



Agenda
Village of Glen Ellyn
Capital Improvements Commission Meeting
Tuesday, September 14, 2021
7:00 PM
Glen Ellyn Civic Center, Room 301

- A. Call to Order**
- B. Public Comment (Non Agenda Items)**
- C. Approval of Minutes**
 - 1) Motion to approve the August 10, 2021 Capital Improvements Commission Meeting Minutes.
- D. Current Business**
 - 1) CBD Vehicular and Pedestrian Grade Separation of UP-West Railroad Line
 - 2) Construction Materials/Unit Prices Report
 - 3) CBD SUI Amendment No. 3, Hillside Parking Options, Traffic Study Update
- E. Trustee's Report**
- F. Other Business**
- G. Public Works Report**
- H. Project Report**
 - 1) Engineering Project Activity Report Dated September 10, 2021
- I. Adjournment**

DRAFT

Village of Glen Ellyn



Minutes
Village of Glen Ellyn
Capital Improvements
Regular Meeting
August 10, 2021
7:00 PM
Glen Ellyn Civic Center Room 301

Board or Commission: Capital Improvement
Meeting: Regular
Quorum: Yes

Date: August 10, 2021
Called to Order: 7:02 p.m.
Adjourned: 7:57 p.m.

MEMBER ATTENDANCE:

Steve Szymanski	Chairman	Present
Joel Baldin	Commissioner	Present
Adam B. Biggam	Commissioner	Absent
Joshua J. Cattero	Commissioner	Absent
Arthur F. Foerster	Commissioner	Absent
Michael M. Lindquist	Commissioner	Present
Steve Neurauter	Commissioner	Present
Rocco J. Zuccherro	Commissioner	Present
Bill Payne	Trustee Liaison	Present via conf. call
Richard Daubert	Staff Liaison Professional Engineer	Absent

Also Present:

Tom Topor	Senior Civil Engineer
Dave Buckley	Public Works Director
Elisa Pollina	Recording Secretary

Public:

A. CALL TO ORDER

The August 10, 2021 meeting of the Capital Improvements Commission was called to order by Chairman Szymanski at 7:02 PM at the Glen Ellyn Civic Center.

B. PUBLIC COMMENT – None

C. APPROVAL OF MINUTES FROM JULY 13, 2021 MEETING

MOTION TO APPROVE MINUTES FROM JULY 13, 2021 CAPITAL IMPROVEMENTS COMMISSION MEETING

MOTION BY: Commissioner Lindquist

SECONDED BY: Commissioner Baldin

RESULT: UNANIMOUS APPROVAL

D. CURRENT BUSINESS - None

E. TRUSTEE'S REPORT – Trustee Payne reports that the Village Board signed the 2nd amendment of the redevelopment agreement; we now have access to Apex parking. We had a Village Board meeting last night, but it was cancelled due to the weather. It is rescheduled for next week. He adds that the Taste of Glen Ellyn starts this week.

F. OTHER BUSINESS – None

G. PUBLIC WORKS REPORT – Public Works Director Buckley reports that we have hired for our maintenance and forestry positions and have extended an offer for our Assistant Public Works Director position that we are waiting to hear back on. The Public Works Customer Request System is going live on August 23rd. We have RFP's going out for the maintenance and snow removal for the Civic Center parking garage.

H. PROJECT REPORT – (See attached report) Engineer Topor reports that multiple streets are under construction for our Utility Roadway Rehabilitation Project including Phillips Avenue, Vine Street, Evergreen, Ridgewood, and Center. The sanitary main improvements are completed and the storm sewer will be next. We hope to have this completed by mid-October. Chairman Szymanski asks if there are any concerns with the residents in having this work done. Senior Civil Engineer Topor states that we have a good system in place. There is a meeting and multiple communications with the residents (i.e. letters) ahead of the work. We have been given some suggestions on how to communicate with the residents better. The Street Resurfacing Project east of Glenbard West is going well. As of tomorrow the surface removal will be completed. We are looking to be 3 to 4 weeks ahead of schedule for this project.

CBD Utility Streetscape - Senior Civil Engineer Topor states that last month we met with the CIC to discuss the direction regarding the geometry changes to Duane/Main

and Main/Crescent. A memo was sent to the Village Board confirming the direction. We hope to further discuss this with the Village Board soon. The cost of monitoring and collecting the data is \$30,000. That will be an increase to the contract of engineering. Civiltech is asking for an increase in the contract for the extra work they put in. They asked for \$420,000; we negotiated and made concessions to get to \$290,000. He adds that we are close to seeing a Phase 1 rollout around August 31st. We are looking to start awarding contracts in October. The overall project to start in March 2022.

Chairman Szymanski asks if there are any concerns with getting materials. Engineer Topor states we are working on ordering street light poles, which have a relatively short lead time. All other standard items are still available. We are also working on finalizing our tree list. We are looking to plant 4" diameter trees, but there will be some 7-10" diameter trees that we are looking to tag and secure.

Chairman Szymanski asks if there is any talk on Phase 2 and 3 in the timeline. Engineer Topor states that we are looking at potentially combining designs for Phase 2 and 3 for added cost savings.

Commissioner Lindquist asks if we are purchasing bricks from one company. Engineer Topor states that we are looking to have the contractor secure the bricks. Topor adds we are looking to purchase the trees ahead of time. Public Works Director Buckley states we tag them and they will hold them for us until we need them. The Suburban Tree Consortium may not have everything we need, so we may need to look for other nurseries.

Chairman Szymanski reports he and a few others met with some businesses downtown who asked about where deliveries would be dropped off. He adds that Toot Toots could be a spot where deliveries can be set up. Engineer Topor states that we are still addressing the delivery and loading areas with UPS, USPS, and FedEx. Public Works Director Buckley states that Glen Ellyn is not used to having an area for drop off, so we can set these areas up with the Streetscape project where it works. He adds that we can put up signs and move them if needed.

Commissioner Neurauder asks if we have tested any areas where we will have drop off zones. Trustee Payne replies that we are going to put some signs up and try some different options. Public Works Director Buckley adds that we are looking to do that in September.

Commissioner Neurauder asks if we can count how many deliveries there are in a day. Engineer Topor states that they can check that data. Chairman Szymanski adds we can also ask businesses how many deliveries they have in a day/week. We can survey them and find out what times the deliveries happen most.

Chairman Szymanski thanks everyone for their continued support, creativity, and ideas.

- I. ADJOURNMENT** – Commissioner Neurauter motions and Commissioner Lindquist seconds to adjourn the meeting. The meeting was adjourned at 7:57 p.m.

Submitted by Elisa Pollina, Recording Secretary

Reviewed by Richard Daubert



**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 9/14/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1404)**

DOC ID: 2021-1404

CBD Vehicular and Pedestrian Grade Separation of UP-West Railroad Line

Statement of the Issue:

Please see the attached memorandum and its associated attachments pertaining to this agenda item.

Analysis:

Budget Impact:

Action Requested:

Attachments:

1. September 2021 Cover Memo on CBD Grade Separation
2. Feasibility Study
3. Feasibility Study PowerPoint Presentation



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer

DATE: September 9, 2021

RE: Central Business District
Vehicular and Pedestrian Grade Separation of UP-West Line
Project Recap and Status Update

Subject

The purpose of this agenda item is to provide the Capital Improvements Commission with a recap and status update on the Village's past efforts in reviewing the construction of a grade separated vehicular and pedestrian crossing of the UP-West Railroad Line in downtown Glen Ellyn.

While this is a good matter of business to occasionally revisit in general, recent public outreach to the Village Board has made this an opportune time to discuss the matter with the CIC. No particular action is requested of the CIC, but dialogue and feedback will be graciously received.

Overview of Feasibility Study

In January of 2014, the Village engaged HDR, Inc., to complete the attached feasibility study for the following:

1. An improved grade separated pedestrian crossing of the UP-West Railroad Line at Taylor Avenue
2. A new grade separated pedestrian crossing of the UP-West Railroad Line near the Glen Ellyn Metra Train Station
3. A new grade separated vehicular and pedestrian crossing of the UP-West Railroad Line in the Central Business District

As a formality, it is noted that study item no. 1 was successfully implemented with construction completed December 31 of 2018. Implementation of study item no. 2 is in progress as part of the Glen Ellyn Metra Station and Multimodal Access Improvements. Hence, this memorandum will be focused on providing an overview on the background and status of study item no. 3.

As outlined in the attached feasibility study, the objective was to find a location for the grade separation that would have palatable impacts on parking, maintain pedestrian access to properties in the Central Business District, have manageable impacts on properties due to the grade changes

required as part of the roadway (i.e. retaining walls and bridges), all while maintaining the community character and context of downtown Glen Ellyn.

The study initially looked at three vehicular/pedestrian underpass alternatives and one overpass alternative which are summarized as follows:

1. Park Boulevard Underpass (Exhibit 7 on Page 26 of Feasibility Study)
2. Main Street Underpass (Exhibit 8 on Page 27)
3. Prospect Avenue Underpass (Exhibit 9 on Page 28)
4. Lorraine Road to Western Avenue Overpass (Exhibit 10 on Page 29)

The Initial Review Findings of these grade separations yielded that:

- For the underpass options, the roadways would need to be lowered by 18.5 feet to 22.5 feet (varies by location) to have the appropriate vertical clearance under the railroad tracks
- For the overpass option at Lorraine to Western, the road would need to be raised 23 feet to cross over the railroad with sufficient clearance for double stacked freight cars
- The project would require reconstructing approximately 3,700 linear feet to 5,300 linear feet of intersecting roadways to accommodate the grade changes while conforming to the geometric design requirements
- Retaining walls ranging in height from 2 feet to 23 feet would be required to accommodate the grade differentials between the re-profiled roadways, sidewalks, and adjacent properties
- Shelved sidewalks would be required to construct the roadways and sidewalk at different gradients as to minimize the footprint of the project and impacts to properties
- The Illinois Prairie Path would require a bridge at its crossings with the underpass alternatives
- The Main Street underpass would require Duane Street to cross over Main Street with no direct vehicular connection being provided between the two streets
- The initial alternative for the Lorraine to Western overpass option resulted in the closure of Western Avenue at Pennsylvania Avenue
- The project would impact properties that would potentially be redeveloped in the future; in particular the Lorraine to Western Avenue corridor. However, it is noted that several other properties that would potentially be impacted by the project and included in the alternatives have already been redeveloped or are in the works for redevelopment since the feasibility study was completed (Dental Office on Prospect Avenue, Avere on Duane Apartments, Duane Street Townhomes, Apex 400 Mixed-Use, McChesney (Glenwood Station), Etcetera).
- The project would render the loss of vehicular access to some properties
- The railroad would likely request the closing of the nearest at-grade crossing as a part of the project.

Village Board Review of Initial Review Findings

The aforementioned initial review findings were presented to the Village Board at its May 19, 2014 Workshop with the Board noting that the impacts of the Park Boulevard and Main Street Underpass were too significant to the downtown. More specifically, the grade changes, modifications required to accommodate property access, and general loss of accessibility were deemed too significant. Hence, Options 1 (Park Boulevard Underpass) and Option 2 (Main Street Underpass) were determined to not be feasible.

The Board thereafter directed a sub-committee of two Village Board Trustees, Staff, and HDR to further investigate Option 3 (Prospect Avenue Underpass) and Option 4 (Lorraine Road to Western Avenue Overpass) which were seen as more viable.

Sub-Committee Review – June of 2014 thru November of 2014

The aforementioned sub-committee of Village Board Trustees, Staff, and HDR met in June of 2014 and ultimately decided to develop further concepts for grade separations at Lorraine Road to Western Avenue as well as at Glenwood Avenue and Prospect Avenue. The goal was to find further opportunities to minimize the project impacts with a particular focus on avoiding the closure of Western Avenue at Pennsylvania Avenue (for the Lorraine Road to Western Avenue corridor) and to minimize impacts in the area of potential redevelopment at Glenwood Avenue.

Five new alternatives were developed and reviewed with the sub-committee in September of 2014. The alternatives included:

1. Pennsylvania to Duane Overpass (Exhibit 11A on page 30 of Feasibility Study)
2. Crescent to Duane Overpass (Exhibit 12A on page 32)
3. Pennsylvania to Glenwood Overpass (Exhibit 13A on page 34)
4. Glenwood Overpass from Hillside to Pennsylvania (Exhibit 14A on page 36)
5. Glenwood Overpass from Duane to Pennsylvania (Exhibit 15A on page 39)

Alternatives 1 and 2 were favorable in concept but not in location due to their impacts on Pennsylvania Avenue and Duane Street. Hence, the sub-committee wanted to see a similar alternative developed for the area west of Western Avenue. Both Glenwood overpass options were not favored and the sub-committee wanted to see an underpass alternative for this location instead as well as a revised underpass for Prospect Avenue.

In November of 2014, HDR brought back to the sub-committee alternatives for the following:

1. Lorraine to Pennsylvania/Western Overpass (Exhibit 16A on page 42)
2. Lorraine to Pennsylvania/Prospect Underpass (Exhibit 17A on page 44)
3. Prospect Boulevard Underpass (Exhibit 18A on page 46)
4. Glenwood Overpass from Duane to Pennsylvania with Prospect Boulevard At-Grade Crossing Closed (Exhibit 19A on page 49)

The sub-committee generally favored components of these options and honed in on detailed adjustments to optimize intersections and minimize project impacts. HDR kindly steered the group back on track to the objective of the study which was to identify if any options would pass muster for feasibility. The sub-committee ultimately concurred that there were feasible options west of Glenwood Avenue and that the topic could be brought back to the Village Board for further discussion and feedback.

Presentation of Sub-Committee Findings to Village Board in January of 2015

Staff and HDR gave a presentation to the Village Board at its January 12, 2015 special board workshop meeting. The meeting involved detailed technical discussions on the project with staff and HDR unable to fully complete their presentation and solicit direction from the Village Board on next steps for the project. Given the Village Board was turning over that spring, it was decided that the new Village Board would revisit the matter in the fall of 2015.

Continued Presentation of Sub-Committee Findings to Village Board in November of 2015

With the new Village Board in place, staff and HDR gave the attached presentation on the study findings, grant opportunities, project timelines, and solicited input from the Village Board. Support for a pedestrian underpass at the Train Station was provided; however, there was mixed support for the grade separated vehicular crossings with concerns associated with its impacts and costs.

Staff Pursuit of Project Funding

Staff pursued federal funding for the Taylor Avenue Underpass as well as the Grade Separated Vehicular/Pedestrian Crossing. While the Taylor Avenue application was successful, the Village simply was not far enough along with engineering to secure funding for the Grade Separated Vehicular and Pedestrian Crossing in the CBD. Having said that, staff did submit an application to the ICC for grade crossing protection funding for the project. In summary, the Illinois Commerce Commission was, and still remains supportive of the project and indicated that the Village would have a good chance of success in securing Grade Crossing Protection Funding for the Project and potentially up to \$12M; however, the Village would need to have Phase I Engineering Further Along for the project and commitments for the balance of project funding. Staff also researched and attended workshops on Transportation Investment Generating Economic Recovery (TIGER) and Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grants but reached the same conclusion that the Village needs to be further along in the design process with Phase I/Preliminary Engineering underway and near complete to be competitive with other applications. These grant programs also require the completion of complex and costly Benefit-Cost Analysis (BCA) to warrant their merits against other applications.

With the latest cost estimate for the project to the tune of \$50M, there is simply too significant of a funding shortfall for the project at this time. The Village would need to put forth significant funds to further advance engineering and position the project for federal funding. In this context as well as in the context of other Village priorities, the project has not been advanced beyond the aforementioned research of funding opportunities.

Action Requested

No particular advisory action of the Commission is required at this time. Please review the materials in advance of the meeting. Staff will provide a high level overview on the information to the CIC and answer any questions the Commission may have.

Attachments

Feasibility Study

Feasibility Study PowerPoint Presentation



Village of Glen Ellyn

Feasibility Project Assessment of the Pedestrian and Vehicular Over/ Under Passes in the Central Business District

December 2014



HDR

Executive Summary

The Village of Glen Ellyn Downtown Business District is bisected by the Union Pacific freight and Metra commuter rail. Train traffic commonly blocks the at-grade crossings within the downtown. Vehicles and pedestrians are often held up resulting in poor circulation within the downtown. The Village is investigating the ability to improve pedestrian and vehicular access across the railroad. Three types of projects were evaluated: 1) improve Taylor Avenue pedestrian access, 2) pedestrian underpass crossing in the vicinity of the train station, and 3) vehicular grade separation between Park Boulevard and Lorraine Avenue.

Taylor Avenue is an existing grade separated crossing. It has limited horizontal clearance under the railroad which limits vehicles to one direction at a time and is controlled by a traffic signal. A very narrow sidewalk exists but is also limited to one direction at a time. The sidewalk is not wide enough for bicyclists to safely pass through. Improvements considered for Taylor Avenue include new tunnel west of roadway, new tunnel east of roadway, improve existing tunnel. A new tunnel to the east of the roadway was selected. The tunnel can be constructed within existing right of way, set back from the roadway to allow future widening, minimizes costs, and can add access to the east side of the Illinois Prairie Path. The tunnel is estimated to cost \$2,400,000 to construct.

In the vicinity of the train station an at-grade crossing is provided to the east at Park Boulevard and to the west at Main Street. An alternative to the existing at-grade crossings is to provide a pedestrian underpass. On the north side of the railroad, underpass access was evaluated east and west of the train station. While each side would result in parking impacts, the west side north of the railroad would have less parking impacts. On the south side of the railroad access was evaluated east, west, and central to the train station. The alternatives looked at long ramps, switchback ramps, and spiral ramps. The alignment of the ramps paralleled the north side of the parking lots, south side of the parking lots, or parallel to Forest Avenue, extending away from the parking lots. The central location with a spiral ramp resulted in the lowest parking impacts. While there are pros and cons to each location, it was generally agreed that it was feasible to place a pedestrian underpass in the vicinity of the train station. The alternatives ranged from \$5.6 million to \$9.8 million to construct.

Vehicular grade separation was initially evaluated at the three existing at-grade locations of Prospect Avenue, Main Street, and Park Boulevard, and as a new crossing location from Lorraine Avenue to Western Avenue. The existing at-grade locations were evaluated as underpasses and the Lorraine – Western connection was an overpass. To provide underpasses and also account for pedestrian accommodations resulted in extensive roadway lowering, inclusion of retaining walls, and property access restrictions. As with the underpasses, an overpass connection from Lorraine Avenue to Western Avenue resulted in raising roadways, inclusion of retaining walls, and property access restrictions. Conversion of the existing at-grade crossings to grade separation were deemed un-feasible; however, other alternatives were brainstormed and further

evaluated. The alternatives were located from Glenwood Avenue to west of Lorraine Avenue. The alignments were curvilinear in nature and included alternative intersection controls such as roundabouts. The alignments were created to minimize impact to traffic flow along Pennsylvania Avenue, minimize property acquisitions, and to complement future land development. As with the pedestrian underpass, while no one alternative was selected as a preferred it was determined that a grade-separation could be feasible. The present day estimated construction cost is approximately \$21 million for the vehicular grade separation.

In addition to determining that there are feasible improvements that can be made at each location it has been further determined that each location would be eligible for funding programs. The programs vary from Surface Transportation, to Congestion Mitigation, to Rail Protection Funds. Each program has differing percentage participations and requirements. The villages has begun coordination toward securing funds for the Taylor Avenue improvement.

Introduction

As stated in the Village's "Eras of Change" the railroad was an early influence on the development of the community. The railroad provided access to the many amenities Glen Ellyn had to offer. Over time, Glen Ellyn has evolved from a resort community to the vibrant suburb it is today. Through time and with other regional influences the strength of downtown has ebbed and flowed. In some regard, the development of the Downtown Business District (Downtown) is closely related to the railroad. While the success of the downtown is not solely related to the windfall derived from the presence of commuter trains, the Union Pacific railroad has had a strong influence on the evolution of, and impacts to the Downtown, for better and for worse.

The Village of Glen Ellyn in recent years has performed a market analysis of the downtown. Responses to the merchant and public surveys indicate that parking is not convenient, the one-way streets are confusing, and the rail crossing is a hindrance. The resulting Downtown Strategic Plan identifies many opportunities and on the converse, challenges. One such challenge is the parking and circulation within the downtown. It is desired to enrich the downtown and one aspect of enrichment is to improve vehicular, parking, and pedestrian access. One way to improve the access is to consider grade separation facilities for pedestrians and vehicles.

The Village of Glen Ellyn wishes to improve pedestrian and vehicular movements within the Downtown. First, there are three existing at-grade rail crossings in the Downtown at Prospect Avenue, Main Street, and Park Boulevard, each have the potential to be developed into a grade-separated vehicular and pedestrian underpass. Second, east of the Downtown, there is a grade-separated crossing of the Union Pacific Railroad at Taylor Avenue. While the underpass itself serves vehicular and pedestrian crossings east of the Downtown, the pedestrian accommodation is insufficient. Third, in the Downtown, improved pedestrian access is desired at the Metra Station, particularly to provide cross access of the rail line.

This Feasibility Study is an early and continuing step toward enabling the Village to implement its Downtown Strategic Plan and reach its long term goals. In the short term, the results of this Feasibility Study will enable Village staff to address frequent resident and customer complaints about downtown congestion caused by a high frequency of passenger and freight train activity through town. This study will evaluate the feasibility to:

- I) Improve the pedestrian crossing at Taylor Avenue
- II) Identify a most suitable location for a pedestrian underpass in the vicinity of the Metra Commuter Rail Station and
- III) Identify a most suitable location for a vehicular grade-separated rail crossing within the Downtown

The following details the purpose and need of each location, the evaluation criteria, a summarization of impacts, and a recommended action. It is important to note that each

location, Taylor Avenue, the Pedestrian Underpass, and the Vehicular Grade Separation are three separate projects that were all evaluated independently of each other.

Taylor Avenue

Taylor Avenue is an existing grade separation where Taylor Avenue is an underpass of the UP tracks. The cross section of the roadway is 10 feet wide with a raised 3 foot sidewalk on the east side. The sidewalk is too narrow, does not meet ADA policy, and does not permit a safe set back from traffic. The narrow cross section only allows for one vehicle to pass through at a time with traffic signal control. The pedestrian approach from the south does not allow a clear sight line through the underpass. The pedestrian way is not controlled by traffic signals, similar to the vehicles. Therefore, opposing conflict occurs for pedestrians and bicyclists. A safer pedestrian underpass is needed at Taylor Avenue.



Figure 1 Taylor Avenue Looking North

The surrounding area is residential with local streets. The Illinois Prairie Path (IPP) is also grade separated from Taylor Avenue and is parallel to the UP. A ramp connection between Taylor Avenue and the IPP is located to the west of Taylor Avenue. Sidewalk exists on the east side of Taylor Avenue and crosses west with a marked crosswalk to the west side of Taylor Avenue.

The following items were taken into consideration for locating the new underpass:

- Minimize changes to railroad structure
The railroad structure has sheet pile that extends approximately 16 feet of east and west of the underpass itself. The location of the path was selected to be outside this area to maintain the current integrity of the rail structure.
- Continuity of existing travel ways
The existing paths/sidewalks are on the east side of Taylor Avenue. Reuse of existing facilities leads to less impacts with utilities.
- Minimize right of way
Due to the angle of Taylor Avenue and the clearance needed between the roadway and the pedestrian way, additional right of way would be needed to be purchased on the west side of Taylor Avenue.
- Consideration of future roadway widening
Based on the alignment of the roadway, the existing roadway configuration and the associated right of way, it appears an easterly widening of the roadway would be the most feasible.

For these reasons, an alignment of the pedestrian underpass is located to the east. Exhibit 1 reflects a plan view of the proposed pedestrian underpass alignment. It is recommended to improve the paved surface to a 10-foot width along Taylor Avenue from the Walnut Avenue north to Willis Street. An estimated cost to construct the Taylor Avenue pedestrian underpass is approximately \$2,400,000.

Other enhancements for future consideration include a ramp connection to the IPP on the east side of Taylor Avenue. This is represented in dotted line on Exhibit 1. Way-finding signing would be beneficial between the IPP and Taylor Avenue. These topics could be addressed in subsequent phases of the project.

Renderings of what the future pedestrian underpass would look like from the users' viewpoint are shown on the next page.

The proposed alignment of the Taylor Avenue pedestrian underpass was presented at a Village Board Workshop on May 19, 2014. At this workshop, the Village Board reviewed the findings and concurred that the alignment was feasible.



Figure 2 Taylor Avenue Looking North at New Pedestrian Underpass



Figure 3 Taylor Avenue Looking South at New Pedestrian Underpass

Pedestrian Underpass

A pedestrian underpass in the vicinity of the Metra commuter station is an important component of the Downtown Strategic Plan. As was previously stated, common complaints about the downtown are the proximity of parking and the ability to cross the tracks when trains are present. The ability to cross the tracks is a problem for all users: commuter, merchant, student, bicyclist, and consumer. A safe and time saving passageway to assist in crossing the tracks would enhance the accessibility to the Downtown and would generate additional trips.

An underpass was evaluated versus an overpass for many reasons. The first being, as shown in the picture below, the railroad has overhead signal controls. The signal controls are at an elevation 23 feet above the rails. The 23 foot elevation permits clearance of the double stacked rail cars. A pedestrian overpass would also need to provide a 23 foot clearance, but because of the overhead signal control would need to be higher. The pedestrian bridge would need to be high enough to also provide clear sight lines of the overhead signal control. The elevation required to pass over the rail would result in longer ramps than for the vertical clearance of an underpass. This elevation is perceived to be obtrusive to the character of the downtown district. For these reasons only underpasses were evaluated.



