIONAL ELECTRIC CODE
NM NEWTON METERS
NO. NUMBER
NUMBER
NTS NOT TO SCALE
OC ON-CENTER
OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OPNG OPENING
P/C PRECAST CONCRETE
PCS PERSONAL COMMUNICATION SERVICES
PCU PRIMARY CONTROL UNIT
PRC PRIMARY RADIO CABINET
PP POLARIZING PRESERVING
PSF POUNDS PER SQUARE FOOT
PSI POUNDS PER SQUARE INCH
PT PRESSURE TREATED
PWR POWER CABINET
QTY QUANTITY
RAD RADIUS
RECT RECTIFIER
REF REFERENCE
REINF REINFORCEMENT
REQ'D REQUIRED
RET REMOTE ELECTRIC TILT
RF RADIO FREQUENCY
RMC RIGID METALLIC CONDUIT
RRH REMOTE RADIO HEAD
RRU REMOTE RADIO UNIT
RWY RACEWAY
SCH SCHEDULE
SHT SHEET
SIAD SMART INTEGRATED ACCESS DEVICE
SIM SIMILAR
SPEC SPECIFICATION
SQ SQUARE
SS STAINLESS STEEL
STD STANDARD
STL STEEL
TEMP TEMPORARY
THK THICKNESS
TMA TOWER MOUNTED AMPLIFIER
TN TOE NAIL
TOA TOP OF ANTENNA
TOC TOP OF CURB
TOF TOP OF FOUNDATION
TOP TOP OF PLATE (PARAPET)
TOS TOP OF STEEL
TOW TOP OF WALL
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP TYPICAL
UG UNDERGROUND
UL UNDERWRITERS LABORATORY
UNO UNLESS NOTED OTHERWISE
UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
UPS UNINTERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
VIF VERIFIED IN FIELD
W WIDE
W/ WITH
WD WOOD
WP WEATHERPROOF
WT WEIGHT

ABBREVIATIONS



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DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
LEGEND AND
ABBREVIATIONS

SHEET NUMBER

GN-1

SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED - NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH Wireless L.L.C. AND TOWER OWNER NOC & THE DISH Wireless L.L.C. AND TOWER OWNER CONSTRUCTION MANAGER.
2. "LOOK UP" - DISH Wireless L.L.C. AND TOWER OWNER SAFETY CLIMB REQUIREMENT:
THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH Wireless L.L.C. AND DISH Wireless L.L.C. AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH Wireless L.L.C. AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH DISH Wireless L.L.C. AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH Wireless L.L.C. AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH Wireless L.L.C. AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF DISH Wireless L.L.C. AND TOWER OWNER, AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1.FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR:GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

CARRIER:DISH Wireless L.L.C.

TOWER OWNER:TOWER OWNER

2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CARRIER POC AND TOWER OWNER.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF DISH Wireless L.L.C. AND TOWER OWNER
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.



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A&E PROJECT NUMBER 6039-Z0001-C		
DISH Wireless L.L.C. PROJECT INFORMATION		
CHCHI00216A 415 TAFT AVE GLEN ELLYN, IL 60137		
SHEET TITLE GENERAL NOTES		
SHEET NUMBER GN-2		

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°F AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:

#4 BARS AND SMALLER 40 ksi

#5 BARS AND LARGER 60 ksi

6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
- CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 BARS AND LARGER 2"
 - #5 BARS AND SMALLER 1-1/2"
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - SLAB AND WALLS 3/4"
 - BEAMS AND COLUMNS 1-1/2"

7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- 4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. TIE WRAPS ARE NOT ALLOWED.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECIMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH Wireless L.L.C. AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH Wireless L.L.C."
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.



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A&E PROJECT NUMBER
6039-Z0001-C

DISH Wireless L.L.C.
PROJECT INFORMATION

CHCHI00216A
415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
GENERAL NOTES

SHEET NUMBER

GN-3

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.



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DISH Wireless L.L.C.
PROJECT INFORMATION

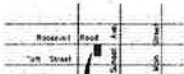
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415 TAFT AVE
GLEN ELLYN, IL 60137

SHEET TITLE
GENERAL NOTES

SHEET NUMBER

GN-4

VICINITY MAP
N67° TO S64° E



N

SITE

PARENT PARCEL LEGAL DESCRIPTION

LOT 9 AND THE WEST 50' OF LOT 10, TOWNSHIP 33 NORTH, RANGE 10 EAST, OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925, AS DOCUMENT 187514, IN DUPage COUNTY, ILLINOIS.

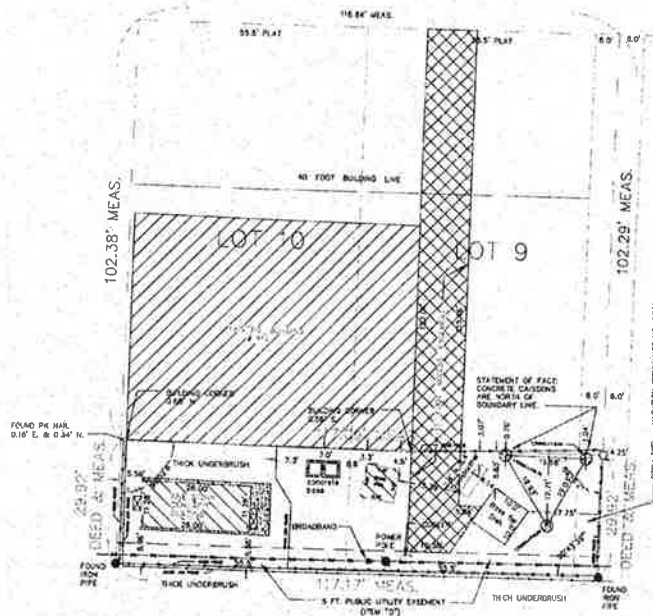
TOWER PARCEL LEGAL DESCRIPTION

THE SOUTH 100 FEET OF LOT 9 AND THE SOUTH 200 FEET OF THE WEST 50' OF LOT 10, TOWNSHIP 33 NORTH, RANGE 10 EAST, OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925, AS DOCUMENT 187514, IN DUPage COUNTY, ILLINOIS.

ACCESS EASEMENT LEGAL DESCRIPTION

SUBJECT PART OF LOT 9, OF TOWNSHIP 33 NORTH, RANGE 10 EAST, OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925, AS DOCUMENT 187514, IN DUPage COUNTY, ILLINOIS, CONTAINS A SUBDIVISION OF THE SOUTH 100 FEET OF LOT 9 AND THE SOUTH 200 FEET OF THE WEST 50' OF LOT 10, TOWNSHIP 33 NORTH, RANGE 10 EAST, OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925, AS DOCUMENT 187514, IN DUPage COUNTY, ILLINOIS.

NOTWITHSTANDING THE ABOVE, THE SURVEYOR HAS BEEN ADVISED THAT THE PROPERTY IS SUBJECT TO A FLOOD HAZARD ZONING MAP, DATED 11/22/92, BY THE DUPage COUNTY BOARD OF SUPERVISORS, WHICH ZONES THE PROPERTY AS A FLOOD HAZARD ZONE "A".



TOWER LOCATION INFORMATION
172.8'±1' METAL TOWER
ON 3'-3.0' DIA. CONCRETE CAISSONS
LATITUDE = 41°51'28.32"± N
LONGITUDE = -88°04'18.23"± W
ELEVATION OF GROUND AT BASE OF TOWER = 746.68'±0.1'
ELEVATION OF TOP OF TOWER = 919.48'±0.1'
TOP OF TOWER HEIGHT ABOVE GROUND = 172.8'±1'
HEIGHT OF TALLEST APPURTENANCE ABOVE TOP OF TOWER = 5'±1'

BOUNDARY SURVEY

OF LEASE PARCEL
PORTION OF TAX P.L.N. 05-23-102-018-0000
VILLAGE OF GLEN ELLYN, ILLINOIS
FOR: PINNACLE TOWERS INC.

SURVEYOR'S CERTIFICATION

I, RONALD A. SHAPIRO, do hereby certify that I am a duly licensed Professional Engineer in the State of Illinois, and that I am the owner of the firm of GEOLINE SURVEYING, INC., which is duly licensed as a Professional Engineering Firm in the State of Illinois, and that I am the duly authorized representative of said firm in the performance of the above described survey work.

(1) I, the Surveyor, have and acknowledge the land indicated hereon and each individual parcel indicated hereon is correct.

(2) To the extent the land indicated hereon is part of a larger parcel, each lot is located within the boundaries of the larger lot, and the description of each parcel as described and referred to on the hereunto shown hereon.

(3) I, the Surveyor, have and acknowledge the location of each parcel as shown hereon.

(4) I, the Surveyor, have and acknowledge the location of each parcel as shown hereon, and I have and acknowledge the location of each parcel as shown hereon, and I have and acknowledge the location of each parcel as shown hereon.

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Preliminary

SITE #6067-001 SITE DuPage, Glen Ellyn, Illinois	
SURVEY WORK PERFORMED BY:	
GEOLINE SURVEYING, INC. 3500 S. ROOSEVELT AVE. SUITE 200 P.O. BOX 1111 GLEN ELLYN, ILLINOIS 60131 TELEPHONE: 708-450-4077 FAX: 708-548-0696 E-MAIL: info@geolineinc.com	
NATIONAL SURVEY SERVICES COORDINATION BY:	
GEOLINE SURVEYING, INC. 3500 S. ROOSEVELT AVE. SUITE 200 P.O. BOX 1111 GLEN ELLYN, ILLINOIS 60131 TELEPHONE: 708-450-4077 FAX: 708-548-0696 E-MAIL: info@geolineinc.com	

EXHIBIT A

PROFESSIONALS ASSOCIATED SURVEY, INC.

Property - Alta - Topo - Condo - Mortgage Surveys
PROFESSIONAL DESIGN FIRM REGISTRATION NO. 0011129145

PLAT OF SURVEY

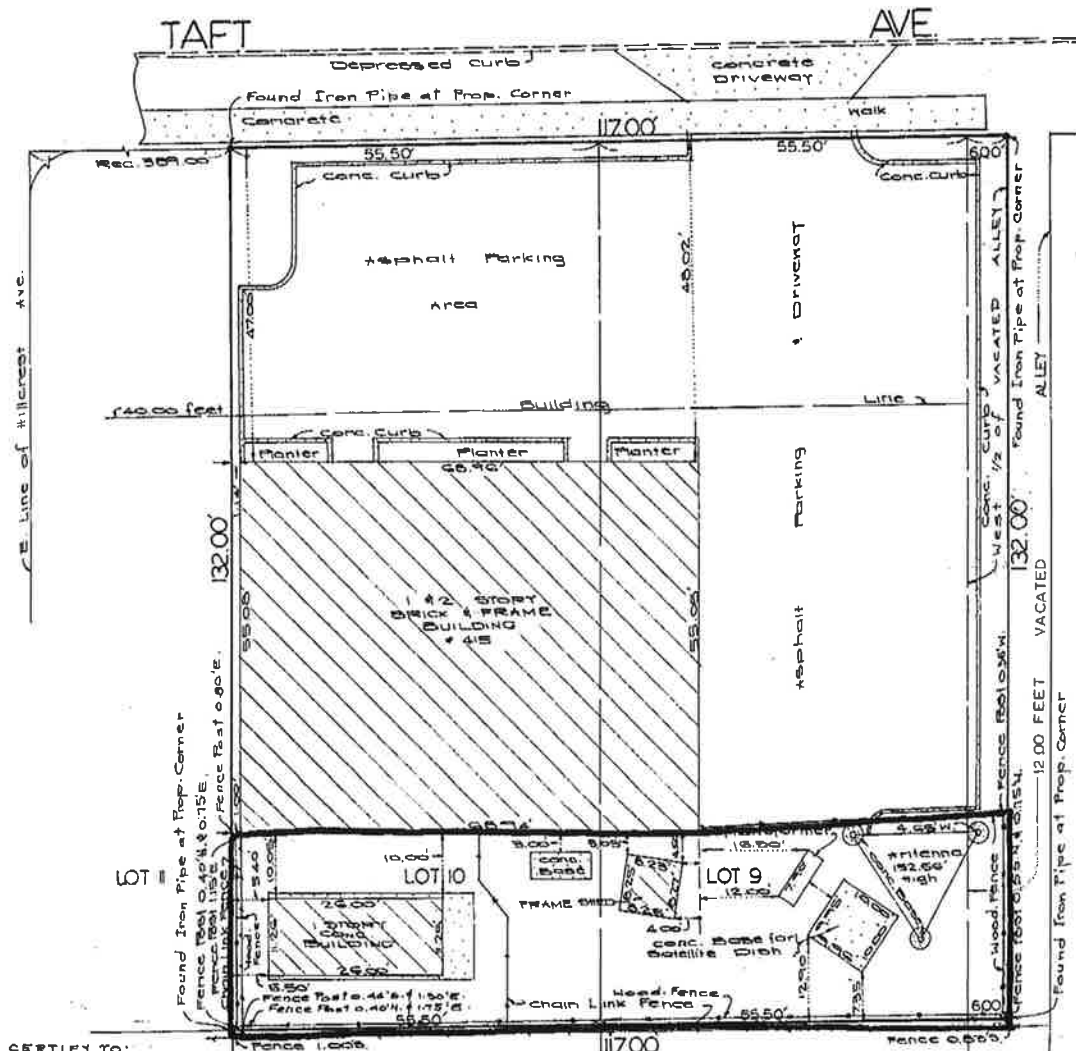
OF

7100 N. TRIPP AVENUE
LINCOLNWOOD, ILLINOIS 60112
TEL: (847) 675-3000
FAX: (847) 675-2167



LOT 9 AND WEST 1/2 OF VACATED ALLEY LYING EAST OF AND ADJOINING AND LOT 10 IN BLOCK 79 IN WHEATON ESTATES, BEING A SUBDIVISION IN SECTION 22 AND SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925 AS DOCUMENT 197514, IN DUPAGE COUNTY, ILLINOIS.

COMMONLY KNOWN AS: 415 TAFT AVENUE, GLEN ELLYN, ILLINOIS.



CERTIFY TO:
- WINFIELD COMMUNITY BANK

UPDATE: July 10, 2003.
Ordered by: PRUDENTIAL REALTY CO., INC.

Order No. 95-37615
Scale: 1 inch = 15 feet
Date: October 1, 1996
Order by: PRUDENTIAL REALTY COMPANY

PROF. IL. LAND SURVEYOR
We, PROFESSIONALS ASSOCIATED, do hereby certify that we have located and surveyed the above property.

PROF. IL. LAND SURVEYOR
We, PROFESSIONALS ASSOCIATED, do hereby certify that we have surveyed the above described property and that the plat hereon shown is a correct representation of said survey.

THIS SURVEY HAS BEEN ORDERED FOR SURFACE DIMENSIONS ONLY, NOT FOR ELEVATIONS.
THIS IS NOT AN ALTA SURVEY
We, PROFESSIONALS ASSOCIATED, do hereby certify that we have surveyed the above described property and that the plat hereon shown is a correct representation of said survey.

RECEIVED

FEB 10 2023

VILLAGE OF GLEN ELLYN

Date: August 30, 2021



Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
(724) 416-2000

Subject: Structural Analysis Report

Carrier Designation: DISH Network Co-locate
Site Number: CHCHI00216A
Site Name: IL-CCI-T-873681

Crown Castle Designation:
BU Number: 873681
Site Name: Chicago
JDE Job Number: 658426
Work Order Number: 2012805
Order Number: 559909 Rev. 2

Engineering Firm Designation: Crown Castle Project Number: 2012805

Site Data: 415 Taft Ave, Glen Ellyn, DuPage County, IL
Latitude 41° 51' 29.32", Longitude -88° 4' 18.23"
172 Foot - Self Support Tower

Crown Castle is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration

Sufficient Capacity

This analysis utilizes a 3-second gust wind speed of 90 mph (converted to an equivalent 116 mph ultimate wind speed) as required by the 2009 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - "Analysis Criteria".

Structural analysis prepared by: Randall Ashworth, EIT

Respectfully submitted by:

Saijun Zhou, P.E., S.E.
Senior Project Engineer



License expires on: 11/30/22

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1) INTRODUCTION

This tower is a 172 ft Self Support tower mapped by FDH, Inc. The tower has been modified multiple times to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	116 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	40 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
126.0	126.0	3	fujitsu	TA08025-B604	1	1-3/4
		3	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MTC3975083 (3)		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
160.0	160.0	2	allgon	7200.01 w/ Mount Pipe	4	1-5/8
		6	allgon	7200.09 w/ Mount Pipe		
		6	misc1	1-5/8"x1-5/8" Unistrut (12-ft Horizontal)		
135.0	137.0	3	vzw	Sub6 Antenna w/ Mount Pipe	12 3	7/8 1-1/4
	136.0	9	andrew	SBNHH-1D65C w/ Mount Pipe		
	135.0	3	site pro 1	VFA12-RRU Sector Mount		
		3	ericsson	4449		
		3	ericsson	8843		
		3	raycap	RC3DC-3315-PF-48		
		3	tower mounts	(1) Site Pro 1 VFA12-RRU Sector Mount		
120.0	120.0	1	andrew	VHLP1-220	-	-
		1	nec corporation	NLITE 155 ODU		
		1	tower mounts	Pipe Mount [PM 601-1]		
115.0	117.0	3	samsung telecommunications	RRH-C2A W/ EXT FILTER_CCIV2	3	7/8
	116.0	3	kmw communications	ET-X-TS-70-15-62-18-IR-RD w/ Mount Pipe		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	115.0	3	samsung telecommunications	RRH-P4 Ph1		
		1	tower mounts	Sector Mount [SM 411-3]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1397350	CCISITES
4-POST-MODIFICATION INSPECTION	8125749	CCISITES
4-POST-MODIFICATION INSPECTION	6000632	CCISITES
4-POST-MODIFICATION INSPECTION	5384978	CCISITES
4-POST-MODIFICATION INSPECTION	3112920	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	5978753	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	1639581	CCISITES
4-TOWER MANUFACTURER DRAWINGS	1640593	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	8130286	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3129902	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2945765	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	1404690	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5245551	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the reinforced leg sections. These calculations are presented in Appendix C.

3.2) Assumptions

- 1) Tower and structures were maintained in accordance with the TIA-222 Standard.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Crown Castle should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	172 - 160	Leg	ROHN 2 STD	1	-0.82	38.68	2.1	Pass
T2	160 - 140	Leg	ROHN 2 STD	25	-9.24	38.68	23.9	Pass
T3	140 - 136	Leg	ROHN 2.5 EH	58	-11.50	87.41	13.2	Pass
T4	136 - 132	Leg	ROHN 2.5 EH	67	-16.26	87.41	18.6	Pass
T5	132 - 128	Leg	ROHN 2.5 EH	76	-21.27	87.41	24.3	Pass
T6	128 - 124	Leg	ROHN 2.5 EH	85	-27.58	87.41	31.5	Pass
T7	124 - 120	Leg	ROHN 2.5 EH	94	-34.14	87.41	39.1	Pass
T8	120 - 115	Leg	ROHN 3 STD	103	-40.60	86.63	46.9	Pass
T9	115 - 110	Leg	ROHN 3 STD	114	-48.32	99.95	48.3	Pass
T10	110 - 105	Leg	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	126	-55.79	159.57	35.0	Pass
T11	105 - 100	Leg	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	135	-62.78	159.57	39.3	Pass
T12	100 - 93.3333	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	144	-70.35	160.21	43.9	Pass
T13	93.3333 - 86.6667	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	153	-78.87	160.21	49.2	Pass
T14	86.6667 - 80	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	162	-86.87	160.21	54.2	Pass
T15	80 - 73.3333	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	171	-94.78	229.21	41.4	Pass
T16	73.3333 - 66.6667	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	180	-102.46	229.20	44.7	Pass
T17	66.6667 - 60	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	189	-110.00	229.21	48.0	Pass
T18	60 - 53.3333	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	198	-117.46	271.62	43.2	Pass
T19	53.3333 - 46.6667	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	207	-124.54	271.62	45.9	Pass
T20	46.6667 - 40	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	216	-131.79	271.62	48.5	Pass
T21	40 - 30	Leg	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	225	-140.71	279.02	50.4	Pass
T22	30 - 20	Leg	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	234	-151.32	279.02	54.2	Pass
T23	20 - 10	Leg	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	243	-162.42	342.30	47.4	Pass
T24	10 - 0	Leg	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	252	-172.48	342.30	50.4	Pass
T1	172 - 160	Diagonal	L1 1/2x1 1/2x1/8	11	-0.33	5.06	6.5	Pass
T2	160 - 140	Diagonal	L1 1/2x1 1/2x3/16	28	-1.22	7.21	16.9	Pass
T3	140 - 136	Diagonal	L1 3/4x1 3/4x3/16	62	-1.30	11.78	11.1	Pass
T4	136 - 132	Diagonal	L2x2x1/4	71	-2.44	21.22	11.5	Pass
T5	132 - 128	Diagonal	L2x2x1/4	80	-2.82	21.19	13.3	Pass
T6	128 - 124	Diagonal	L2x2x1/4	88	-3.25	21.18	15.3	Pass
T7	124 - 120	Diagonal	L2x2x1/4	98	-3.89	21.16	18.4	Pass
T8	120 - 115	Diagonal	L2x2x1/4	107	-3.18	17.69	18.0	Pass
T9	115 - 110	Diagonal	L2x2x1/4	116	-3.66	16.05	22.8	Pass
T10	110 - 105	Diagonal	L2x2x1/4	128	-3.53	14.93	23.7	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T11	105 - 100	Diagonal	L2x2x1/4	137	-3.49	13.72	25.4	Pass
T12	100 - 93.3333	Diagonal	L2x2x3/16	148	-3.77	7.80	48.4	Pass
T13	93.3333 - 86.6667	Diagonal	L2x2x1/4	157	-3.80	9.13	41.7	Pass
T14	86.6667 - 80	Diagonal	L2x2x1/4	166	-3.84	8.29	46.3	Pass
T15	80 - 73.3333	Diagonal	L2 1/2x2 1/2x1/4	175	-3.92	15.46	25.4	Pass
T16	73.3333 - 66.6667	Diagonal	L2 1/2x2 1/2x1/4	184	-3.99	14.09	28.3	Pass
T17	66.6667 - 60	Diagonal	L2 1/2x2 1/2x1/4	193	-4.15	12.88	32.2	Pass
T18	60 - 53.3333	Diagonal	L2 1/2x2 1/2x3/16	202	-4.10	9.03	45.5	Pass
T19	53.3333 - 46.6667	Diagonal	L2 1/2x2 1/2x3/16	211	-4.28	8.28	51.6	Pass
T20	46.6667 - 40	Diagonal	L2 1/2x2 1/2x1/4	220	-4.39	9.90	44.3	Pass
T21	40 - 30	Diagonal	L3x3x3/16	229	-5.09	10.03	50.8	Pass
T22	30 - 20	Diagonal	L3x3x1/4	238	-5.41	11.92	45.4	Pass
T23	20 - 10	Diagonal	L3 1/2x3 1/2x1/4	247	-5.37	17.67	30.4	Pass
T24	10 - 0	Diagonal	L3 1/2x3 1/2x1/4	256	-5.87	16.20	36.2	Pass
T9	115 - 110	Secondary Horizontal	L2x2x1/4	122	-0.84	21.46	3.9	Pass
T1	172 - 160	Top Girt	L1 1/2x1 1/2x1/8	5	-0.04	1.76	2.2	Pass
							Summary	
						Leg (T22)	54.2	Pass
						Diagonal (T19)	51.6	Pass
						Secondary Horizontal (T9)	3.9	Pass
						Top Girt (T1)	2.2	Pass
						Bolt Checks	64.8	Pass
						Rating =	64.8	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	50.8	Pass
1	Base Foundation (Structure)	0	9.6	Pass
1	Base Foundation (Soil Interaction)	0	79.1	Pass