Figure 4 Pedestrians Waiting for Freight Train at Park Boulevard

The criteria used to identify a reasonable location for the pedestrian underpass include:

- **Ability to Serve Multiple Users**
While the general area considered for a pedestrian underpass is the Metra commuter station, the underpass would be used by multiple users, i.e. bicyclists, students, merchants, and commuters. Therefore, the access should be centrally located and highly visible.
- **Minimize Parking Impacts**
Since the availability and proximity of parking is of concern to the Downtown users, minimizing the number of spaces impacted is an important factor.
- **Travel Pattern Changes**
A travel pattern change could be either a change in space layout resulting in one-way travel or access drive realignments. If vehicular changes are made that deter trips to the Downtown, then the underpass will be perceived as a hindrance versus a benefit.

Five alternatives were evaluated for the pedestrian underpass. Three alternatives are located east of the train station and two alternatives are located west of the train station. The differences between alternatives all occur south of the tracks. The ramp and stair connections on the north side of the tracks were constant for the three alternatives east of the station and constant for the two alternatives west of the station.

The north side connection east of the station is a switchback ramp with access from the tunnel to track level. ADA routes would lead from the track level to the east at Park Boulevard or west around the station to the existing ramp. Stairs are also available to get to both street level and track level. The north-east ramp is shown to be compatible with the future Crescent Avenue parking changes.

The north side connection west of the station is a switchback ramp with access to street level and track level. The ADA route is accommodated via the switchback ramp. Stairs are available leading only to track level. Parking loss and a change in parking layout is associated with the north-west side.

East Alternative A is located between the IPP and the commuter parking lot. The ramp extends from Park Boulevard toward Forest Avenue. Stairs are located near Forest Avenue. This alternative results in a 110-foot long tunnel, a loss of parking, a change in parking layout to one-way westbound with diagonal parking, and modifications to the IPP alignment. Alternative A is shown in Exhibit 2 and is estimated to cost \$8,200,000.

East Alternative B is located in the same general location between the IPP and the commuter parking; however, it includes a switchback ramp encroaching on the commuter parking lot. This alternative has the similar impacts as Alternative A, except it impacts more parking spaces. Alternative B is shown as Exhibit 3 and is estimated to cost \$7,100,000.

East Alternative C is a similar layout of Alternative B, except it is located between the tracks and the commuter parking. The tunnel length is shorter than Alternative B at 65-feet long. This alternative, like A and B, changes the parking layout to one-way with diagonal parking and has more parking impacts. However, it does not change the alignment of the IPP. Alternative C shown as Exhibit 4 and is estimated to cost \$5,600,000.

The West Alternative is a circular ramp located south of the tracks between the commuter lots at Forest Avenue. The West Alternative results in a 75-foot tunnel, a loss of parking spaces, and a change in the location of the exit drives. Parking is retained as parallel parking and the exit drives are retained as one-way out. The West Alternative is shown as Exhibit 5 and is estimated to cost \$6,600,000.

The Forest Avenue Alternative is a switchback ramp north-south along Forest Avenue. This alternative results in a 145-foot tunnel with a kink to pass under the railroad and to pass under the exit drive. This alternative has a loss of parking and alignment changes to the IPP. The Forest Avenue Alternative is shown as Exhibit 6 and is estimated to cost \$9,800,000.

A summary of the impacts of each alternative is provided as Table 1. Generally, all alternatives provide access to all users. All Alternates all have centrally located stairs near the Forest Avenue / Commuter Lot intersection. The ramp entrance, which would be ADA compliant and used by pedestrians and bicyclists, varies with each alternative. Alternate A has the furthest east entrance while the remaining alternate ramp entrances are centrally located near the Forest Avenue / Commuter Lot intersection.

Table 1: DOWNTOWN Pedestrian Underpass Impact Summary

	EAST ALT A	EAST ALT B	EAST ALT C	WEST ALT	FOREST ALT
Parking Loss	22	39	42	7	3
Multiple User Access		X		X	X
Travel Pattern Change	X	X	X	X	
IPP Impact	X	X		X	X
Length of Tunnel	110'	110'	65'	75'	145'
Cost (\$M)	8.2	7.1	5.6	6.6	9.8

Comparing the three key items which are parking impacts, multiple-use access, and travel pattern changes, the Western and Forest Alternatives have the least impact to parking, serve multiple users, and have the least impact to travel pattern change. When adding in the length of tunnel and the associated cost, the Western Alternative is a shorter tunnel and costs less than the Forest Alternative.

Renderings of what the Western Alternative could look like from the user's perspective are shown on the next page.

The five alignments for the pedestrian underpass at the Metra Station were presented at a Village Board Workshop on May 19, 2014. At this workshop, the Village Board reviewed the findings and discussed the merit and functionality of each alternative. One design aspect that was not shown, but was discussed, was the use of elevators instead of ramps. Elevators could save space and minimize impacts to adjacent properties. Elevators are also about the same cost to construct as the ramp with retaining walls. There is a maintenance and upkeep cost to the elevators that would not be associated with the ramps. A key aspect of the pedestrian underpass is the ability for all users: bicyclist, merchant, student, and commuter to use the facility. Bicyclists are not likely to wait for or utilize an elevator. In general there were different design aspects of each alternative that were liked and could be mixed and matched, including the elevator concept, to determine the preferred alternative in subsequent phases of the project. While a specific location was not selected, it was determined that a pedestrian underpass is feasible between Main Street and Park Boulevard.



Figure 5 Western Alternative Looking North along Forest Avenue



Figure 6 Western Alternative Looking East from Parking Lot

DOWNTOWN Grade Separation

To address frequent complaints/requests about downtown congestion in relation to the passenger and freight train activity through the town, the Village Board has asked about the feasibility of road grade separations. Three primary routes within the Downtown were evaluated as railroad underpasses including (from east to west) Park Boulevard, Main Street, and Prospect Avenue. In addition to the three underpass alternatives, a fourth route evaluated is an overpass between Lorraine Street from south of the tracks to Western Avenue on the north side of the tracks. The plan layout of each alternative location: Park Boulevard, Main Street, Prospect Avenue, and Lorraine/Western with the associated summarized impacts as discussed below are provided as Exhibits 7 through 10.



Figure 7 Cars Waiting for Freight Train at Park Boulevard

The criteria used to identify a reasonable location for the roadway grade separation included:

- **Parking Impacts**
Since the availability and proximity of parking is of concern to the Downtown users, minimizing the number of spaces impacted is an important factor.
- **Pedestrian Access**
While the improvement is for the mobility of vehicles, pedestrian access must be maintained to the adjacent properties.

- **Retaining Walls**
It is understood that the roadways will be lowered/raised to go under/over the railroad. Retaining walls will need to be utilized to accommodate the change in roadway elevation and contain the elevation changes within the roadway right of way to minimize impacts to adjacent properties.
- **Community Character / Context**
Will the use of retaining walls and lowered streets change the character of the community?

The key design aspects of the roadway grade separation are:

- The roadway will need to be lowered 18.5 feet to 22.5 feet to go under the railroad. At the Lorraine/Western location the road will need to be raised 23 feet to cross over the railroad.
- To minimize longitudinal impacts, the roadway grade is 7.5%. To meet ADA requirements, the sidewalk grade is 5%. The difference in percentage of grade results in the sidewalk and roadway at the low point, under the railroad, to be at different elevations as reflected in Figure 8

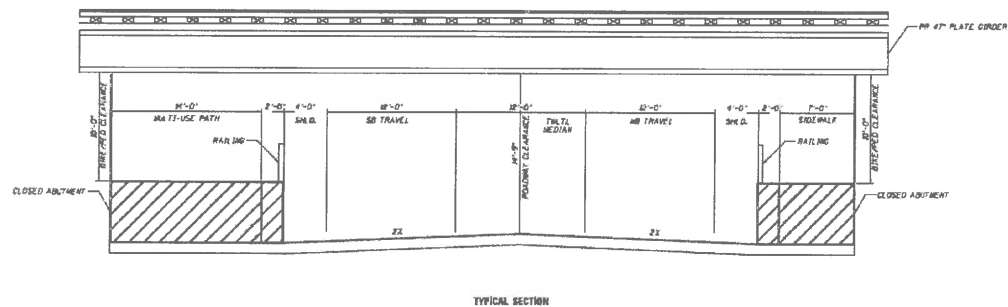


Figure 8 Typical Section for Underpasses

- Each alternative results in tiered sidewalks to maintain street access and building access.
- With each alternative an additional bike bridge is needed to maintain a safe crossing for the IPP.
- The Main Street alternative results in a bridge crossing of Duane Street over Main Street resulting in no access between Duane and Main.
- The extent of pavement impacts range from 3,700 linear feet of pavement to 5,300 linear feet of pavement.
- Each road with a profile adjustment has retaining walls. Retaining walls range in height from 2 feet to 23 feet.
- Many parking lots need to be re-graded with retaining walls on-site to maintain vehicular access.
- Many private driveways are closed and homes lose access.
- The Lorraine/Western alternative results in closure of Western Avenue.

- The Lorraine/Western Alternative appears to have many site redevelopment opportunities; however, the timing of site redevelopment may not coincide with the roadway improvement.

As can be seen with the plan views and the generalized summary of impacts, there are many design and operational considerations associated with the grade separations. The grade separation may provide improved mobility for the vehicular traffic, yet, the intent of improving vehicular mobility is to improve accessibility and enhance the Downtown. The impact of lowering/raising roadways and the associated access impacts does not improve accessibility of the Downtown. The need for tiered sidewalks to provide access down at street level and at store level does not enhance visibility of the Downtown. The character of the community changes with the extent of the retaining walls, lowered streets, and modified parking lots.

The four alternatives for vehicular grade separation were presented at a Village Board Workshop on May 19, 2014. At this workshop, the Village Board reviewed the findings and concurred that the impacts at the Park Boulevard and Main Street crossings were too great to the downtown. Park Boulevard and Main Street are determined to not be feasible. It was decided that the Prospect Avenue and the Lorraine/Western alternatives were viable and a subcommittee was created to evaluate vehicular grade separation alternatives further.

Sub Committee Coordination

A sub-committee of Trustee Elliott and Trustee Ladesic, the Village Engineer, the Village Manager, and HDR met three times: June 20, September 24, and November 19, 2014.

June 2014

At the June meeting the alternatives were reviewed and the likes/dislikes of each discussed. It was once again stated that the Park Boulevard and Main Street alternatives were not feasible because there were too many impacts to the adjacent properties. The focus became west of Main Street. From a general topography standpoint, with Pennsylvania Avenue elevated to the north of the tracks and Hillside Avenue elevated to the south of the tracks, it appeared that an overpass would be viable. The western alignment of Lorrain/Western was also liked in the context that it did not interfere with the operations of the downtown. However, closure of Western Avenue and raising Pennsylvania Avenue was not desired. It was noted how the underpasses previously evaluated had impacts two to three blocks away from the rail crossing. It is desired to keep impacts to a more confined area. It was also noted that there are redevelopment opportunities between Prospect Avenue and Main Street and it would be interesting to see how a grade separation could work with a redevelopment. From these points HDR was asked to provide profiles for the alignments, evaluate other non-traditional alignments for the Lorraine/Western overpass to try to minimize impacts and to evaluate an overpass crossing at Glenwood Avenue.

September 2014

The new overpass alternatives were presented at the September meeting. Overpass Alternative A through Overpass Alternative E are included as Exhibit 11 through Exhibit 15. With these and future alternatives, the impacts were not summarized, but were visually portrayed. The alternatives were evaluated on functionality and implied visual impacts to the surrounding properties.

Alternative A is a curving alignment from Pennsylvania Avenue over the tracks to Duane Street. While Pennsylvania Avenue is elevated above the railroad track, the bridge crossing still needs to be elevated 20+ feet to provide the railroad clearance. A ramp is proposed within the existing roadway of Pennsylvania Avenue. The ramp would utilize much of the existing roadway, thus only allowing westbound through traffic on Pennsylvania Avenue. Eastbound through traffic would follow a diverted route from the intersection of Western Avenue along the bank entrance continuing through to intersect with Prospect Avenue at Crescent Avenue.

Alternative B is a ninety-degree turning alignment beginning at the Prospect Avenue / Crescent Avenue intersection. The ramp would proceed upward toward the Western Avenue intersection following the alignment of the bank driveway. Elevated above Pennsylvania Avenue the alignment turns 90 degrees south to cross the railroad and commuter parking lot. Two-way traffic would be maintained on Pennsylvania Avenue under the overpass structure.

With both Alternative A and B the roadway grade is between 8 and 9%. The pedestrian way which has an allowable maximum grade of 5%, has to be provided on separate alignment from the roadway structure. The pedestrian routes are shown in blue on the Exhibits.

Both Alternative A and B terminate on the south side of the tracks in the same manner. Again, a ramp is located in the center of Duane Street. In this location two-way traffic is maintained with a one-way travel lane on either side of the ramp. The roadway would be widened north and south to accommodate this design.

The Committee liked the general curving alignment but did not like the impacts along Pennsylvania Avenue and Duane Street. The Village suggested keeping the same type of alignment and moving it west of Western Street. The Village further asked to keep Pennsylvania Avenue as the through movement, i.e. not change the routing of traffic, and to keep the Western Avenue intersection open.

Overpass C provided an alignment that started at the Pennsylvania/Western intersection, traversed south and east parallel to the railroad tracks to the Prospect/Crescent Avenue intersection and then turned south over the tracks and aligned with Glenwood Avenue. This alignment results in Glenwood Avenue closed to through traffic and the closure of parking lot driveways. This general alignment was not looked at favorably.

Overpass D is located at Glenwood Avenue. Due to geometric policies with sight distance over the bridge and vertical curve lengths, the intersection of Pennsylvania Avenue would need to be raised to meet the bridge alignment. The profile of this alternative was compared to a recent developers' proposal for the Glenwood / Pennsylvania / Prospect / Crescent block. The bridge would be crossing within the sight lines of the users of the building. This would not be a desirable selling point. It also appeared that the redevelopment site in the northeast quadrant of Hillside Avenue and Glenwood Avenue would not be conducive to access. For these reasons this alternative was not looked at favorably. However, it was requested to see if an underpass would be feasible and work with a developer's access plan.

Overpass E is also located at Glenwood and is different on the south side of the tracks. Instead of continuing on tangent alignment toward Hillside Avenue, the ramps extend east and west toward Main Street and Prospect Avenue. This would allow for a one-way eastbound at-grade segment for through traffic between Prospect Avenue and Main Street. This was not a favorable alternative due to the 28 foot high ramps along Duane Street.

At this meeting HDR indicated that with any new alignment, i.e. Lorraine/Western versus a grade separation at an existing road crossing, it is expected for the railroad to request closure of the nearest at-grade crossing. The closest crossing would be Prospect Avenue.

From the discussions at this meeting HDR was tasked with further evaluating an overpass and underpass at Lorraine/Western, further evaluate an underpass at Prospect Avenue, and evaluate an underpass at Glenwood Avenue.

November 2014

The new alignments were presented in November. The alternatives were labeled Alt 1 through Alt 4 and are included as Exhibit 16 through Exhibit 19.

Alt 1 is an overpass at Lorraine/Western Avenue. This alternative maintains the at-grade intersection of Western Avenue and Pennsylvania Avenue. The intersection is currently three-legged with the bank driveway as the fourth leg. With this alternative it is proposed to create a roundabout at the intersection, shift the west leg of Pennsylvania Avenue northward and create a ramp between Pennsylvania Avenue and the railroad right of way. The alignment curves west and south in the vicinity of Newton Avenue. South of the railroad the alignment meets at the Lorraine/Duane Avenue intersection. Duane Avenue would be closed west of the ramp. In concept, this alignment was well received but the committee members asked if it was possible to further minimize impacts to adjacent properties.

Alt 2 is an underpass at Lorraine/Western. This alternative is different in that the entrance to the ramp is located at the Prospect/Pennsylvania Avenue intersection, again with a roundabout. This alternative provides a better connection to the underpass for the

eastbound traffic. This alignment also brings the impacts back to the east, which is not desired. The village questioned if this underpass concept could be combined with the Alt 1 alignment and combined with an entrance at the Prospect/Crescent Avenue intersection. HDR concurred with the probability of an underpass alignment and the ramp entrance location.

Alt 3 is an underpass at Prospect Avenue. The purpose of the re-evaluation was to compare what the effect of different bridge deck depths would have. It was determined that if the bridge deck depth was two feet less, then the length of impact would be reduced by approximately 50 feet. A discussion was held regarding the maximum grade of the roadway; a steeper grade reduces the length of impact. It was noted that all the alternatives maximize the grade based on policy and known surrounding land elevations. It was discussed as to how these are the same impacts to Alt 4, which is an underpass at Glenwood Avenue.

Alt 4 is similar to Overpass 3 presented in September. As previously noted, if the alignment were to extend south on tangent alignment the impacts would extend to Hillside Avenue. With the alignment as shown, the east/west ramps would be below ground and maintain a one-way eastbound through lane. This alternative takes into consideration access needs for development should the block surrounded by Glenwood / Pennsylvania / Prospect / Crescent be re-developed. The vertical alignment was designed to allow Crescent Avenue to be maintained over Glenwood Avenue. The effect of lowering Glenwood Avenue in a shorter distance than the railroad tracks is that Pennsylvania Avenue would too need to be lowered. Again, this is due to maximum grades, vertical curve lengths, and sight distance requirements.

Many of the alignment requests at this meeting focused around adjustments of where intersections were located or the ability to minimize impacts. HDR then focused the conversation toward the goal of the study which is feasibility. HDR pointed out that the September meeting and the November meeting focused on alignments west of Glenwood Avenue. With the goal of the study to determine feasibility, has the Sub-Committee determined that an alignment located west of Glenwood Avenue could be feasible? It was noted that the process of determining the actual location, the look of it, and the public coordination would occur in the next step of the project. Understanding the next step, the Sub-Committee concurred that an alternative west of Glenwood Avenue could be feasible.

Funding Opportunities

Based on the proposed types of improvements and the intended purpose of the improvements a matrix of potential funding sources was identified. The funding opportunities are listed in Exhibit 20. There are many opportunities for funding. Generally, funding sources can be combined to offset the local match. HDR is able to assist the Village of Glen Ellyn in grant writing and identifying further the best funding scenarios. Since this feasibility study has been initiated, the Village of Glen Ellyn has submitted and been selected for TCM (Transportation Control Measures) funding from

the DuPage County Council of Mayors and Managers. The TCM funding is for construction of the Taylor Street underpass improvement. Additionally, coordination has occurred with the ICC (Illinois Commerce Commission) in which they recommend submitting a GPF (Grade Protection Fund) application for each project.

Summary

A feasibility study was performed for three different projects in the Village of Glen Ellyn. The three projects are:

1. Taylor Avenue Pedestrian Underpass
2. Pedestrian Underpass
3. Vehicular Grade Separation

The Taylor Avenue Pedestrian Underpass was deemed feasible. An eastern alignment was preferred that will minimize changes to the existing railroad structure, minimize right of way need, maintain route continuity, and will allow for future improvements to Taylor Avenue if desired. The Taylor Avenue Pedestrian Underpass construction is estimated to cost \$2,100,000.

The Pedestrian Underpass was deemed feasible. The Western alignment west of the train station minimizes parking loss, minimizes travel changes, and provides a central location for multiple users. The Forest Avenue Pedestrian Underpass construction is estimated to cost \$7,700,000.

For the Vehicular Grade Separation a particular alignment was not selected but it was determined that a vehicular grade separation is feasible west of Glenwood Avenue. Additional studies and public coordination is needed to determine a preferred alignment. An evaluation of the worse case (most costly) alignment studied construction cost is estimated at \$21,200,000

TAYLOR ST. PEDESTRIAN
TUNNEL ALTERNATIVE

TAYLOR

ELEV. 724'

ELEV. 712.5'

ELEV. 708'

WALNUT

TAYLOR

EXHIBIT 1

EAST PEDESTRIAN
TUNNEL ALTERNATIVE A



EXHIBIT 2

EAST PEDESTRIAN
TUNNEL ALTERNATIVE B



EXHIBIT 3

EAST PEDESTRIAN
TUNNEL ALTERNATIVE C



EXHIBIT 4

WEST PEDESTRIAN
TUNNEL ALTERNATIVE

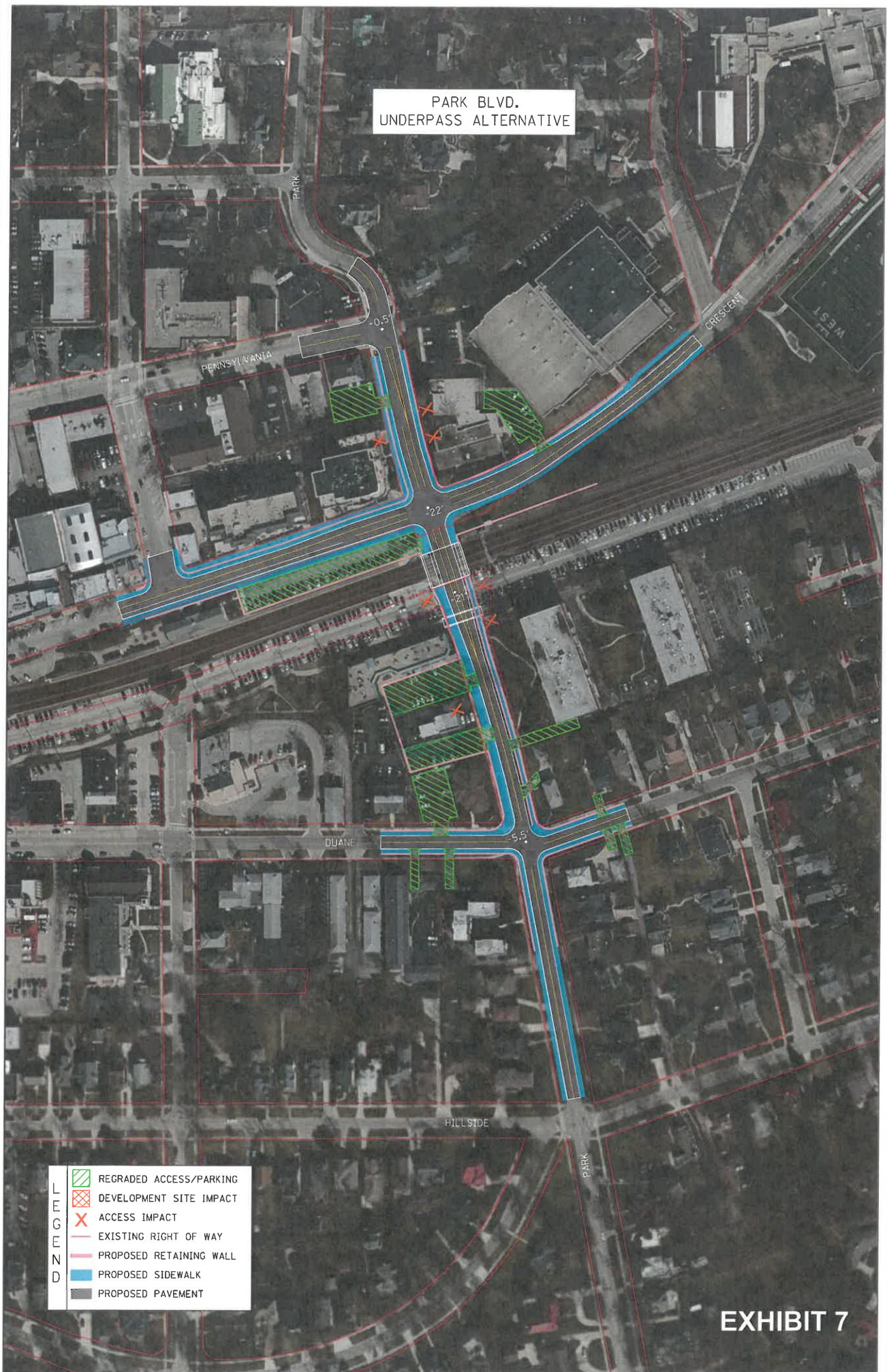


EXHIBIT 5



EXHIBIT 6

PARK BLVD.
UNDERPASS ALTERNATIVE



- LEGEND**
- ▨ REGRADED ACCESS/PARKING
 - ▨ DEVELOPMENT SITE IMPACT
 - X ACCESS IMPACT
 - EXISTING RIGHT OF WAY
 - PROPOSED RETAINING WALL
 - PROPOSED SIDEWALK
 - PROPOSED PAVEMENT

EXHIBIT 7

MAIN ST.
UNDERPASS ALTERNATIVE

- LEGEND
- REGRADED ACCESS/PARKING
 - DEVELOPMENT SITE IMPACT
 - ACCESS IMPACT
 - EXISTING RIGHT OF WAY
 - PROPOSED RETAINING WALL
 - PROPOSED SIDEWALK
 - PROPOSED PAVEMENT

EXHIBIT 8

PROSPECT AVE.
UNDERPASS ALTERNATIVE

LEGEND

-  REGRADED ACCESS/PARKING
-  DEVELOPMENT SITE IMPACT
-  ACCESS IMPACT
-  EXISTING RIGHT OF WAY
-  PROPOSED RETAINING WALL
-  PROPOSED SIDEWALK
-  PROPOSED PAVEMENT

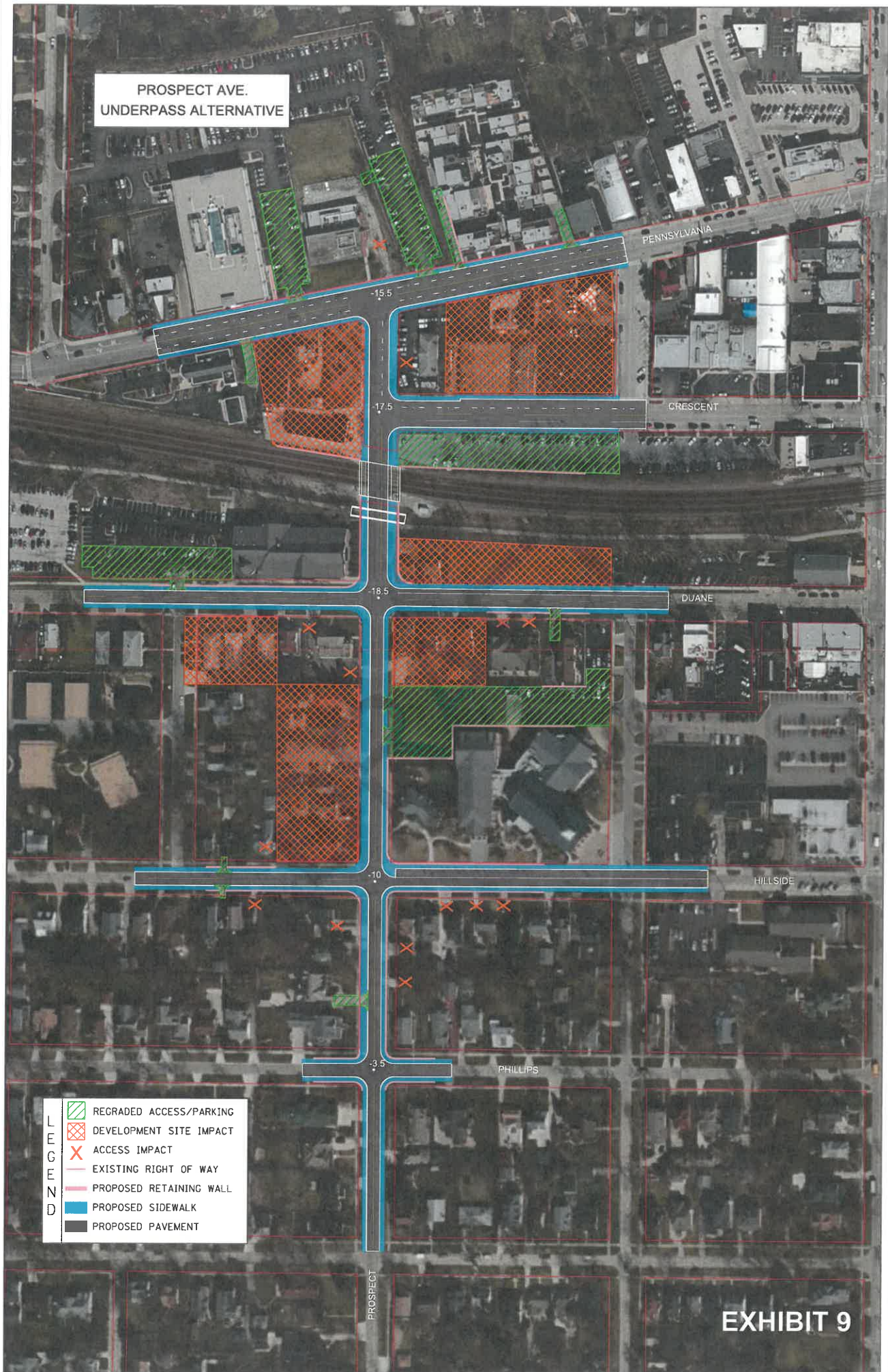


EXHIBIT 9





EXHIBIT 11A

OVERPASS
ALTERNATIVE A

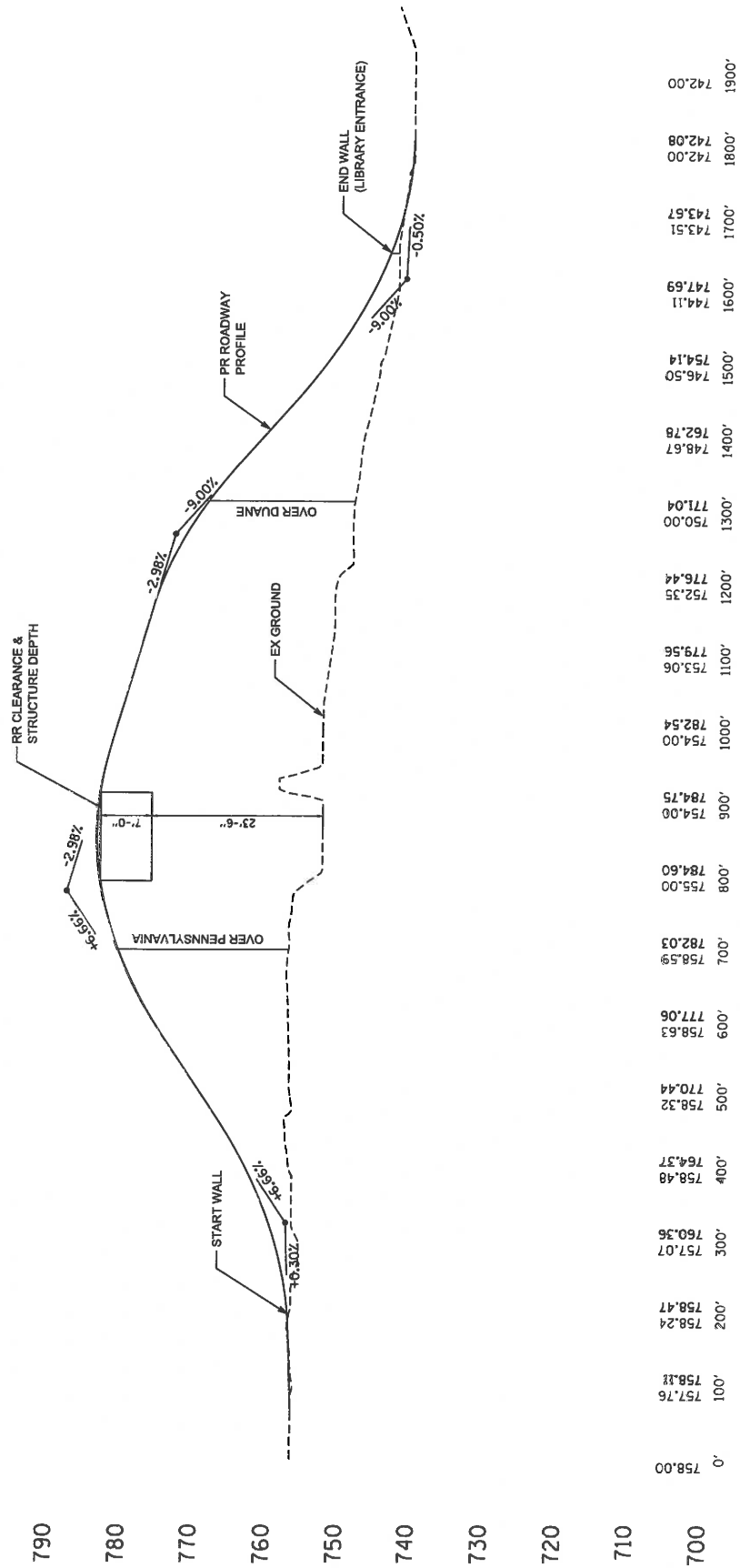


EXHIBIT 11B

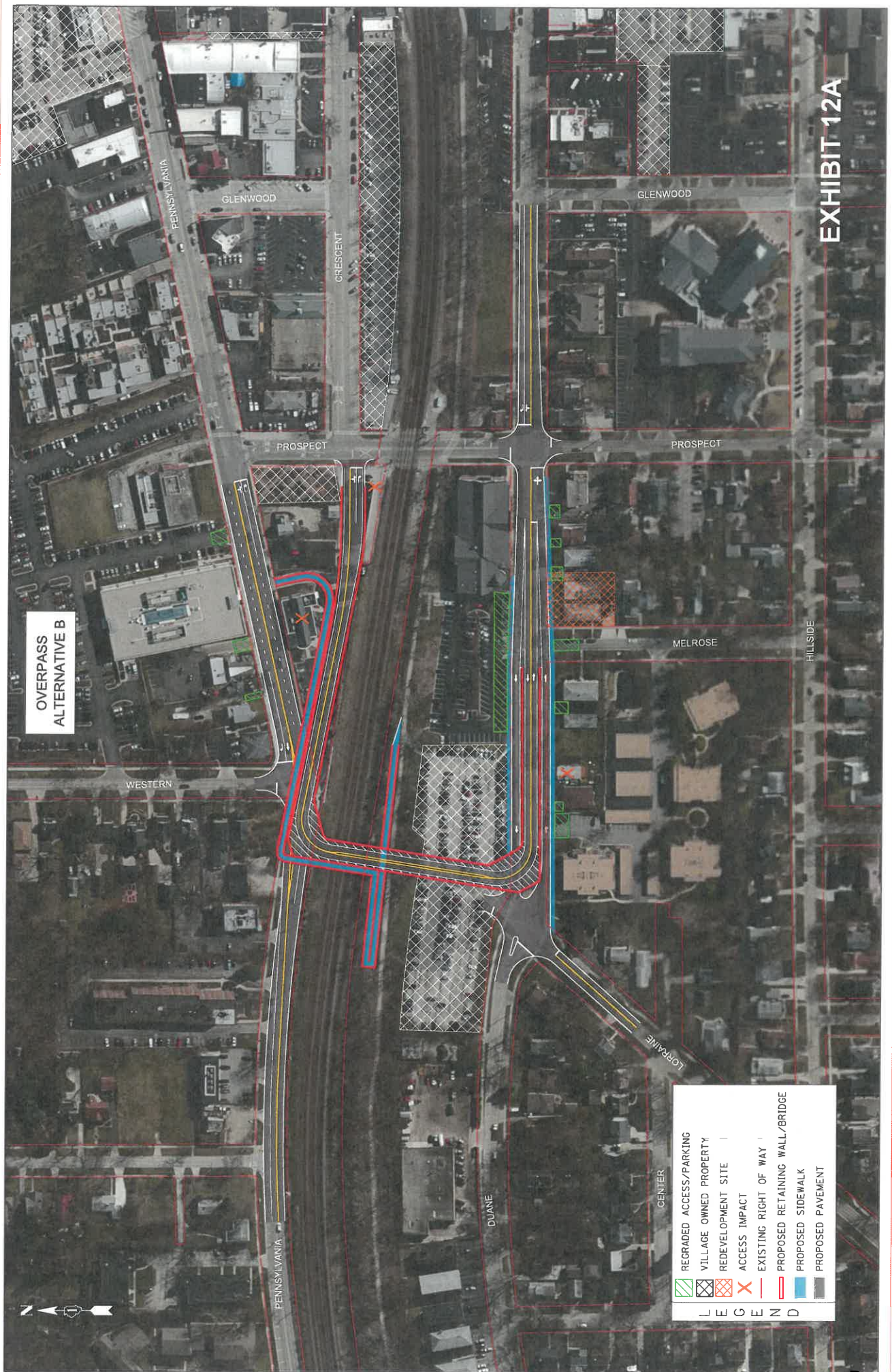


EXHIBIT 12A

OVERPASS
ALTERNATIVE B

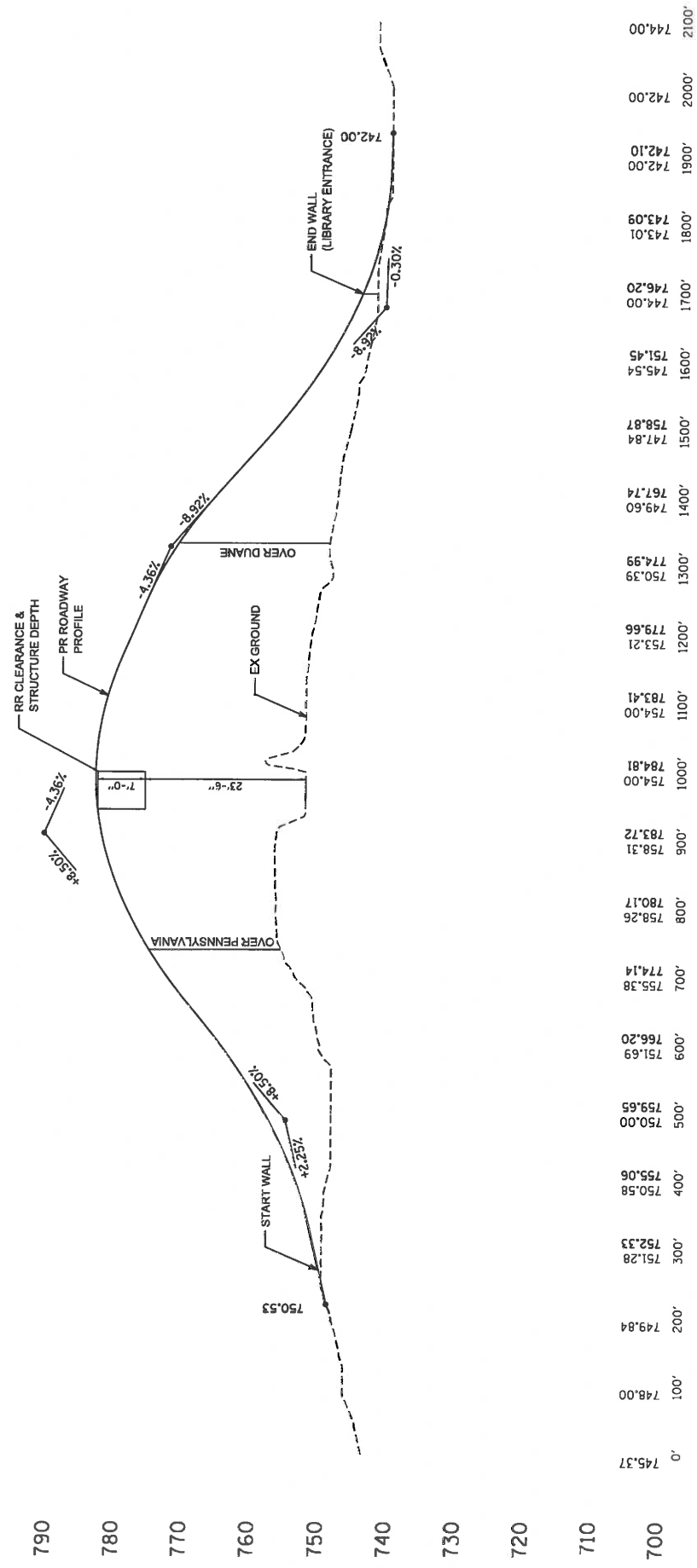
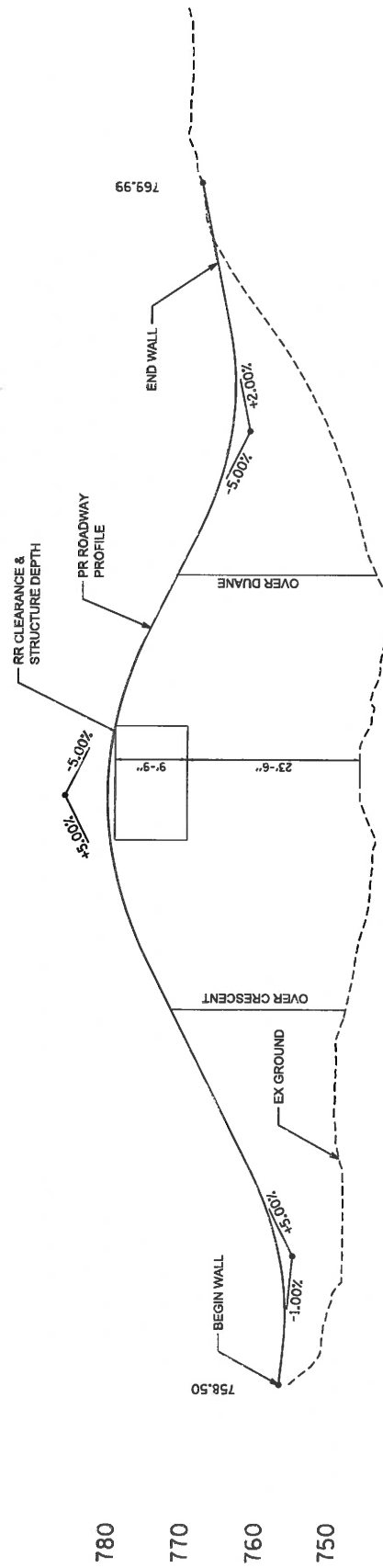


EXHIBIT 12B



EXHIBIT 13A

OVERPASS
ALTERNATIVE C



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751.93	100'	757.75
750.00	200'	759.13
750.29	300'	763.00
751.13	400'	768.00
749.94	500'	773.00
748.04	600'	777.90
746.29	700'	781.16
748.00	800'	782.25
746.45	900'	781.16
744.97	1000'	777.90
745.88	1100'	773.00
749.04	1200'	768.25
752.61	1300'	765.63
758.04	1400'	765.50
765.15	1500'	767.35
769.53	1600'	769.35
771.92	1700'	771.92
771.40	1800'	769.99

EXHIBIT 13B



OVERPASS
ALTERNATIVE D

PENNSYLVANIA

780

770

760

750

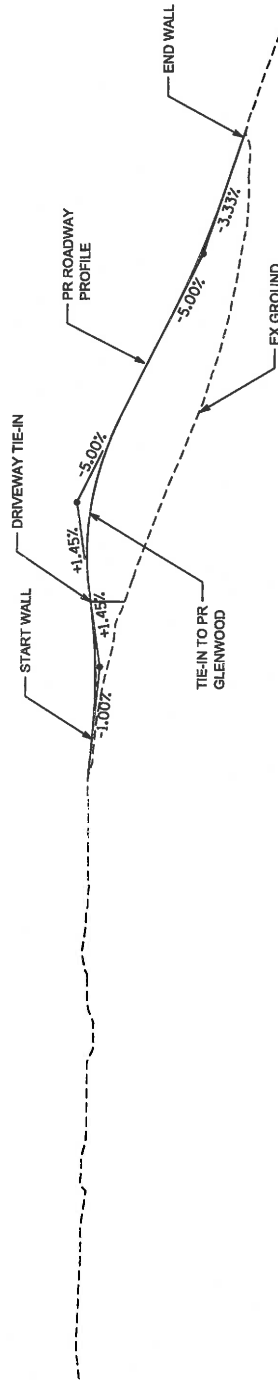
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730

720

710

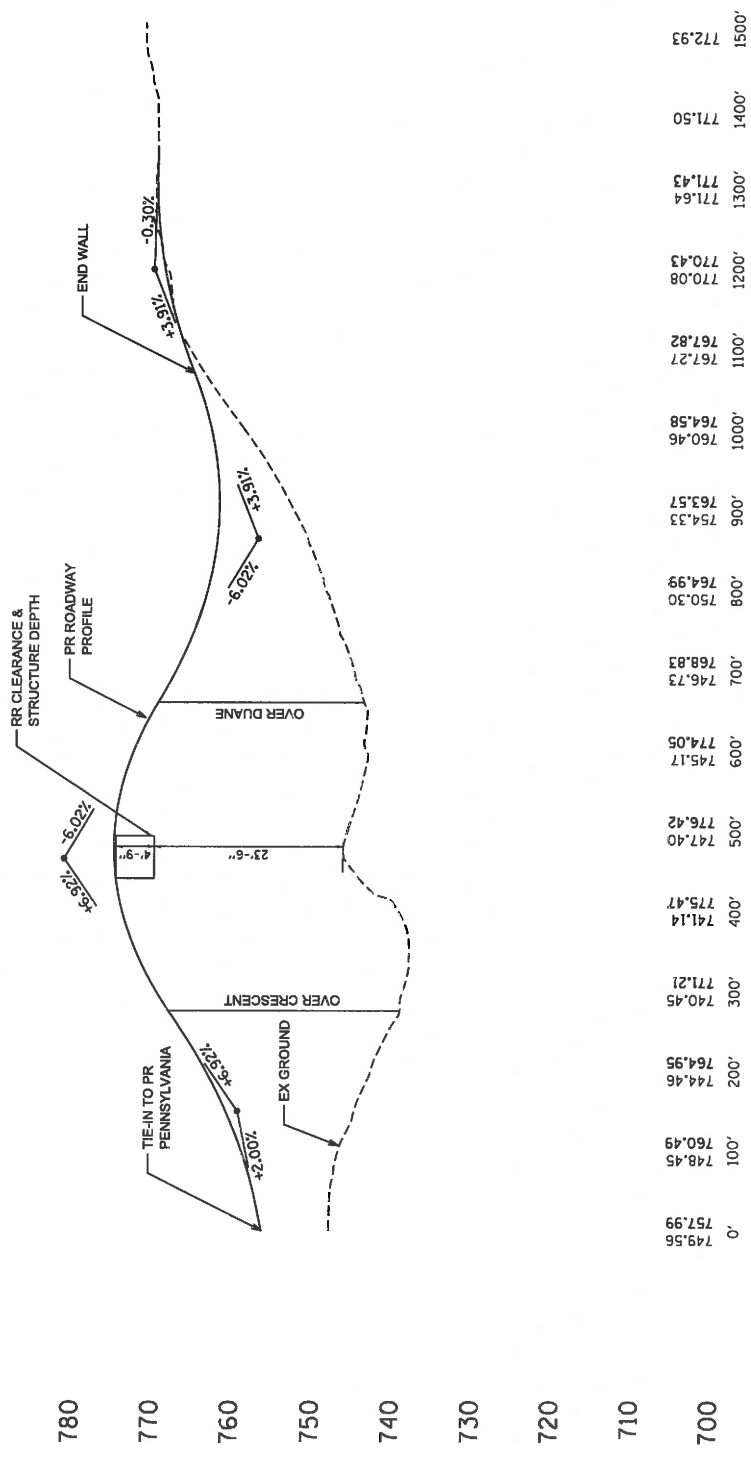
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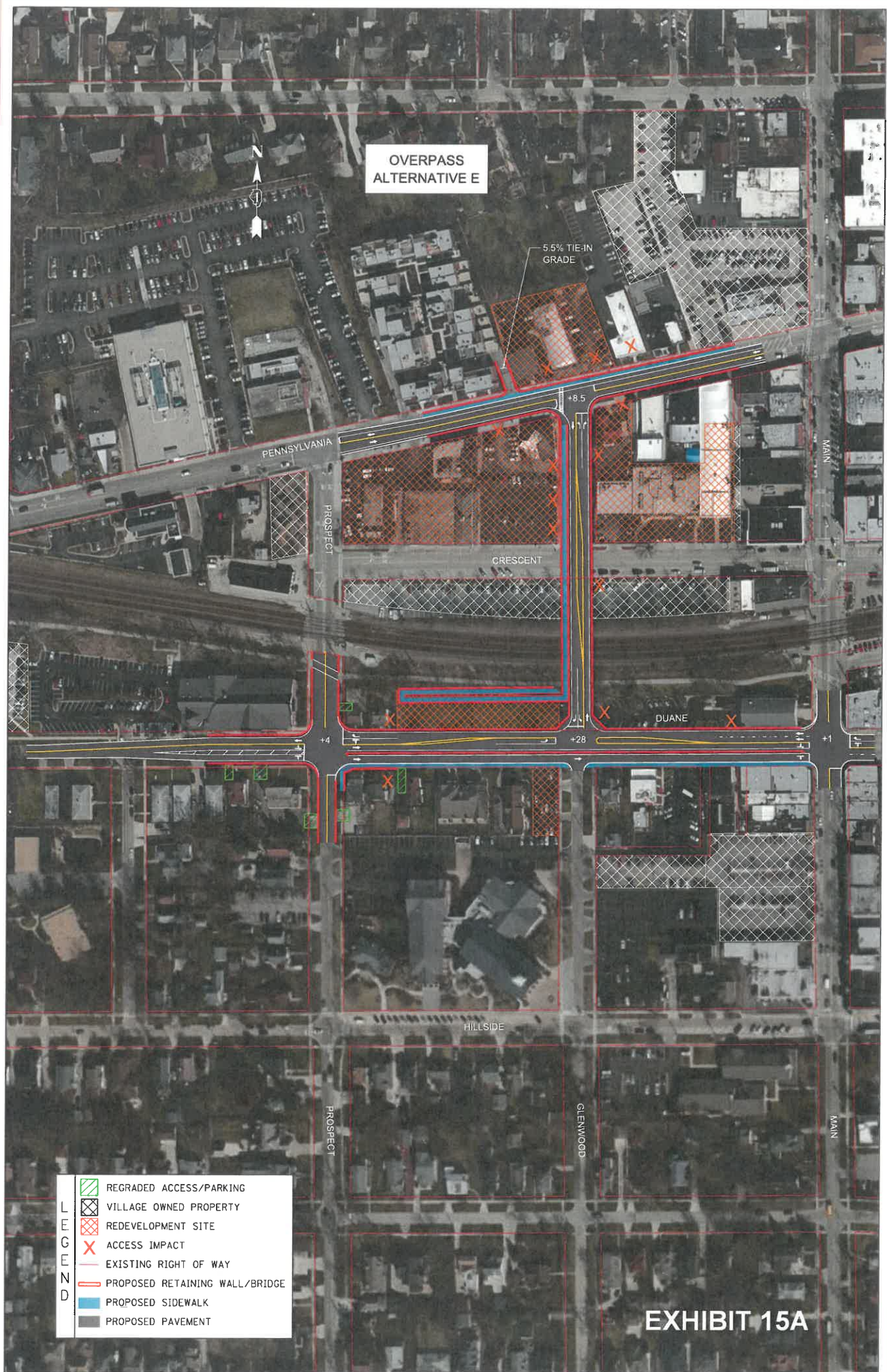