Structure Rating (max from all components) =	79.1%
---	--------------

Notes:

- See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

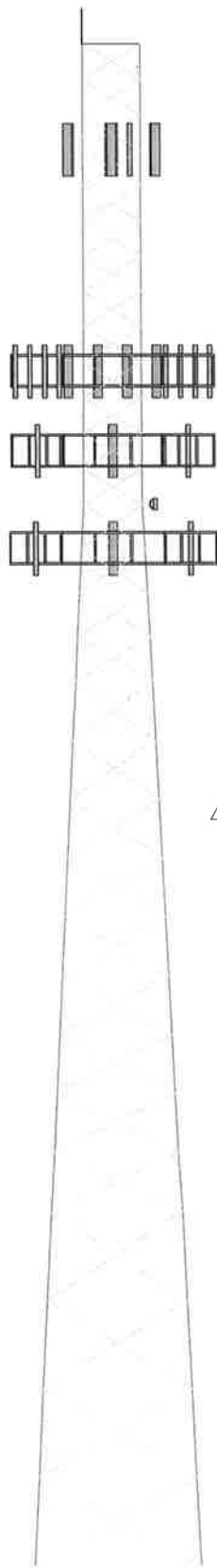
4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A
TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23	T24
Legs		ROHN 2 STD						ROHN 2.5 EH																
Leg Grade																								
Diagonals																								
Diagonal Grade																								
Top Girts																								
Sec. Horizontals																								
Face Width (ft)	18.7708																							
# Panels @ (ft)																								
Weight (K)	17.1																							

172.0 ft
160.0 ft
140.0 ft
136.0 ft
132.0 ft
128.0 ft
124.0 ft
120.0 ft
115.0 ft
110.0 ft
105.0 ft
100.0 ft
93.3 ft
86.7 ft
80.0 ft
73.3 ft
66.7 ft
60.0 ft
53.3 ft
46.7 ft
40.0 ft
30.0 ft
20.0 ft
10.0 ft
0.0 ft



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	F	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in
B	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	G	L1 3/4x1 3/4x3/16
C	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	H	L2x2x3/16
D	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	I	L2 1/2x2 1/2x1/4
E	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	J	L2x2x1/4

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

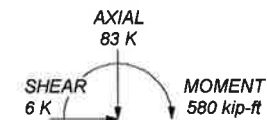
1. Tower is located in Du Page County, Illinois.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 116 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 40 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0'
8. TOWER RATING: 64.8%

ALL REACTIONS
ARE FACTORED

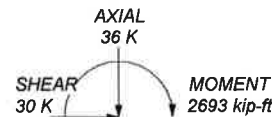
MAX. CORNER REACTIONS AT BASE:

DOWN: 178 K
SHEAR: 19 K

UPLIFT: -148 K
SHEAR: 16 K



TORQUE 2 kip-ft
40 mph WIND - 1.500 in ICE



TORQUE 14 kip-ft
REACTIONS - 116 mph WIND

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
Phone: (724) 416-2000
FAX:

Job: **BU 873681**
Project:
Client: Crown Castle
Code: TIA-222-H
Path: C:\NEW Directory\473681\WO 201205 - 3A\Fred\873681 RPA - Leg Reinforcement.dwg
Drawn by: Rashworth
Date: 08/30/21
Scale: NTS
Dwg No: E-1

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 172' above the ground line.

The base of the tower is set at an elevation of 0' above the ground line.

The face width of the tower is 6'6-1/4" at the top and 18'9-1/4" at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

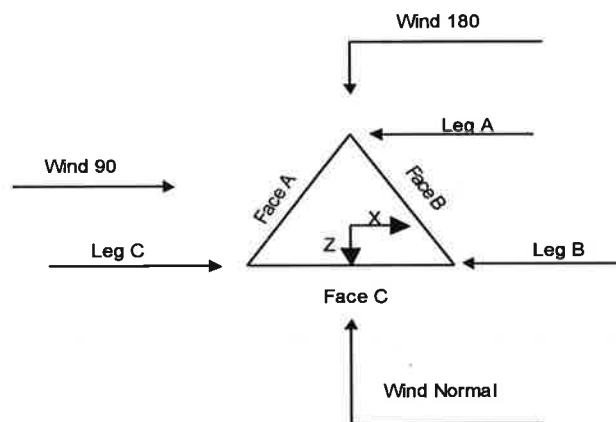
- Tower is located in Du Page County, Illinois.
- Tower base elevation above sea level: 750'.
- Basic wind speed of 116 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0'.
- Nominal ice thickness of 1.500 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.00 pcf.
- A wind speed of 40 mph is used in combination with ice.
- Temperature drop of 50.00 °F.
- Deflections calculated using a wind speed of 60 mph.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	✓ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	✓ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	✓ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
✓ Use Code Stress Ratios	✓ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
✓ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	✓ Bypass Mast Stability Checks	✓ Consider Feed Line Torque
Always Use Max Kz	✓ Use Azimuth Dish Coefficients	✓ Include Angle Block Shear Check
Use Special Wind Profile	✓ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist.
Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Exemption
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Use TIA-222-H Tension Splice
✓ Secondary Horizontal Braces Leg	✓ Sort Capacity Reports By Component	Exemption
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	

Poles

Include Shear-Torsion Interaction
 Always Use Sub-Critical Flow
 Use Top Mounted Sockets
 Pole Without Linear Attachments
 Pole With Shroud Or No
 Appurtenances
 Outside and Inside Corner Radii Are
 Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	172'-160'			6'6-1/4"	1	12'
T2	160'-140'			6'6-1/4"	1	20'
T3	140'-136'			6'6-23/32"	1	4'
T4	136'-132'			6'6-27/32"	1	4'
T5	132'-128'			6'6-31/32"	1	4'
T6	128'-124'			6'7-3/32"	1	4'
T7	124'-120'			6'7-3/16"	1	4'
T8	120'-115'			6'7-3/16"	1	5'
T9	115'-110'			7'1-3/16"	1	5'
T10	110'-105'			7'7-3/16"	1	5'
T11	105'-100'			8'1-3/16"	1	5'
T12	100'-93'3-31/32"			8'7-3/16"	1	6'8-1/32"
T13	93'3-31/32"-86'8-1/32"			9'3-3/8"	1	6'8-1/32"
T14	86'8-1/32"-80'			9'11-17/32"	1	6'8-1/32"
T15	80'-73'3-31/32"			10'7-11/16"	1	6'8-1/32"
T16	73'3-31/32"-66'8-1/32"			11'3-27/32"	1	6'8-1/32"
T17	66'8-1/32"-60'			12'	1	6'8-1/32"
T18	60'-53'3-31/32"			12'8-5/32"	1	6'8-1/32"
T19	53'3-31/32"-46'8-1/32"			13'4-9/16"	1	6'8-1/32"
T20	46'8-1/32"-40'			14'27/32"	1	6'8-1/32"
T21	40'-30'			14'9-1/4"	1	10'
T22	30'-20'			15'9-1/4"	1	10'
T23	20'-10'			16'9-1/4"	1	10'
T24	10'-0'			17'9-1/4"	1	10'

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	172'-160'	4'	X Brace	No	No	0.000	0.000
T2	160'-140'	4'	X Brace	No	No	0.000	0.000
T3	140'-136'	4'	X Brace	No	No	0.000	0.000
T4	136'-132'	4'	X Brace	No	No	0.000	0.000
T5	132'-128'	4'	X Brace	No	No	0.000	0.000
T6	128'-124'	4'	X Brace	No	No	0.000	0.000
T7	124'-120'	4'	X Brace	No	No	0.000	0.000
T8	120'-115'	5'	X Brace	No	No	0.000	0.000
T9	115'-110'	5'	X Brace	No	Yes	0.000	0.000
T10	110'-105'	5'	X Brace	No	Yes	0.000	0.000
T11	105'-100'	5'	X Brace	No	Yes	0.000	0.000
T12	100'-93'3-31/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T13	93'3-31/32"-86'8-1/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T14	86'8-1/32"-80'	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T15	80'-73'3-31/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T16	73'3-31/32"-66'8-1/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T17	66'8-1/32"-60'	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T18	60'-53'3-31/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T19	53'3-31/32"-46'8-1/32"	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T20	46'8-1/32"-40'	6'8-1/32"	X Brace	No	Yes	0.000	0.000
T21	40'-30'	10'	X Brace	No	Yes	0.000	0.000
T22	30'-20'	10'	X Brace	No	Yes	0.000	0.000
T23	20'-10'	10'	X Brace	No	Yes	0.000	0.000
T24	10'-0'	10'	X Brace	No	Yes	0.000	0.000

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 172'-160'	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Equal Angle	L1 1/2x1 1/2x1/8	A36 (36 ksi)
T2 160'-140'	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Equal Angle	L1 1/2x1 1/2x3/16	A36 (36 ksi)
T3 140'-136'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T4 136'-132'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T5 132'-128'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T6 128'-124'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T7 124'-120'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T8 120'-115'	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T9 115'-110'	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T10 110'-105'	Arbitrary Shape	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T11 105'-100'	Arbitrary Shape	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T12 100'-93'3-31/32"	Arbitrary Shape	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	A572-50 (50 ksi)	Equal Angle	L2x2x3/16	A36 (36 ksi)
T13 93'3-31/32"-86'8-1/32"	Arbitrary Shape	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T14 86'8-1/32"-80'	Arbitrary Shape	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T15 80'-73'3-31/32"	Arbitrary Shape	P 4in x 0.318in w/ 1/2HSS	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
31/32"		5.563in x 0.375in	(50 ksi)			(36 ksi)
T16 73'-31/32"-66'8-1/32"	Arbitrary Shape	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T17 66'8-1/32"-60'	Arbitrary Shape	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T18 60'-53'3-31/32"	Arbitrary Shape	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T19 53'-31/32"-46'8-1/32"	Arbitrary Shape	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T20 46'8-1/32"-40'	Arbitrary Shape	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T21 40'-30'	Arbitrary Shape	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T22 30'-20'	Arbitrary Shape	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	A572-50 (50 ksi)	Equal Angle	L3x3x1/4	A36 (36 ksi)
T23 20'-10'	Arbitrary Shape	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)
T24 10'-0'	Arbitrary Shape	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 172'-160'	Equal Angle	L1 1/2x1 1/2x1/8	A36 (36 ksi)	Single Angle		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T9 115'-110'	Single Angle	L2x2x1/4	A36 (36 ksi)	Single Angle		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 172'-160'	0.00	0.179	A36 (36 ksi)	1.03	1	1.05	36.000	36.000	36.000
T2 160'-140'	0.00	0.179	A36 (36 ksi)	1.03	1	1.05	36.000	36.000	36.000
T3 140'-136'	0.00	0.179	A36 (36 ksi)	1.03	1	1.05	36.000	36.000	36.000
T4 136'-132'	0.00	0.179	A36 (36 ksi)	1.03	1	1.05	36.000	36.000	36.000
T5 132'-128'	0.00	0.179	A36	1.03	1	1.05	36.000	36.000	36.000

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontal in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
T6 128'-124'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T7 124'-120'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T8 120'-115'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T9 115'-110'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T10 110'-105'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T11 105'-100'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T12 100'-93'3-31/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T13 93'3-31/32"-86'8-1/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T14 86'8-1/32"-80'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T15 80'-73'3-31/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T16 73'3-31/32"-66'8-1/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T17 66'8-1/32"-60'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T18 60'-53'3-31/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T19 53'3-31/32"-46'8-1/32"	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T20 46'8-1/32"-40'	0.00	0.179	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T21 40'-30'	0.00	0.250	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T22 30'-20'	0.00	0.250	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T23 20'-10'	0.00	0.250	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000
T24 10'-0'	0.00	0.250	(36 ksi) A36	1.03	1	1.05	36.000	36.000	36.000

Tower Section Geometry (cont'd)

Tower Elevation	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹						
				X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace
				X Y	X Y	X Y	X Y	X Y	X Y	X Y
T1 172'-160'	Yes	Yes	1	1	1	1	1	1	1	1
T2 160'-140'	Yes	Yes	1	1	1	1	1	1	1	1
T3 140'-136'	Yes	Yes	1	1	1	1	1	1	1	1
T4 136'-132'	Yes	Yes	1	1	1	1	1	1	1	1
T5 132'-128'	Yes	Yes	1	1	1	1	1	1	1	1
T6 128'-124'	Yes	Yes	1	1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors ¹							
			Legs	X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace
				X Y	X Y	X Y	X Y	X Y	X Y	X Y
T7 124'-120'	Yes	Yes	1	1	1	1	1	1	1	1
T8 120'-115'	Yes	Yes	1	1	1	1	1	1	1	1
T9 115'-110'	Yes	Yes	1	1	1	1	1	1	0.5	1
T10 110'-105'	Yes	Yes	1.124	1	1	1	1	1	1	1
T11 105'-100'	Yes	Yes	1.124	1	1	1	1	1	1	1
T12 100'-93'3-31/32"	Yes	Yes	1.073	1	1	1	1	1	1	1
T13 93'3-31/32"-86'8-1/32"	Yes	Yes	1.073	1	1	1	1	1	1	1
T14 86'8-1/32"-80'	Yes	Yes	1.073	1	1	1	1	1	1	1
T15 80'-73'3-31/32"	Yes	Yes	1.061	1	1	1	1	1	1	1
T16 73'3-31/32"-66'8-1/32"	Yes	Yes	1.061	1	1	1	1	1	1	1
T17 66'8-1/32"-60'	Yes	Yes	1.061	1	1	1	1	1	1	1
T18 60'-53'3-31/32"	Yes	Yes	1.079	1	1	1	1	1	1	1
T19 53'3-31/32"-46'8-1/32"	Yes	Yes	1.079	1	1	1	1	1	1	1
T20 46'8-1/32"-40'	Yes	Yes	1.079	1	1	1	1	1	1	1
T21 40'-30'	Yes	Yes	1.037	1	1	1	1	1	1	1
T22 30'-20'	Yes	Yes	1.037	1	1	1	1	1	1	1
T23 20'-10'	Yes	Yes	1.039	1	1	1	1	1	1	1
T24 10'-0'	Yes	Yes	1.039	1	1	1	1	1	1	1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 172'-160'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 160'-140'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 140'-136'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 136'-132'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 132'-128'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 128'-124'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 124'-120'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 120'-115'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 115'-110'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 110'-105'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T11 105'-100'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T12 100'-93'3-31/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T13 93'3-31/32"-86'8-1/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 86'8-1/32"-80'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T15 80'-73'3-31/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T16 73'3-31/32"-66'8-1/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T17 66'8-1/32"-60'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T18 60'-53'3-31/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T19 53'3-31/32"-46'8-1/32"	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T20 46'8-1/32"-40'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T21 40'-30'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T22 30'-20'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T23 20'-10'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T24 10'-0'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub- Diagonal		Redundant Sub- Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 172'-160'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 160'-140'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 140'-136'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 136'-132'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 132'-128'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 128'-124'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 124'-120'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 120'-115'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 115'-110'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 110'-105'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T11 105'-100'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T12 100'-93'3-31/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T13 93'3-31/32"-86'8-1/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 86'8-1/32"-80'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T15 80'-73'3-31/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T16 73'3-31/32"-66'8-1/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T17 66'8-1/32"-60'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T18 60'-53'3-31/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T19 53'3-31/32"-46'8-1/32"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub- Diagonal		Redundant Sub- Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T20 46'8- 1/32"-40'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T21 40'-30'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T22 30'-20'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T23 20'-10'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T24 10'-0'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 172'-160'	Flange	0.625 A325N	4	0.500 A325X	1	0.500 A325X	1	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T2 160'-140'	Flange	0.625 A325N	4	0.500 A325X	1	0.500 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T3 140'-136'	Flange	0.750 A325N	0	0.500 A325X	1	0.500 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T4 136'-132'	Flange	0.750 A325N	0	0.500 A325X	1	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T5 132'-128'	Flange	0.750 A325N	0	0.500 A325N	1	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T6 128'-124'	Flange	0.750 A325N	0	0.500 A325N	1	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T7 124'-120'	Flange	0.750 A325N	4	0.500 A325N	1	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T8 120'-115'	Flange	0.875 A325N	0	0.500 A325N	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T9 115'-110'	Flange	0.875 A325N	0	0.500 A325N	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.625 A325N	1
T10 110'-105'	Flange	0.875 A325N	0	0.500 A325N	1	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T11 105'-100'	Flange	0.875 A325N	4	0.500 A325N	1	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T12 100'- 93'3-31/32"	Flange	0.875 A325N	0	0.500 A325N	1	0.500 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T13 93'3- 31/32"-86'8- 1/32"	Flange	0.875 A325N	0	0.500 A325N	1	0.500 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.500 A325N	0
T14 86'8- 1/32"-80'	Flange	0.875 A325N	4	0.500 A325N	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T15 80'-73'3- 31/32"	Flange	1.000 A325N	0	0.500 A325N	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T16 73'3- 31/32"-66'8- 1/32"	Flange	1.000 A325N	0	0.500 A325N	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T17 66'8- 1/32"-60'	Flange	1.000 A325N	4	0.500 A325N	1	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T18 60'-53'3- 31/32"	Flange	1.000 A325N	0	0.500 A325X	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T19 53'3- 31/32"-46'8- 1/32"	Flange	1.000 A325N	0	0.500 A325X	1	0.500 A325N	0	0.000 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T20 46'8- 1/32"-40'	Flange	1.000 A325N	4	0.500 A325N	1	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0	0.500 A325N	0
T21 40'-30'	Flange	1.000 A325N	0	0.625 A325X	1	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0
T22 30'-20'	Flange	1.000 A325N	4	0.625 A325N	1	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T23 20'-10'	Flange	1.000	0	0.625	1	0.625	0	0.000	0	0.625	0	0.625	0	0.625	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T24 10'-0'	Flange	1.000	0	0.625	1	0.625	0	0.625	0	0.625	0	0.625	0	0.625	0
		A354-BC		A325N		A325N		A325N		A325N		A325N		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
*** Misc ***													
Step Pegs (5/8" SR)	C	No	No	Ar (CaAa)	172' -0'	0.000	0.5	1	1	0.313	0.313		0.52
7.5-in w/ 30" Step													
Safety Line 3/8	C	No	No	Ar (CaAa)	172' -0'	0.000	0.5	1	1	0.375	0.375		0.22
*** CA Face ***													
HF- T1L20F060S	A	No	No	Ar (CaAa)	115' -0'	0.000	0.35	3	3	0.500	0.960		0.50
E(7/8) Feedline Ladder (Af)	A	No	No	Af (CaAa)	120' -0'	0.000	0.35	1	1	3.000	3.000		8.40
*** BC Face													
Left ***													
HFT1208- 24S26(1-1/4)	C	No	No	Ar (CaAa)	135' -0'	0.000	-0.43	3	3	0.500	1.300		1.17
LDF5- 50A(7/8)	C	No	No	Ar (CaAa)	135' -0'	0.000	-0.37	12	12	0.500	1.090		0.33
Feedline Ladder (Af)	C	No	No	Af (CaAa)	135' -0'	0.000	-0.4	1	1	3.000	3.000		8.40
*** BC Face													
Right ***													
LDF7-50A(1- 5/8)	C	No	No	Ar (CaAa)	160' -0'	0.000	0.4	4	2	0.500	1.980		0.82
Feedline Ladder (Af)	C	No	No	Af (CaAa)	160' -0'	0.000	0.4	1	1	3.000	3.000		8.40

CU12PSM6P 490(1-3/4)	A	No	No	Ar (CaAa)	126' -0'	0.000	0.48	1	1	1.750	1.750		2.72

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _A A _A ft ² /ft	Weight plf

Feed Line/Linear Appurtenances Section Areas

Tower Section n	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T1	172'-160'	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.826	0.000	0.01
T2	160'-140'	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	27.216	0.000	0.25
T3	140'-136'	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	5.443	0.000	0.05
T4	136'-132'	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	12.037	0.000	0.10
T5	132'-128'	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	14.235	0.000	0.11
T6	128'-124'	A	0.000	0.000	0.350	0.000	0.01
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	14.235	0.000	0.11
T7	124'-120'	A	0.000	0.000	0.700	0.000	0.01
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	14.235	0.000	0.11
T8	120'-115'	A	0.000	0.000	3.375	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	17.794	0.000	0.14
T9	115'-110'	A	0.000	0.000	4.815	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	17.794	0.000	0.14
T10	110'-105'	A	0.000	0.000	4.815	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	17.794	0.000	0.14
T11	105'-100'	A	0.000	0.000	4.815	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	17.794	0.000	0.14
T12	100'-93'3-31/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T13	93'3-31/32"-86'8-1/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T14	86'8-1/32"-80'	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T15	80'-73'3-31/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T16	73'3-31/32"-66'8-1/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T17	66'8-1/32"-60'	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T18	60'-53'3-31/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T19	53'3-31/32"-46'8-1/32"	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T20	46'8-1/32"-40'	A	0.000	0.000	6.420	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	23.725	0.000	0.19
T21	40'-30'	A	0.000	0.000	9.630	0.000	0.13
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	35.588	0.000	0.28
T22	30'-20'	A	0.000	0.000	9.630	0.000	0.13
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	35.588	0.000	0.28

Tower Sectio n	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T23	20'-10'	A	0.000	0.000	9.630	0.000	0.13
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	35.588	0.000	0.28
T24	10'-0'	A	0.000	0.000	9.630	0.000	0.13
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	35.588	0.000	0.28

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Sectio n	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T1	172'-160'	A	1.499	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	8.019	0.000	0.09
T2	160'-140'	A	1.483	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	55.435	0.000	0.88
T3	140'-136'	A	1.471	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	11.040	0.000	0.17
T4	136'-132'	A	1.467	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	24.950	0.000	0.36
T5	132'-128'	A	1.462	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	29.561	0.000	0.43
T6	128'-124'	A	1.458	0.000	0.000	0.933	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	29.528	0.000	0.43
T7	124'-120'	A	1.453	0.000	0.000	1.862	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	29.495	0.000	0.42
T8	120'-115'	A	1.448	0.000	0.000	6.270	0.000	0.13
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	36.820	0.000	0.53
T9	115'-110'	A	1.441	0.000	0.000	11.119	0.000	0.18
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	36.764	0.000	0.53
T10	110'-105'	A	1.435	0.000	0.000	11.095	0.000	0.18
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	36.706	0.000	0.53
T11	105'-100'	A	1.428	0.000	0.000	11.070	0.000	0.18
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	36.645	0.000	0.52
T12	100'-93'3-31/32"	A	1.420	0.000	0.000	14.718	0.000	0.24
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.761	0.000	0.69
T13	93'3-31/32"-86'8-1/32"	A	1.410	0.000	0.000	14.668	0.000	0.24
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.640	0.000	0.69
T14	86'8-1/32"-80'	A	1.399	0.000	0.000	14.615	0.000	0.23
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.512	0.000	0.69
T15	80'-73'3-31/32"	A	1.387	0.000	0.000	14.558	0.000	0.23
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.374	0.000	0.68
T16	73'3-31/32"-66'8-1/32"	A	1.375	0.000	0.000	14.496	0.000	0.23
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.225	0.000	0.68
T17	66'8-1/32"-60'	A	1.361	0.000	0.000	14.428	0.000	0.23
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	48.062	0.000	0.67
T18	60'-53'3-31/32"	A	1.346	0.000	0.000	14.354	0.000	0.23
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	47.883	0.000	0.66