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EXHIBIT 14B

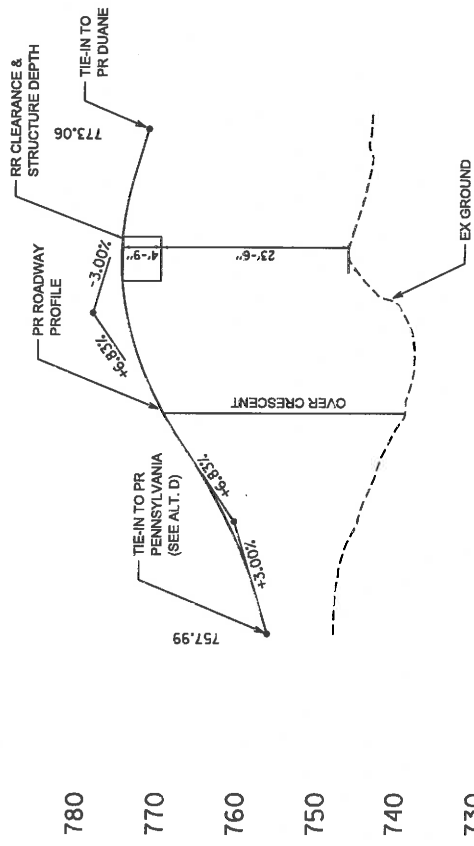
OVERPASS
ALTERNATIVE D
GLENWOOD





OVERPASS
ALTERNATIVE E

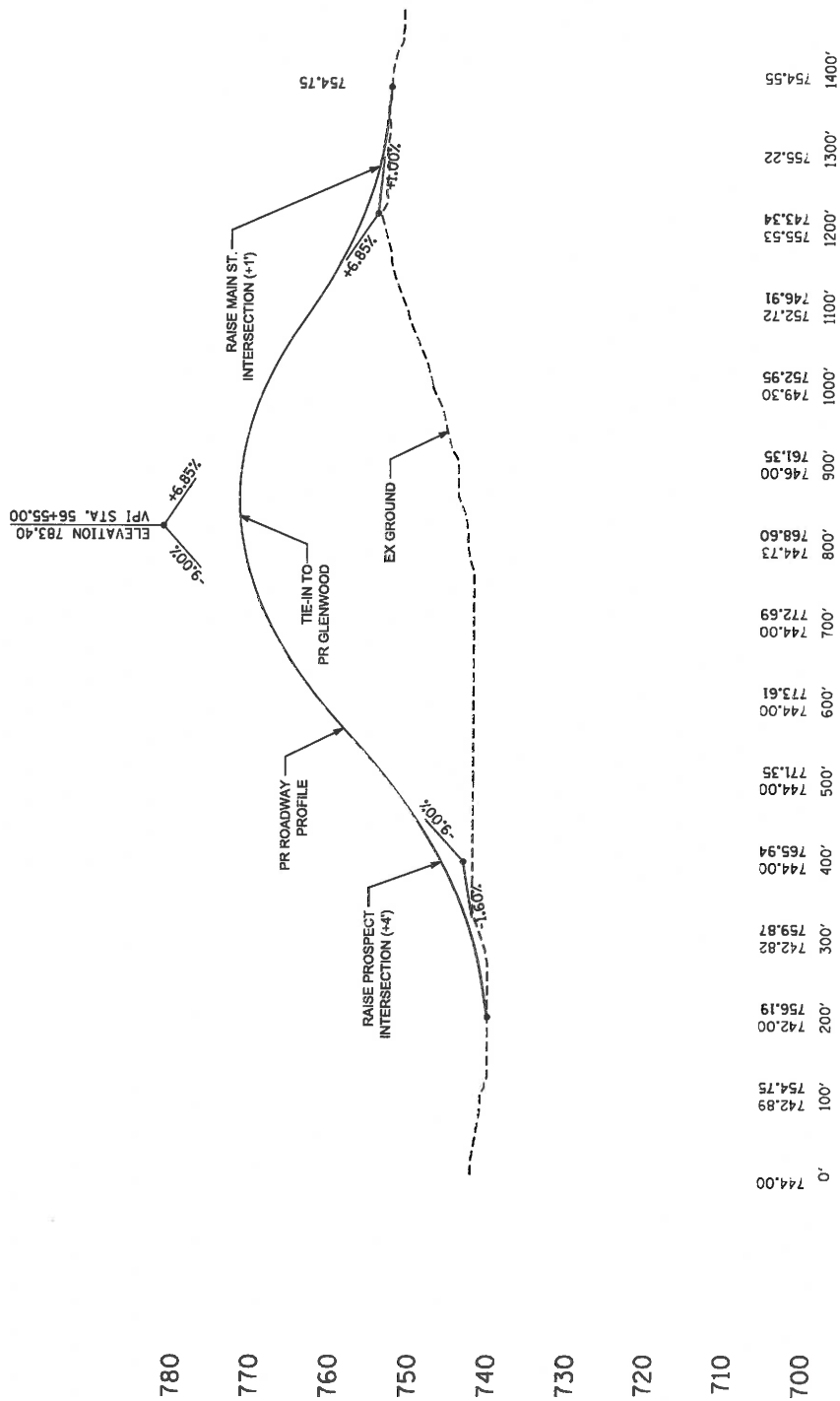
GLENWOOD

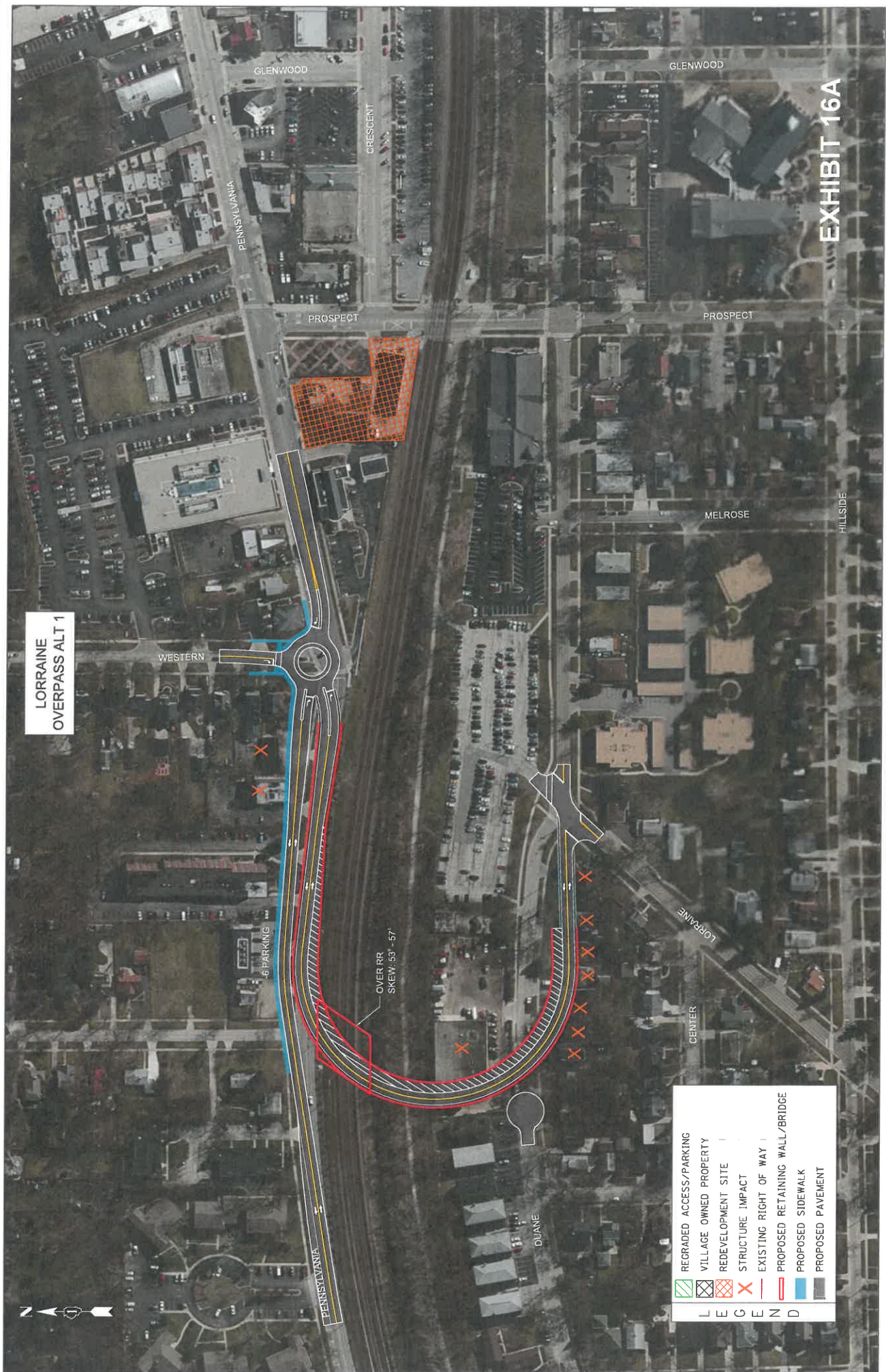


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100'	748.45
200'	744.46
300'	740.45
400'	741.14
500'	747.40
600'	745.17
700'	773.94

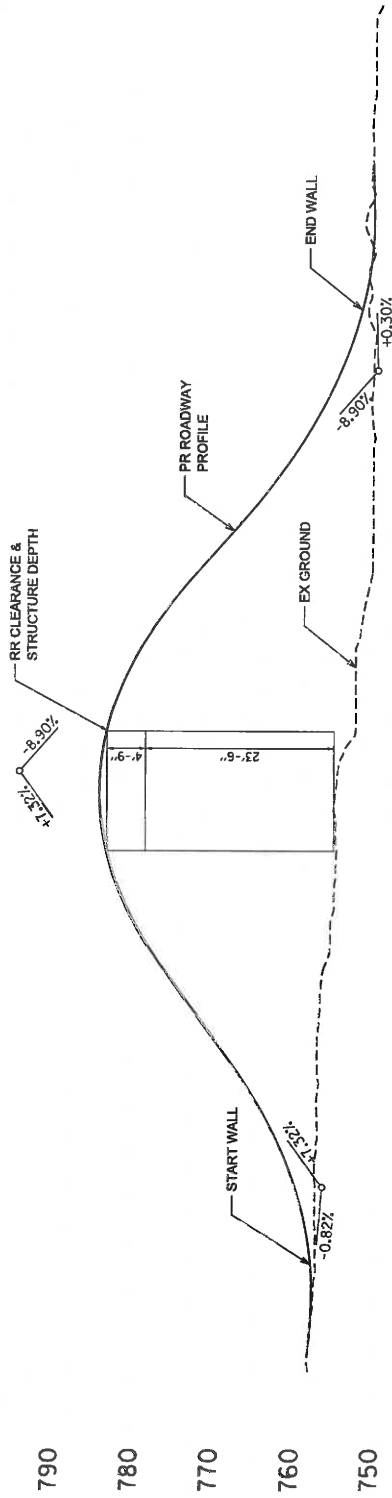
EXHIBIT 15C

OVERPASS ALTERNATIVE E DUANE



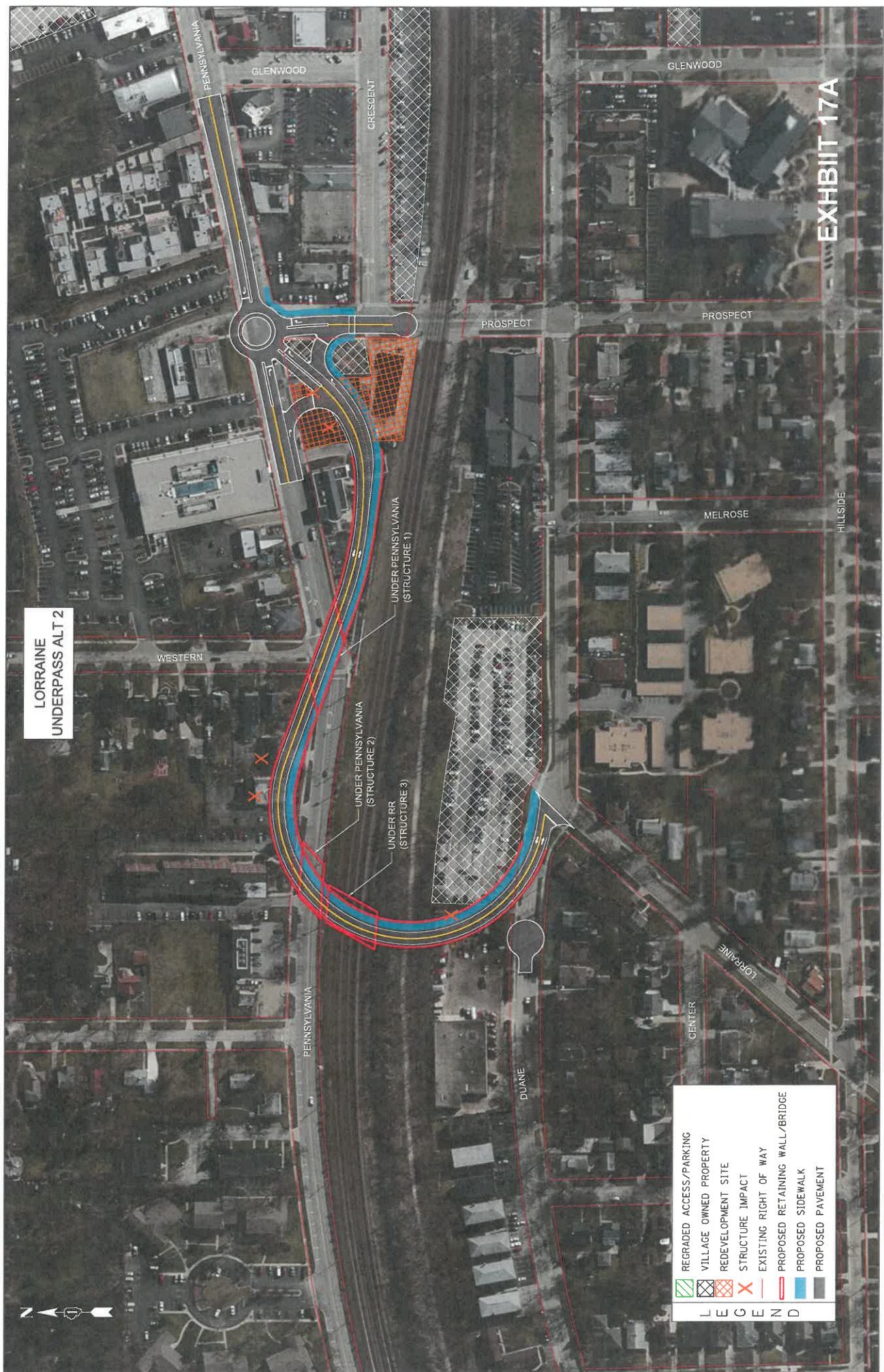


LORRAINE
OVERPASS ALT 1



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EXHIBIT 16B



LORRAINE
UNDERPASS ALT 2

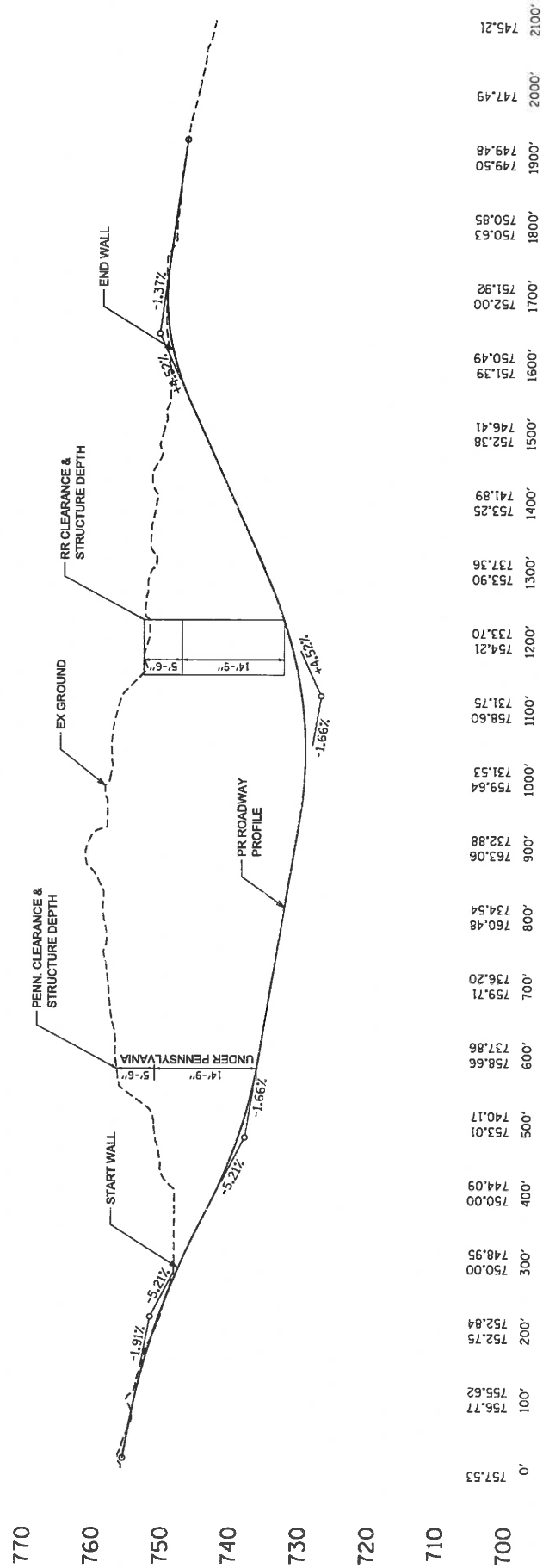
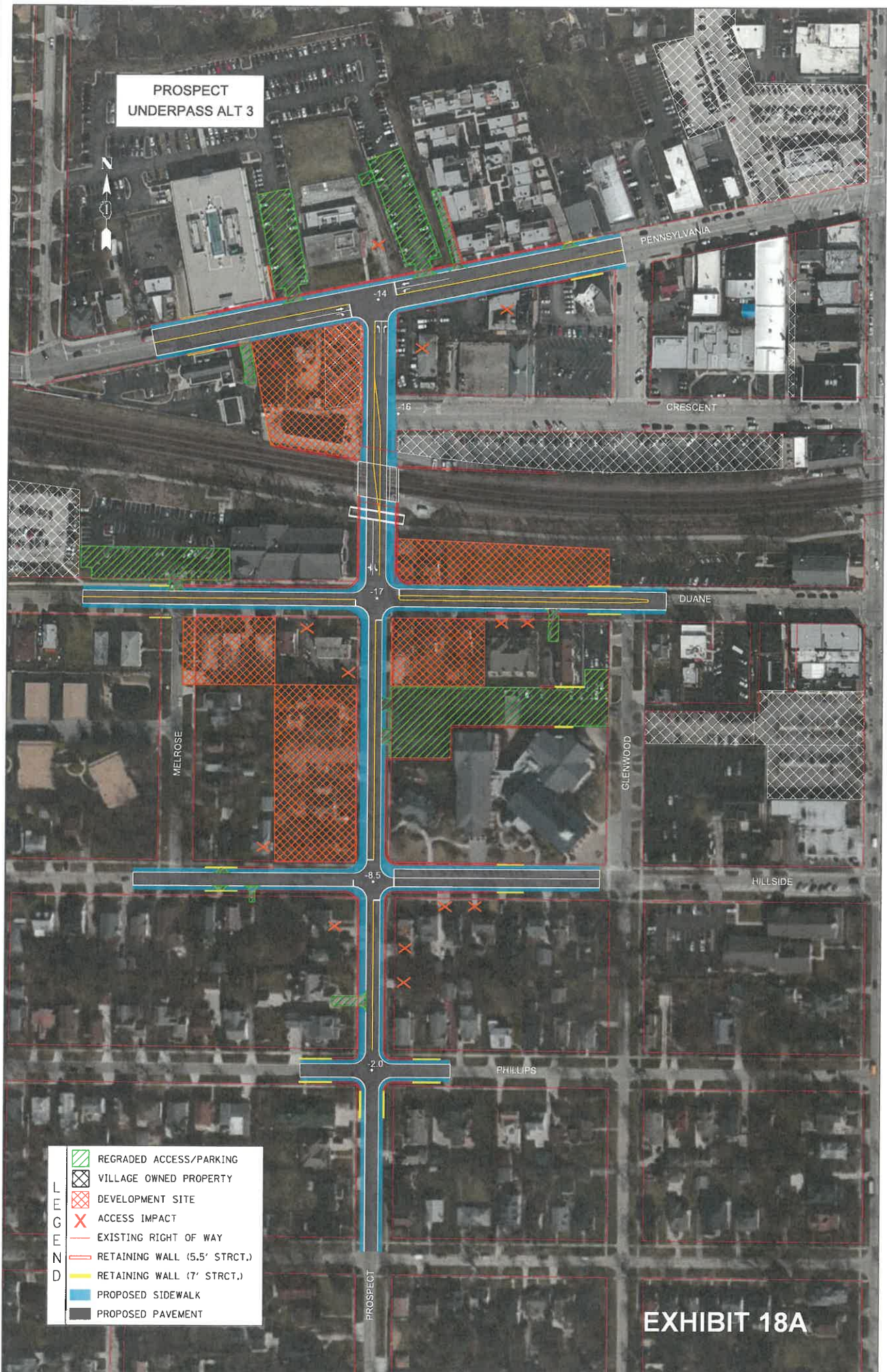


EXHIBIT 17B

PROSPECT
UNDERPASS ALT 3

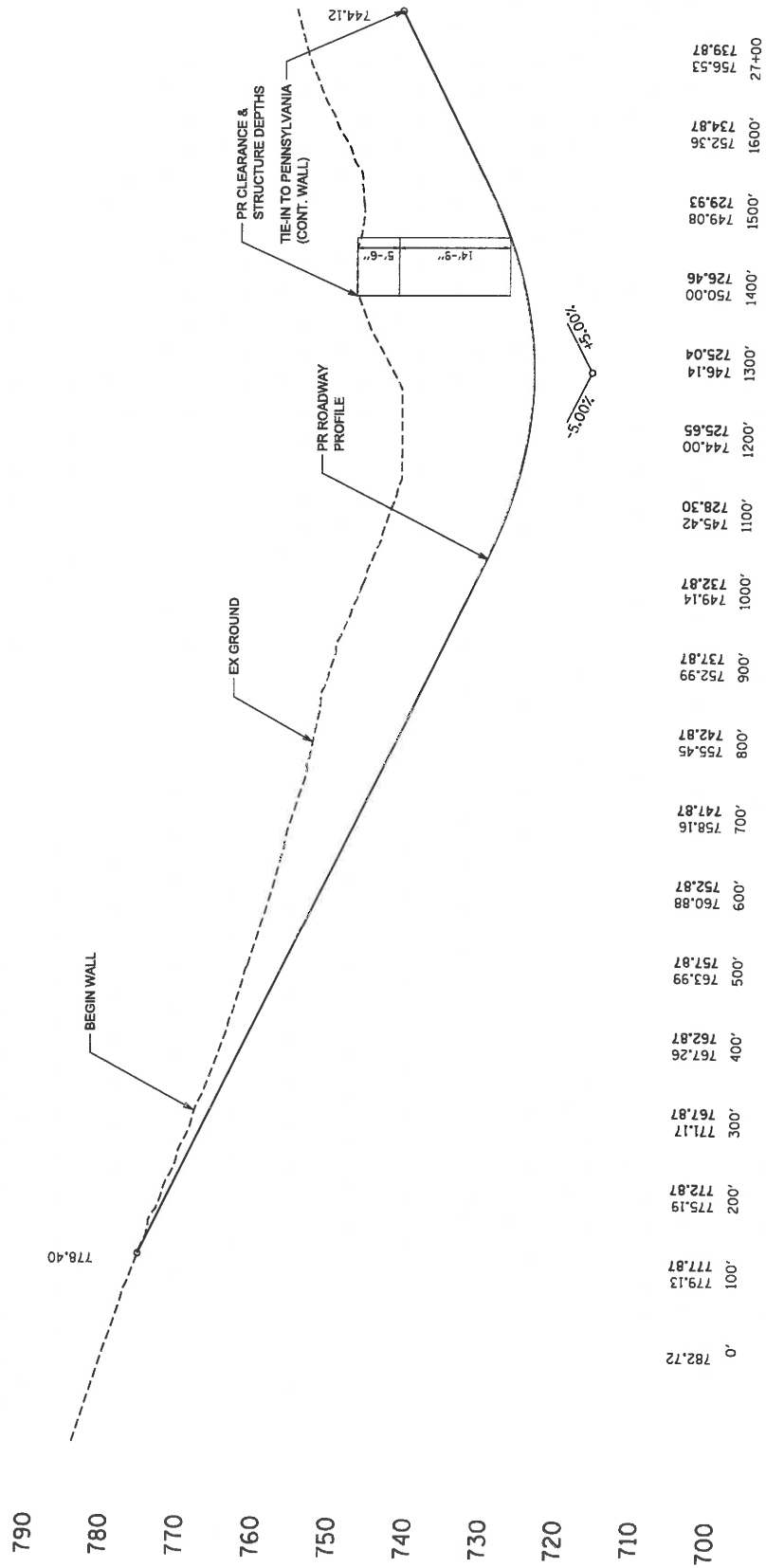


- LEGEND**
- REGRADED ACCESS/PARKING
 - VILLAGE OWNED PROPERTY
 - DEVELOPMENT SITE
 - ACCESS IMPACT
 - EXISTING RIGHT OF WAY
 - RETAINING WALL (5.5' STRCT.)
 - RETAINING WALL (7' STRCT.)
 - PROPOSED SIDEWALK
 - PROPOSED PAVEMENT

EXHIBIT 18A

EXHIBIT 18B

PROSPECT UNDERPASS ALT 3



PROSPECT
UNDERPASS ALT 3

PENNSYLVANIA

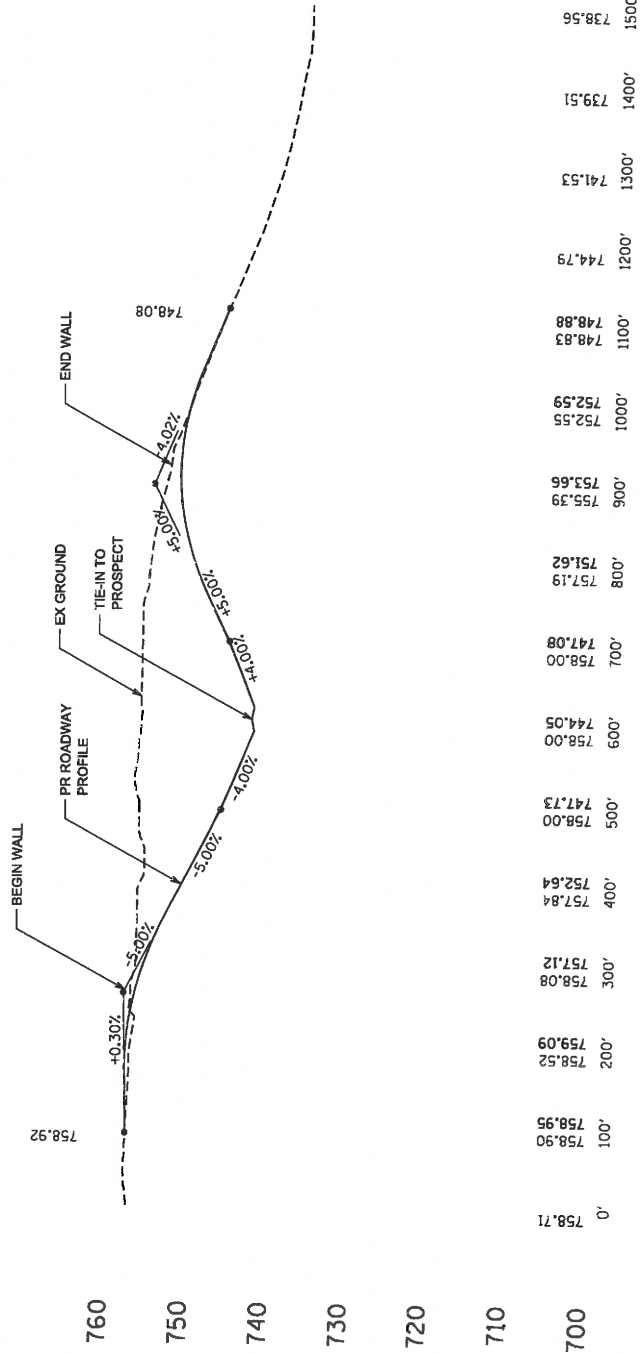
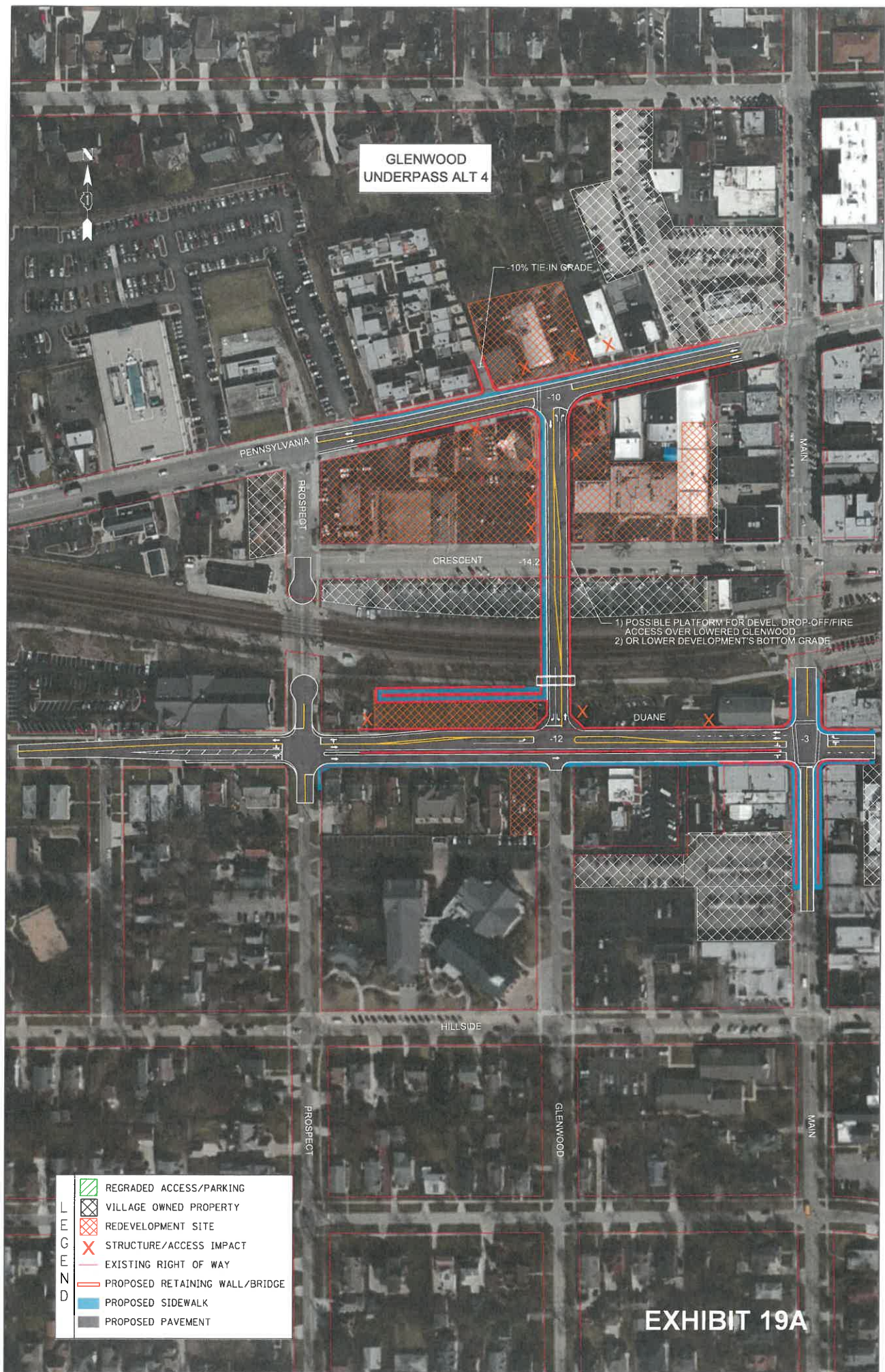


EXHIBIT 18C



GLENWOOD
UNDERPASS ALT 4

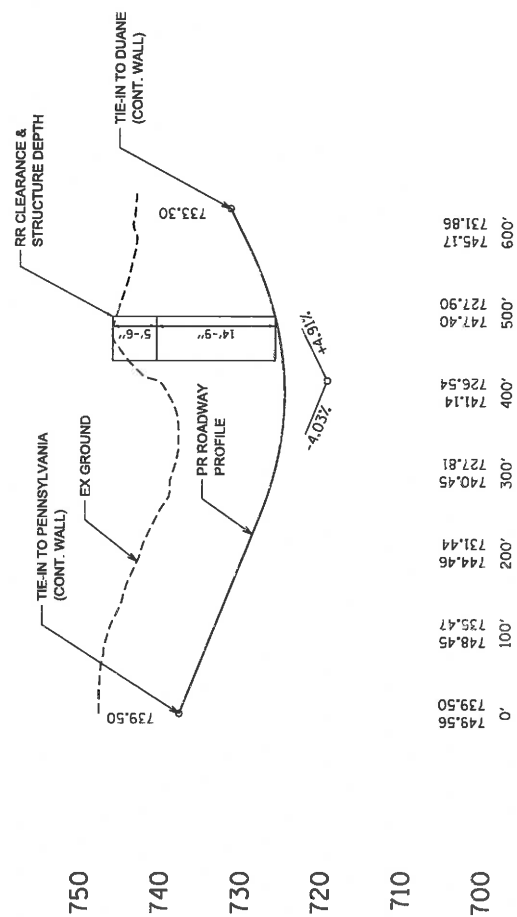


EXHIBIT 19C

GLENWOOD UNDERPASS ALT 4 DUANE

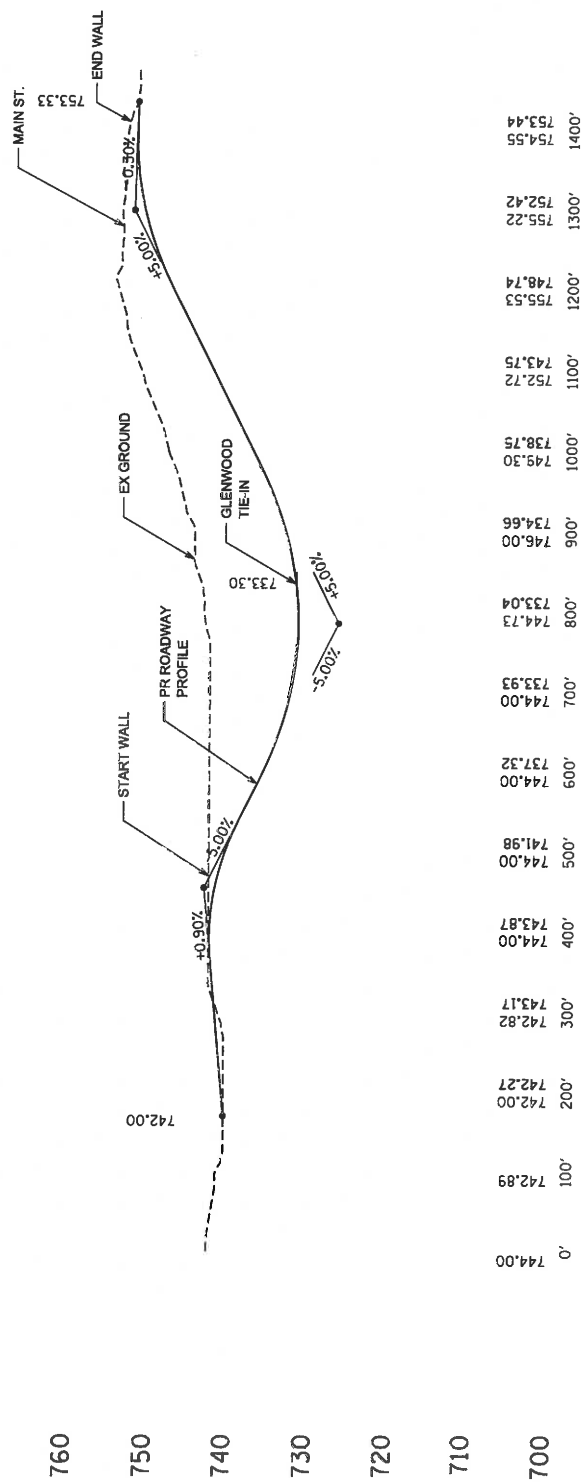
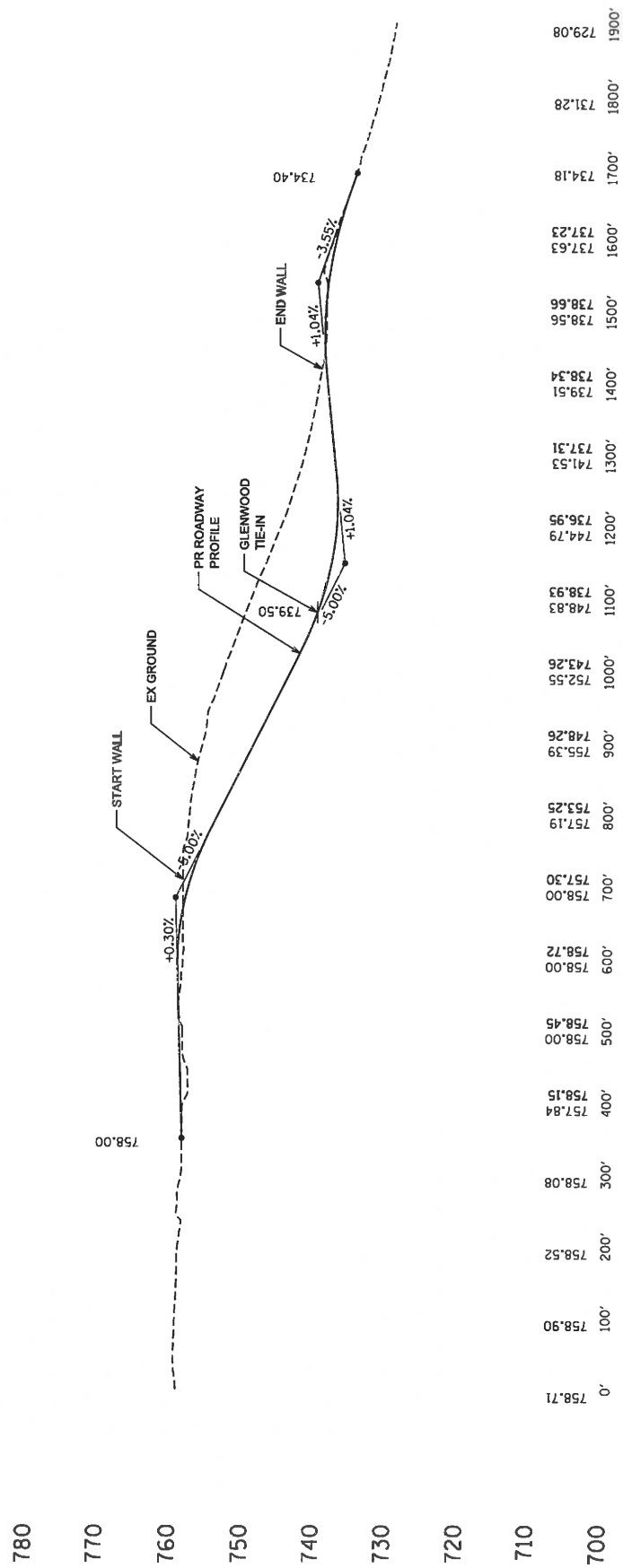


EXHIBIT 19D

GLENWOOD
UNDERPASS ALT 4
PENNSYLVANIA



**GLEN ELLYN GRADE SEPARATION FEASIBILITY STUDY
POTENTIAL FUNDING SOURCES**

Fund	Objective	Funding Ratios (maximum percentages) (federal / non-federal or state / local)	Eligible Items				Pedestrian Underpass Eligible?	Roadway Grade Separation Eligible?
Federal								
Federal Transportation Bill (Currently: MAP-21)								
Transportation Alternatives Program	Competitive application program to fund projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects. Administered through CMAP.	80 / 20	x	x	x	Yes	No	
Surface Transportation Program (STP) - DuPage	Program administered by the DuPage Mayors and Managers Conference to allocate federal STP funds to DuPage municipalities. 30% of DuPage STP funds must go to Transportation Control Measure (TCM) projects, which reduce single-occupancy auto travel and/or have a positive impact on air quality, including transit, pedestrian, and bicycle improvements.	70/30 local for highway projects; 75/25 for TCM projects			x	Yes	Yes, but unlikely	
Rail-Highway Safety (Section 130) Program	Program to reduce the number of fatalities and injuries at public highway-rail grade crossings through the elimination of hazards and/or the installation/upgrade of protective devices at crossings. Administered by IDOT Central Bureau of Local Roads Rail Unit to Districts and Railroad Companies	90/10	x	x	x	Yes	Yes	
Congestion Mitigation and Air Quality (CMAQ)	Provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas). Administered by CMAP through an annual call for projects.	80/20	x		x	Yes	Yes	
Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant program	Annual competitive funding program for multi-modal, multi-jurisdictional or other projects that are challenging to fund through existing programs. Applicants must detail the benefits their project would deliver for five long-term outcomes: safety, economic competitiveness, state of good repair, livability and environmental sustainability. USDOT also evaluates projects on their expected contributions to economic recovery, as well as their ability to facilitate innovation and new partnerships. Typical projects have NEPA, design, and ROW completed and are ready for construction.	Standard project: up to 80/20			x	Yes	Yes	
Federal Transit Administration (Section 5309)	Federal transit funding program allocated through the Regional Transportation Authority to Metra, CTA and Pace. Requires coordination with eligible grant recipient (Metra, CTA or Pace).	80/20	x	x	x	Yes, at transit station	Yes	
Job Access and Reverse Commute (Section 5316)	Federal transit funding program allocated through the Regional Transportation Authority to Metra, CTA and Pace. Requires coordination with eligible grant recipient (Metra, CTA or Pace). Address transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment.	80/20		x	x	Yes, at transit station if need is shown and met	Yes, if need is shown and met	
U.S. Dept. of Housing and Urban Development	Local Technical Assistance Program, administered by CMAP and Community Planning Program, administered by RTA. Both programs provide assistance to communities to undertake planning projects that advance principles of GoTO 2040 Plan, transit oriented development, and transit enhancement. Competitive program with annual call for projects in Spring. Programs use same application. Common project types include transportation planning, TOD planning, and bicycle/pedestrian planning.	Up to 100%	x			Yes	No	
State								
Illinois Department of Natural Resources Bicycle Path Program	Competitive program that helps with the acquisition, construction and rehabilitation of public, non-motorized bicycle paths and directly related support facilities. Applications must be received by IDNR by March 1 of each calendar year. http://dnr.state.il.us/ocd/newbike2.htm .	50/50; maximum grant award is \$200,000	x	x	x	Yes	No	
Illinois Department of Natural Resources Recreational Trails Program	Competitive program that helps with the acquisition, development, rehabilitation and maintenance of motorized and non-motorized recreation trails. Applications are due March 1 of each calendar year.	80/20	x	x	x	Yes	No	
High Growth Cities Assistance Program	Program administered by IDOT Bureau of Local Roads. For municipalities over 5,000 residents that have experienced at least a 5-percent increase in population between two decennial censuses or between a decennial census and a special census. Funding is based on population and relative per capita population increase.	up to 100%	x	x	x	Yes	Yes	

**GLEN ELLYN GRADE SEPARATION FEASIBILITY STUDY
POTENTIAL FUNDING SOURCES**

Fund	Objective	Funding Ratios (maximum percentages) (federal / non-federal or state / local)	Eligible Items			Pedestrian Underpass Eligible?	Roadway Grade Separation Eligible?
Illinois Grade Crossing Protection Fund	To help defray the cost of installing necessary improvements and reduce accidents at railroad/highway and railroad/pedestrian crossings	60% ICC/State, 40% local; up to \$12 million	x	x	x	Yes	Yes. The Illinois Commerce Commission accepts applications on a continual basis. Applicants may reapply every year. Project evaluation is based on crash criteria. Separate applications are required for each project type. Applicants are notified when the Five Year Plan is published, generally in the Spring.
Motor Fuel Tax - State	Motor Fuel Tax provides funds for the purpose of improving, maintaining, repairing, and constructing highways	up to 100%	x	x	x	No	Yes. IDOT Local Planning and Programming Unit to Local Agencies
General Obligation Bonds	Bonds authorized through general purpose units of government for capital improvements		x	x	x	Yes	Yes



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Grade Separation Feasibility Study

Village of Glen Ellyn
November 16, 2015

PROJECT PROCESS

- Feasibility Study
- Phase I Preliminary Engineering
- Phase II Design Engineering
- Phase III Construction

PURPOSE AND NEED

- Common response for not visiting the downtown is that parking is not convenient and the rail crossing is a hindrance.
- It is desired to enrich the downtown and therefore it is desired to improve vehicular and pedestrian access.
- One way to improve the access is to consider grade separation facilities for pedestrians and vehicles.

FEASIBILITY STUDY

- Determine if an improvement could be implemented and the resulting changes could be accepted.
 - Potential Changes include:
 - Pedestrian Access
 - Travel Routes
 - Driveway access
 - Property Acquisition
 - Visual
- Potential Findings of Feasibility Study
 - Nothing feasible
 - Possibilities, need engineering details, move to Phase I
 - Feasible, with one obvious answer, move to Phase I

VEHICULAR GRADE SEPARATION

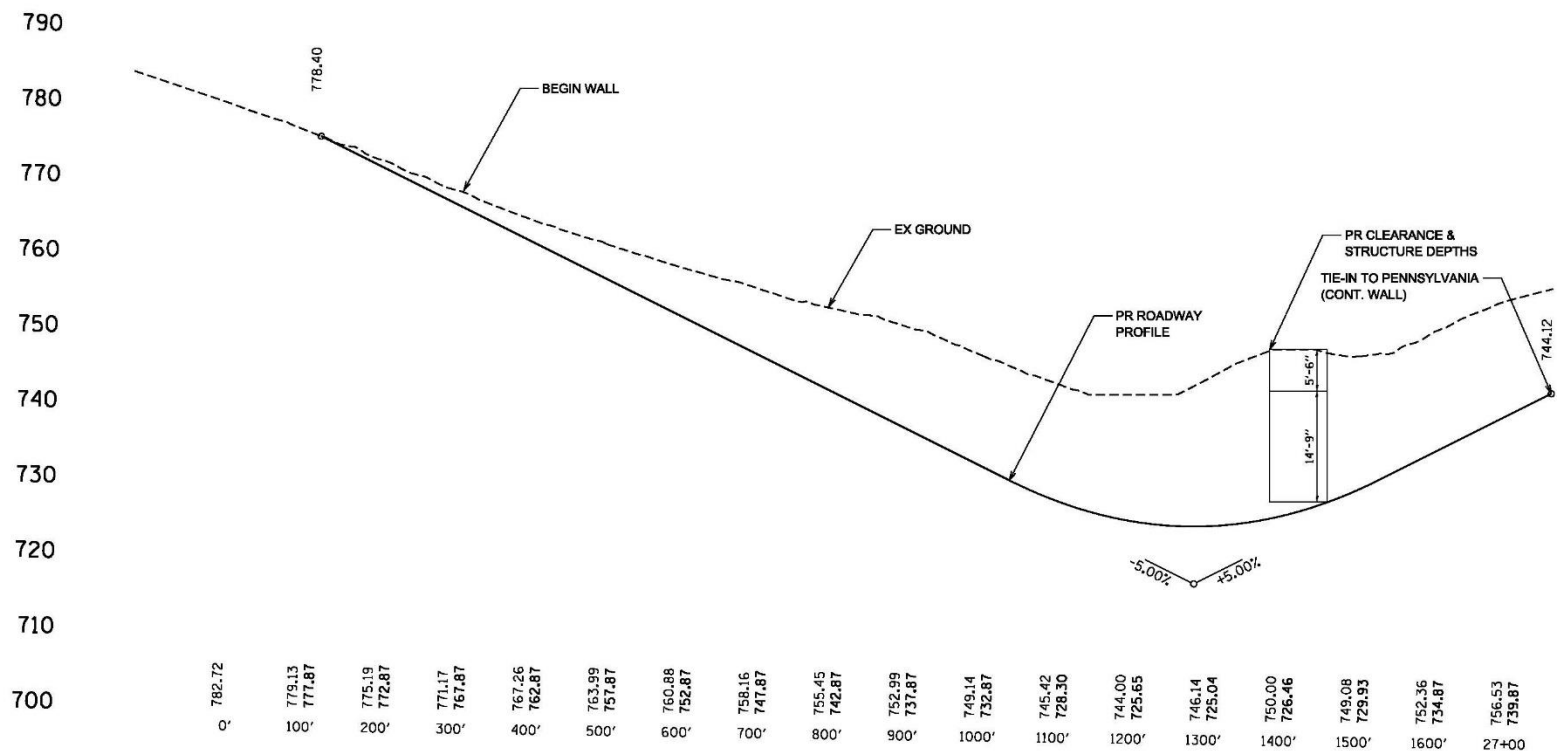


VEHICULAR GRADE SEPARATION

- Park, Main, and Prospect
 - Underpass
 - Access changes
 - Long roadway profile adjustments
 - Business/Pedestrian challenges