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
T19	53'3-31/32"-46'8-1/32"	A	1.329	0.000	0.000	14.271	0.000	0.22
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	47.685	0.000	0.66
T20	46'8-1/32"-40'	A	1.310	0.000	0.000	14.178	0.000	0.22
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	47.460	0.000	0.65
T21	40'-30'	A	1.283	0.000	0.000	21.063	0.000	0.33
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	70.698	0.000	0.96
T22	30'-20'	A	1.240	0.000	0.000	20.749	0.000	0.32
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	69.943	0.000	0.93
T23	20'-10'	A	1.178	0.000	0.000	20.293	0.000	0.31
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	68.845	0.000	0.90
T24	10'-0'	A	1.056	0.000	0.000	19.389	0.000	0.28
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	66.670	0.000	0.83

Feed Line Center of Pressure

Section	Elevation ft	CP_x in	CP_z in	CP_x Ice in	CP_z Ice in
T1	172'-160'	-0.733	0.476	-3.755	2.281
T2	160'-140'	-7.376	6.135	-9.590	7.097
T3	140'-136'	-6.664	5.548	-9.183	6.817
T4	136'-132'	2.290	7.059	1.897	8.985
T5	132'-128'	4.325	7.592	4.310	9.631
T6	128'-124'	4.258	6.758	4.219	8.418
T7	124'-120'	4.192	5.950	4.132	7.257
T8	120'-115'	3.820	3.408	3.747	4.658
T9	115'-110'	3.351	1.406	3.267	1.917
T10	110'-105'	3.829	1.578	3.687	2.136
T11	105'-100'	3.996	1.622	3.875	2.206
T12	100'-93'3-31/32"	4.436	1.778	4.275	2.398
T13	93'3-31/32"-86'8-1/32"	4.678	1.845	4.546	2.498
T14	86'8-1/32"-80'	4.910	1.909	4.811	2.591
T15	80'-73'3-31/32"	4.708	1.790	4.826	2.537
T16	73'3-31/32"-66'8-1/32"	4.892	1.839	5.065	2.613
T17	66'8-1/32"-60'	5.066	1.884	5.302	2.683
T18	60'-53'3-31/32"	5.232	1.928	5.537	2.748
T19	53'3-31/32"-46'8-1/32"	5.394	1.969	5.777	2.809
T20	46'8-1/32"-40'	5.546	2.008	6.018	2.864
T21	40'-30'	5.962	2.136	6.559	3.039
T22	30'-20'	6.184	2.193	6.988	3.106
T23	20'-10'	6.000	2.104	7.232	3.034
T24	10'-0'	6.199	2.158	7.916	2.974

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	160.00 - 172.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	3	Safety Line 3/8	160.00 - 172.00	0.6000	0.6000
T2	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	140.00 - 160.00	0.6000	0.6000
T2	3	Safety Line 3/8	140.00 - 160.00	0.6000	0.6000
T2	12	LDF7-50A(1-5/8)	140.00 - 160.00	0.6000	0.6000
T2	13	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	136.00 - 140.00	0.6000	0.6000
T3	3	Safety Line 3/8	136.00 - 140.00	0.6000	0.6000
T3	12	LDF7-50A(1-5/8)	136.00 - 140.00	0.6000	0.6000
T3	13	Feedline Ladder (Af)	136.00 - 140.00	0.6000	0.6000
T4	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	132.00 - 136.00	0.6000	0.6000
T4	3	Safety Line 3/8	132.00 - 136.00	0.6000	0.6000
T4	8	HFT1208-24S26(1-1/4)	132.00 - 135.00	0.6000	0.6000
T4	9	LDF5-50A(7/8)	132.00 - 135.00	0.6000	0.6000
T4	10	Feedline Ladder (Af)	132.00 - 135.00	0.6000	0.6000
T4	12	LDF7-50A(1-5/8)	132.00 - 136.00	0.6000	0.6000
T4	13	Feedline Ladder (Af)	132.00 - 136.00	0.6000	0.6000
T5	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	128.00 - 132.00	0.6000	0.6000
T5	3	Safety Line 3/8	128.00 - 132.00	0.6000	0.6000
T5	8	HFT1208-24S26(1-1/4)	128.00 - 132.00	0.6000	0.6000
T5	9	LDF5-50A(7/8)	128.00 - 132.00	0.6000	0.6000
T5	10	Feedline Ladder (Af)	128.00 - 132.00	0.6000	0.6000
T5	12	LDF7-50A(1-5/8)	128.00 - 132.00	0.6000	0.6000
T5	13	Feedline Ladder (Af)	128.00 - 132.00	0.6000	0.6000
T6	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	124.00 - 128.00	0.6000	0.6000
T6	3	Safety Line 3/8	124.00 - 128.00	0.6000	0.6000
T6	8	HFT1208-24S26(1-1/4)	124.00 - 128.00	0.6000	0.6000
T6	9	LDF5-50A(7/8)	124.00 - 128.00	0.6000	0.6000
T6	10	Feedline Ladder (Af)	124.00 - 128.00	0.6000	0.6000
T6	12	LDF7-50A(1-5/8)	124.00 - 128.00	0.6000	0.6000
T6	13	Feedline Ladder (Af)	124.00 - 128.00	0.6000	0.6000
T6	15	CU12PSM6P4XXX(1-3/4)	124.00 - 126.00	0.6000	0.6000
T7	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	120.00 - 124.00	0.6000	0.6000
T7	3	Safety Line 3/8	120.00 - 124.00	0.6000	0.6000
T7	8	HFT1208-24S26(1-1/4)	120.00 - 124.00	0.6000	0.6000
T7	9	LDF5-50A(7/8)	120.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
			124.00		
T7	10	Feedline Ladder (Af)	120.00 - 124.00	0.6000	0.6000
T7	12	LDF7-50A(1-5/8)	120.00 - 124.00	0.6000	0.6000
T7	13	Feedline Ladder (Af)	120.00 - 124.00	0.6000	0.6000
T7	15	CU12PSM6P4XXX(1-3/4)	120.00 - 124.00	0.6000	0.6000
T8	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	115.00 - 120.00	0.6000	0.6000
T8	3	Safety Line 3/8	115.00 - 120.00	0.6000	0.6000
T8	6	Feedline Ladder (Af)	115.00 - 120.00	0.6000	0.6000
T8	8	HFT1208-24S26(1-1/4)	115.00 - 120.00	0.6000	0.6000
T8	9	LDF5-50A(7/8)	115.00 - 120.00	0.6000	0.6000
T8	10	Feedline Ladder (Af)	115.00 - 120.00	0.6000	0.6000
T8	12	LDF7-50A(1-5/8)	115.00 - 120.00	0.6000	0.6000
T8	13	Feedline Ladder (Af)	115.00 - 120.00	0.6000	0.6000
T8	15	CU12PSM6P4XXX(1-3/4)	115.00 - 120.00	0.6000	0.6000
T9	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	110.00 - 115.00	0.6000	0.6000
T9	3	Safety Line 3/8	110.00 - 115.00	0.6000	0.6000
T9	5	HF-T1L20F060SE(7/8)	110.00 - 115.00	0.6000	0.6000
T9	6	Feedline Ladder (Af)	110.00 - 115.00	0.6000	0.6000
T9	8	HFT1208-24S26(1-1/4)	110.00 - 115.00	0.6000	0.6000
T9	9	LDF5-50A(7/8)	110.00 - 115.00	0.6000	0.6000
T9	10	Feedline Ladder (Af)	110.00 - 115.00	0.6000	0.6000
T9	12	LDF7-50A(1-5/8)	110.00 - 115.00	0.6000	0.6000
T9	13	Feedline Ladder (Af)	110.00 - 115.00	0.6000	0.6000
T9	15	CU12PSM6P4XXX(1-3/4)	110.00 - 115.00	0.6000	0.6000
T10	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	105.00 - 110.00	0.6000	0.6000
T10	3	Safety Line 3/8	105.00 - 110.00	0.6000	0.6000
T10	5	HF-T1L20F060SE(7/8)	105.00 - 110.00	0.6000	0.6000
T10	6	Feedline Ladder (Af)	105.00 - 110.00	0.6000	0.6000
T10	8	HFT1208-24S26(1-1/4)	105.00 - 110.00	0.6000	0.6000
T10	9	LDF5-50A(7/8)	105.00 - 110.00	0.6000	0.6000
T10	10	Feedline Ladder (Af)	105.00 - 110.00	0.6000	0.6000
T10	12	LDF7-50A(1-5/8)	105.00 - 110.00	0.6000	0.6000
T10	13	Feedline Ladder (Af)	105.00 - 110.00	0.6000	0.6000
T10	15	CU12PSM6P4XXX(1-3/4)	105.00 - 110.00	0.6000	0.6000
T11	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	100.00 - 105.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T11	3	Safety Line 3/8	100.00 - 105.00	0.6000	0.6000
T11	5	HF-T1L20F060SE(7/8)	100.00 - 105.00	0.6000	0.6000
T11	6	Feedline Ladder (Af)	100.00 - 105.00	0.6000	0.6000
T11	8	HFT1208-24S26(1-1/4)	100.00 - 105.00	0.6000	0.6000
T11	9	LDF5-50A(7/8)	100.00 - 105.00	0.6000	0.6000
T11	10	Feedline Ladder (Af)	100.00 - 105.00	0.6000	0.6000
T11	12	LDF7-50A(1-5/8)	100.00 - 105.00	0.6000	0.6000
T11	13	Feedline Ladder (Af)	100.00 - 105.00	0.6000	0.6000
T11	15	CU12PSM6P4XXX(1-3/4)	100.00 - 105.00	0.6000	0.6000
T12	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	93.33 - 100.00	0.6000	0.6000
T12	3	Safety Line 3/8	93.33 - 100.00	0.6000	0.6000
T12	5	HF-T1L20F060SE(7/8)	93.33 - 100.00	0.6000	0.6000
T12	6	Feedline Ladder (Af)	93.33 - 100.00	0.6000	0.6000
T12	8	HFT1208-24S26(1-1/4)	93.33 - 100.00	0.6000	0.6000
T12	9	LDF5-50A(7/8)	93.33 - 100.00	0.6000	0.6000
T12	10	Feedline Ladder (Af)	93.33 - 100.00	0.6000	0.6000
T12	12	LDF7-50A(1-5/8)	93.33 - 100.00	0.6000	0.6000
T12	13	Feedline Ladder (Af)	93.33 - 100.00	0.6000	0.6000
T12	15	CU12PSM6P4XXX(1-3/4)	93.33 - 100.00	0.6000	0.6000
T13	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	86.67 - 93.33	0.6000	0.6000
T13	3	Safety Line 3/8	86.67 - 93.33	0.6000	0.6000
T13	5	HF-T1L20F060SE(7/8)	86.67 - 93.33	0.6000	0.6000
T13	6	Feedline Ladder (Af)	86.67 - 93.33	0.6000	0.6000
T13	8	HFT1208-24S26(1-1/4)	86.67 - 93.33	0.6000	0.6000
T13	9	LDF5-50A(7/8)	86.67 - 93.33	0.6000	0.6000
T13	10	Feedline Ladder (Af)	86.67 - 93.33	0.6000	0.6000
T13	12	LDF7-50A(1-5/8)	86.67 - 93.33	0.6000	0.6000
T13	13	Feedline Ladder (Af)	86.67 - 93.33	0.6000	0.6000
T13	15	CU12PSM6P4XXX(1-3/4)	86.67 - 93.33	0.6000	0.6000
T14	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	80.00 - 86.67	0.6000	0.6000
T14	3	Safety Line 3/8	80.00 - 86.67	0.6000	0.6000
T14	5	HF-T1L20F060SE(7/8)	80.00 - 86.67	0.6000	0.6000
T14	6	Feedline Ladder (Af)	80.00 - 86.67	0.6000	0.6000
T14	8	HFT1208-24S26(1-1/4)	80.00 - 86.67	0.6000	0.6000
T14	9	LDF5-50A(7/8)	80.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
			86.67		
T14	10	Feedline Ladder (Af)	80.00 - 86.67	0.6000	0.6000
T14	12	LDF7-50A(1-5/8)	80.00 - 86.67	0.6000	0.6000
T14	13	Feedline Ladder (Af)	80.00 - 86.67	0.6000	0.6000
T14	15	CU12PSM6P4XXX(1-3/4)	80.00 - 86.67	0.6000	0.6000
T15	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	73.33 - 80.00	0.6000	0.6000
T15	3	Safety Line 3/8	73.33 - 80.00	0.6000	0.6000
T15	5	HF-T1L20F060SE(7/8)	73.33 - 80.00	0.6000	0.6000
T15	6	Feedline Ladder (Af)	73.33 - 80.00	0.6000	0.6000
T15	8	HFT1208-24S26(1-1/4)	73.33 - 80.00	0.6000	0.6000
T15	9	LDF5-50A(7/8)	73.33 - 80.00	0.6000	0.6000
T15	10	Feedline Ladder (Af)	73.33 - 80.00	0.6000	0.6000
T15	12	LDF7-50A(1-5/8)	73.33 - 80.00	0.6000	0.6000
T15	13	Feedline Ladder (Af)	73.33 - 80.00	0.6000	0.6000
T15	15	CU12PSM6P4XXX(1-3/4)	73.33 - 80.00	0.6000	0.6000
T16	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	66.67 - 73.33	0.6000	0.6000
T16	3	Safety Line 3/8	66.67 - 73.33	0.6000	0.6000
T16	5	HF-T1L20F060SE(7/8)	66.67 - 73.33	0.6000	0.6000
T16	6	Feedline Ladder (Af)	66.67 - 73.33	0.6000	0.6000
T16	8	HFT1208-24S26(1-1/4)	66.67 - 73.33	0.6000	0.6000
T16	9	LDF5-50A(7/8)	66.67 - 73.33	0.6000	0.6000
T16	10	Feedline Ladder (Af)	66.67 - 73.33	0.6000	0.6000
T16	12	LDF7-50A(1-5/8)	66.67 - 73.33	0.6000	0.6000
T16	13	Feedline Ladder (Af)	66.67 - 73.33	0.6000	0.6000
T16	15	CU12PSM6P4XXX(1-3/4)	66.67 - 73.33	0.6000	0.6000
T17	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	60.00 - 66.67	0.6000	0.6000
T17	3	Safety Line 3/8	60.00 - 66.67	0.6000	0.6000
T17	5	HF-T1L20F060SE(7/8)	60.00 - 66.67	0.6000	0.6000
T17	6	Feedline Ladder (Af)	60.00 - 66.67	0.6000	0.6000
T17	8	HFT1208-24S26(1-1/4)	60.00 - 66.67	0.6000	0.6000
T17	9	LDF5-50A(7/8)	60.00 - 66.67	0.6000	0.6000
T17	10	Feedline Ladder (Af)	60.00 - 66.67	0.6000	0.6000
T17	12	LDF7-50A(1-5/8)	60.00 - 66.67	0.6000	0.6000
T17	13	Feedline Ladder (Af)	60.00 - 66.67	0.6000	0.6000
T17	15	CU12PSM6P4XXX(1-3/4)	60.00 - 66.67	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T18	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	53.33 - 60.00	0.6000	0.6000
T18	3	Safety Line 3/8	53.33 - 60.00	0.6000	0.6000
T18	5	HF-T1L20F060SE(7/8)	53.33 - 60.00	0.6000	0.6000
T18	6	Feedline Ladder (Af)	53.33 - 60.00	0.6000	0.6000
T18	8	HFT1208-24S26(1-1/4)	53.33 - 60.00	0.6000	0.6000
T18	9	LDF5-50A(7/8)	53.33 - 60.00	0.6000	0.6000
T18	10	Feedline Ladder (Af)	53.33 - 60.00	0.6000	0.6000
T18	12	LDF7-50A(1-5/8)	53.33 - 60.00	0.6000	0.6000
T18	13	Feedline Ladder (Af)	53.33 - 60.00	0.6000	0.6000
T18	15	CU12PSM6P4XXX(1-3/4)	53.33 - 60.00	0.6000	0.6000
T19	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	46.67 - 53.33	0.6000	0.6000
T19	3	Safety Line 3/8	46.67 - 53.33	0.6000	0.6000
T19	5	HF-T1L20F060SE(7/8)	46.67 - 53.33	0.6000	0.6000
T19	6	Feedline Ladder (Af)	46.67 - 53.33	0.6000	0.6000
T19	8	HFT1208-24S26(1-1/4)	46.67 - 53.33	0.6000	0.6000
T19	9	LDF5-50A(7/8)	46.67 - 53.33	0.6000	0.6000
T19	10	Feedline Ladder (Af)	46.67 - 53.33	0.6000	0.6000
T19	12	LDF7-50A(1-5/8)	46.67 - 53.33	0.6000	0.6000
T19	13	Feedline Ladder (Af)	46.67 - 53.33	0.6000	0.6000
T19	15	CU12PSM6P4XXX(1-3/4)	46.67 - 53.33	0.6000	0.6000
T20	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	40.00 - 46.67	0.6000	0.6000
T20	3	Safety Line 3/8	40.00 - 46.67	0.6000	0.6000
T20	5	HF-T1L20F060SE(7/8)	40.00 - 46.67	0.6000	0.6000
T20	6	Feedline Ladder (Af)	40.00 - 46.67	0.6000	0.6000
T20	8	HFT1208-24S26(1-1/4)	40.00 - 46.67	0.6000	0.6000
T20	9	LDF5-50A(7/8)	40.00 - 46.67	0.6000	0.6000
T20	10	Feedline Ladder (Af)	40.00 - 46.67	0.6000	0.6000
T20	12	LDF7-50A(1-5/8)	40.00 - 46.67	0.6000	0.6000
T20	13	Feedline Ladder (Af)	40.00 - 46.67	0.6000	0.6000
T20	15	CU12PSM6P4XXX(1-3/4)	40.00 - 46.67	0.6000	0.6000
T21	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	30.00 - 40.00	0.6000	0.6000
T21	3	Safety Line 3/8	30.00 - 40.00	0.6000	0.6000
T21	5	HF-T1L20F060SE(7/8)	30.00 - 40.00	0.6000	0.6000
T21	6	Feedline Ladder (Af)	30.00 - 40.00	0.6000	0.6000
T21	8	HFT1208-24S26(1-1/4)	30.00 - 40.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T21	9	LDF5-50A(7/8)	40.00 30.00 - 40.00	0.6000	0.6000
T21	10	Feedline Ladder (Af)	30.00 - 40.00	0.6000	0.6000
T21	12	LDF7-50A(1-5/8)	30.00 - 40.00	0.6000	0.6000
T21	13	Feedline Ladder (Af)	30.00 - 40.00	0.6000	0.6000
T21	15	CU12PSM6P4XXX(1-3/4)	30.00 - 40.00	0.6000	0.6000
T22	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	20.00 - 30.00	0.6000	0.6000
T22	3	Safety Line 3/8	20.00 - 30.00	0.6000	0.6000
T22	5	HF-T1L20F060SE(7/8)	20.00 - 30.00	0.6000	0.6000
T22	6	Feedline Ladder (Af)	20.00 - 30.00	0.6000	0.6000
T22	8	HFT1208-24S26(1-1/4)	20.00 - 30.00	0.6000	0.6000
T22	9	LDF5-50A(7/8)	20.00 - 30.00	0.6000	0.6000
T22	10	Feedline Ladder (Af)	20.00 - 30.00	0.6000	0.6000
T22	12	LDF7-50A(1-5/8)	20.00 - 30.00	0.6000	0.6000
T22	13	Feedline Ladder (Af)	20.00 - 30.00	0.6000	0.6000
T22	15	CU12PSM6P4XXX(1-3/4)	20.00 - 30.00	0.6000	0.6000
T23	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	10.00 - 20.00	0.6000	0.6000
T23	3	Safety Line 3/8	10.00 - 20.00	0.6000	0.6000
T23	5	HF-T1L20F060SE(7/8)	10.00 - 20.00	0.6000	0.6000
T23	6	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T23	8	HFT1208-24S26(1-1/4)	10.00 - 20.00	0.6000	0.6000
T23	9	LDF5-50A(7/8)	10.00 - 20.00	0.6000	0.6000
T23	10	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T23	12	LDF7-50A(1-5/8)	10.00 - 20.00	0.6000	0.6000
T23	13	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T23	15	CU12PSM6P4XXX(1-3/4)	10.00 - 20.00	0.6000	0.6000
T24	2	Step Pegs (5/8" SR) 7.5-in w/ 30" Step	0.00 - 10.00	0.6000	0.6000
T24	3	Safety Line 3/8	0.00 - 10.00	0.6000	0.6000
T24	5	HF-T1L20F060SE(7/8)	0.00 - 10.00	0.6000	0.6000
T24	6	Feedline Ladder (Af)	0.00 - 10.00	0.6000	0.6000
T24	8	HFT1208-24S26(1-1/4)	0.00 - 10.00	0.6000	0.6000
T24	9	LDF5-50A(7/8)	0.00 - 10.00	0.6000	0.6000
T24	10	Feedline Ladder (Af)	0.00 - 10.00	0.6000	0.6000
T24	12	LDF7-50A(1-5/8)	0.00 - 10.00	0.6000	0.6000
T24	13	Feedline Ladder (Af)	0.00 - 10.00	0.6000	0.6000
T24	15	CU12PSM6P4XXX(1-3/4)	0.00 - 10.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
4' x 2" Pipe Mount	C	From Leg	0.00 0' 2'	0.000	172'	No Ice 1/2" Ice 1" Ice 2" Ice	0.79 1.03 1.28 1.81	0.79 1.03 1.28 1.81	0.03 0.04 0.04 0.07

(2) 7200.01 w/ Mount Pipe	A	From Face	0.50 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	3.04 3.60 4.18 5.38	2.81 3.37 3.95 5.14	0.04 0.07 0.12 0.24
(3) 7200.09 w/ Mount Pipe	B	From Face	0.50 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	3.04 3.60 4.18 5.38	2.81 3.37 3.95 5.14	0.04 0.07 0.12 0.24
(3) 7200.09 w/ Mount Pipe	C	From Face	0.50 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	3.04 3.60 4.18 5.38	2.81 3.37 3.95 5.14	0.04 0.07 0.12 0.24
1-5/8"x1-5/8" Unistrut (12- ft Horizontal)	A	From Face	0.25 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	1.95 2.76 3.58 5.25	0.02 0.04 0.07 0.15	0.01 0.03 0.06 0.15
1-5/8"x1-5/8" Unistrut (12- ft Horizontal)	B	From Face	0.25 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	1.95 2.76 3.58 5.25	0.02 0.04 0.07 0.15	0.01 0.03 0.06 0.15
1-5/8"x1-5/8" Unistrut (12- ft Horizontal)	C	From Face	0.25 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	1.95 2.76 3.58 5.25	0.02 0.04 0.07 0.15	0.01 0.03 0.06 0.15
6' x 2" Mount Pipe	A	From Face	0.50 0' 0'	0.000	160'	No Ice 1/2" Ice 1" Ice 2" Ice	1.43 1.92 2.29 3.06	1.43 1.92 2.29 3.06	0.02 0.03 0.05 0.09

(3) SBNHH-1D65C w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	5.56 6.07 6.59 7.66	4.47 4.97 5.48 6.52	0.08 0.16 0.26 0.49
(3) SBNHH-1D65C w/ Mount Pipe	B	From Leg	4.00 0' 1'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	5.56 6.07 6.59 7.66	4.47 4.97 5.48 6.52	0.08 0.16 0.26 0.49
(3) SBNHH-1D65C w/ Mount Pipe	C	From Leg	4.00 0' 1'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	5.56 6.07 6.59 7.66	4.47 4.97 5.48 6.52	0.08 0.16 0.26 0.49
RC3DC-3315-PF-48	A	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	3.79 4.04 4.30 4.84	2.51 2.72 2.94 3.41	0.03 0.06 0.10 0.18

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
RC3DC-3315-PF-48	B	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	3.79 4.04 4.30 4.84	2.51 2.72 2.94 3.41	0.03 0.06 0.10 0.18
RC3DC-3315-PF-48	C	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	3.79 4.04 4.30 4.84	2.51 2.72 2.94 3.41	0.03 0.06 0.10 0.18
Sub6 Antennaw/ Mount Pipe	A	From Leg	4.00 0' 2'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	4.23 4.56 4.89 5.58	2.88 3.30 3.75 4.69	0.09 0.13 0.18 0.28
Sub6 Antennaw/ Mount Pipe	B	From Leg	4.00 0' 2'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	4.23 4.56 4.89 5.58	2.88 3.30 3.75 4.69	0.09 0.13 0.18 0.28
Sub6 Antennaw/ Mount Pipe	C	From Leg	4.00 0' 2'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	4.23 4.56 4.89 5.58	2.88 3.30 3.75 4.69	0.09 0.13 0.18 0.28
4449	A	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.97 2.15 2.33 2.72	1.40 1.56 1.72 2.07	0.07 0.09 0.11 0.16
4449	B	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.97 2.15 2.33 2.72	1.40 1.56 1.72 2.07	0.07 0.09 0.11 0.16
4449	C	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.97 2.15 2.33 2.72	1.40 1.56 1.72 2.07	0.07 0.09 0.11 0.16
8843	A	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.65 1.81 1.98 2.34	1.36 1.51 1.67 2.00	0.07 0.09 0.11 0.16
8843	B	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.65 1.81 1.98 2.34	1.36 1.51 1.67 2.00	0.07 0.09 0.11 0.16
8843	C	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.65 1.81 1.98 2.34	1.36 1.51 1.67 2.00	0.07 0.09 0.11 0.16
(1) Site Pro 1 VFA12-RRU Sector Mount	A	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	12.02 17.63 23.07 34.46	7.98 11.95 15.72 23.86	0.45 0.58 0.77 0.97
(1) Site Pro 1 VFA12-RRU Sector Mount	B	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	12.02 17.63 23.07 34.46	7.98 11.95 15.72 23.86	0.45 0.58 0.77 0.97

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
(1) Site Pro 1 VFA12-RRU Sector Mount	C	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	12.02 17.63 23.07 34.46	7.98 11.95 15.72 23.86	0.45 0.58 0.77 0.97
(2) L2.5x2.5x5/16x54" (Horizontal)	A	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.13 1.44 1.77 2.44	0.05 0.08 0.12 0.22	0.02 0.03 0.05 0.09
(2) L2.5x2.5x5/16x54" (Horizontal)	B	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.13 1.44 1.77 2.44	0.05 0.08 0.12 0.22	0.02 0.03 0.05 0.09
(2) L2.5x2.5x5/16x54" (Horizontal)	C	From Leg	2.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	1.13 1.44 1.77 2.44	0.05 0.08 0.12 0.22	0.02 0.03 0.05 0.09
2.4" x 12' Stabilizer	A	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	0.04 0.07 0.09 0.18
2.4" x 12' Stabilizer	B	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	0.04 0.07 0.09 0.18
2.4" x 12' Stabilizer	C	From Leg	4.00 0' 0'	0.000	135'	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	0.04 0.07 0.09 0.18

MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice 2" Ice	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice 2" Ice	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice 2" Ice	8.01 8.52 9.04 10.11	4.23 4.69 5.16 6.12	0.11 0.19 0.29 0.52
TA08025-B604	A	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice 2" Ice	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15
TA08025-B604	B	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice 2" Ice	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15
TA08025-B604	C	From Leg	4.00 0' 0'	0.000	126'	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32 2.71	0.98 1.11 1.25 1.55	0.06 0.08 0.10 0.15

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
TA08025-B605	A	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
TA08025-B605	B	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
TA08025-B605	C	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32 2.71	1.13 1.27 1.41 1.72	0.08 0.09 0.11 0.16
RDIDC-9181-PF-48	A	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	2.31 2.50 2.70 3.12	1.29 1.45 1.61 1.96	0.02 0.04 0.06 0.12
Commscope MTC3975083 (3)	C	None		0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	23.85 34.12 44.39 64.93	23.85 34.12 44.39 64.93	1.26 1.80 2.35 3.43
(2) 8' x 2" Mount Pipe	A	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
(2) 8' x 2" Mount Pipe	B	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
(2) 8' x 2" Mount Pipe	C	From Leg	4.00 0' 0'	0.000	126'	2" Ice No Ice 1/2" Ice 1" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
*** NLITE 155 ODU	B	From Face	1.00 0' 0'	0.000	120'	2" Ice No Ice 1/2" Ice 1" Ice	0.75 0.86 0.98 1.23	0.38 0.46 0.55 0.76	0.01 0.02 0.02 0.05
Pipe Mount [PM 601-1]	B	From Leg	0.50 0' 0'	0.000	120'	2" Ice No Ice 1/2" Ice 1" Ice	1.32 1.58 1.84 2.40	1.32 1.58 1.84 2.40	0.07 0.08 0.09 0.13
*** ET-X-TS-70-15-62-18-IR- RD w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.000	115'	2" Ice No Ice 1/2" Ice 1" Ice	4.61 5.05 5.51 6.44	3.27 3.69 4.12 5.02	0.07 0.13 0.20 0.38
ET-X-TS-70-15-62-18-IR- RD w/ Mount Pipe	C	From Leg	4.00 0' 1'	0.000	115'	2" Ice No Ice 1/2" Ice 1" Ice	4.61 5.05 5.51 6.44	3.27 3.69 4.12 5.02	0.07 0.13 0.20 0.38
ET-X-TS-70-15-62-18-IR- RD w/ Mount Pipe	B	From Leg	4.00 0'	0.000	115'	2" Ice No Ice 1/2"	4.61 5.05	3.27 3.69	0.07 0.13

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
			1'			Ice	5.51	4.12	0.20
						1" Ice	6.44	5.02	0.38
						2" Ice			
RRH-P4 Ph1	A	From Leg	4.00	0.000	115'	No Ice	2.25	1.05	0.06
			0'			1/2"	2.44	1.19	0.08
			1'			Ice	2.63	1.34	0.10
						1" Ice	3.04	1.66	0.15
						2" Ice			
RRH-P4 Ph1	B	From Leg	4.00	0.000	115'	No Ice	2.25	1.05	0.06
			0'			1/2"	2.44	1.19	0.08
			1'			Ice	2.63	1.34	0.10
						1" Ice	3.04	1.66	0.15
						2" Ice			
RRH-P4 Ph1	C	From Leg	4.00	0.000	115'	No Ice	2.25	1.05	0.06
			0'			1/2"	2.44	1.19	0.08
			1'			Ice	2.63	1.34	0.10
						1" Ice	3.04	1.66	0.15
						2" Ice			
RRH-C2A W/ EXT FILTER_CCIV2	A	From Leg	4.00	0.000	115'	No Ice	3.07	1.36	0.06
			0'			1/2"	3.30	1.53	0.09
			1'			Ice	3.52	1.70	0.11
						1" Ice	4.00	2.06	0.17
						2" Ice			
RRH-C2A W/ EXT FILTER_CCIV2	B	From Leg	4.00	0.000	115'	No Ice	3.07	1.36	0.06
			0'			1/2"	3.30	1.53	0.09
			1'			Ice	3.52	1.70	0.11
						1" Ice	4.00	2.06	0.17
						2" Ice			
RRH-C2A W/ EXT FILTER_CCIV2	C	From Leg	4.00	0.000	115'	No Ice	3.07	1.36	0.06
			0'			1/2"	3.30	1.53	0.09
			1'			Ice	3.52	1.70	0.11
						1" Ice	4.00	2.06	0.17
						2" Ice			
Sector Mount [SM 411-3]	C	None		0.000	115'	No Ice	20.53	20.53	1.07
						1/2"	28.62	28.62	1.46
						Ice	36.63	36.63	1.97
						1" Ice	52.73	52.73	3.37
						2" Ice			
(3) 6' x 2" Mount Pipe	A	From Leg	4.00	0.000	115'	No Ice	1.43	1.43	0.02
			0'			1/2"	1.92	1.92	0.03
			0'			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			
(3) 6' x 2" Mount Pipe	B	From Leg	4.00	0.000	115'	No Ice	1.43	1.43	0.02
			0'			1/2"	1.92	1.92	0.03
			0'			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			
(3) 6' x 2" Mount Pipe	C	From Leg	4.00	0.000	115'	No Ice	1.43	1.43	0.02
			0'			1/2"	1.92	1.92	0.03
			0'			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft ²	Weight K
VHLP1-220	B	Paraboloid w/Shroud (HP)	From Leg	1.00 0' 0'	40.000		120'	1.29	No Ice 0.79 1/2" Ice 0.92 1" Ice 1.06 2" Ice 1.33	0.02 0.04 0.06 0.09

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces	
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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T7	124 - 120	Diagonal	Max. Mx	2	-26.25	-0.39	-0.01
			Max. My	8	-3.06	-0.02	-0.40
			Max. Vy	2	0.32	0.23	-0.01
			Max. Vx	16	-0.36	-0.02	0.30
			Max Tension	8	3.29	0.00	0.00
			Max. Compression	21	-3.25	0.00	0.00
			Max. Mx	34	0.79	0.02	-0.00
			Max. My	10	-3.14	-0.00	-0.00
			Max. Vy	34	-0.02	0.02	-0.00
			Max. Vx	10	0.00	0.00	0.00
		Leg	Max Tension	15	26.33	-0.08	0.01
			Max. Compression	18	-34.14	0.14	0.02
			Max. Mx	14	25.56	-0.22	0.00
			Max. My	16	-3.32	-0.02	0.30
			Max. Vy	6	-0.06	-0.22	-0.00
			Max. Vx	16	0.11	-0.02	0.30
			Max Tension	21	3.81	0.00	0.00
			Max. Compression	8	-3.89	0.00	0.00
			Max. Mx	35	0.64	0.03	-0.00
			Max. My	10	3.03	0.03	-0.00
T8	120 - 115	Diagonal	Max. Vy	35	-0.03	0.03	-0.00
			Max. Vx	10	0.00	0.00	0.00
			Max Tension	15	32.47	-0.08	0.01
			Max. Compression	18	-40.60	-0.10	0.00
			Max. Mx	35	-18.09	-0.14	-0.01
			Max. My	16	-3.65	-0.05	0.27
			Max. Vy	2	0.08	0.14	-0.01
			Max. Vx	16	-0.10	-0.05	0.27
			Max Tension	9	2.94	0.00	0.00
			Max. Compression	10	-3.18	0.00	0.00
		Leg	Max. Mx	14	2.66	0.03	0.00
			Max. My	10	-3.14	-0.01	-0.00
			Max. Vy	35	-0.03	0.02	0.00
			Max. Vx	36	-0.00	0.00	0.00
			Max Tension	15	38.74	0.01	0.00
			Max. Compression	2	-48.32	-0.10	-0.00
			Max. Mx	18	-48.28	0.45	-0.00
			Max. My	16	-3.90	-0.05	0.27
			Max. Vy	6	-0.42	-0.00	-0.01
			Max. Vx	16	0.66	-0.05	0.27
T9	115 - 110	Diagonal	Max Tension	9	3.59	0.02	-0.00
			Max. Compression	8	-3.66	0.00	0.00
			Max. Mx	35	0.66	0.04	-0.00
			Max. My	10	2.65	0.04	-0.01
			Max. Vy	35	-0.03	0.04	-0.00
			Max. Vx	10	0.00	0.00	0.00
		Secondary Horizontal	Max Tension	16	0.35	0.01	-0.00
			Max. Compression	3	-0.28	0.00	0.00
			Max. Mx	32	0.16	0.02	0.00
			Max. My	14	-0.18	0.01	0.01
			Max. Vy	32	0.03	0.02	0.00
			Max. Vx	14	-0.00	0.00	0.00
T10	110 - 105	Leg	Max Tension	15	45.05	0.05	0.00
			Max. Compression	2	-55.79	0.21	-0.01
			Max. Mx	2	-55.79	0.21	-0.01
			Max. My	16	-4.86	-0.03	0.22
			Max. Vy	2	-0.10	0.21	-0.01
			Max. Vx	4	-0.07	-0.03	-0.21
		Diagonal	Max Tension	8	3.49	0.00	0.00
			Max. Compression	8	-3.53	0.00	0.00
			Max. Mx	35	0.56	0.03	0.00
			Max. My	37	0.60	0.03	0.00
			Max. Vy	33	0.03	0.03	-0.00
			Max. Vx	37	-0.00	0.00	0.00
T11	105 - 100	Leg	Max Tension	15	51.24	-0.18	0.01
			Max. Compression	2	-62.78	0.07	-0.01
			Max. Mx	2	-62.69	0.21	-0.01
			Max. My	16	-5.27	-0.01	0.17

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T12	100 - 93.3333	Diagonal	Max. Vy	2	0.06	0.21	-0.01
			Max. Vx	4	0.06	-0.01	-0.17
			Max Tension	8	3.51	0.00	0.00
			Max. Compression	8	-3.49	0.00	0.00
			Max. Mx	35	0.74	0.03	-0.00
			Max. My	31	-0.64	0.03	-0.00
		Leg	Max. Vy	33	0.03	0.03	0.00
			Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	58.04	-0.08	0.01
			Max. Compression	2	-70.35	0.21	-0.01
			Max. Mx	3	-69.08	0.21	-0.01
			Max. My	16	-5.56	-0.00	0.26
T13	93.3333 - 86.6667	Diagonal	Max. Vy	3	-0.07	0.21	-0.01
			Max. Vx	16	-0.08	-0.00	0.26
			Max Tension	24	3.73	0.00	0.00
			Max. Compression	24	-3.77	0.00	0.00
			Max. Mx	33	0.62	0.03	-0.00
			Max. My	37	-0.81	0.03	0.01
		Leg	Max. Vy	33	0.03	0.03	-0.00
			Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	65.54	-0.20	0.01
			Max. Compression	2	-78.87	0.13	-0.01
			Max. Mx	3	-77.41	0.21	-0.01
			Max. My	16	-5.78	-0.00	0.26
T14	86.6667 - 80	Diagonal	Max. Vy	22	-0.06	-0.20	0.02
			Max. Vx	16	0.07	-0.00	0.26
			Max Tension	24	3.80	0.00	0.00
			Max. Compression	24	-3.80	0.00	0.00
			Max. Mx	33	0.63	0.04	0.01
			Max. My	31	-0.82	0.04	-0.01
		Leg	Max. Vy	33	0.04	0.04	0.01
			Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	72.59	-0.13	0.01
			Max. Compression	2	-86.87	0.21	-0.01
			Max. Mx	3	-85.43	0.21	-0.01
			Max. My	16	-6.30	-0.01	0.29
T15	80 - 73.3333	Diagonal	Max. Vy	22	0.06	-0.20	0.01
			Max. Vx	16	-0.08	-0.01	0.29
			Max Tension	24	3.80	0.00	0.00
			Max. Compression	24	-3.84	0.00	0.00
			Max. Mx	33	0.62	0.05	0.01
			Max. My	37	0.58	0.05	0.01
		Leg	Max. Vy	33	0.04	0.05	0.01
			Max. Vx	37	-0.00	0.00	0.00
			Max Tension	15	79.42	-0.20	0.01
			Max. Compression	2	-94.78	0.22	-0.01
			Max. Mx	3	-93.24	0.22	-0.01
			Max. My	16	-6.53	-0.01	0.29
T16	73.3333 - 66.6667	Diagonal	Max. Vy	22	0.06	-0.20	0.01
			Max. Vx	16	0.08	-0.01	0.29
			Max Tension	24	3.89	0.00	0.00
			Max. Compression	24	-3.92	0.00	0.00
			Max. Mx	33	0.57	0.06	0.01
			Max. My	31	0.46	0.06	-0.01
		Leg	Max. Vy	33	0.05	0.06	0.01
			Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	85.95	-0.21	0.01
			Max. Compression	2	-102.46	0.19	-0.01
			Max. Mx	3	-100.67	0.22	-0.01
			Max. My	16	-7.19	-0.01	0.38
		Diagonal	Max. Vy	3	0.06	0.22	-0.01
			Max. Vx	16	-0.09	-0.01	0.38
			Max Tension	24	3.97	0.00	0.00
			Max. Compression	24	-3.99	0.00	0.00
			Max. Mx	33	0.65	0.07	0.01
			Max. My	31	-0.84	0.06	-0.01

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T17	66.6667 - 60	Leg	Max. Vy	33	0.05	0.07	0.01
			Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	92.34	-0.20	0.01
			Max. Compression	2	-110.00	0.20	-0.00
			Max. Mx	14	90.62	-0.21	0.01
			Max. My	16	-7.43	-0.01	0.38
			Max. Vy	22	-0.06	-0.20	0.01
		Diagonal	Max. Vx	16	0.10	-0.01	0.38
			Max Tension	24	4.12	0.00	0.00
			Max. Compression	24	-4.15	0.00	0.00
			Max. Mx	33	0.52	0.08	0.01
			Max. My	31	0.40	0.08	-0.01
			Max. Vy	33	0.05	0.08	0.01
T18	60 - 53.3333	Leg	Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	98.60	-0.18	0.00
			Max. Compression	2	-117.46	0.21	-0.01
			Max. Mx	37	1.57	-0.35	0.00
			Max. My	16	-8.12	-0.02	0.39
			Max. Vy	37	0.09	-0.35	0.00
		Diagonal	Max. Vx	16	-0.10	-0.02	0.39
			Max Tension	24	4.11	0.00	0.00
			Max. Compression	24	-4.10	0.00	0.00
			Max. Mx	33	0.74	0.07	0.01
			Max. My	31	-0.76	0.07	-0.01
			Max. Vy	33	0.05	0.07	0.01
T19	53.3333 - 46.6667	Leg	Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	104.58	-0.23	0.01
			Max. Compression	2	-124.54	0.37	-0.02
			Max. Mx	27	-43.37	0.52	-0.00
			Max. My	16	-8.31	-0.02	0.39
			Max. Vy	37	-0.13	-0.35	0.00
		Diagonal	Max. Vx	16	0.08	-0.02	0.39
			Max Tension	24	4.22	0.00	0.00
			Max. Compression	24	-4.28	0.00	0.00
			Max. Mx	33	0.36	0.09	0.01
			Max. My	31	0.24	0.08	-0.01
			Max. Vy	33	0.05	0.09	0.01
T20	46.6667 - 40	Leg	Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	110.57	-0.32	0.02
			Max. Compression	2	-131.79	0.30	-0.01
			Max. Mx	37	1.91	-0.67	0.00
			Max. My	16	-9.04	-0.02	0.33
			Max. Vy	37	0.17	-0.67	0.00
		Diagonal	Max. Vx	16	-0.07	-0.02	0.33
			Max Tension	24	4.38	0.00	0.00
			Max. Compression	24	-4.39	0.00	0.00
			Max. Mx	33	0.98	0.09	0.01
			Max. My	31	-0.56	0.08	-0.01
			Max. Vy	33	0.06	0.09	0.01
T21	40 - 30	Leg	Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	117.90	-0.30	0.01
			Max. Compression	2	-140.71	0.43	-0.03
			Max. Mx	27	-48.30	0.87	-0.01
			Max. My	16	-9.74	-0.04	1.01
			Max. Vy	37	-0.16	-0.67	0.00
		Diagonal	Max. Vx	16	-0.17	-0.04	1.01
			Max Tension	24	5.11	0.00	0.00
			Max. Compression	24	-5.09	0.00	0.00
			Max. Mx	33	0.20	0.14	0.02
			Max. My	31	-1.62	0.13	-0.02
			Max. Vy	33	0.07	0.14	0.02
T22	30 - 20	Leg	Max. Vx	31	0.00	0.00	0.00
			Max Tension	15	126.73	-0.47	0.03
			Max. Compression	2	-151.32	0.57	-0.02
			Max. Mx	33	6.19	-1.25	0.00
			Max. My	16	-10.02	-0.04	1.01
			Max. Vy	37	0.22	-1.25	0.00
			Max. Vx	16	0.19	-0.04	1.01

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T23	20 - 10	Diagonal	Max Tension	24	5.28	0.00	0.00
			Max. Compression	24	-5.41	0.00	0.00
		Leg	Max. Mx	33	1.55	0.13	-0.02
			Max. My	34	1.52	0.13	0.02
			Max. Vy	33	0.07	0.13	-0.02
			Max. Vx	34	-0.00	0.00	0.00
			Max Tension	15	135.55	-0.49	0.02
			Max. Compression	2	-162.42	0.37	-0.02
			Max. Mx	27	-54.99	1.32	-0.00
			Max. My	16	-11.38	-0.07	1.10
			Max. Vy	37	-0.27	-1.25	0.00
			Max. Vx	16	-0.19	-0.07	1.10
		Diagonal	Max Tension	24	5.41	0.00	0.00
			Max. Compression	24	-5.37	0.00	0.00
		T24	10 - 0	Leg	Max. Mx	33	-0.32
Max. My	31				-2.10	0.21	-0.02
Max. Vy	33				0.09	0.23	0.02
Max. Vx	31				0.00	0.00	0.00
Max Tension	15				143.56	-0.45	0.02
Max. Compression	2				-172.48	0.00	0.00
Max. Mx	27				-60.10	1.32	-0.00
Max. My	16				-11.74	-0.07	1.10
Max. Vy	37				0.14	0.00	-0.00
Max. Vx	16				0.20	-0.07	1.10
Diagonal	Max Tension			24	5.59	0.00	0.00
	Max. Compression			2	-5.87	0.00	0.00
	Max. Mx			32	-0.07	-0.13	0.02
	Max. My			34	2.28	0.12	0.03
	Max. Vy			32	0.08	0.13	-0.02
		Max. Vx	34	-0.00	0.00	0.00	