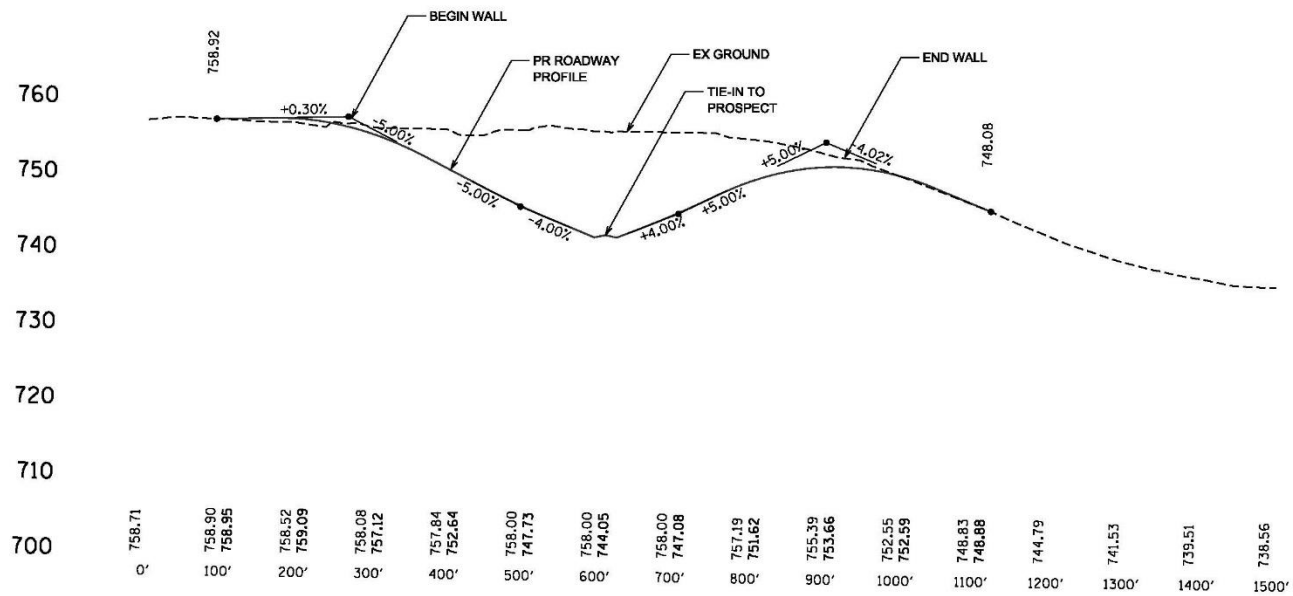


PROSPECT
UNDERPASS ALT 3



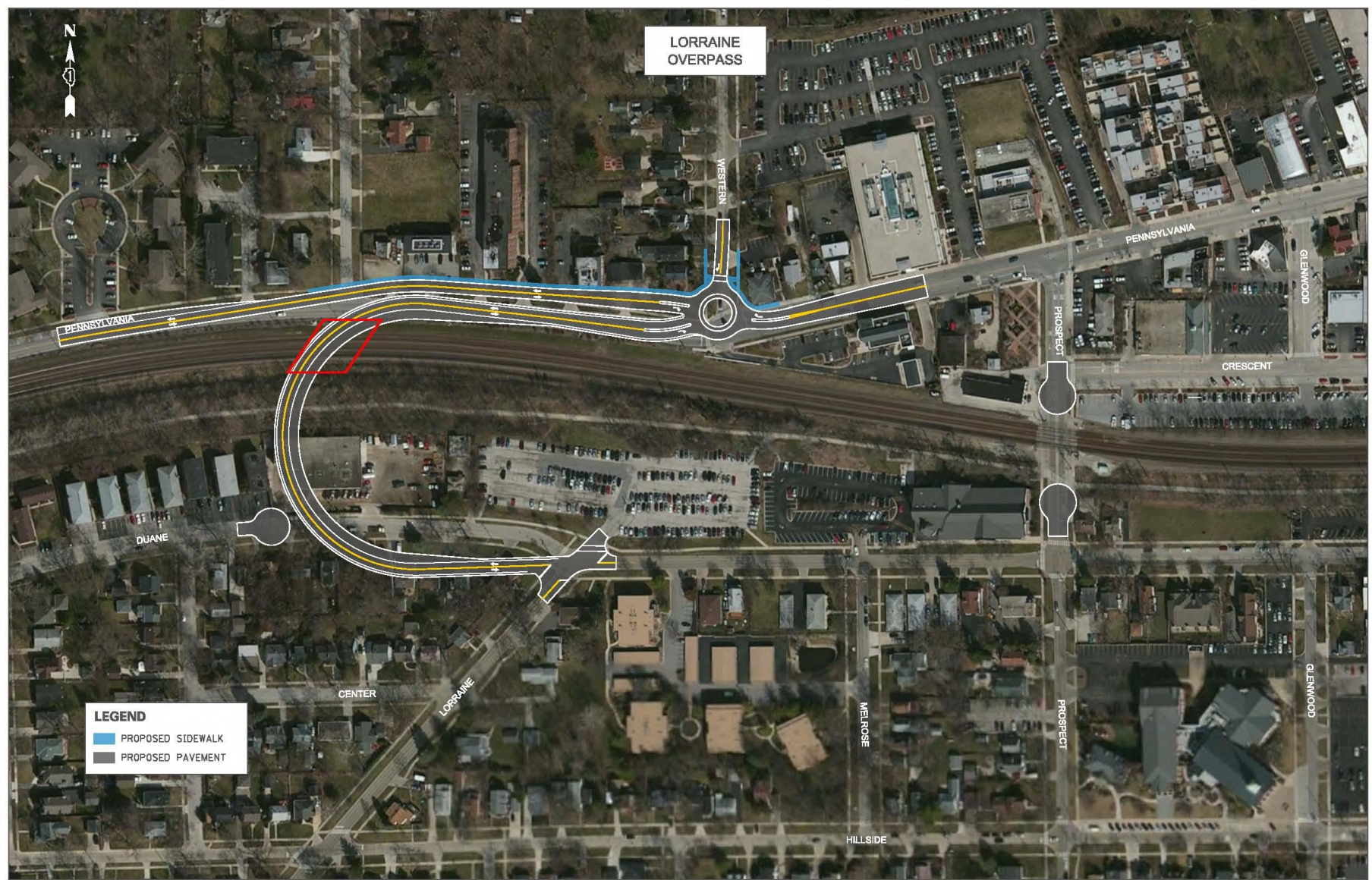
PROSPECT UNDERPASS ALT 3

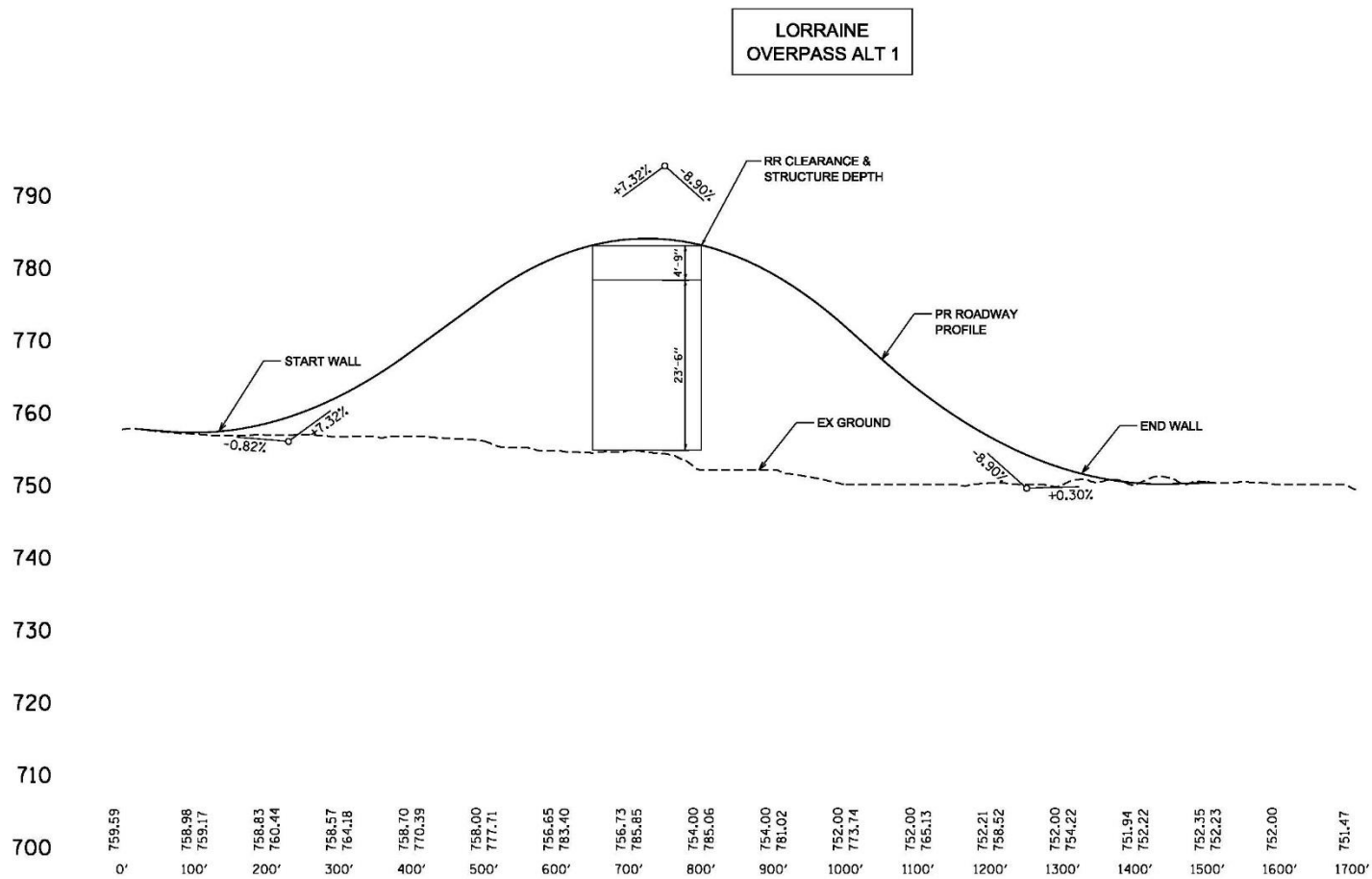
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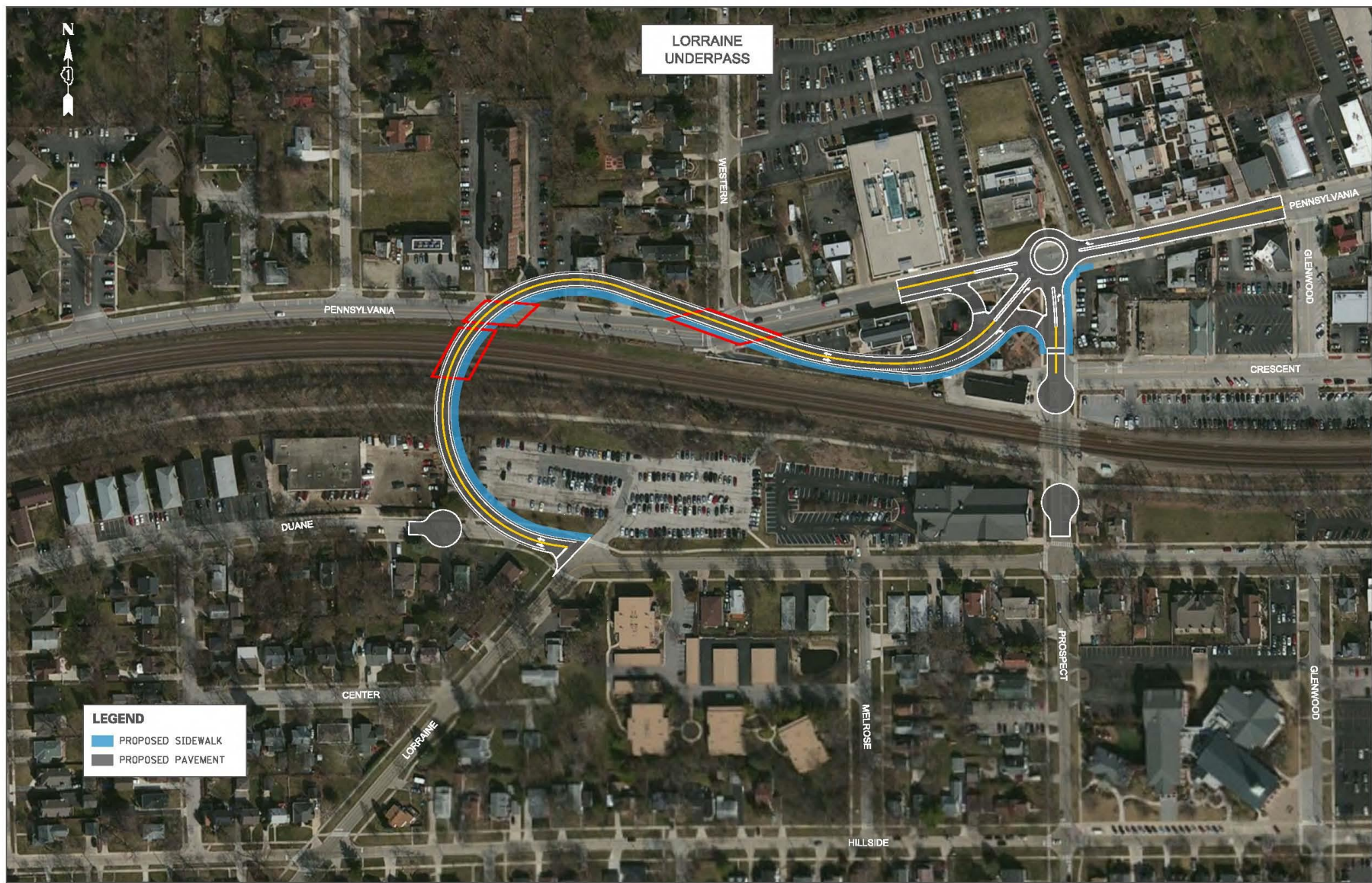


VEHICULAR GRADE SEPARATION

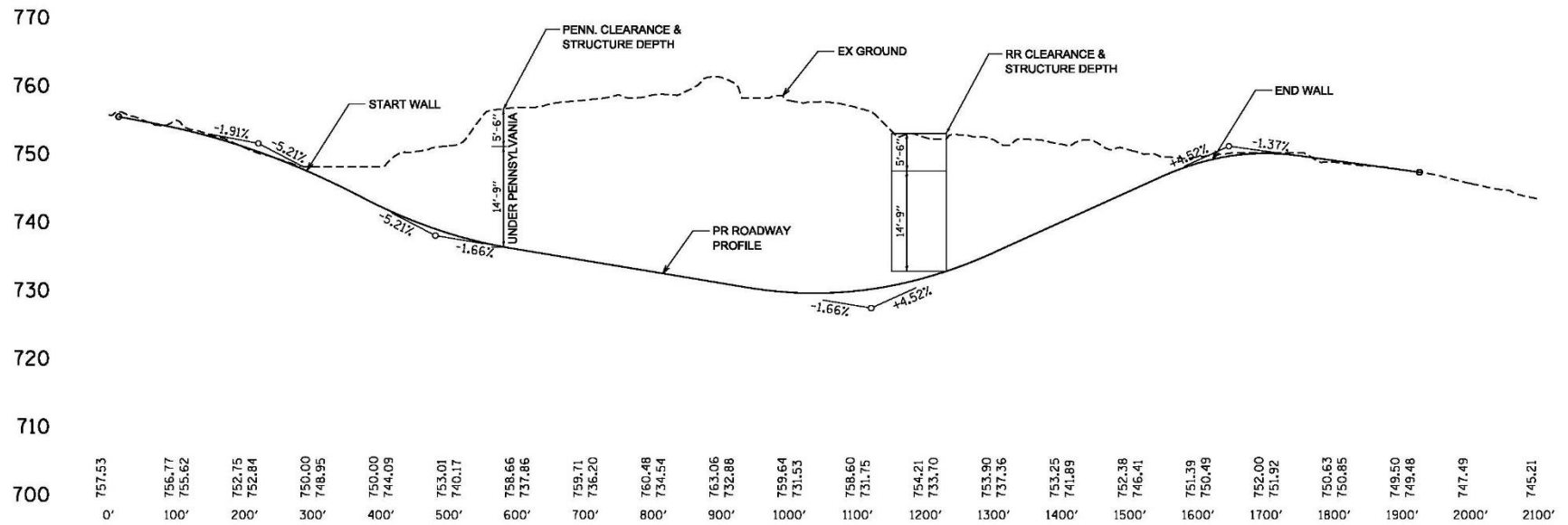
- Lorraine and Glenwood
 - Overpass and Underpass options
 - Redevelopment Opportunities