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	171.10	15.56	-8.67
	Max. H _x	18	171.10	15.56	-8.67
	Max. H _z	5	-127.69	-11.75	7.41
	Min. Vert	7	-140.07	-13.15	7.29
	Min. H _x	7	-140.07	-13.15	7.29
	Min. H _z	18	171.10	15.56	-8.67
Leg B	Max. Vert	10	171.57	-15.61	-8.74
	Max. H _x	23	-140.53	13.20	7.36
	Max. H _z	25	-128.60	11.65	7.85
	Min. Vert	23	-140.53	13.20	7.36
	Min. H _x	10	171.57	-15.61	-8.74
	Min. H _z	10	171.57	-15.61	-8.74
Leg A	Max. Vert	2	177.71	0.23	18.72
	Max. H _x	20	11.79	1.60	0.94
	Max. H _z	2	177.71	0.23	18.72
	Min. Vert	15	-147.63	-0.23	-15.96
	Min. H _x	9	8.83	-1.60	0.70
	Min. H _z	15	-147.63	-0.23	-15.96

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overtuming Moment, M _x kip-ft	Overtuming Moment, M _z kip-ft	Torque kip-ft
Dead Only	30.38	0.00	0.00	5.22	-0.23	0.00

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturing Moment, M _x kip-ft	Overturing Moment, M _z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 0 deg - No Ice	36.46	0.00	-29.82	-2691.34	-0.51	7.36
0.9 Dead+1.0 Wind 0 deg - No Ice	27.35	0.00	-29.82	-2692.90	-0.45	7.36
1.2 Dead+1.0 Wind 30 deg - No Ice	36.46	14.09	-24.45	-2222.35	-1283.96	14.37
0.9 Dead+1.0 Wind 30 deg - No Ice	27.35	14.09	-24.45	-2223.92	-1283.90	14.37
1.2 Dead+1.0 Wind 60 deg - No Ice	36.46	22.78	-13.17	-1209.34	-2101.26	8.61
0.9 Dead+1.0 Wind 60 deg - No Ice	27.35	22.78	-13.17	-1210.90	-2101.19	8.61
1.2 Dead+1.0 Wind 90 deg - No Ice	36.46	25.53	0.00	6.21	-2371.60	4.18
0.9 Dead+1.0 Wind 90 deg - No Ice	27.35	25.53	0.00	4.64	-2371.54	4.18
1.2 Dead+1.0 Wind 120deg - No Ice	36.46	24.56	14.20	1302.03	-2240.61	7.43
0.9 Dead+1.0 Wind 120deg - No Ice	27.35	24.56	14.20	1300.46	-2240.55	7.43
1.2 Dead+1.0 Wind 150deg - No Ice	36.46	14.24	24.69	2248.93	-1292.78	0.80
0.9 Dead+1.0 Wind 150deg - No Ice	27.35	14.24	24.69	2247.37	-1292.71	0.80
1.2 Dead+1.0 Wind 180deg - No Ice	36.46	-0.00	27.89	2549.58	0.17	-7.34
0.9 Dead+1.0 Wind 180deg - No Ice	27.35	-0.00	27.89	2548.01	0.24	-7.34
1.2 Dead+1.0 Wind 210deg - No Ice	36.46	-14.09	24.44	2234.29	1283.67	-14.36
0.9 Dead+1.0 Wind 210deg - No Ice	27.35	-14.09	24.44	2232.72	1283.73	-14.36
1.2 Dead+1.0 Wind 240deg - No Ice	36.46	-24.45	14.14	1298.84	2233.65	-8.61
0.9 Dead+1.0 Wind 240deg - No Ice	27.35	-24.45	14.14	1297.28	2233.72	-8.61
1.2 Dead+1.0 Wind 270deg - No Ice	36.46	-25.53	-0.00	5.92	2371.04	-4.16
0.9 Dead+1.0 Wind 270deg - No Ice	27.35	-25.53	-0.00	4.35	2371.11	-4.16
1.2 Dead+1.0 Wind 300deg - No Ice	36.46	-22.90	-13.24	-1213.28	2107.47	-7.41
0.9 Dead+1.0 Wind 300deg - No Ice	27.35	-22.90	-13.24	-1214.85	2107.54	-7.41
1.2 Dead+1.0 Wind 330deg - No Ice	36.46	-14.24	-24.69	-2237.11	1292.49	-0.78
0.9 Dead+1.0 Wind 330deg - No Ice	27.35	-14.24	-24.69	-2238.68	1292.56	-0.78
1.2 Dead+1.0 Ice+1.0 Temp	82.62	0.00	0.00	26.14	-4.73	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	82.62	-0.00	-6.17	-542.86	-4.72	1.44
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	82.62	2.91	-5.05	-445.55	-276.57	2.25
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	82.62	4.74	-2.74	-232.84	-452.67	1.37
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	82.62	5.39	0.00	26.18	-516.03	1.23
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	82.62	4.95	2.86	294.32	-468.61	1.84
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	82.62	2.94	5.10	500.62	-278.36	0.86
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	82.62	-0.00	5.97	580.01	-4.69	-1.44
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	82.62	-2.91	5.05	497.73	267.16	-2.24
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	82.62	-4.91	2.84	292.66	456.21	-1.37
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	82.62	-5.39	-0.00	26.04	506.57	-1.23

Load Combination	Vertical K	Shear _x K	Shear _y K	Overturing Moment, M _x kip-ft	Overturing Moment, M _y kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	82.62	-4.79	-2.77	-234.63	446.23	-1.84
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	82.62	-2.94	-5.10	-448.46	268.95	-0.86
Dead+Wind 0 deg - Service	30.38	0.00	-8.53	-760.79	-0.29	2.07
Dead+Wind 30 deg - Service	30.38	4.04	-7.00	-627.86	-364.89	4.05
Dead+Wind 60 deg - Service	30.38	6.53	-3.78	-340.27	-597.37	2.42
Dead+Wind 90 deg - Service	30.38	7.33	0.00	5.21	-674.35	1.18
Dead+Wind 120 deg - Service	30.38	7.03	4.07	373.29	-636.62	2.09
Dead+Wind 150 deg - Service	30.38	4.08	7.07	642.27	-367.38	0.22
Dead+Wind 180 deg - Service	30.38	-0.00	7.99	727.78	-0.10	-2.07
Dead+Wind 210 deg - Service	30.38	-4.04	7.00	638.14	364.51	-4.04
Dead+Wind 240 deg - Service	30.38	-7.00	4.05	372.39	634.36	-2.43
Dead+Wind 270 deg - Service	30.38	-7.33	-0.00	5.13	673.90	-1.17
Dead+Wind 300 deg - Service	30.38	-6.57	-3.80	-341.38	598.82	-2.09
Dead+Wind 330 deg - Service	30.38	-4.08	-7.07	-632.02	367.00	-0.22

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-30.38	0.00	0.00	30.38	0.00	0.000%
2	0.00	-36.46	-29.82	-0.00	36.46	29.82	0.000%
3	0.00	-27.35	-29.82	-0.00	27.35	29.82	0.000%
4	14.09	-36.46	-24.45	-14.09	36.46	24.45	0.000%
5	14.09	-27.35	-24.45	-14.09	27.35	24.45	0.000%
6	22.78	-36.46	-13.17	-22.78	36.46	13.17	0.000%
7	22.78	-27.35	-13.17	-22.78	27.35	13.17	0.000%
8	25.53	-36.46	0.00	-25.53	36.46	-0.00	0.000%
9	25.53	-27.35	0.00	-25.53	27.35	-0.00	0.000%
10	24.56	-36.46	14.20	-24.56	36.46	-14.20	0.000%
11	24.56	-27.35	14.20	-24.56	27.35	-14.20	0.000%
12	14.24	-36.46	24.69	-14.24	36.46	-24.69	0.000%
13	14.24	-27.35	24.69	-14.24	27.35	-24.69	0.000%
14	-0.00	-36.46	27.89	0.00	36.46	-27.89	0.000%
15	-0.00	-27.35	27.89	0.00	27.35	-27.89	0.000%
16	-14.09	-36.46	24.44	14.09	36.46	-24.44	0.000%
17	-14.09	-27.35	24.44	14.09	27.35	-24.44	0.000%
18	-24.45	-36.46	14.14	24.45	36.46	-14.14	0.000%
19	-24.45	-27.35	14.14	24.45	27.35	-14.14	0.000%
20	-25.53	-36.46	-0.00	25.53	36.46	0.00	0.000%
21	-25.53	-27.35	-0.00	25.53	27.35	0.00	0.000%
22	-22.90	-36.46	-13.24	22.90	36.46	13.24	0.000%
23	-22.90	-27.35	-13.24	22.90	27.35	13.24	0.000%
24	-14.24	-36.46	-24.69	14.24	36.46	24.69	0.000%
25	-14.24	-27.35	-24.69	14.24	27.35	24.69	0.000%
26	0.00	-82.62	0.00	0.00	82.62	-0.00	0.000%
27	-0.00	-82.62	-6.17	0.00	82.62	6.17	0.000%
28	2.91	-82.62	-5.05	-2.91	82.62	5.05	0.000%
29	4.74	-82.62	-2.74	-4.74	82.62	2.74	0.000%
30	5.39	-82.62	0.00	-5.39	82.62	-0.00	0.000%
31	4.95	-82.62	2.86	-4.95	82.62	-2.86	0.000%
32	2.94	-82.62	5.10	-2.94	82.62	-5.10	0.000%
33	-0.00	-82.62	5.97	0.00	82.62	-5.97	0.000%
34	-2.91	-82.62	5.05	2.91	82.62	-5.05	0.000%
35	-4.91	-82.62	2.84	4.91	82.62	-2.84	0.000%
36	-5.39	-82.62	-0.00	5.39	82.62	0.00	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
37	-4.79	-82.62	-2.77	4.79	82.62	2.77	0.000%
38	-2.94	-82.62	-5.10	2.94	82.62	5.10	0.000%
39	0.00	-30.38	-8.53	-0.00	30.38	8.53	0.000%
40	4.04	-30.38	-7.00	-4.04	30.38	7.00	0.000%
41	6.53	-30.38	-3.78	-6.53	30.38	3.78	0.000%
42	7.33	-30.38	0.00	-7.33	30.38	-0.00	0.000%
43	7.03	-30.38	4.07	-7.03	30.38	-4.07	0.000%
44	4.08	-30.38	7.07	-4.08	30.38	-7.07	0.000%
45	-0.00	-30.38	7.99	0.00	30.38	-7.99	0.000%
46	-4.04	-30.38	7.00	4.04	30.38	-7.00	0.000%
47	-7.00	-30.38	4.05	7.00	30.38	-4.05	0.000%
48	-7.33	-30.38	-0.00	7.33	30.38	0.00	0.000%
49	-6.57	-30.38	-3.80	6.57	30.38	3.80	0.000%
50	-4.08	-30.38	-7.07	4.08	30.38	7.07	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	172 - 160	3.51	39	0.183	0.016
T2	160 - 140	3.06	39	0.182	0.015
T3	140 - 136	2.31	39	0.168	0.013
T4	136 - 132	2.17	39	0.165	0.013
T5	132 - 128	2.03	39	0.161	0.013
T6	128 - 124	1.90	39	0.156	0.013
T7	124 - 120	1.76	39	0.150	0.013
T8	120 - 115	1.64	39	0.143	0.013
T9	115 - 110	1.49	39	0.131	0.012
T10	110 - 105	1.35	39	0.119	0.012
T11	105 - 100	1.23	39	0.112	0.011
T12	100 - 93.3333	1.11	39	0.105	0.011
T13	93.3333 - 86.6667	0.96	39	0.097	0.010
T14	86.6667 - 80	0.82	39	0.088	0.009
T15	80 - 73.3333	0.70	39	0.078	0.008
T16	73.3333 - 66.6667	0.59	39	0.071	0.008
T17	66.6667 - 60	0.49	39	0.064	0.007
T18	60 - 53.3333	0.40	39	0.056	0.006
T19	53.3333 - 46.6667	0.32	39	0.049	0.005
T20	46.6667 - 40	0.24	39	0.042	0.004
T21	40 - 30	0.18	39	0.035	0.003
T22	30 - 20	0.10	39	0.026	0.002
T23	20 - 10	0.05	39	0.016	0.001
T24	10 - 0	0.02	39	0.008	0.001

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
172'	4' x 2" Pipe Mount	39	3.51	0.183	0.016	621215
160'	(2) 7200.01 w/ Mount Pipe	39	3.06	0.182	0.015	410215
135'	(3) SBNHH-1D65C w/ Mount Pipe	39	2.14	0.164	0.013	134288
126'	MX08FRO665-21 w/ Mount Pipe	39	1.83	0.154	0.013	43650
120'	VHLP1-220	39	1.64	0.143	0.013	25018
115'	ET-X-TS-70-15-62-18-IR-RD w/ Mount Pipe	39	1.49	0.131	0.012	22355

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	172 - 160	12.55	3	0.647	0.055
T2	160 - 140	10.92	3	0.646	0.054
T3	140 - 136	8.24	3	0.600	0.048
T4	136 - 132	7.74	3	0.590	0.046
T5	132 - 128	7.24	3	0.578	0.046
T6	128 - 124	6.75	3	0.561	0.046
T7	124 - 120	6.28	3	0.538	0.046
T8	120 - 115	5.82	3	0.510	0.046
T9	115 - 110	5.29	3	0.470	0.044
T10	110 - 105	4.81	3	0.425	0.043
T11	105 - 100	4.36	3	0.401	0.041
T12	100 - 93.3333	3.93	3	0.375	0.039
T13	93.3333 - 86.6667	3.40	3	0.345	0.035
T14	86.6667 - 80	2.91	3	0.313	0.032
T15	80 - 73.3333	2.48	3	0.279	0.030
T16	73.3333 - 66.6667	2.08	3	0.253	0.027
T17	66.6667 - 60	1.73	3	0.226	0.025
T18	60 - 53.3333	1.41	3	0.199	0.022
T19	53.3333 - 46.6667	1.12	3	0.174	0.019
T20	46.6667 - 40	0.86	3	0.149	0.015
T21	40 - 30	0.64	3	0.124	0.012
T22	30 - 20	0.36	3	0.091	0.008
T23	20 - 10	0.18	3	0.057	0.005
T24	10 - 0	0.06	2	0.028	0.003

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
172'	4' x 2" Pipe Mount	3	12.55	0.647	0.055	183513
160'	(2) 7200.01 w/ Mount Pipe	3	10.92	0.646	0.054	125629
135'	(3) SBNHH-1D65C w/ Mount Pipe	3	7.61	0.588	0.046	40564
126'	MX08FRO665-21 w/ Mount Pipe	3	6.51	0.550	0.046	12636
120'	VHLP1-220	3	5.82	0.510	0.046	7148
115'	ET-X-TS-70-15-62-18-IR-RD w/ Mount Pipe	3	5.29	0.470	0.044	6381

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	172	Leg	A325N	0.625	4	0.12	20.34	0.006	1.05	Bolt Tension
		Diagonal	A325X	0.500	1	0.29	3.13	0.093	1.05	Member Block Shear
		Top Girt	A325X	0.500	1	0.03	3.13	0.009	1.05	Member Block Shear
T2	160	Leg	A325N	0.625	4	1.82	20.34	0.089	1.05	Bolt Tension

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
		Diagonal	A325X	0.500	1	1.22	5.20	0.234	1.05	Member Block Shear
T3	140	Diagonal	A325X	0.500	1	1.27	6.20	0.204	1.05	Member Bearing
T4	136	Diagonal	A325X	0.500	1	2.38	7.18	0.331	1.05	Gusset Bearing
T5	132	Diagonal	A325N	0.500	1	2.79	7.18	0.389	1.05	Gusset Bearing
T6	128	Diagonal	A325N	0.500	1	3.29	7.18	0.459	1.05	Gusset Bearing
T7	124	Leg	A325N	0.750	4	6.58	30.10	0.219	1.05	Bolt Tension
		Diagonal	A325N	0.500	1	3.81	7.18	0.531	1.05	Gusset Bearing
T8	120	Diagonal	A325N	0.500	1	2.94	7.18	0.410	1.05	Gusset Bearing
T9	115	Diagonal	A325N	0.500	1	3.59	7.18	0.500	1.05	Gusset Bearing
		Secondary Horizontal	A325N	0.625	1	0.84	6.86	0.122	1.05	Gusset Bearing
T10	110	Diagonal	A325N	0.500	1	3.49	7.18	0.486	1.05	Gusset Bearing
T11	105	Leg	A325N	0.875	4	12.81	41.56	0.308	1.05	Bolt Tension
		Diagonal	A325N	0.500	1	3.51	7.18	0.489	1.05	Gusset Bearing
T12	100	Diagonal	A325N	0.500	1	3.73	6.20	0.601	1.05	Member Bearing
T13	93.3333	Diagonal	A325N	0.500	1	3.80	7.18	0.529	1.05	Gusset Bearing
T14	86.6667	Leg	A325N	0.875	4	18.15	41.56	0.437	1.05	Bolt Tension
		Diagonal	A325N	0.500	1	3.80	7.18	0.530	1.05	Gusset Bearing
T15	80	Diagonal	A325N	0.500	1	3.89	7.18	0.542	1.05	Gusset Bearing
T16	73.3333	Diagonal	A325N	0.500	1	3.97	7.18	0.554	1.05	Gusset Bearing
T17	66.6667	Leg	A325N	1.000	4	23.09	54.52	0.423	1.05	Bolt Tension
		Diagonal	A325N	0.500	1	4.12	7.18	0.574	1.05	Gusset Bearing
T18	60	Diagonal	A325X	0.500	1	4.11	6.20	0.663	1.05	Member Bearing
T19	53.3333	Diagonal	A325X	0.500	1	4.22	6.20	0.681	1.05	Member Bearing
T20	46.6667	Leg	A325N	1.000	4	27.64	54.52	0.507	1.05	Bolt Tension
		Diagonal	A325N	0.500	1	4.38	7.18	0.611	1.05	Gusset Bearing
T21	40	Diagonal	A325X	0.625	1	5.11	7.83	0.652	1.05	Member Bearing
T22	30	Leg	A325N	1.000	4	31.68	54.52	0.581	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	5.28	10.44	0.505	1.05	Member Bearing
T23	20	Diagonal	A325N	0.625	1	5.41	13.81	0.392	1.05	Bolt Shear
T24	10	Diagonal	A325N	0.625	1	5.87	13.81	0.425	1.05	Bolt Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio P _u /φP _n
T1	172 - 160	ROHN 2 STD	12'	4'	61.0 K=1.00	1.075	-0.82	36.84	0.022 ¹
T2	160 - 140	ROHN 2 STD	20'	4'	61.0 K=1.00	1.075	-9.24	36.84	0.251 ¹
T3	140 - 136	ROHN 2.5 EH	4'	4'	51.9 K=1.00	2.254	-11.50	83.25	0.138 ¹
T4	136 - 132	ROHN 2.5 EH	4'	4'	51.9 K=1.00	2.254	-16.26	83.25	0.195 ¹
T5	132 - 128	ROHN 2.5 EH	4'	4'	51.9 K=1.00	2.254	-21.27	83.25	0.255 ¹
T6	128 - 124	ROHN 2.5 EH	4'	4'	51.9 K=1.00	2.254	-27.58	83.25	0.331 ¹
T7	124 - 120	ROHN 2.5 EH	4'	4'	51.9 K=1.00	2.254	-34.14	83.25	0.410 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T8	120 - 115	ROHN 3 STD	5'1/8"	5'1/8"	51.7	2.228	-40.60	82.51	0.492 ¹
T9	115 - 110	ROHN 3 STD	5'1/8"	2'7- 3/32"	K=1.00 26.7	2.228	-48.32	95.19	0.508 ¹
T10	110 - 105	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	5'1/8"	5'1/8"	61.0	4.432	-55.79	151.97	0.367 ¹
T11	105 - 100	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	5'1/8"	5'1/8"	K=1.12 61.0	4.432	-62.78	151.97	0.413 ¹
T12	100 - 93.3333	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	K=1.12 76.8	5.220	-70.35	152.58	0.461 ¹
T13	93.3333 - 86.6667	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	K=1.07 76.8	5.220	-78.87	152.58	0.517 ¹
T14	86.6667 - 80	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	K=1.07 76.8	5.220	-86.87	152.58	0.569 ¹
T15	80 - 73.3333	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.07 67.0	6.734	-94.78	218.29	0.434 ¹
T16	73.3333 - 66.6667	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.06 67.0	6.734	-102.46	218.29	0.469 ¹
T17	66.6667 - 60	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.06 67.0	6.734	-110.00	218.29	0.504 ¹
T18	60 - 53.3333	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.06 59.8	7.463	-117.46	258.68	0.454 ¹
T19	53.3333 - 46.6667	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.08 59.8	7.463	-124.54	258.68	0.481 ¹
T20	46.6667 - 40	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	K=1.08 59.8	7.463	-131.79	258.68	0.509 ¹
T21	40 - 30	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	K=1.08 70.6	8.502	-140.71	265.74	0.530 ¹
T22	30 - 20	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	K=1.04 70.6	8.502	-151.32	265.74	0.569 ¹
T23	20 - 10	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	K=1.04 69.5	10.314	-162.42	326.00	0.498 ¹
T24	10 - 0	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	K=1.04 69.5	10.314	-172.48	326.00	0.529 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	172 - 160	L1 1/2x1 1/2x1/8	7'7- 13/16"	3'7- 3/16"	146.0	0.359	-0.33	4.82	0.068 ¹
T2	160 - 140	L1 1/2x1 1/2x3/16	7'8- 5/32"	3'7- 7/16"	K=1.00 148.2	0.527	-1.22	6.87	0.177 ¹
T3	140 - 136	L1 3/4x1 3/4x3/16	7'8- 9/32"	3'7- 3/16"	K=1.00 125.9	0.621	-1.30	11.22	0.116 ¹
T4	136 - 132	L2x2x1/4	7'8- 13/32"	3'7- 5/16"	K=1.02 113.0	0.938	-2.44	20.21	0.120 ¹
T5	132 - 128	L2x2x1/4	7'8- 13/32"	3'7- 5/16"	K=1.02 113.1	0.938	-2.82	20.18	0.140 ¹
T6	128 - 124	L2x2x1/4	7'8- 17/32"	3'7- 5/16"	K=1.02 113.2	0.938	-3.25	20.17	0.161 ¹
T7	124 - 120	L2x2x1/4	7'8-5/8"	3'7- 7/16"	K=1.02 113.3	0.938	-3.89	20.15	0.193 ¹
T8	120 - 115	L2x2x1/4	8'5-7/8"	4'1- 5/16"	K=1.00 126.2	0.938	-3.18	16.85	0.189 ¹
T9	115 - 110	L2x2x1/4	8'10- 11/16"	4'3- 27/32"	K=1.00 132.5	0.938	-3.66	15.29	0.239 ¹
T10	110 - 105	L2x2x1/4	9'3- 23/32"	4'5-3/4"	K=1.00 137.4	0.938	-3.53	14.22	0.248 ¹
T11	105 - 100	L2x2x1/4	9'8-7/8"	4'8- 1/32"	K=1.00 143.3	0.938	-3.49	13.07	0.267 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T12	100 - 93.3333	L2x2x3/16	11'1- 29/32"	5'5- 13/32"	166.0 K=1.00	0.715	-3.77	7.42	0.508 ¹
T13	93.3333 - 86.6667	L2x2x1/4	11'8- 17/32"	5'8-3/4" K=1.00	175.8 K=1.00	0.938	-3.80	8.69	0.438 ¹
T14	86.6667 - 80	L2x2x1/4	12'3- 1/4"	6'1/8" K=1.00	184.4 K=1.00	0.938	-3.84	7.90	0.486 ¹
T15	80 - 73.3333	L2 1/2x2 1/2x1/4	12'10- 3/32"	6'2-5/8" K=1.00	152.1 K=1.00	1.190	-3.92	14.72	0.266 ¹
T16	73.3333 - 66.6667	L2 1/2x2 1/2x1/4	13'5- 5/32"	6'6-1/4" K=1.00	159.3 K=1.00	1.190	-3.99	13.42	0.298 ¹
T17	66.6667 - 60	L2 1/2x2 1/2x1/4	14'1/4" K=1.00	6'9- 27/32"	166.6 K=1.00	1.190	-4.15	12.27	0.338 ¹
T18	60 - 53.3333	L2 1/2x2 1/2x3/16	14'7- 9/16"	7'1- 13/16"	173.3 K=1.00	0.902	-4.10	8.60	0.477 ¹
T19	53.3333 - 46.6667	L2 1/2x2 1/2x3/16	15'3- 1/8"	7'5- 17/32"	180.9 K=1.00	0.902	-4.28	7.89	0.542 ¹
T20	46.6667 - 40	L2 1/2x2 1/2x1/4	15'10- 11/16"	7'9-3/8" K=1.00	190.1 K=1.00	1.190	-4.39	9.43	0.466 ¹
T21	40 - 30	L3x3x3/16	18'3- 1/8"	8'11- 3/4"	180.7 K=1.00	1.090	-5.09	9.55	0.533 ¹
T22	30 - 20	L3x3x1/4	19'1- 3/16"	9'4- 13/16"	190.5 K=1.00	1.440	-5.41	11.35	0.477 ¹
T23	20 - 10	L3 1/2x3 1/2x1/4	19'11- 17/32"	9'9- 19/32"	169.5 K=1.00	1.690	-5.37	16.83	0.319 ¹
T24	10 - 0	L3 1/2x3 1/2x1/4	20'9- 31/32"	10'2- 7/8"	177.1 K=1.00	1.690	-5.87	15.43	0.381 ¹

¹ P_u / φP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T9	115 - 110	L2x2x1/4	7'4- 3/16"	3'4- 11/16"	112.0 K=1.08	0.938	-0.84	20.44	0.041 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	172 - 160	L1 1/2x1 1/2x1/8	6'6-1/4"	6'1- 5/16"	247.7 K=1.00	0.359	-0.04	1.68	0.023 ¹

KL/R > 200 (C) - 5

¹ P_u / φP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	172 - 160	ROHN 2 STD	12'	4'	61.0	1.075	0.48	48.35	0.010 ¹
T2	160 - 140	ROHN 2 STD	20'	4'	61.0	1.075	7.28	48.35	0.150 ¹
T3	140 - 136	ROHN 2.5 EH	4'	4'	51.9	2.254	9.16	101.41	0.090 ¹
T4	136 - 132	ROHN 2.5 EH	4'	4'	51.9	2.254	11.93	101.41	0.118 ¹
T5	132 - 128	ROHN 2.5 EH	4'	4'	51.9	2.254	15.87	101.41	0.156 ¹
T6	128 - 124	ROHN 2.5 EH	4'	4'	51.9	2.254	20.78	101.41	0.205 ¹
T7	124 - 120	ROHN 2.5 EH	4'	4'	51.9	2.254	26.33	101.41	0.260 ¹
T8	120 - 115	ROHN 3 STD	5'1/8"	5'1/8"	51.7	2.228	32.47	100.28	0.324 ¹
T9	115 - 110	ROHN 3 STD	5'1/8"	2'5- 1/32"	24.9	2.228	38.32	100.28	0.382 ¹
T10	110 - 105	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	5'1/8"	5'1/8"	54.2	4.432	45.05	199.45	0.226 ¹
T11	105 - 100	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	5'1/8"	5'1/8"	54.2	4.432	51.24	199.45	0.257 ¹
T12	100 - 93.3333	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	71.6	5.220	58.04	234.88	0.247 ¹
T13	93.3333 - 86.6667	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	71.6	5.220	65.54	234.88	0.279 ¹
T14	86.6667 - 80	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	6'8- 5/32"	6'8- 5/32"	71.6	5.220	72.59	234.88	0.309 ¹
T15	80 - 73.3333	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	63.1	6.734	79.42	303.05	0.262 ¹
T16	73.3333 - 66.6667	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	63.1	6.734	85.95	303.05	0.284 ¹
T17	66.6667 - 60	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	63.1	6.734	92.34	303.05	0.305 ¹
T18	60 - 53.3333	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	55.4	7.463	98.60	335.85	0.294 ¹
T19	53.3333 - 46.6667	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	55.4	7.463	104.58	335.85	0.311 ¹
T20	46.6667 - 40	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	6'8- 5/32"	6'8- 5/32"	55.4	7.463	110.57	335.85	0.329 ¹
T21	40 - 30	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	68.1	8.502	117.90	382.61	0.308 ¹
T22	30 - 20	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	68.1	8.502	126.73	382.61	0.331 ¹
T23	20 - 10	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	66.9	10.314	135.55	464.15	0.292 ¹
T24	10 - 0	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	10'1/4"	10'1/4"	66.9	10.314	143.56	464.15	0.309 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	172 - 160	L1 1/2x1 1/2x1/8	7'7- 13/16"	3'7- 3/16"	95.7	0.211	0.29	9.18	0.032 ¹
T2	160 - 140	L1 1/2x1 1/2x3/16	7'8- 5/32"	3'7- 7/16"	97.9	0.308	1.22	13.38	0.091 ¹
T3	140 - 136	L1 3/4x1 3/4x3/16	7'8- 9/32"	3'7- 3/16"	82.8	0.378	1.27	16.44	0.077 ¹
T4	136 - 132	L2x2x1/4	7'8- 13/32"	3'7- 5/16"	73.1	0.586	2.38	25.50	0.093 ¹
T5	132 - 128	L2x2x1/4	7'8- 13/32"	3'7- 5/16"	73.2	0.586	2.79	25.50	0.109 ¹
T6	128 - 124	L2x2x1/4	7'8- 17/32"	3'7- 5/16"	73.3	0.586	3.29	25.50	0.129 ¹
T7	124 - 120	L2x2x1/4	7'8-5/8"	3'7- 7/16"	73.3	0.586	3.81	25.50	0.149 ¹
T8	120 - 115	L2x2x1/4	8'5-7/8"	4'1-	83.1	0.586	2.94	25.50	0.115 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T9	115 - 110	L2x2x1/4	8'10- 11/16"	5/16" 4'3- 27/32"	87.1	0.586	3.59	25.50	0.141 ¹
T10	110 - 105	L2x2x1/4	9'3- 23/32"	4'5-3/4"	90.3	0.586	3.49	25.50	0.137 ¹
T11	105 - 100	L2x2x1/4	9'8-7/8"	4'8- 1/32"	94.5	0.586	3.51	25.50	0.138 ¹
T12	100 - 93.3333	L2x2x3/16	11'1- 29/32"	5'5- 13/32"	108.0	0.448	3.73	19.50	0.191 ¹
T13	93.3333 - 86.6667	L2x2x1/4	11'8- 17/32"	5'8-3/4"	114.9	0.586	3.80	25.50	0.149 ¹
T14	86.6667 - 80	L2x2x1/4	12'3- 1/4"	6'1/8"	120.4	0.586	3.80	25.50	0.149 ¹
T15	80 - 73.3333	L2 1/2x2 1/2x1/4	12'10- 3/32"	6'2-5/8"	99.1	0.775	3.89	33.73	0.115 ¹
T16	73.3333 - 66.6667	L2 1/2x2 1/2x1/4	13'5- 5/32"	6'6-1/4"	103.7	0.775	3.97	33.73	0.118 ¹
T17	66.6667 - 60	L2 1/2x2 1/2x1/4	14'1/4"	6'9- 27/32"	108.3	0.775	4.12	33.73	0.122 ¹
T18	60 - 53.3333	L2 1/2x2 1/2x3/16	14'7- 9/16"	7'1- 13/16"	111.9	0.589	4.11	25.60	0.160 ¹
T19	53.3333 - 46.6667	L2 1/2x2 1/2x3/16	15'3- 1/8"	7'5- 17/32"	116.7	0.589	4.22	25.60	0.165 ¹
T20	46.6667 - 40	L2 1/2x2 1/2x1/4	15'10- 11/16"	7'9-3/8"	123.0	0.775	4.38	33.73	0.130 ¹
T21	40 - 30	L3x3x3/16	18'3- 1/8"	8'11- 3/4"	116.3	0.712	5.11	30.97	0.165 ¹
T22	30 - 20	L3x3x1/4	19'1- 3/16"	9'4- 13/16"	122.8	0.939	5.28	40.86	0.129 ¹
T23	20 - 10	L3 1/2x3 1/2x1/4	19'11- 17/32"	9'9- 19/32"	109.5	1.127	5.41	49.02	0.110 ¹
T24	10 - 0	L3 1/2x3 1/2x1/4	20'9- 31/32"	10'2- 7/8"	114.3	1.127	5.59	49.02	0.114 ¹

¹ P_u / φP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T9	115 - 110	L2x2x1/4	7'4- 3/16"	3'4- 11/16"	139.0	0.563	0.84	24.49	0.034 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	172 - 160	L1 1/2x1 1/2x1/8	6'6-1/4"	6'1- 5/16"	163.1	0.211	0.03	9.18	0.003 ¹

¹ P_u / φP_n controls

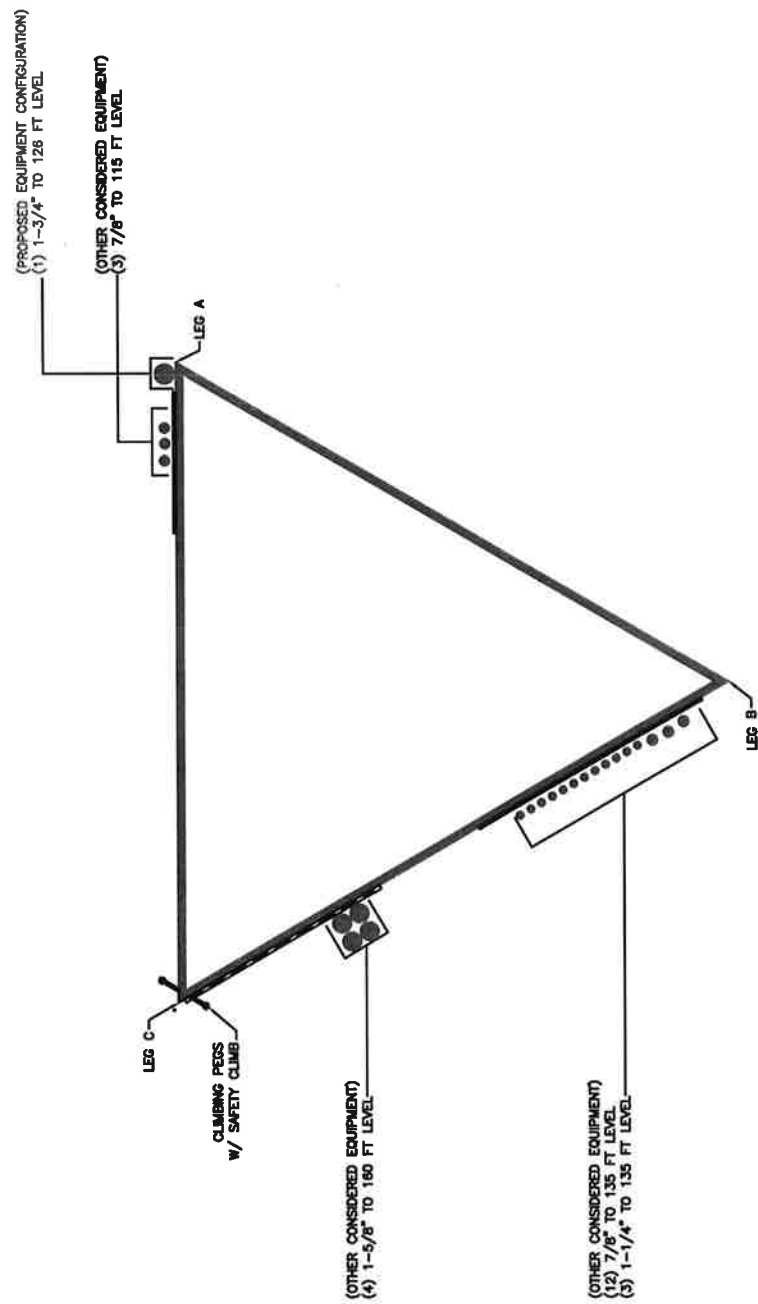
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	172 - 160	Leg	ROHN 2 STD	1	-0.82	38.68	2.1	Pass
T2	160 - 140	Leg	ROHN 2 STD	25	-9.24	38.68	23.9	Pass
T3	140 - 136	Leg	ROHN 2.5 EH	58	-11.50	87.41	13.2	Pass
T4	136 - 132	Leg	ROHN 2.5 EH	67	-16.26	87.41	18.6	Pass
T5	132 - 128	Leg	ROHN 2.5 EH	76	-21.27	87.41	24.3	Pass
T6	128 - 124	Leg	ROHN 2.5 EH	85	-27.58	87.41	31.5	Pass
T7	124 - 120	Leg	ROHN 2.5 EH	94	-34.14	87.41	39.1	Pass
T8	120 - 115	Leg	ROHN 3 STD	103	-40.60	86.63	46.9	Pass
T9	115 - 110	Leg	ROHN 3 STD	114	-48.32	99.95	48.3	Pass
T10	110 - 105	Leg	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	126	-55.79	159.57	35.0	Pass
T11	105 - 100	Leg	P 3.5in x 0.216in w/ 1/2HSS 4.5in x 0.337in	135	-62.78	159.57	39.3	Pass
T12	100 - 93.3333	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	144	-70.35	160.21	43.9	Pass
T13	93.3333 - 86.6667	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	153	-78.87	160.21	49.2	Pass
T14	86.6667 - 80	Leg	P 3.5in x 0.3in w/ 1/2HSS 4.5in x 0.337in	162	-86.87	160.21	54.2	Pass
T15	80 - 73.3333	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	171	-94.78	229.21	41.4	Pass
T16	73.3333 - 66.6667	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	180	-102.46	229.20	44.7	Pass
T17	66.6667 - 60	Leg	P 4in x 0.318in w/ 1/2HSS 5.563in x 0.375in	189	-110.00	229.21	48.0	Pass
T18	60 - 53.3333	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	198	-117.46	271.62	43.2	Pass
T19	53.3333 - 46.6667	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	207	-124.54	271.62	45.9	Pass
T20	46.6667 - 40	Leg	P 4.5in x 0.337in w/ 1/2HSS 5.563in x 0.375in	216	-131.79	271.62	48.5	Pass
T21	40 - 30	Leg	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	225	-140.71	279.02	50.4	Pass
T22	30 - 20	Leg	P 5.563in x 0.258in w/ 1/2HSS 6.625in x 0.432in	234	-151.32	279.02	54.2	Pass
T23	20 - 10	Leg	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	243	-162.42	342.30	47.4	Pass
T24	10 - 0	Leg	P 5.563in x 0.375in w/ 1/2HSS 6.625in x 0.432in	252	-172.48	342.30	50.4	Pass
T1	172 - 160	Diagonal	L1 1/2x1 1/2x1/8	11	-0.33	5.06	6.5	Pass
T2	160 - 140	Diagonal	L1 1/2x1 1/2x3/16	28	-1.22	7.21	16.9	Pass
T3	140 - 136	Diagonal	L1 3/4x1 3/4x3/16	62	-1.30	11.78	11.1	Pass
T4	136 - 132	Diagonal	L2x2x1/4	71	-2.44	21.22	11.5	Pass
T5	132 - 128	Diagonal	L2x2x1/4	80	-2.82	21.19	13.3	Pass
T6	128 - 124	Diagonal	L2x2x1/4	88	-3.25	21.18	15.3	Pass
T7	124 - 120	Diagonal	L2x2x1/4	98	-3.89	21.16	18.4	Pass
T8	120 - 115	Diagonal	L2x2x1/4	107	-3.18	17.69	18.0	Pass
T9	115 - 110	Diagonal	L2x2x1/4	116	-3.66	16.05	22.8	Pass
T10	110 - 105	Diagonal	L2x2x1/4	128	-3.53	14.93	23.7	Pass
T11	105 - 100	Diagonal	L2x2x1/4	137	-3.49	13.72	25.4	Pass
T12	100 - 93.3333	Diagonal	L2x2x3/16	148	-3.77	7.80	48.4	Pass
T13	93.3333 - 86.6667	Diagonal	L2x2x1/4	157	-3.80	9.13	41.7	Pass
T14	86.6667 - 80	Diagonal	L2x2x1/4	166	-3.84	8.29	46.3	Pass
T15	80 - 73.3333	Diagonal	L2 1/2x2 1/2x1/4	175	-3.92	15.46	25.4	Pass
T16	73.3333 - 66.6667	Diagonal	L2 1/2x2 1/2x1/4	184	-3.99	14.09	28.3	Pass
T17	66.6667 - 60	Diagonal	L2 1/2x2 1/2x1/4	193	-4.15	12.88	32.2	Pass
T18	60 - 53.3333	Diagonal	L2 1/2x2 1/2x3/16	202	-4.10	9.03	45.5	Pass
T19	53.3333 - 46.6667	Diagonal	L2 1/2x2 1/2x3/16	211	-4.28	8.28	51.6	Pass
T20	46.6667 - 40	Diagonal	L2 1/2x2 1/2x1/4	220	-4.39	9.90	44.3	Pass
T21	40 - 30	Diagonal	L3x3x3/16	229	-5.09	10.03	50.8	Pass
T22	30 - 20	Diagonal	L3x3x1/4	238	-5.41	11.92	45.4	Pass
T23	20 - 10	Diagonal	L3 1/2x3 1/2x1/4	247	-5.37	17.67	30.4	Pass
T24	10 - 0	Diagonal	L3 1/2x3 1/2x1/4	256	-5.87	16.20	36.2	Pass
T9	115 - 110	Secondary	L2x2x1/4	122	-0.84	21.46	3.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	172 - 160	Horizontal Top Girt	L1 1/2x1 1/2x1/8	5	-0.04	1.76	2.2	Pass
Summary								
		Leg (T22)					54.2	Pass
		Diagonal (T19)					51.6	Pass
		Secondary Horizontal (T9)					3.9	Pass
		Top Girt (T1)					2.2	Pass
		Bolt					64.8	Pass
		Checks						
		RATING =					64.8	Pass

***NOTE: Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.**

APPENDIX B
BASE LEVEL DRAWING



APPENDIX C

ADDITIONAL CALCULATIONS

Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	110ft - 105ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _i Factor Override:	

Leg Data		
Diameter:	3.5	in
Thickness:	0.216	in
Yield (F _y):	50	ksi
Unbraced Length:	60.125	in

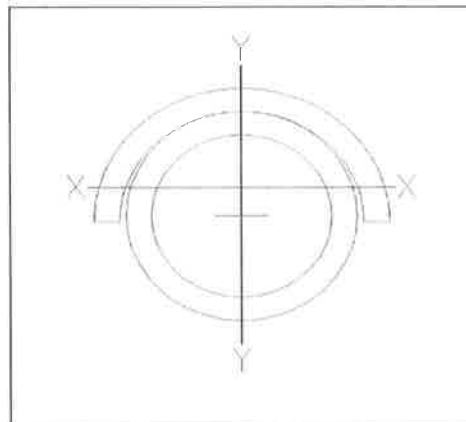
Split Pipe Data		
Outside Diameter:	4.5	in
Thickness:	0.337	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	4.4322	in ²	Polar Moment of Inertia, J:	6.0343	in ⁴
Moment of Intertia, I _{xx} :	5.4397	in ⁴	Moment of Intertia, I _{yy} :	7.8224	in ⁴
Eccentricity, e:	0.5793	in	Plastic Neutral Axis:	0.5793	in

Leg Axial Load		
Compression, P _u :	55.79	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	35.0%	Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.124
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	105ft - 100ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _i Factor Override:	

Leg Data		
Diameter:	3.5	in
Thickness:	0.216	in
Yield (F _y):	50	ksi
Unbraced Length:	60.125	in

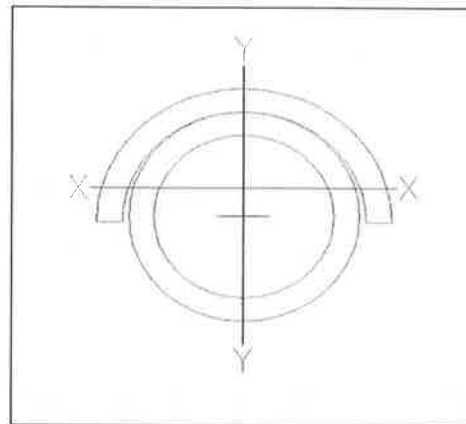
Split Pipe Data		
Outside Diameter:	4.5	in
Thickness:	0.337	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	4.4322	in ²	Polar Moment of Inertia, J:	6.0343	in ⁴
Moment of Intertia, I _{xx} :	5.4397	in ⁴	Moment of Intertia, I _{yy} :	7.8224	in ⁴
Eccentricity, e:	0.5793	in	Plastic Neutral Axis:	0.5793	in

Leg Axial Load		
Compression, P _u :	62.78	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	39.4%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:	☒	
N/A	☐	



TNX K Factor Adjustment	1.124
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	100ft - 93.3ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data	
Diameter:	3.5 in
Thickness:	0.3 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

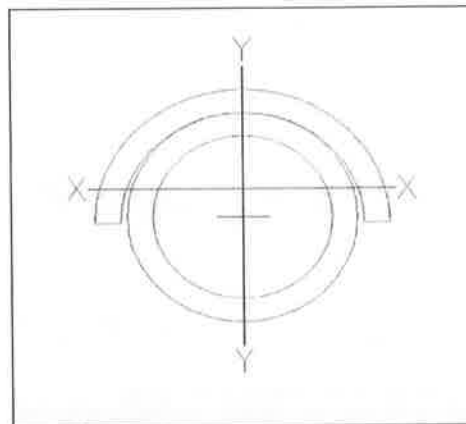
Split Pipe Data	
Outside Diameter:	4.5 in
Thickness:	0.337 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	5.2196	in ²	
Moment of Intertia, I _{xx} :	6.5412	in ⁴	
Eccentricity, e:	0.4919	in	
Polar Moment of Inertia, J:	7.7886	in ⁴	
Moment of Intertia, I _{yy} :	8.6996	in ⁴	
Plastic Neutral Axis:	0.4919	in	

Leg Axial Load	
Compression, P _u :	70.35 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	43.9% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.073
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	93.3ft - 86.7ft

Reinforcement Type	
Split Pipe	

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data	
Diameter:	3.5 in
Thickness:	0.3 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