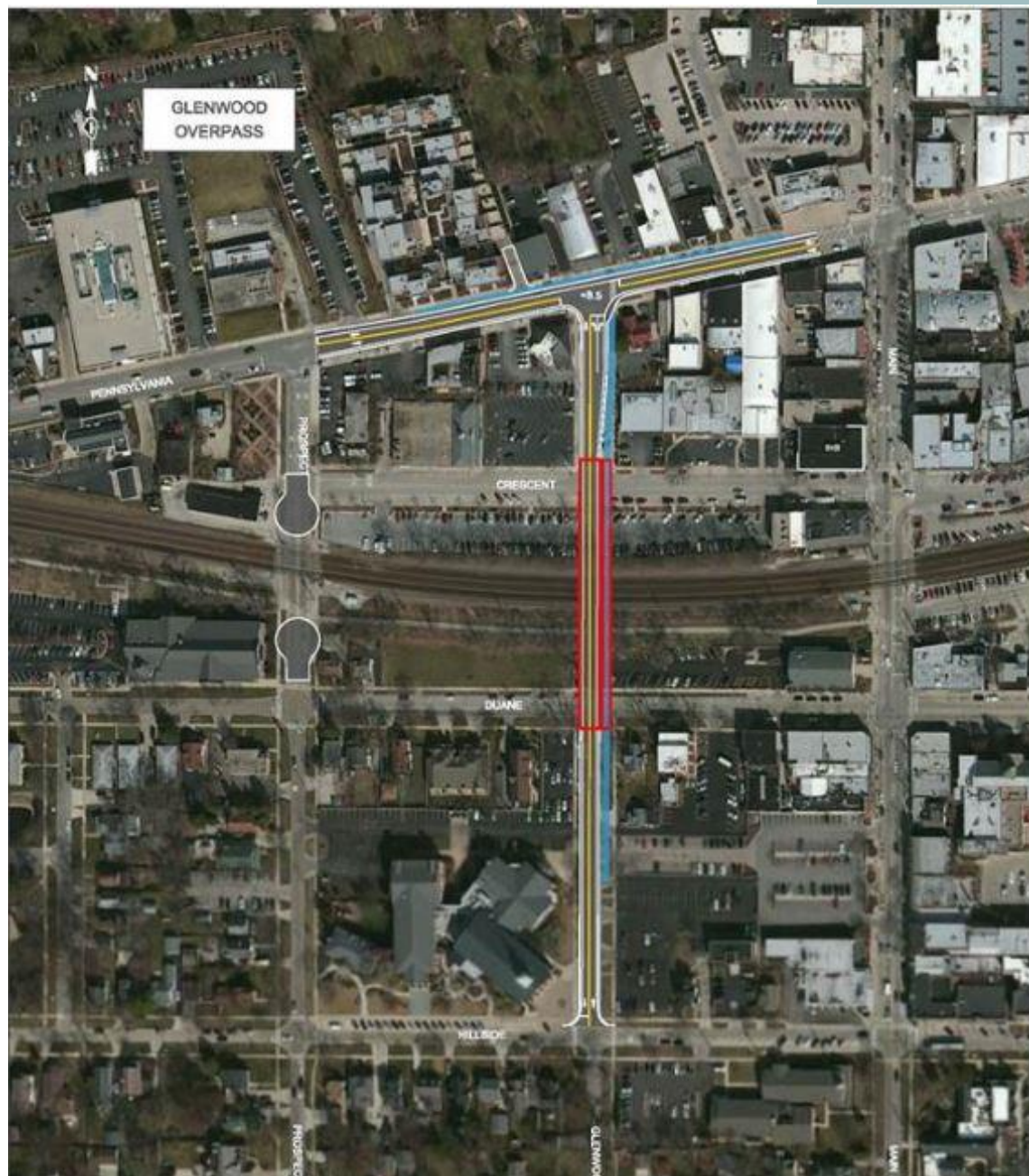


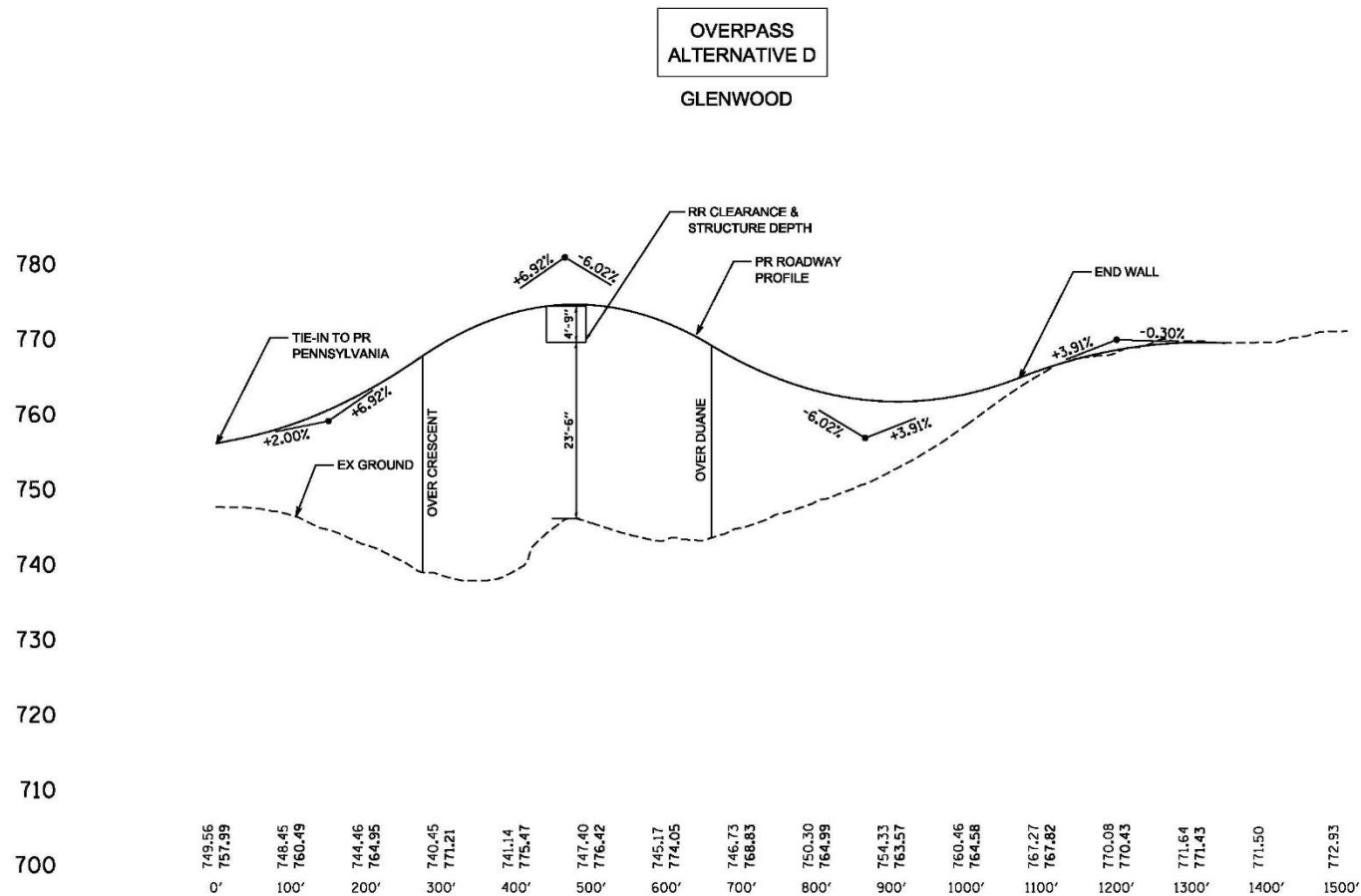




LORRAINE UNDERPASS ALT 2

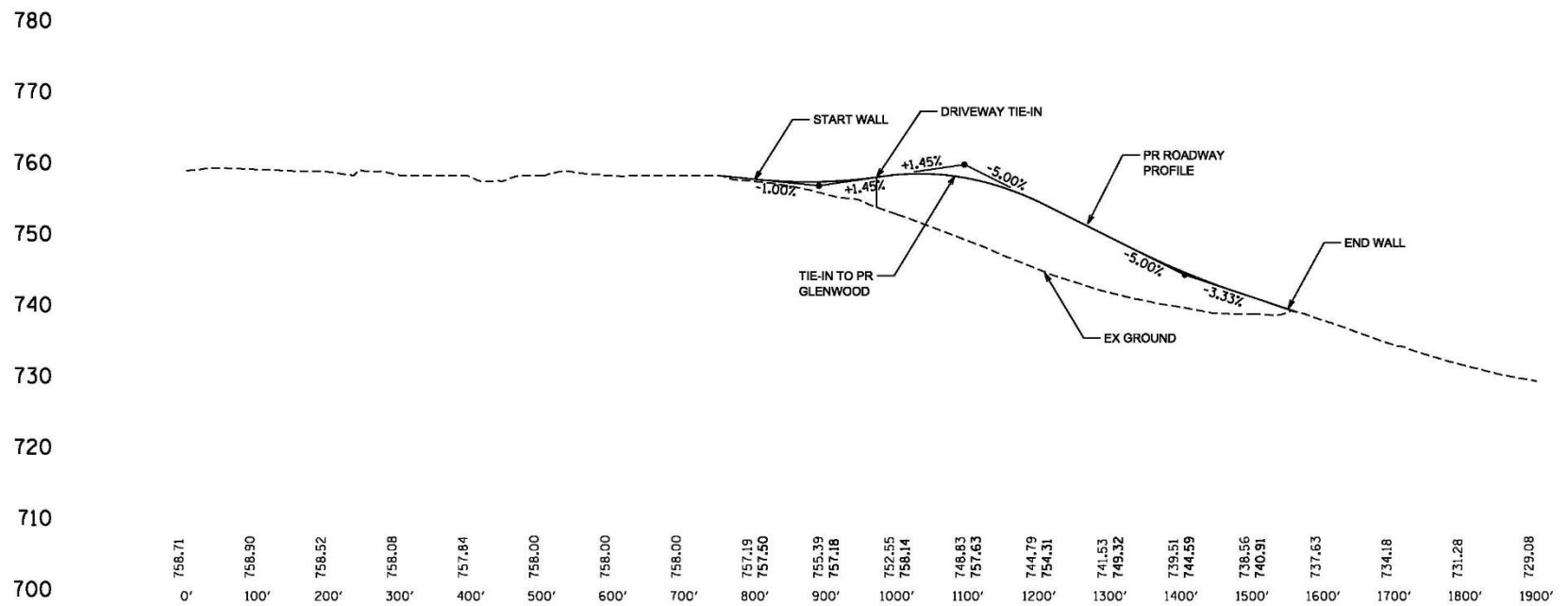


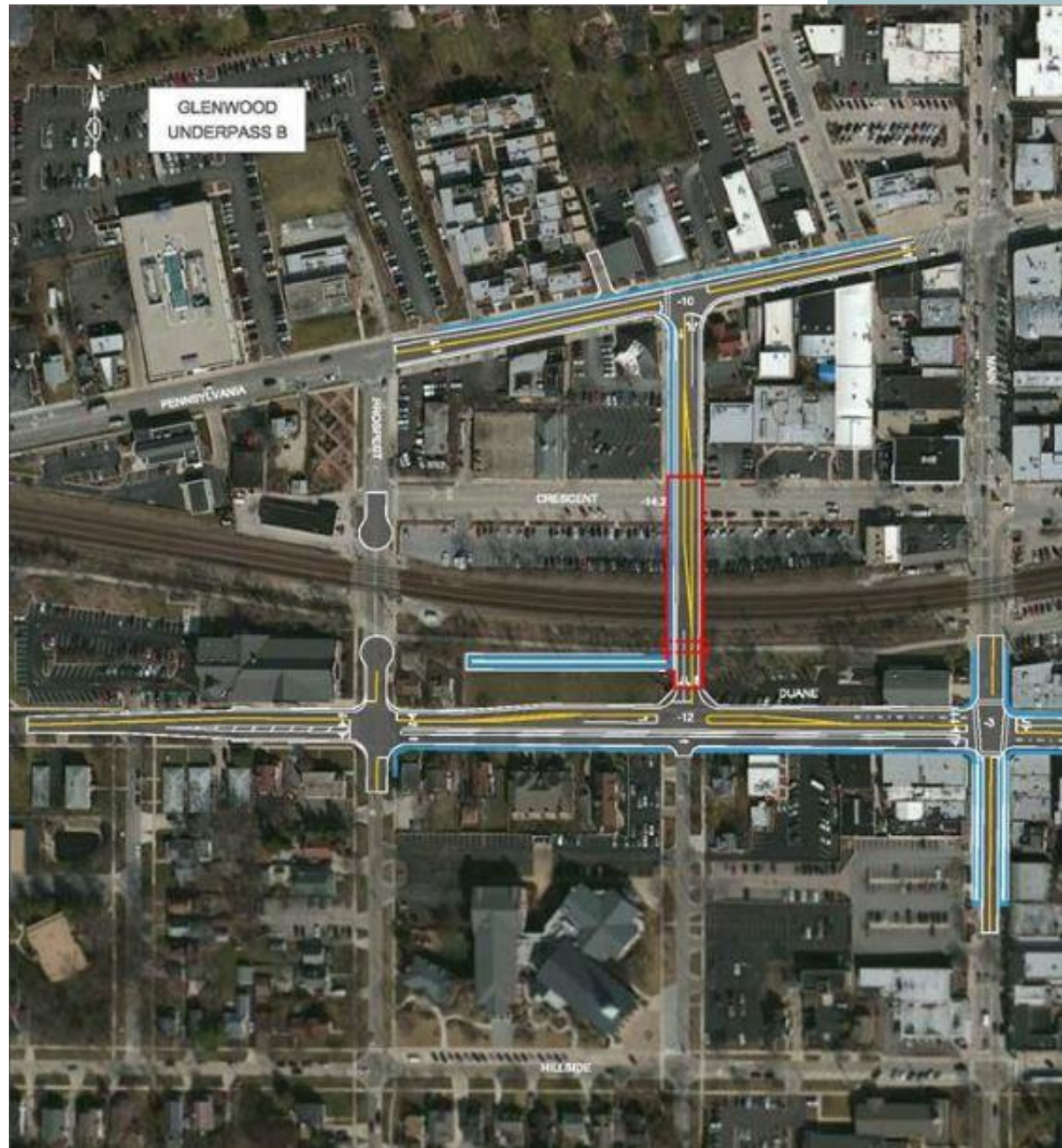




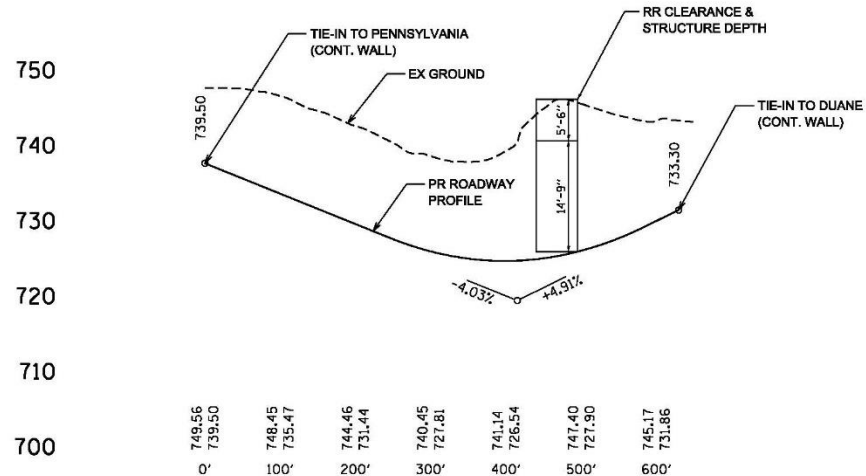
OVERPASS ALTERNATIVE D

PENNSYLVANIA



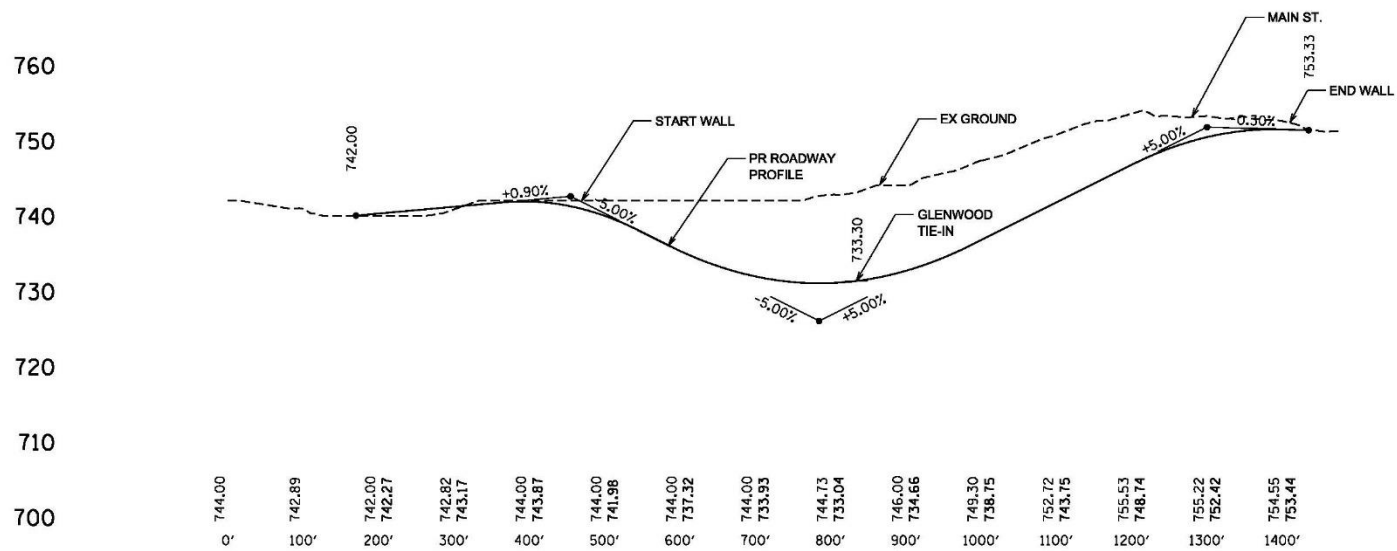


GLENWOOD UNDERPASS ALT 4

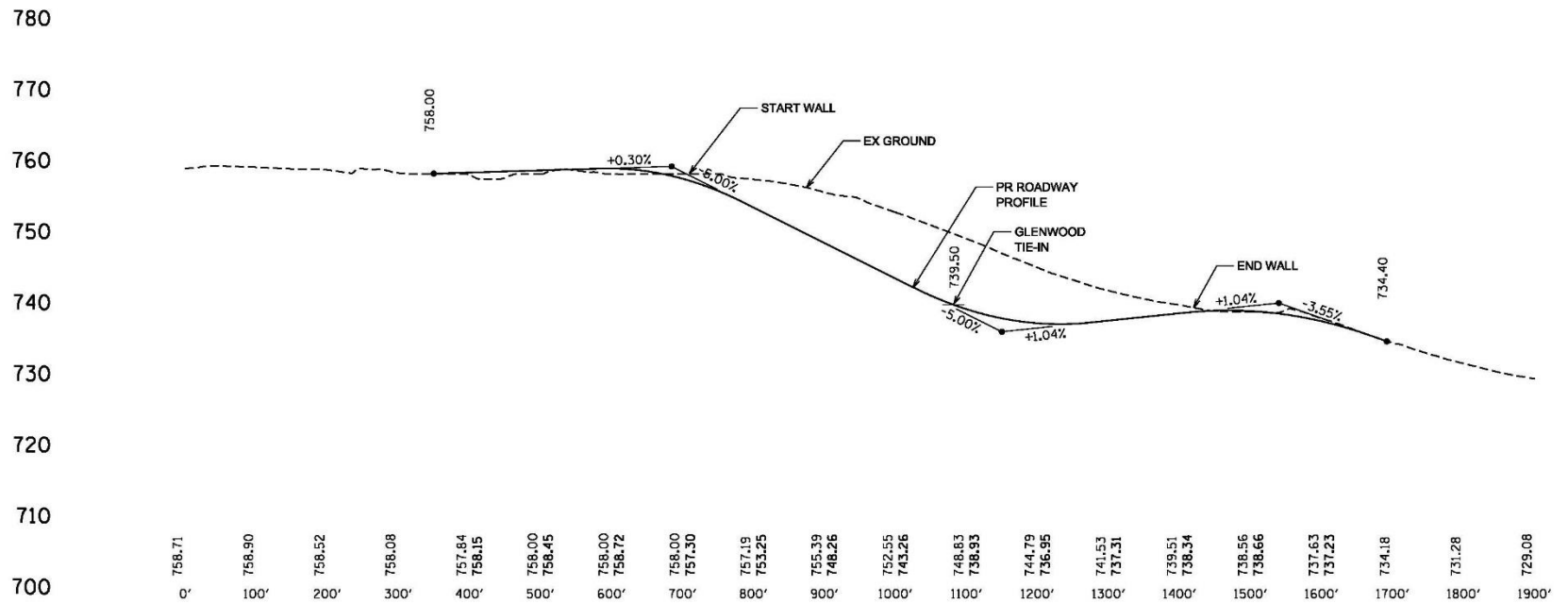


GLENWOOD UNDERPASS ALT 4

DUANE



GLENWOOD
UNDERPASS ALT 4
PENNSYLVANIA



VEHICULAR GRADE SEPARATION

- Do not select a preferred alternative from the feasibility study
- Select a study area
- Phase I with Public Involvement
 - Study alternatives in more detail
 - Get public perspective and buy-in

Vehicular Grade Separation

- Funding

- Total Cost = \$49,500,000

- Grade Crossing Protection Fund (60% / \$12 million)
 - Congestion Mitigation Air Quality (80%)
 - Surface Transportation Program (70%)

- Project Timeline

- Phase I – 24 months
 - Phase II – 18-24 months
 - Phase III – 12-18 months

PEDESTRIAN UNDERPASS



PEDESTRIAN UNDERPASS EAST ALTERNATIVE A

- North Lot ADA Access from Track level
- Located between parking lot and IPP
- Ramp entrance at Park Boulevard
- 110-foot long tunnel
- 22 space parking loss
- One-way westbound Lot
- IPP Realignment



PEDESTRIAN UNDERPASS EAST ALTERNATIVE B

- Located between parking lot and IPP
- Switchback Ramp entrance at Prairie Path Park
- 110-foot long tunnel
- 39 space parking loss
- One-way westbound Lot
- IPP Realignment



PEDESTRIAN UNDERPASS

EAST ALTERNATIVE C

- Located between rail and parking lot
- Switchback Ramp entrance in parking lot
- 65-foot long tunnel
- 42 space parking loss
- One-way westbound Lot



PEDESTRIAN UNDERPASS

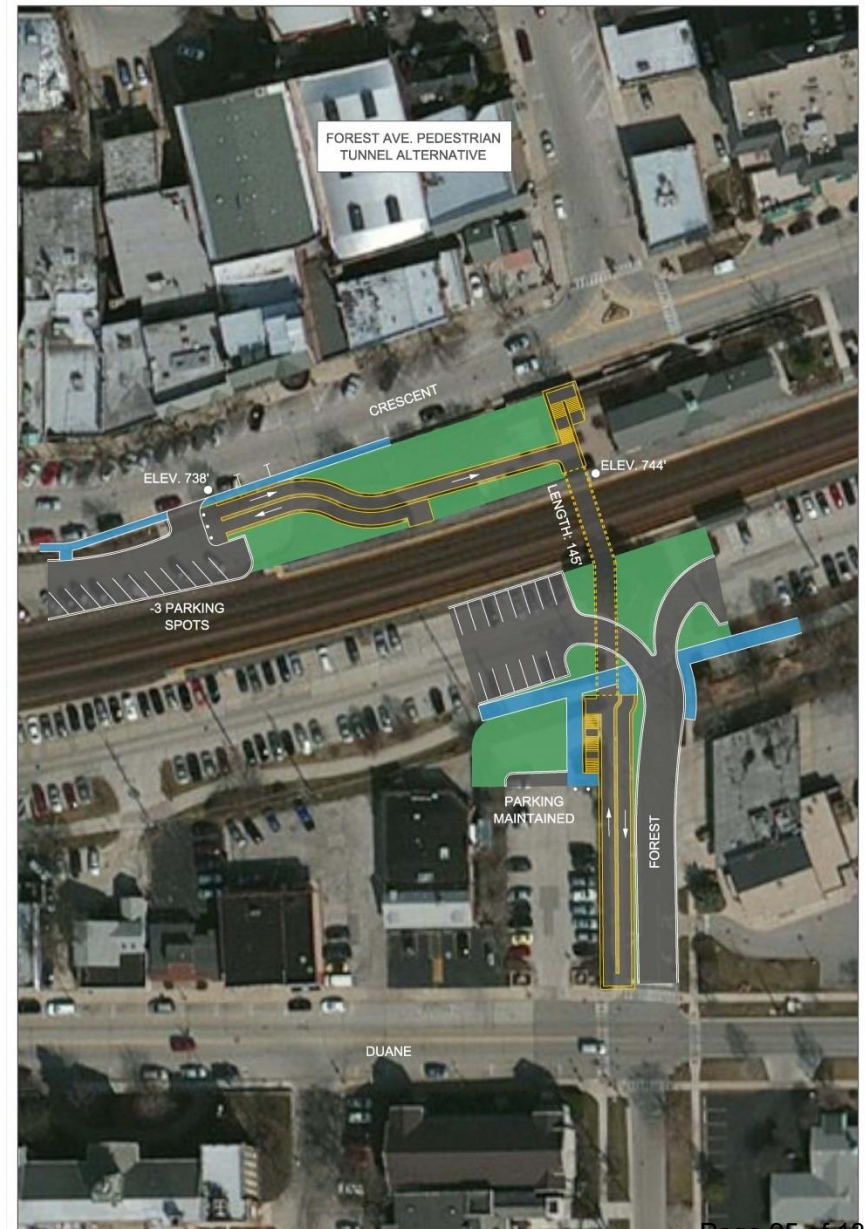
WEST ALTERNATIVE

- North switchback to street level and track level
- South Access Located in separator island between parking lots north of Forest Avenue
- Circular Ramp entrance in parking lot
- 75-foot long tunnel
- 7 space parking loss
- Exit Drive Modifications
- IPP realignment



PEDESTRIAN UNDERPASS FOREST AVENUE ALTERNATIVE

- Switch Back along Forest Avenue
- 145-foot long tunnel with kink
- 3 space parking loss
- IPP Realignment



PEDESTRIAN OVERPASS

FOREST AVENUE

ALTERNATIVE

- Stairs and Elevator
- 75-foot long bridge
- 7 space parking loss



PEDESTRIAN OVERPASS

PARK AVENUE

ALTERNATIVE

- Stairs and Elevator
- 75-foot long bridge
- 8 space parking loss



PEDESTRIAN UNDERPASS / OVERPASS

- Funding
 - Total Cost = \$8,800,000 / \$3,000,000
 - Grade Crossing Protection Fund (60% / \$12 million)
 - Congestion Mitigation Air Quality (80%)
 - Surface Transportation Program (75%)
- Project Timeline
 - Phase I – 15 months
 - Phase II – 15 months
 - Phase III – 12 months

SUMMARY

- Grade Separation – Feasible
- Pedestrian Underpass – Feasible
- Next Steps
 - Begin GCPF application
 - Budget
 - Select Consultant / Begin Phase I

DISCUSSION



**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 9/14/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1405)**

DOC ID: 2021-1405

Construction Materials/Unit Prices Report

Statement of the Issue:

Please see the attached memorandum pertaining to this agenda item.

Analysis:

Budget Impact:

Action Requested:

Attachments:

1. 09.14.2021.CIC Construction Unit Prices Report



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer
Tom Topor, Senior Civil Engineer

DATE: September 10, 2021

RE: Construction Materials/Unit Prices Report

INTRODUCTION

The purpose of this agenda is to provide a brief update on construction materials/unit prices.

BACKGROUND

The construction of the first phase of the CBD SUI is currently estimated at \$5.7M (construction only). The project will include a large number of construction pay items and most associated with a variety of construction materials.

Fluctuations in material costs have been significant but not the sole effect on actual unit prices. Other factors include timing of the bids, attractiveness of the project, and availability of contractors. In general a unit price for a particular pay item, i.e. a ton of asphalt installation, comprises 30%-35% material cost and remaining cost is labor, trucking, construction administrations, and profit.

IDOT tracks material price of bituminous, steel, and fuel in monthly price indices. This special provision was developed by IDOT and industry as a result of the volatility in the cost of bituminous, steel and fuel. A cost adjustment special provision(s) is sometimes included in certain contracts to provide additional compensation to the contractor, or credit to the owner, for fluctuations in the cost of bituminous, steel or fuel when optioned by the contractor.

Below is a tabular summary of recent price indices. It is noted that this is not the cost of the finished product (i.e. a ton of asphalt used to a pave a roadway, a ton of rebar, a gallon of fuel) rather these are material cost indices that reflect the producers costs. Based on the indices, the price of asphalt is on a slight uptick but remained generally steady over the past 2 years, steel has spiked in cost with a 30% increase just in the last 6 months, and fuel costs are up 8%.

IDOT Price Indices

Date	Bituminous \$/Ton	Steel \$/CWT	Fuel \$/Gal
9/1/2021	\$482.98	\$71.49	\$2.14
8/1/2021	\$482.98	\$70.13	\$2.18
7/1/2021	\$478.91	\$62.00	\$2.13
6/1/2021	\$463.48	\$60.65	\$2.13
5/1/2021	\$458.98	\$58.68	\$1.96
4/1/2021	\$455.10	\$58.68	\$1.88
3/1/2021	\$440.40	\$57.87	\$1.94
2/1/2021	\$418.10	\$56.79	\$1.61
1/1/2021	\$399.20	\$56.30	\$1.54
12/1/2020	\$389.56	\$55.87	\$1.35
11/1/2020	\$390.80	\$55.99	\$1.14
10/1/2020	\$394.90	\$55.84	\$1.15
9/1/2020	\$400.40	\$55.70	\$1.30
8/2/2020	\$402.20	\$55.48	\$0.98
7/1/2020	\$411.20	\$55.66	\$0.98
6/1/2020	\$412.70	\$55.76	\$1.21
5/1/2020	\$418.10	\$55.97	\$1.21
4/1/2020	\$446.00	\$55.63	\$1.52
3/1/2020	\$463.46	\$55.63	\$1.65
2/1/2020	\$459.23	\$55.51	\$1.93
1/1/2020	\$461.85	\$55.43	\$1.96
12/1/2019	\$463.83	\$55.03	\$1.87
11/1/2019	\$469.92	\$55.29	\$2.11
10/1/2019	\$484.62	\$55.35	\$1.79
9/1/2019	\$493.08	\$55.00	\$1.98

Costs for items such as Ductile Iron and PVC pipe have increased significantly in accordance with the price indices and general availability of material. 8-Inch Ductile Iron Pipe increased in cost by approximately \$10 per foot earlier this year with PVC pipe also increasing in cost. In addition, certain items such as gaskets for reinforced concrete pipe (for storm sewer) have been hard to come by. Suppliers have suggested the use of tar to make up joints for concrete pipe with the Village not

comfortable with this approach and accordingly looking to switch to alternative pipe material. For 12-inch pipe, switching from reinforced concrete pipe to PVC pipe results in a cost increase of approximately \$16 per foot.

Major material components of the project, such as hot mix asphalt and ready mix concrete are not anticipated to see significant price increases. In contrast, increases in raw material, labor, and logistics costs have accelerated costs of chemical based products. Material costs of paint and thermoplastic (used for pavement markings) have increased up to 20% just this summer. Fortunately, pavement markings make up a very small component of the project and would have a negligible effect on the overall cost.

As noted earlier in this memorandum, the actual bid unit prices for a given project will certainly be influenced by material costs but also significantly impacted by labor costs, availability of work and the contractors' desired profit on a project. These latter components can be more significant than material cost increases with the Village recently seeing contractors cut their desired profit and overhead just to keep their crews employed. However, the alternative has also happened where there has been workforce limitations hindering contractor availability to complete project. In these cases, contractors have adjusted their bids to reflect a market premium and cover limited workforce capabilities.

With the first phase of the project being approximately \$5.7M, assuming materials encompass roughly 1/3 of that cost; i.e. about \$2M, a theoretical uptick of 10% in material costs across all materials could result in approximately \$200,000 in increased cost. Conversely, variability in the desired profit on the project, say on the order of 3%, could result in a \$171,000 premium or a \$171,000 savings.

In summary, staff feels that there will likely be a premium associated with certain project elements (pipe, steel reinforcement, structure castings, etc.) that will cause an uptick in the bid unit prices for those items. However, it is difficult to predict how contractors will bid on the overall contract in terms of their desired margins. This latter unknown could attenuate or amplify the cost implications of material increases.

Action Requested by the Capital Improvements Commission

No particular action is requested of the CIC on this item. Rather it is intended to be brief report on material costs.



**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 9/14/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1406)**

DOC ID: 2021-1406

CBD SUI Amendment No. 3, Hillside Parking Options, Traffic Study Update

Statement of the Issue:

Please see the attached memorandum and its associated attachments pertaining to this agenda item.

Analysis:

Budget Impact:

Action Requested:

Attachments:

1. 09.14.2021.CIC CBD Streetscape Memo
2. 1. Contract Amendment 3 - Additional Scope Items
3. 2. 09.14.2021.CIC CBD Streetscape Presentation
4. 3. Revised Traffic Study Proposal
5. 4. Right Turn Lane Test Closure Plan for Main and Crescent



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer
Tom Topor, Senior Civil Engineer

DATE: September 10, 2021

RE: CBD Streetscape and Utility Improvements
Request for Contract Amendment 3, Hillside Ave On-street Parking and Overhead Utility Options, and Update on the Supplemental Traffic Study at Main and Crescent

INTRODUCTION

The purpose of this agenda item is to seek input and recommendations from the Capital Improvements Commission concerning the following items related to the CBD Streetscape and Utility Improvements:

- Request for contract amendment to the Phase II Engineering Design Services – Second Phase in the amount \$339,897.48 for Civiltech Engineering.
- Options for Hillside Ave on street parking and approach to existing overhead utility lines.
- Update on the Supplemental Traffic Study at Main and Crescent - review of the proposed Right Turn Lane Test Closure Plan

BACKGROUND

Request for Contract Amendment 3

On September 23, 2019, the Village Board approved an agreement with Civiltech Engineering, Inc, of Itasca, Illinois for Phase II Engineering Services - Second Phase for the CBD Streetscape and Utility Improvement Project, in the not-to-exceed amount of \$1,003,174. The original scope of the services has been defined by the Consultant Services Contract agreement with a specific list of tasks and numbers of hours associated with each task for Civiltech and its sub consultants, mainly from RJN Group, MUSE Community + Design, and Huff and Huff, Inc.