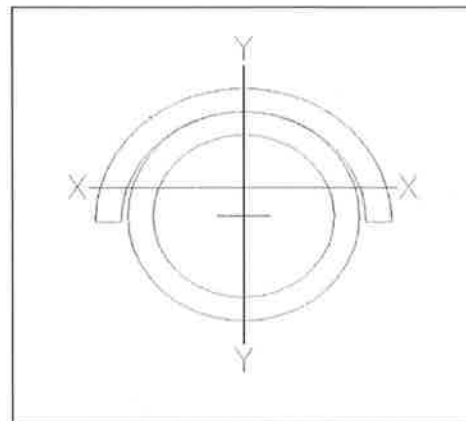
Split Pipe Data	
Outside Diameter:	4.5 in
Thickness:	0.337 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	5.2196	in ²	
Moment of Intertia, I _{xx} :	6.5412	in ⁴	
Eccentricity, e:	0.4919	in	
Polar Moment of Inertia, J:	7.7886	in ⁴	
Moment of Intertia, I _{yy} :	8.6996	in ⁴	
Plastic Neutral Axis:	0.4919	in	

Leg Axial Load	
Compression, P _u :	78.87 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	49.2% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.073
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	86.7ft - 80ft

Reinforcement Type	
	Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K, Factor Override:	

Leg Data		
Diameter:	3.5	in
Thickness:	0.3	in
Yield (Fy):	50	ksi
Unbraced Length:	80.15625	in

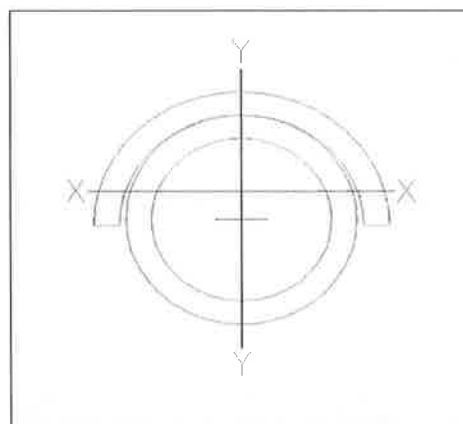
Split Pipe Data		
Outside Diameter:	4.5	in
Thickness:	0.337	in
Yield (Fy):	50	ksi

Built-Up Section Properties		
Area:	5.2196	in ²
Moment of Intertia, I _{xx} :	6.5412	in ⁴
Eccentricity, e:	0.4919	in

Leg Axial Load		
Compression, Pu:	86.87	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	54.2%	Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.073
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Built-Up Section Properties		
Polar Moment of Inertia, J:	7.7886	in ⁴
Moment of Intertia, I _{yy} :	8.6996	in ⁴
Plastic Neutral Axis:	0.4919	in

Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	80ft - 73.3ft

Reinforcement Type	
Split Pipe	

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data		
Diameter:	4	in
Thickness:	0.318	in
Yield (F _y):	50	ksi
Unbraced Length:	80.15625	in

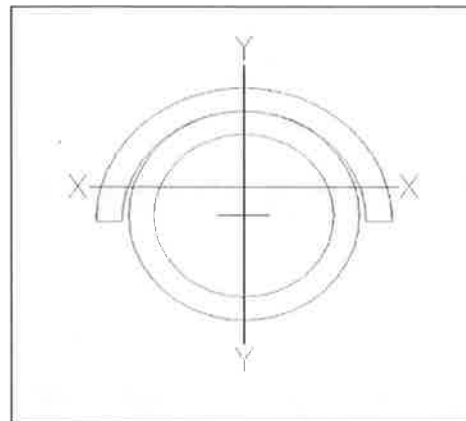
Split Pipe Data		
Outside Diameter:	5.563	in
Thickness:	0.375	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	6.7344	in ²	Polar Moment of Inertia, J:	12.5602	in ⁴
Moment of Intertia, I _{xx} :	10.8512	in ⁴	Moment of Intertia, I _{yy} :	16.6154	in ⁴
Eccentricity, e:	0.5662	in	Plastic Neutral Axis:	0.5662	in

Leg Axial Load		
Compression, P _u :	94.78	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	41.4%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:	☒	
	N/A	☐



TNX K Factor Adjustment	1.061
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	73.3ft - 66.7ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _r Factor Override:	

Leg Data		
Diameter:	4	in
Thickness:	0.318	in
Yield (F _y):	50	ksi
Unbraced Length:	80.15625	in

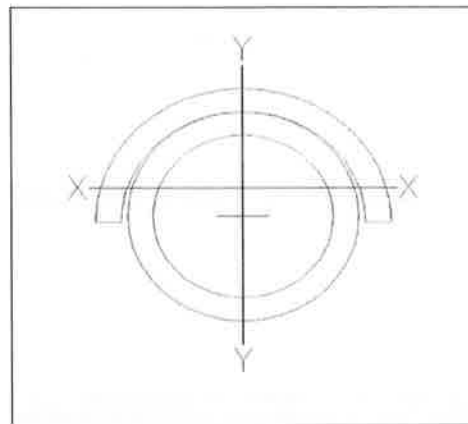
Split Pipe Data		
Outside Diameter:	5.563	in
Thickness:	0.375	in
Yield (F _y):	50	ksi

Built-Up Section Properties				
Area:	6.7344	in ²	Polar Moment of Inertia, J:	12.5602 in ⁴
Moment of Intertia, I _{xx} :	10.8512	in ⁴	Moment of Intertia, I _{yy} :	16.6154 in ⁴
Eccentricity, e:	0.5662	in	Plastic Neutral Axis:	0.5662 in

Leg Axial Load		
Compression, P _u :	102.46	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	44.7%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:	☒	
	N/A	☐



TNX K Factor Adjustment	1.061
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	66.7ft - 60ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data	
Diameter:	4 in
Thickness:	0.318 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

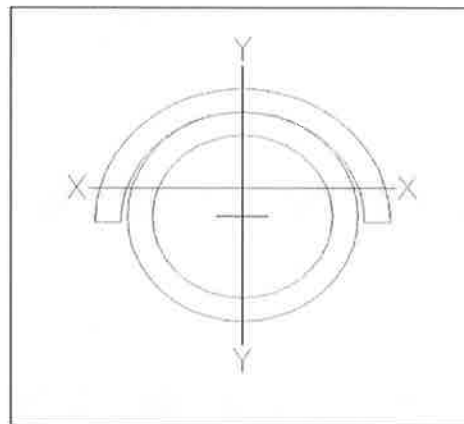
Split Pipe Data	
Outside Diameter:	5.563 in
Thickness:	0.375 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	6.7344	in ²	
Moment of Intertia, I _{xx} :	10.8512	in ⁴	
Eccentricity, e:	0.5662	in	
Polar Moment of Inertia, J:	12.5602	in ⁴	
Moment of Intertia, I _{yy} :	16.6154	in ⁴	
Plastic Neutral Axis:	0.5662	in	

Leg Axial Load	
Compression, P _u :	110 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	48.0% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.061
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	60ft - 53.3ft

Reinforcement Type
Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _i Factor Override:	

Leg Data	
Diameter:	4.5 in
Thickness:	0.337 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

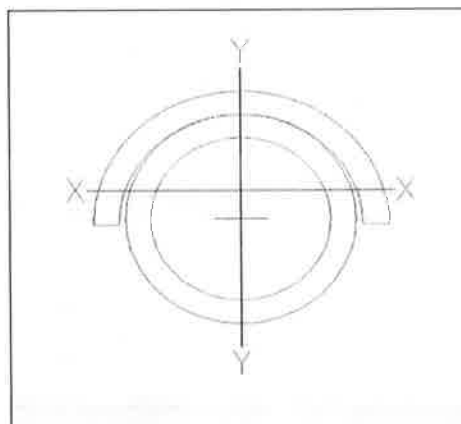
Split Pipe Data	
Outside Diameter:	5.563 in
Thickness:	0.375 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	7.4634	in ²	
Moment of Intertia, I _{xx} :	15.6313	in ⁴	
Eccentricity, e:	0.6133	in	
Polar Moment of Inertia, J:	19.2210	in ⁴	
Moment of Intertia, I _{yy} :	19.9458	in ⁴	
Plastic Neutral Axis:	0.6133	in	

Leg Axial Load	
Compression, P _u :	117.46 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	43.2% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.079
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	53.3ft - 46.7ft

Reinforcement Type	
Split Pipe	

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data	
Diameter:	4.5 in
Thickness:	0.337 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

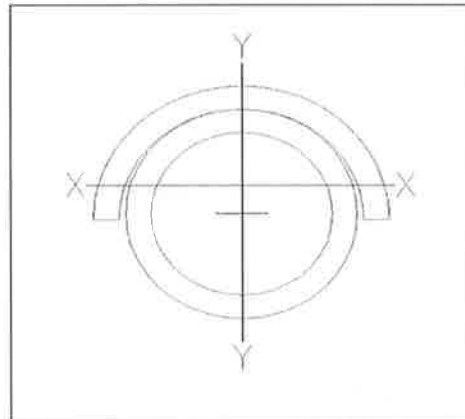
Split Pipe Data	
Outside Diameter:	5.563 in
Thickness:	0.375 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	7.4634	in ²	
Moment of Intertia, I _{xx} :	15.6313	in ⁴	
Eccentricity, e:	0.6133	in	
Polar Moment of Inertia, J:	19.2210	in ⁴	
Moment of Intertia, I _{yy} :	19.9458	in ⁴	
Plastic Neutral Axis:	0.6133	in	

Leg Axial Load	
Compression, P _u :	124.54 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	45.8% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.079
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	46.7ft - 40ft

Reinforcement Type	
	Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data	
Diameter:	4.5 in
Thickness:	0.337 in
Yield (F _y):	50 ksi
Unbraced Length:	80.15625 in

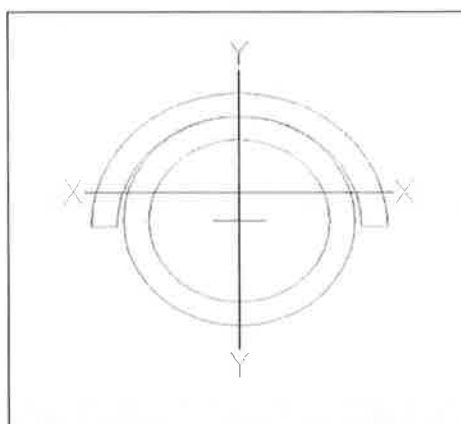
Split Pipe Data	
Outside Diameter:	5.563 in
Thickness:	0.375 in
Yield (F _y):	50 ksi

Built-Up Section Properties			
Area:	7.4634	in ²	
Moment of Intertia, I _{xx} :	15.6313	in ⁴	
Eccentricity, e:	0.6133	in	
Polar Moment of Inertia, J:	19.2210	in ⁴	
Moment of Intertia, I _{yy} :	19.9458	in ⁴	
Plastic Neutral Axis:	0.6133	in	

Leg Axial Load	
Compression, P _u :	131.79 kips

Ratings (per TIA-222-H Section 15.5)	
Spacing Req.:	O.K.
Reinforced Leg:	48.5% Pass

Check Limitation	
Apply TIA-222-H Section 15.5:	☒
N/A	☐



TNX K Factor Adjustment	1.079
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	40ft - 30ft

Reinforcement Type	
Split Pipe	

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K_f Factor Override:	

Leg Data		
Diameter:	5.563	in
Thickness:	0.258	in
Yield (Fy):	50	ksi
Unbraced Length:	120.02083	in

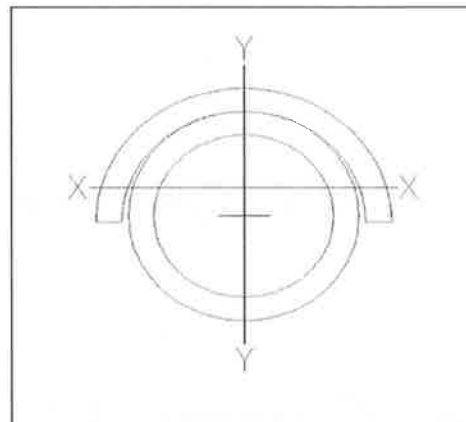
Split Pipe Data		
Outside Diameter:	6.625	in
Thickness:	0.432	in
Yield (Fy):	50	ksi

Built-Up Section Properties					
Area:	8.5023	in ²	Polar Moment of Inertia, J:	30.3244	in ⁴
Moment of Intertia, I_{xx} :	26.4994	in ⁴	Moment of Intertia, I_{yy} :	35.4075	in ⁴
Eccentricity, e:	0.9270	in	Plastic Neutral Axis:	0.9270	in

Leg Axial Load		
Compression, Pu:	140.71	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	50.4%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:	☒	
	N/A	☐



TNX K Factor Adjustment	1.037
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	30ft - 20ft

Reinforcement Type	
	Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data		
Diameter:	5.563	in
Thickness:	0.258	in
Yield (F _y):	50	ksi
Unbraced Length:	120.02083	in

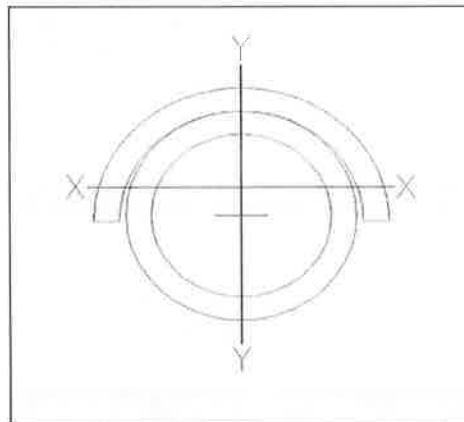
Split Pipe Data		
Outside Diameter:	6.625	in
Thickness:	0.432	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	8.5023	in ²	Polar Moment of Inertia, J:	30.3244	in ⁴
Moment of Intertia, I _{xx} :	26.4994	in ⁴	Moment of Intertia, I _{yy} :	35.4075	in ⁴
Eccentricity, e:	0.9270	in	Plastic Neutral Axis:	0.9270	in

Leg Axial Load		
Compression, P _u :	151.32	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	54.2%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:		☒
	N/A	☐



TNX K Factor Adjustment	1.037
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	20ft - 10ft

Reinforcement Type	
Split Pipe	

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data		
Diameter:	5.563	in
Thickness:	0.375	in
Yield (F _y):	50	ksi
Unbraced Length:	120.02083	in

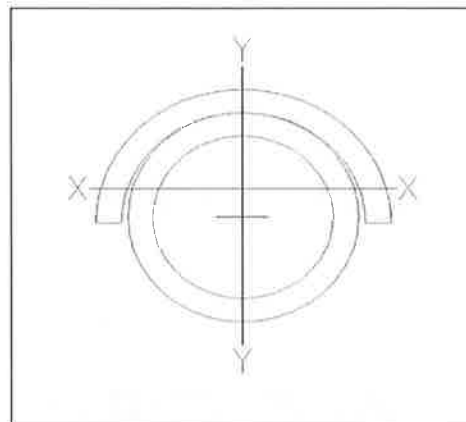
Split Pipe Data		
Outside Diameter:	6.625	in
Thickness:	0.432	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	10.3144	in ²	Polar Moment of Inertia, J:	41.3413	in ⁴
Moment of Intertia, I _{xx} :	33.2915	in ⁴	Moment of Intertia, I _{yy} :	40.9160	in ⁴
Eccentricity, e:	0.7641	in	Plastic Neutral Axis:	0.7641	in

Leg Axial Load		
Compression, P _u :	162.42	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	47.4%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:	☒	
N/A	☐	



TNX K Factor Adjustment	1.039
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Built-Up Leg Reinforcement Tool



Site Data	
BU#:	873681
Site Name:	Chicago
Order #:	559909 Rev 2
Section:	10ft - 0ft

Reinforcement Type	
	Split Pipe

Connection and Analysis Options	
TIA-222 Revision:	H
Tower Type:	Self Support
Consider Leg Load at Time of Modification:	
End Connections:	Fixed
Leg Crushing Check:	No
Applied Load:	Axial
Slenderness Ratio:	KL/r Modified
Intermediate Connection:	Bolted
Intermediate Spacing:	18 in
Split Pipe K _f Factor Override:	

Leg Data		
Diameter:	5.563	in
Thickness:	0.375	in
Yield (F _y):	50	ksi
Unbraced Length:	120.02083	in

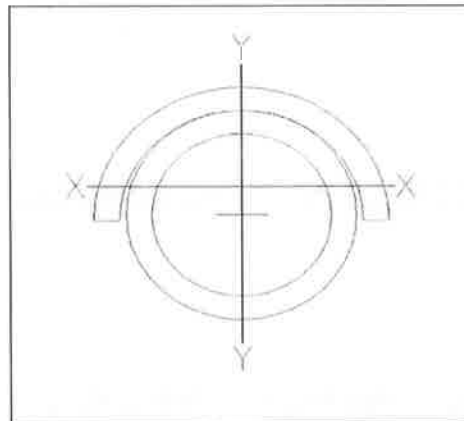
Split Pipe Data		
Outside Diameter:	6.625	in
Thickness:	0.432	in
Yield (F _y):	50	ksi

Built-Up Section Properties					
Area:	10.3144	in ²	Polar Moment of Inertia, J:	41.3413	in ⁴
Moment of Intertia, I _{xx} :	33.2915	in ⁴	Moment of Intertia, I _{yy} :	40.9160	in ⁴
Eccentricity, e:	0.7641	in	Plastic Neutral Axis:	0.7641	in

Leg Axial Load		
Compression, P _u :	172.48	kips

Ratings (per TIA-222-H Section 15.5)		
Spacing Req.:	O.K.	
Reinforced Leg:	50.3%	Pass

Check Limitation		
Apply TIA-222-H Section 15.5:		☒
	N/A	☐



TNX K Factor Adjustment	1.039
-------------------------	-------

Self Support Anchor Rod Capacity



Site Info	
BU #	873681
Site Name	Chicago
Order #	559909 Rev 2

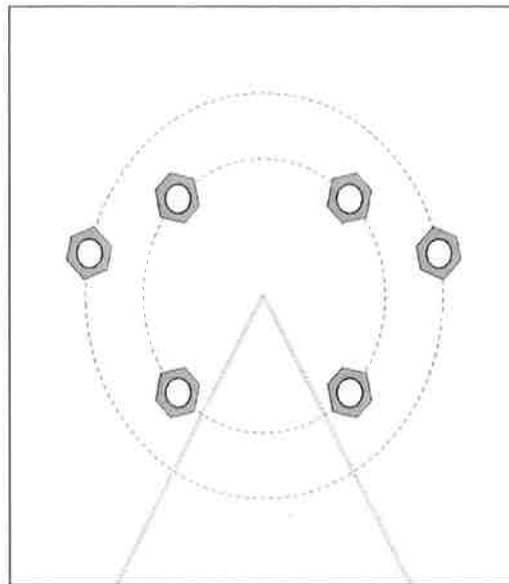
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
l_{ar} (in)	See Custom Sheet

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	177.71	147.63
Shear Force (kips)	18.72	15.96

*TIA-222-H Section 15.5 Applied

Considered Eccentricity	
Leg Mod Eccentricity (in)	0.000
Anchor Rod N.A Shift (in)	0.485
Total Eccentricity (in)	0.485

*Anchor Rod Eccentricity Applied



Connection Properties		Analysis Results		
Anchor Rod Data		Anchor Rod Summary (units of kips, kip-in)		
GROUP 1: (4) 1" ϕ bolts (A354-BC N; $F_y=109$ ksi, $F_u=125$ ksi) on 9.5" BC l_{ar} (in): 2		GROUP 1:		
		$Pu_t = 30.31$	$\phi Pn_t = 56.81$	Stress Rating
		$Vu = 3.99$	$\phi Vn = 36.82$	50.8%
		$Mu = n/a$	$\phi Mn = n/a$	Pass
GROUP 2: (2) 1" ϕ bolts (A193 Gr. B7 N; $F_y=105$ ksi, $F_u=125$ ksi) on 14" BC $pos. (deg): 12, 168$ l_{ar} (in): 1.5		GROUP 2:		
		$Pu_t = 23.16$	$\phi Pn_t = 56.81$	Stress Rating
		$Vu = 0$	$\phi Vn = 36.82$	38.8%
		$Mu = 0$	$\phi Mn = 15.75$	Pass

CCiplate

Elevation (ft) 0 (Base)

note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Grout Considered
1	Yes	Yes	Yes
2	Yes	No	No

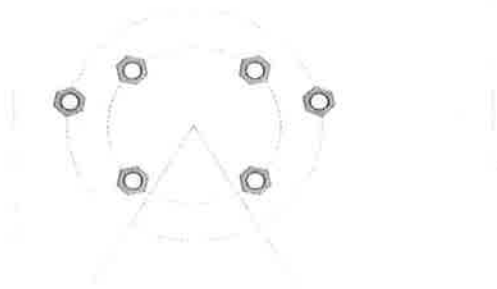
Leg Mod Eccentricity (in)
0

☒ Consider Anchor Rod Eccentricity

Custom Bolt Connection										
Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η	l_e (in)	Thread Type	Area Override, in^2	Tension Only
1	1	45	1	A354-BC	9.5	0.5	2	N-Included		No
2	1	135	1	A354-BC	9.5	0.5	2	N-Included		No
3	1	225	1	A354-BC	9.5	0.5	2	N-Included		No
4	1	315	1	A354-BC	9.5	0.5	2	N-Included		No
5	2	12	1	A193 Gr. B7	14	0.5	1.5	N-Included		No
6	2	168	1	A193 Gr. B7	14	0.5	1.5	N-Included		No

note: For Self-Support towers, only one direction is checked (in+out of the tower) so please use the Plot Graphic button to confirm Anchor Rod placement.

Plot Graphic



SST Unit Base Foundation



BU #: 873681
 Site Name: Chicago
 Order Number: 559909 Rev 2

TIA-222 Revision: H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☒
Block Foundation?:	☒
Rectangular Pad?:	☒

Superstructure Analysis Reactions		
Global Moment, M:	2691.34	ft-kips
Global Axial, P:	36.46	kips
Global Shear, V:	29.82	kips
Leg Compression, P_{comp}:	177.71	kips
Leg Comp. Shear, V_{u, comp}:	18.72	kips
Leg Uplift, P_{uplift}:	147.63	kips
Leg Uplift. Shear, V_{u, uplift}:	15.96	kips
Tower Height, H:	172	ft
Base Face Width, BW:	18.77	ft
BP Dist. Above Fdn, bp_{dia}:	3	in
Anchor Bolt Circle, BC:	9.5	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Lateral (Sliding) (kips)</i>	283.09	29.82	10.0%	Pass
<i>Bearing Pressure (ksf)</i>	5.63	3.89	69.2%	Pass
<i>Overturing (kip*ft)</i>	3922.27	3100.90	79.1%	Pass
<i>Pad Flexure (kip*ft)</i>	4041.03	405.27	9.6%	Pass
<i>Pad Shear - 1-way (kips)</i>	2742.07	0.00	0.0%	Pass
<i>Pad Shear - Comp 2-way (ksi)</i>	0.164	0.003	1.9%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	1065.79	0.00	0.0%	Pass
<i>Pad Shear - Tension 2-way (ksi)</i>	0.164	0.003	1.5%	Pass
<i>Flexural 2-way (Tension) (kip*ft)</i>	1065.79	0.00	0.0%	Pass

*Rating per TIA-222-H Section 15.5

Structural Rating*:	9.6%
Soil Rating*:	79.1%

Pad Properties		
Depth, D:	11.00	ft
Pad Width, W₁:	17.74	ft
Pad Width, W₂:	21.75	ft
Pad Thickness, T:	11.00	ft
Pad Rebar Size (Bottom dir. 1), Sp₁:	6	
Pad Rebar Quantity (Bottom dir. 1), mp₁:	16	
Pad Rebar Size (Bottom dir. 2), Sp₂:	6	
Pad Rebar Quantity (Bottom dir. 2), mp₂:	16	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, Fy:	60	ksi
Concrete Compressive Strength, F'c:	3	ksi
Dry Concrete Density, δc:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	110	pcf
Ultimate Gross Bearing, Qult:	7.500	ksf
Cohesion, Cu:	0.400	ksf
Friction Angle, φ:	0	degrees
SPT Blow Count, N_{blows}:	0	
Base Friction, μ:	0.3	
Neglected Depth, N:	4.2	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, gw:	25	ft

<-- Toggle between Gross and Net



Hazards by Location

Search Information

Coordinates: 41.858144, -88.071731
Elevation: 745 ft
Timestamp: 2021-08-30T16:37:19.077Z
Hazard Type: Wind



ASCE 7-16

MRI 10-Year 74 mph
 MRI 25-Year 80 mph
 MRI 50-Year 85 mph
 MRI 100-Year 92 mph
 Risk Category I 100 mph
 Risk Category II 107 mph
 Risk Category III 114 mph
 Risk Category IV 119 mph

ASCE 7-10

MRI 10-Year 76 mph
 MRI 25-Year 84 mph
 MRI 50-Year 90 mph
 MRI 100-Year 96 mph
 Risk Category I 105 mph
 Risk Category II 115 mph
 Risk Category III-IV 120 mph

ASCE 7-05

ASCE 7-05 Wind Speed 90 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

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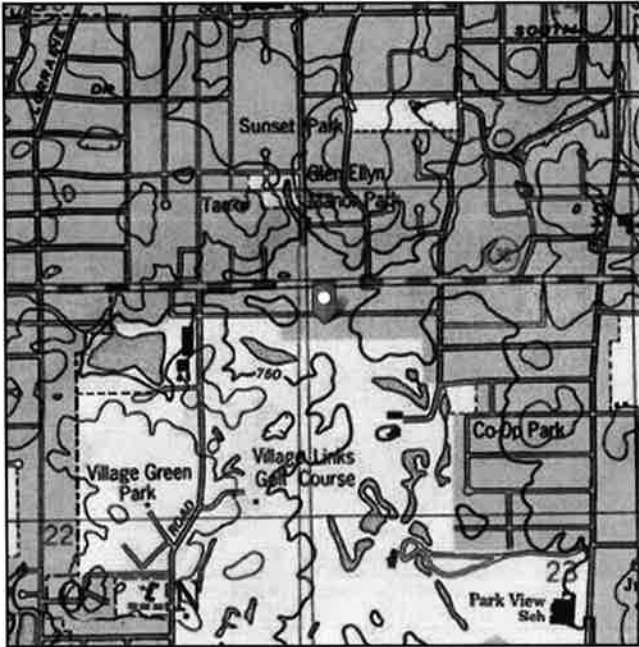
building site described by latitude/longitude location in the report.

ASCE 7 Hazards Report

Address:
No Address at This
Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 749.73 ft (NAVD 88)
Latitude: 41.858144
Longitude: -88.071731

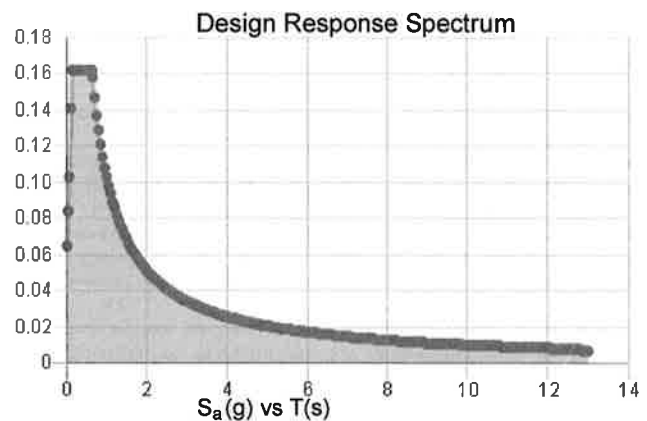
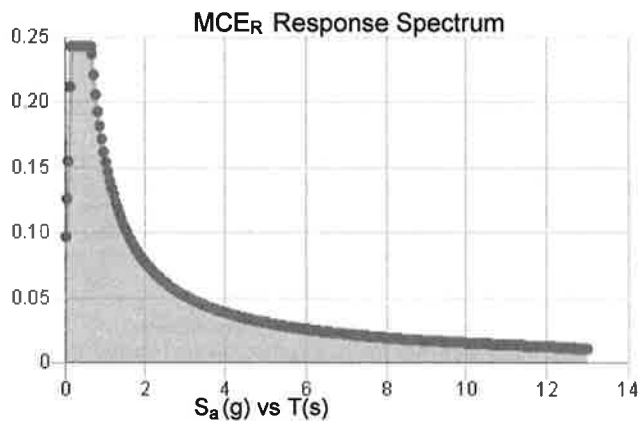


Site Soil Class: D - Stiff Soil

Results:

S_S :	0.152	S_{DS} :	0.162
S_1 :	0.064	S_{D1} :	0.103
F_a :	1.6	T_L :	12
F_v :	2.4	PGA :	0.08
S_{MS} :	0.243	PGA_M :	0.128
S_{M1} :	0.154	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B



Data Accessed:

Sat Jun 26 2021

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Results:

Ice Thickness: 0.75 in.
Concurrent Temperature: 5 F
Gust Speed: 40 mph

Data Source: Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

Date Accessed: Sat Jun 26 2021

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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3025 Highland Pkwy Suite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

February 9, 2023

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

Re: Narrative on 5G Concerns for Special Use Permit to allow the Installation and Operation of New DISH Wireless

Network Equipment to the Existing Tower at 415 Taft Ave
DISH Site CHCHI00216A / Crown Site 873681

To Whom It May Concern,

Fullerton Engineering on behalf of DISH Wireless, and Tower Owner Crown Castle, submit for review and approval, a Special Use Application for the proposed addition of DISH Wireless Antennas and Support Equipment to the telecommunications tower at 415 Taft Ave. DISH Wireless is proposing to install their telecommunication equipment on the tower and on the ground within a leased space. Crown Castle is the owner of the telecommunications tower located at this referenced tower location. Currently, there are (3) other carriers located on the tower.

DISH Wireless would install their equipment on the third space on the tower from the top for operation. This centerline for installation is located on the tower at the 126' high mark. The antenna equipment that DISH is proposing to install on the tower would support 5G technology. This is a key offering that their network would provide to their consumers. The proposed new co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G capable technology that the equipment would bring to the community.

DISH Wireless is a division of the company we all know to be the satellite television provider. In recent years, DISH has become one of the major wireless carriers. Their focus will be providing 5G wireless connectivity to power the Smart Cities of the future. Smart Homes, Factories, Driverless Cars, and Artificial Intelligence...in addition to the millions of wearables, sensors, devices, and robots that will support them. Additional information regarding the DISH Story is available on their web site at <https://about.dish.com/company-info>.

Wireless Communications have been designated Critical Infrastructure by the Federal Government and should be considered Essential Services in all Comprehensive Plans. As DISH Wireless is constructing this new network, every new facility in the network is essential to the seamless operation. This Crown Castle tower,

The Foundation for a Wireless World

CrownCastle.com



3025 Highland Pkwy Suite 510
Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

located at 415 Taft Ave, was selected to fill a gap in the DISH Wireless network. The tower height and location are important factors in determining how network coverage can be expanded. Structure height is key in extending that coverage. The higher the structure the farther the coverage will extend.

On the Crown Castle tower, DISH Wireless would be installing their antennas, radio equipment, and associated cabling at top location on the tower. At the base of the tower, within the fenced compound area, DISH would install an ice bridge, a 5' x 7' metal platform, and an equipment cabinet. The proposed addition of DISH Wireless's equipment will not cause an increase in the height of the tower or in the existing leased ground space.

The new antenna equipment would support 5G technology. This would be in addition to other technologies that would the DISH network would offer to consumers. As an example, another technology supported by this antenna would be 4G. There is no hazard emission that is produced from the use of 5G technology. Consumers would only be able to utilize this 5G network if they should purchase a cellular device that has 5G capable technologies.

Submitted with the Special Use Permit Application, we have included a radio frequency interference statement provided by DISH RF Engineers confirming that all frequencies utilized by DISH Wireless will follow guidelines enforced by the Federal Communications Commission. This is further confirmation the proposed new Co-location of DISH antennas does not present any detrimental effect to the community public safety, health and/or welfare. Even with the 5G technology capability provided by the new antennas.

It is also worth mentioning that the antenna equipment DISH Wireless is utilizing would be of similar make and models that other carriers are installing on their telecommunication towers to support their network. As technology improves for cellular networks there will always be the need for future equipment upgrades to DISH Wireless's network. This need would be the same for any carrier in the cellular market.

In the coming years, DISH Wireless will continue to expand their network. As mentioned previously, every new facility in the DISH network is essential to the seamless operation of this new network. This Crown Castle tower, located at 415 Taft Avenue, was selected to fill a gap in the DISH Wireless network.

The proposed addition of the DISH Wireless equipment at this location, even with the 5G technology offered by the antennas, this tower will not be hazardous to the community surrounding this property. As confirmed in the radio frequency statement provided by the DISH RF Engineering Manager, DISH Wireless shall comply with all FCC rules regarding interference to other radio services and human exposure to radio frequency energy.



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Downers Grove, IL 60515

Phone: (630) 480-5164
www.crowncastle.com

If there are still any outstanding questions or concerns, please feel free to reach out using any of my contact information listed below in my signature. Addressing all concerns for this project is of utmost importance to myself, and Crown Castle.

Best regards,

Ariel Stouder
Senior Zoning and Permitting Specialist
Fullerton Engineering, on behalf of Crown Castle
M: 574-849-8420
Email: astouder@fullertonengineering.com

NOTICE OF PUBLIC HEARING

Fullerton Engineering Consultants, LCC, on behalf of DISH Wireless LLC and OBO Crown Castle USA Inc., is requesting approval of a Special Use Permit in accordance with Sections 10-4-16(E)2 and 10-8-8 of the Zoning Code to allow an addition of DISH Wireless antennas and support equipment to the existing cellular tower at 415 Taft Avenue. The Glen Ellyn Plan Commission will conduct a public hearing to consider the Special Use Permit on Thursday, April 27, 2023, at 7:00 p.m. in the Galligan Board Room on the 3rd floor of the Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois, 60137.

The property is located in the C4-Office District and legally described as follows:

LOT 9 AND THE WEST 1/2 OF THE VACATED ALLEY LYING EAST OF AND ADJOINING SAID LOT 9 AND LOT 10 IN BLOCK 79 IN WHEATON ESTATES, BEING A SUBDIVISION IN SECTION 22 AND SECTION 23, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 7, 1925 AS DOCUMENT 197514.

P.I.N. 05-23-102-018
All persons who are interested are invited to attend the public hearing of the Plan Commission to listen and be heard. Information related to the request, including the plans for the proposed project are available for public review at any time before or after the meeting between the hours of 8:00am and 4:30pm in the Community Development Department of the Civic Center, 535 Duane Street, Glen Ellyn, Illinois. Questions related to the request should be directed to Brad Iwicki, Planning Intern, biwicki@glenellyn.org. All public comments received by 4:30 pm on Thursday, April 27, 2023, will be read into the record at the public hearing.

Published in Daily Herald April 12, 2023 (4598268)

RECEIVED

APR 21 2023

VILLAGE OF GLEN ELLYN

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

**DuPage County
Daily Herald**

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **DuPage County DAILY HERALD**. That said **DuPage County DAILY HERALD** is a secular newspaper, published in Naperville, DuPage County, State of Illinois, and has been in general circulation daily throughout DuPage County, continuously for more than 50 weeks prior to the first Publication of the attached notice, and a newspaper as defined by 715 ILCS 5/5.

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 04/12/2023

in said **DuPage County DAILY HERALD**. This notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1.

BY

Paula Baltz

Designee of the Publisher of the Daily Herald

Control # 4598268





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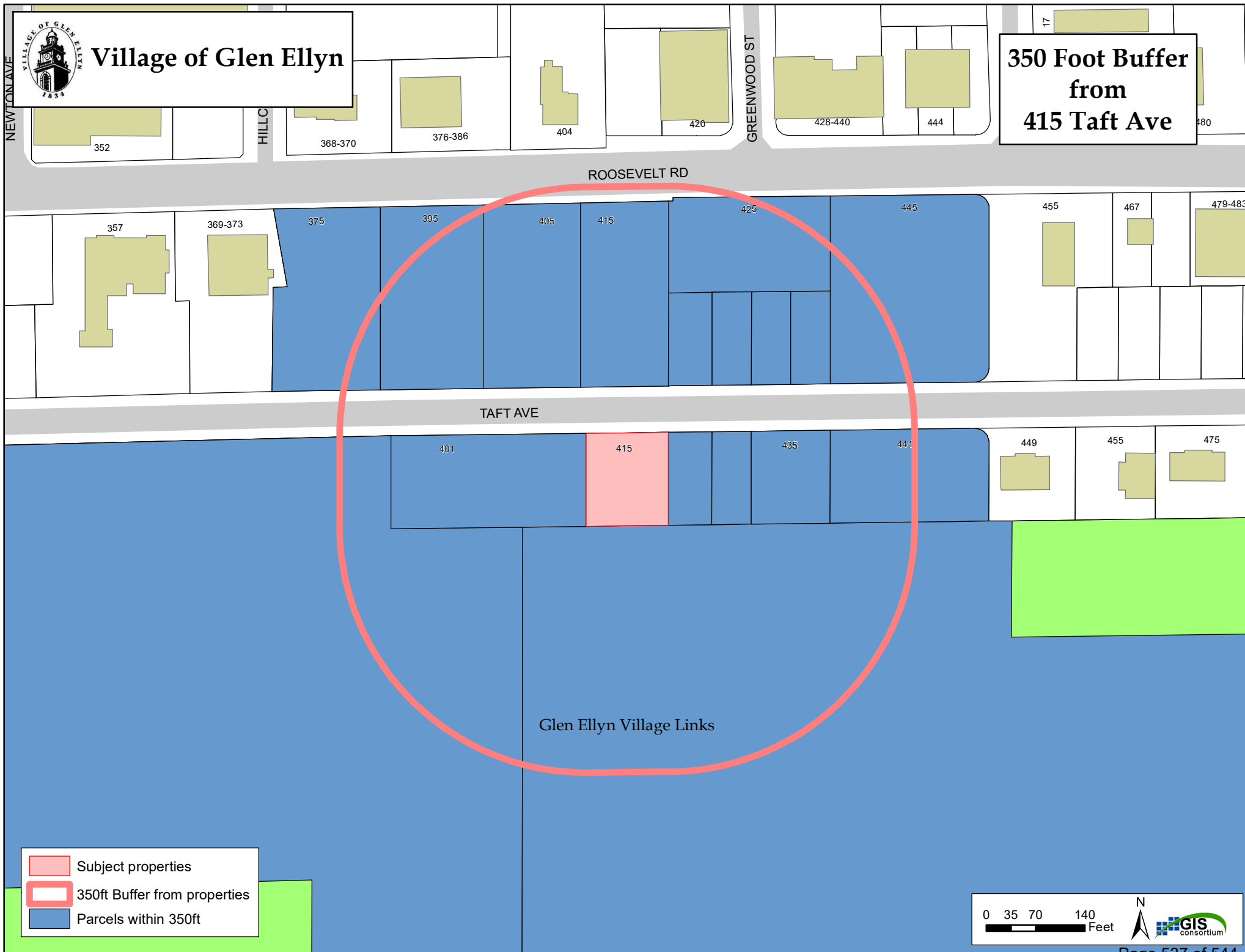
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Village of Glen Ellyn

**350 Foot Buffer
from
415 Taft Ave**



**(DRAFT) FINDINGS OF FACT TO SUPPORT A MOTION TO RECOMMEND
APPROVAL OF A SPECIAL USE PERMIT TO ALLOW AN ADDITION OF DISH
WIRELESS 5G CAPABLE ANTENNAS AND SUPPORT EQUIPMENT TO THE
EXISTING CELLULAR TOWER AT 415 TAFT AVENUE**

(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, because the cellular tower is existing and is a compatible use within the Office District in which it's located. Wireless communications including 5G have been designated critical infrastructure by the federal government and the expansion of a new carrier to an existing wireless support structure supports this.
2. The proposed use 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 because the DISH Wireless antennas construction will be consistent with the existing cellular tower at the site and therefore will remain harmonious and appropriate with the existing character of the vicinity. DISH Wireless's antennas and ground equipment will not increase the height or footprint of the existing structure.
3. The proposed use will not be hazardous or disturbing to existing or future neighborhood uses of the property because the addition will be similar to the carriers previously operating at the site. The location of the existing tower also provides the adequate buffer from surrounding neighborhood uses and therefore poses no hazard or disturbance. The installation of the new DISH Wireless will comply with all applicable Building and Electrical Codes. The DISH Wireless and 5G technologies will also meet all the FCC rules regarding interference to other radio services and human exposure to radio frequency energy.
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 because as constructed the existing tower is currently covered by local emergency services and does not require any sewer, water, refuse disposal or school services. The expansion will change neither the nature of this facility nor its public services requirements.
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 as noted in the above response, this proposal will not significantly change the use and nature of the existing tower and therefore will not create excessive additional requirements at a public cost. The new 5G technologies will meet all the FCC rules regarding interference to other radio services and human exposure to radio frequency energy.

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 facility and new Wireless DISH with 5G will not generate any noise, smoke, fumes, glare, or odors and all FCC rules and regulations will be met. It will generate nominal traffic for scheduled maintenance visits.
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 the existing cellular tower is and will continue to be unmanned and will be serviced via the existing driveway by a single technician approximately once a month.
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 expansion of equipment will not change footprint which will pose no increase in potential for flood damage to adjacent property. Nor will it require additional public expenses 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 no major changes proposed to the structure or the site that would cause any damage to the character, environment, or community resources. As part of installation of 5G technology, all FCC requirements will be met.

**(DRAFT) MOTION TO RECOMMEND APPROVAL OF A SPECIAL USE PERMIT TO
ALLOW AN ADDITION OF DISH WIRELESS ANTENNAS 5G CAPABLE AND
SUPPORT EQUIPMENT TO THE EXISTING CELLULAR TOWER AT 415 TAFT AVE.**

After conducting a public hearing and deliberating on the request of the petitioner, Tony Phillips of Fullerton Engineers Consultants LLC, on behalf of Crown Castle USA Inc. and DISH Wireless LLC, for approval of a Special Use Permit to allow an addition of DISH Wireless antennas 5G capable and support equipment to the existing cellular tower at 415 Taft Avenue in the C-4 Office District, the Plan Commission hereby recommends approval based on the findings of fact, as discussed or amended at the Plan Commission public hearing on April 27, 2023, 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 new DISH Wireless antenna with 5G technology added to the existing cellular tower be operated in substantial conformance with the plans and testimony presented at the Plan Commission public hearing and before the Village Board of Trustees.

Motion by: _____ Seconded by: _____

**(DRAFT) MOTION TO RECOMMEND DENIAL OF A SPECIAL USE PERMIT TO
ALLOW AN ADDITION OF DISH WIRELESS ANTENNAS 5G CAPABLE AND
SUPPORT EQUIPMENT TO THE EXISTING CELLULAR TOWER AT 415 TAFT AVE.**

After conducting a public hearing and deliberating on the request of the petitioner, Tony Phillips of Fullerton Engineers Consultants LLC, on behalf of Crown Castle USA Inc. and DISH Wireless LLC, for approval of a Special Use to allow an addition of DISH Wireless antennas 5G capable and support equipment to the existing cellular tower at 415 Taft Avenue in the C-4 Office District, the Plan Commission hereby recommends denial of the request based on the following findings of fact.

In regard to the requested Special Use Permit the Plan Commission finds that (*only one negative finding needs to be made*):

1. The proposed use will not be harmonious and in accordance with the general objectives, or within a specific objective of the Comprehensive Plan and/or Zoning Code because_____
_____.
2. The proposed use is not designed and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and will change the essential character of the area because_____
_____.
3. The proposed use will be hazardous or disturbing to existing or future neighborhood uses of the property because _____
_____.
4. The proposed use will not be served adequately by existing 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 not be able to provide adequately any such services because _____
_____.
5. The proposed use could create excessive additional requirements at public cost for public services because _____
_____.
6. The use will involve activities, processes, materials, equipment and/or conditions of operation that are detrimental to any persons, property or the general welfare by reason of the excessive production of traffic, noise, smoke, fumes, glare and odors because_____
_____.
7. The proposed use will not have vehicular approaches to the property which are so designed as not to create an undue interference with traffic on surrounding public streets or roads because_____
_____.

8. The proposed use will increase the potential for flood damage to adjacent property or require additional public expense for flood protection, rescue or relief because _____

_____.

9. The proposed use will result in the destruction, loss or damage of natural, scenic or historic features of major importance to the community because _____

_____.

Motion by: _____ Seconded by: _____



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

Meeting 4/27/2023 7:00 PM
Department: Community Development
Department Head:
Category: Discussion Item
Prepared By:

**AGENDA ITEM (ID
2023-475)**

DOC ID: 2023-475

Discussion and Recommendation - Proposed Zoning Text Amendments: Possible amendments to the Zoning Code relating the keeping of hens.

Statement of the Issue:

Please see the attached Staff Report. Village staff is requesting a continuation (to May 25, 2023) of the review of text amendments to the Village Code relating to hens.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. PC Memo - 4-27-23 - Village Code Text Amendments - Hens

STAFF REPORT

TO: Glen Ellyn Plan Commission

FROM: Marty Scott, Director of Community Development

DATE: April 21, 2023

FOR: April 27, 2023 Plan Commission Meeting

SUBJECT: Proposed Village Code Text Amendments - Hens

PETITIONER: The Village of Glen Ellyn

REQUEST: Village staff is requesting a continuation (to May 25, 2023) of the review of text amendments to the Village Code relating to hens.

PUBLIC NOTICE: Notice of the public hearing was published in the February 21, 2023 edition of The Daily Herald advertising a public hearing to be held on Thursday, March 9, 2023. The portion of the hearing related to regulating hens was closed but the Commission discussion was continued to the April 27th meeting.

SUMMARY: Keeping of Hens

The March 9th Plan Commission meeting included an excellent discussion regarding the possibility of allowing hens in our community. Due to staffing issues as well as several projects which were already ready for Commission review, this issue needs to be continued to the May 25th meeting. In the meantime, staff is researching the list of questions and issues raised at the initial meeting. That report will be provided at the next meeting. The local community group in support of hen keeping, named Hen Ellyn, has been notified that the discussion of this issue will very likely be continued until May 25th.

PLAN COMMISSION ACTION:

The Plan Commission should move to continue the discussion regarding proposed Zoning Code text amendments relating to hens to the May 25, 2023 meeting.

ATTACHMENTS: None