On March 8, 2021, the Village Board approved a Contract Amendment 1 for additional services performed beyond the scope of the original contract in the amount of \$134,082.70, primarily addressing consultant efforts of adopting to various direction changes, prolonged streetscape materials decision making process, and adding new sections of watermain replacement to the

scope of the design work.

Amendment 1 was intended to address the most immediate out of scope items, related to various direction changes. The list of out of scope items was presented in December 2020 and finalized at staff level in early January 2021. There were many factors still unknown when the draft list was provided and therefore the initial amendment did not address any of the out of scope efforts to be expended in 2021. In the first quarter of 2021, the team was able to successfully complete the decisions on major components of the project. These efforts resulted in a significant increase of hours required to complete the tasks. At the same time the overall project phasing plan was still being developed and additional efforts required to break up the project into phases were not accounted.

Subsequently, Amendment 2 of the contract was approved on April 12, 2021 by the Village Manager for work associated with creation of public outreach construction animation in the amount of \$10,000.00. Accounting for the prior contract amendment, the total not-to-exceed contract amount has been revised to \$1,147,256.70.

Summary of Additional Scope Items for Amendment 3

Civiltech began compiling a list of additional tasks and hours required to produce construction ready plans for phases 1 – 3 of the project during the second quarter of this year. In early July, Civiltech has put forth a request for Contract Amendment 3 and a list of out of scope tasks and estimated number of hours for each task.

The overall amount of amendment, initially requested was \$439,315.24. Staff and Civiltech then began review and discussions of each out of scope work item. Additional documentation and justification for each item were requested and provided. During the course of negotiations, Civiltech made a number of concessions from the original request. Civiltech has agreed to reduce the anticipated number of hours for future public meetings (-234 hours), not billing the Village for hours spent on project bi-weekly progress meetings (-200 hours) as staff felt that these should have been brought forth at an earlier time, removing future progress meetings hours (-72 hours), and reducing the anticipated number of hours needed to create separate drawings sets for each phase of the project (-400 hours), with an understanding that design plans for Phase 2 and Phase 3 of the project will be combined into one set. At the same time staff identified additional design hours required for expanding the street lighting system (+net 111 hours), future construction assistance (+40 hours), survey and design of Main St alley storm sewer replacement (+56 hours), future construction assistance (+40 hours), and additional coordination with utilities on Hillside, design, permitting and meetings (+total 48 hours).

In an effort to minimize the amount of the change order, Civiltech has also reduced the direct labor multiplier from 2.4796 to 2.4001 (effectively reducing Civiltech's overhead rate from 116.56% to 109.62%), which resulted in \$10,415.64 decrease in anticipated contract costs. Additionally, the proposed cost of traffic study for Main and Crescent has been included in the request for contract amendment 3 utilizing a reduced overhead rate, in the amount of \$16,980.

In total, Civiltech trimmed 651 hours / \$81,452.76 from their portion of the change order. However, Civiltech has also requested amendments for services performed by its sub consultants. The total amount of change order requested for RJN Group was originally \$40,620; however, was staff did not find suitable justification for the totality of the request and it was accordingly reduced by \$20,640.00. The original amendment requests for Muse (\$15,025) for public engagement work

and Huff & Huff, Inc. (\$2,675) for additional CCDD soil certification work were both deemed warranted as originally presented.

Overall, the amount of amendment has been reduced by approximately \$102,092.76 from the original request for a revised total of \$339,897.48.

A detailed list is included with this memorandum. The out of scope item are summarized below grouped into the type of work effort required:

Table1

Type of Work	Number of Additional Hours	Estimated Amount
Additional Project Phasing, Construction Contracts, and Supplemental Plan and Special Provisions	1200	\$126,725.28
Streetscape Materials and Decision Process	396	\$41,819.34
Additional Streetlight System Design	301	\$31,786.92
Additional Design and Coordination With CBD Developments and Train Station Project	216	\$22,810.55
Public Meeting, Coordination and Preparation	160	\$16,896.70
Additional Revisions to Pennsylvania Ave Improvement Project	128	\$13,517.36
Additional Utilities Design and Coordination	180	\$19,008.79
Revisit Parking Options / Traffic Studies	80	\$8,448.35
Future Construction Assistance and RFI's	40	\$4,224.18
Traffic Analysis for Main and Crescent		\$16,980.00
Total	2701	\$302,217.48

Table 2

Sub Consultant and Type of Work	Requested Amount
RJN Group - Additional Utility Design (water main revisions, additional storm sewer on Duane St, and sanitary services)	\$19,980
MUSE Community + Design - Future Maintenance of project website, additional content development, social media, and newsletter posts	\$15,025
Huff & Huff, Inc. - Additional Soil Testing for CCDD	\$2,675
Total	\$37,680

Staff and Civiltech acknowledges that the requested amount of \$339,897.48 is still a significant amount of change order and will be present at the meeting to discuss any questions or concerns regarding this request. This contract amendment request will be presented to the Village Board for consideration at the September 20 Village Board workshop.

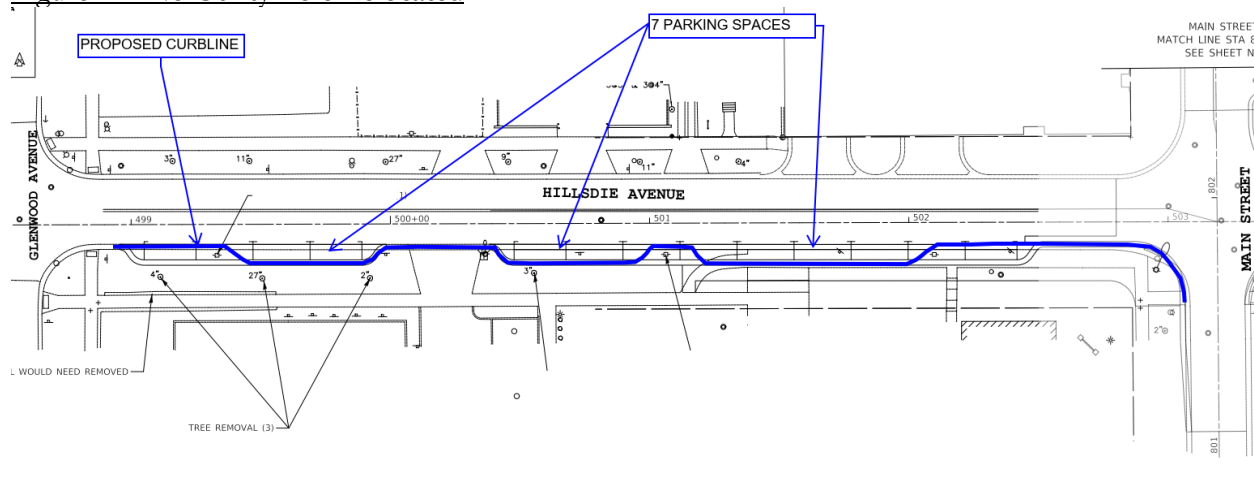
Hillside Utility Undergrounding

Part of the Apex 400 PUD agreement, the Village has agreed to convert the section of Hillside Avenue (Main St to Glenwood Ave) from one-way westbound to two-way traffic. Upon consultation with local businesses, the Village has also agreed to retain on-street parking on the south side of the street, by converting the existing diagonal parking to parallel parking. In order to accommodate both lanes of traffic and parking; sections of Hillside Avenue will effectively need to be widened by approximately 6 feet to the south to allow for a parking lane.

Option 1

This option allows for addition of 7 parking spaces. Adding more spaces not allowed without moving the ComEd poles located approximately 2 feet from the south back of curb.

Figure 1 – No Utility Pole Relocated

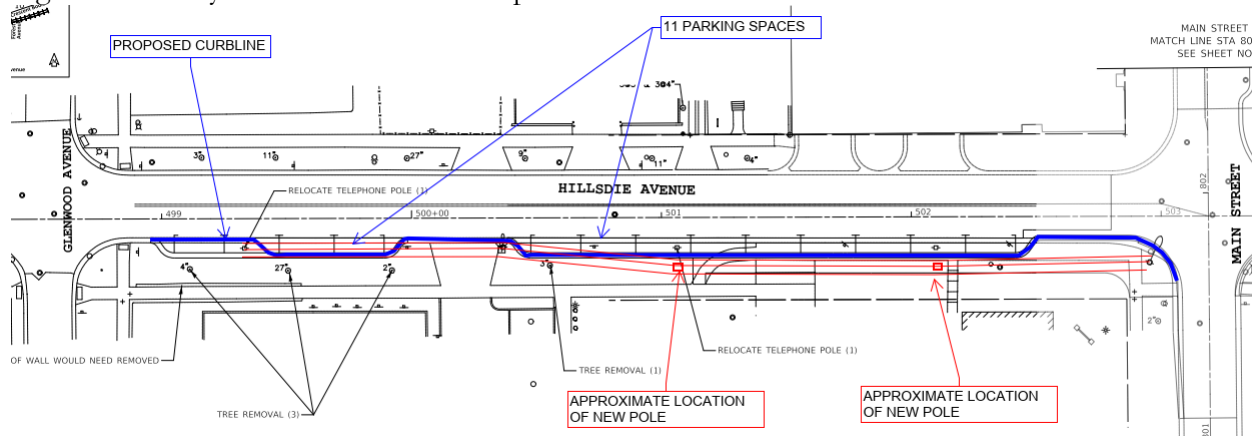


Option 2

This option will allow for addition of 11 parking spaces. The anticipated street widening will conflict with a number of existing ComEd poles and two of the poles would need to be moved. The existing ComEd poles carry multiple lines consisting of triple high voltage and single low voltage distribution lines, as well as AT&T, Comcast lines, and WOW fiber and coax lines.

The Village's consultant begin coordination with ComEd and other communication companies on the relocation of these poles. ComEd is required to move poles located within the Right-of-Way if found in conflict with proposed public improvements projects at no cost to the Village. Communication companies on poles would also be required to move their respective lines as well, at no cost to the Village. The pole relocation process would take several months and would be completed in time for the Hillside Avenue portion of the streetscape project, slated to start in summer of 2021. The extent of pole relocation is shown on a concept plan herein.

Figure 2 – Utility Pole Relocation Concept Plan



As shown on the plan, the overhead wires would be moved closer to the existing right-of-way line, but would still be within the public right-of-way and meeting the minimal separation between high voltage line and a building. Moving the poles would be an acceptable solution, but alternatively the lines could be buried. Furthermore, the Glen Ellyn Bible Church expressed a concern with moving the lines closer to the property line.

Option 3

This option would also allow for addition of 11 parking spaces. Staff also began exploring feasibility of removing these poles and undergrounding the lines. Initial coordination with ComEd focused on identifying practical limits of undergrounding and rough assessment of costs of these improvements. Contrary to the pole relocation strategy, the cost of removing the poles, burying of the lines and installation of added equipment would not be compensated by the utility companies and would need to be paid for by the Village.

Based on existing pole configuration the undergrounding limits were extended east of Main Street to allow for an added benefit of burying the overhead lines above Main Street, clearly visible traveling north on Main Street into the downtown. Also, extending the undergrounding limits south on Main Street allows for removal of the pole and line at the SE corner of Main and Hillside and “cleaning up” this intersection. Based on conversations with ComEd, the south leg could be

accomplished without a need to install an added switchgear equipment reducing the cost of this segment.

Figure 3 – Hillside/Main conceptual utility undergrounding plan

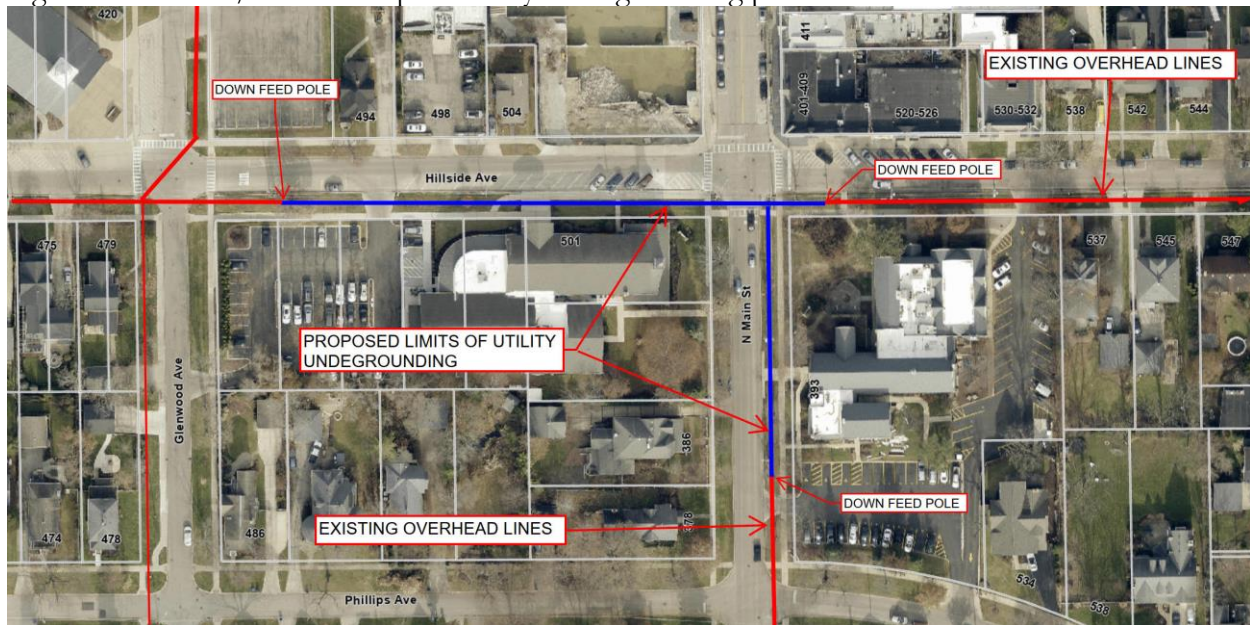


Figure 4 - View from Hillside/Main Intersection looking southwest



Figure 5 - View from Main Street looking north at Hillside Avenue



Pros of Undergrounding

- Allow for addition of 11 on-street parking spaces
- Improved aesthetics for section of Hillside Ave
- Removal of overhead lines above Main Street and much improved roadway aesthetics
- Alleviates concerns from Glen Ellyn Bible Church with moving high voltage lines closer to the building

Cons of Undergrounding

- Rough cost of the improvements for ComEd identified at approximately \$300,000, to be paid by the Village
- A rough cost of undergrounding communications lines was not provided but the costs would be the Village's full responsibility. More engineering is required to identify the costs but they could be on the order of the ComEd underground costs.
- Additional equipment to be added on the ground (2 switchgears, pedestals, junction boxes) which will congest the right-of-way

Next Steps

Staff looks for a recommendation from the CIC and on preferred option to be present to the Village Board for consideration.

If moving in a direction of undergrounding is preferred, the Village would be required to issue a \$25,000 engineering deposit to ComEd to perform design engineering and detailed cost estimate. If the undergrounding were to happen, the deposit would be applied to the cost of the improvements. In case, the Village were to decide not to proceed with the project after the ComEd design is performed, the deposit amount would be forfeited. Based on current estimates it would take

approximately 16-20 weeks from the time that the deposit is received and completion of the undergrounding work. AT&T is ready to begin preliminary engineering as well. A small fee (~\$5,000) will be required to complete that design work. A request was made to Comcast to prepare engineering design and cost estimate has been submitted and should be received this month. Design work for WOW would be initiated, as soon as Village decided to proceed further with the project.

Supplemental Traffic Study for Main Street and Crescent

CIC has provided recommendations on the scope, timing, and cost of the trial improvements and traffic study at Main and Crescent. Civiltech has since prepared a Right Turn Lane Test Closure Plan and updated their proposal. The plan is included as Attachment 1 for CIC's review and any further comments. Staff plans to outline the details of the traffic study along with a request to approve the cost of the traffic study at the September 20, Village Board workshop. The temporary lane closure installation is scheduled to be installed the week of September 27th and be in place until the last week of October.

Action Requested by the Capital Improvements Commission

Staff respectfully requests that the CIC review the aforementioned materials and provide any Feedback. Particularly, staff is looking for input on the following items:

- Review of the proposed request for Contract Amendment 3 and providing any input that would be useful for the Village Board to consider.
- Review and recommendation on roadway geometry and overhead utility direction for Hillside Ave with three options summarized below:
 - Addition of 7 spaces and no utility pole relocation
 - Addition of 11 spaces and utility pole relocation
 - Addition of 11 spaces and undergrounding of the overhead lines on Hillside and Main
- Review of the Right Turn Lane Traffic Test Closure and any further input on the proposed plan.

Attachments

1. Contract Amendment 3 – Additional Scope Items
2. Presentation on Contract Amendment 3
3. Revised Traffic Study Proposal
4. Right Turn Lane Test Closure Plan for Main and Crescent

Central Business District (CBD) Streetscape and Utility Improvements Design Services (Second Phase)
Village of Glen Ellyn - Contract Amendment 3 Request

	Initial Amendment #3 Request (July 2021) Hours	Negotiated Amendment #3 Request (Sept 2021) Hours	Difference	Notes:
Additional Scope Items				
CIC Meetings and prep (1 additional attended, 4 more anticipated)	200	33	(167)	July 13, 2021 Meeting + Material Prep for 4 future packets
Aesthetic / Historic Research	24	24	-	
Material Research and Graphics	140	140	-	Brick Cross walks & carriage walks, stamped colored MMA research
Additional Graphics after initial narrowing down of options	50	50	-	Revisiting Material Selections, Festoon lighting, and updating Renderings
Downtown Alliance Meeting and prep (Feb 2020)	6	6	-	6/15/2021 Alliance additional meeting
Village Board Meeting and prep (1 additional attended, 4 more anticipated)	100	33	(67)	June 21, 2021 Meeting + Material Prep for 4 future packets
Mock Up Assistance - Expanded scope	24	24	-	Additional Hours (outreach event and follow-up questions)
Pennsylvania/ATM interim plan	128	128	-	228 hours were expended to accommodate unanticipated updates & revisions
Historic Plaque Layout and Coordination	16	16	-	Additional Hours (on-going, multiple revisions developed for plaque size and placement)
Revisit Parking Options	24	24	-	Additional Hours (produced graphics and comparisons for multiple sidewalk and parking configurations)
Parking Options for west end of Crescent	20	20	-	Additional Hours (on-going coordination with developer on North Side and Village Event Space on south side)
Village Comment - Crescent Lane Configuration - Traffic Study (Memo only)	12	12	-	Additional Hours (support for Police & Fire Memo)
Village Comment - Pennsylvania Lane Configuration - Traffic Study (Memo only)	12	12	-	Additional Hours (support for Police & Fire Memo)
Meeting Comments - Investigate Duane St midblock crossing	12	12	-	
Additional Design for extending Hillside Limit to Glenwood	60	60	-	4 Additional Plan Sheets, On-Going
Environmental Commission 1/26/2021	16	16	-	3 people x 2 hours + 10 hours Prep
Construction scheduling details and meetings	24	24	-	Multiple iterations of Phase I construction schedule & Concept Detours
Additional graphics for tree diversity	10	10	-	Updated the tree graphics
Different plan packaging	1600	1200	(400)	Supplemental PS&E hours (Amend 3 = Phase 2 & 3 combined into 1 contract, Phase 4 not incl. within this Amendment)
Crescent Plan Set and coordination with CDM Smith/Train	120	120	-	Anticipated Coordination with Train Station / CDM & IDOT involvement
Brick research and analysis	24	24	-	MMA & Brick crosswalk research
Additional tree species revisions	80	80	-	Significant coordination, research, meetings, and responses to review comments from staff & Forestry, Phasing of Planting, Nursery Tagging
Structural design of the seat wall to accommodate the utilities	60	60	-	Anticipated effort to accommodate utility conflicts with wall locations
Other utility coordination (like ATM AT&T)	48	48	-	Utility Coordination in segments versus single contract approach
Additional Apex design effort and coordination	24	24	-	Additional effort required to tie in the design at Main & Hillside
Hillside Sawtooth Revisions	8	8	-	Detailed grading was completed for 3 sawtooths, Concepts were then requested for 1 and then 2 , Detailed grading is needed for 2
Bi-Weekly Progress Meetings (previously completed)	200	0	(200)	22 Meetings x 4 people x 2 hours + Prep & Minutes
As Needed Progress Meetings (future allowance)	120	48	(72)	12 Meetings x 2 people x 2 hours + Prep & Minutes
Lighting - Intricate Controller layout required for 4 phases, Extensive pole selection	115	100	(15)	
Electrical - Tree Outlets for locations beyond Main and Crescent	75	75	-	
Additional Lighting Areas Identified		126	126	(Hillside west, Prairie Path, Civic Center, Crescent south side, Bollards at horse trough)
Construction Assistance		40	40	
Decorative Sign Post and Base Options		20	20	
Utility Coordination and Review for undergrounding of Hillside Utilities		16	16	
Additional Metra Permitting for Phase 2 and 3		12	12	(Previously scoped as 1 project)
Storm sewer replacement for Main St alley		56	56	
Total Hours	3352	2701	(651)	
Fee	Fee = Total Hours*\$44*2.48	Fee = Total Hours*\$44*2.4001		
	\$365,770.24	\$285,237.48		
Traffic Analysis for Main and Crescent				
Revised 7/6/21 Proposal with reduced overhead rate	\$17,900.00	\$16,980.00	(\$920.00)	
Total Fee (Civitech)	\$383,670.24	\$302,217.48	(\$81,452.76)	
Sub Consultants				
RJN				
See Attached (Design Additions & Revisions)	\$40,620.00	\$19,980.00	(\$20,640.00)	
Muse				
See Attached (Website Updates & Messaging)	\$15,025.00	\$15,025.00		
Huff & Huff				
See Attached (Updated CCD forms for Phases 2 & 3)	\$2,675.00	\$2,675.00		
Subtotal (Sub Consultants)	\$55,645.00	\$37,680.00	(\$20,640.00)	
TOTAL	\$439,315.24	\$339,897.48	(\$102,092.76)	

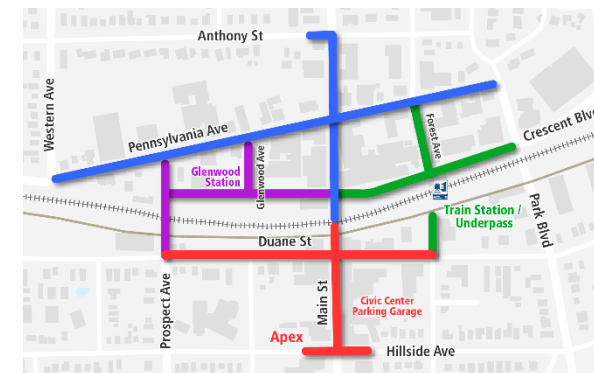
Amendment #1 (134k)

Background

- Prepared in December 2020
- Provided a list of “current” out of scope items
- There were many factors still unknown when the draft list was provided to staff
- Major unknowns were the overall timeline and delivery phasing to accommodate the businesses during Pandemic, Frida Kahlo, Civic Center, APEX, and the Train Station improvements
- Preliminary Design Concepts and Final Direction on Phase II detailed design remain outstanding

Key Considerations

- 30 Additional Scope items
- Hours listed were a “snapshot” and not all inclusive
- At the time provided, 8 additional scope items were identified but not included as they were not defined



Phasing Plan was Unknown

Amendment #2 (10k)

Single Item:

- Construction Animation video was created to help explain the overall process to stakeholders and show examples on how access would be maintained



Amendment #3 - Justification

- PS&E Contract layout is different from original proposal
 - Original Proposal - 1 Utility, 1 Streetscape, and 1 Resurfacing contract
 - Current Scope - 4 contracts with all elements combined within each
 - Beneficial to the Village from funding and business interruption perspective,
 - Increases the amount of work for the design team,
 - Design work extended over additional years (labor rate increases)
- Extensive support for the decision making process
 - Linked Meeting approach (Staff – CIC – Board) often required several iterations for each design feature
 - Final decisions were commonly revisited (examples include streetscape materials, tree selections, parking configurations, geometry /bump outs) resulting in continuous duplicative work

Amendment #3 - Justification

- Additional Streetlight System Design (Hillside, Prairie Path, etc.)
- Anticipated coordination with CBD developments and Train Station project
- Additional CIC, Stakeholder, and Board Meetings
- Additional Revisions to Pennsylvania Ave Improvement Project
- Additional Utilities Design and Coordination
- Revisiting Parking Options /Geometry/ Traffic Studies
 - Main/Duane, Main/Crescent Intersections
 - MOT & Detour Plans require more detail than originally anticipated since stakeholder involvement plays a larger role
 - Concept Construction Staging for each Phase requires a time intensive process
- Future Construction Assistance and RFI's

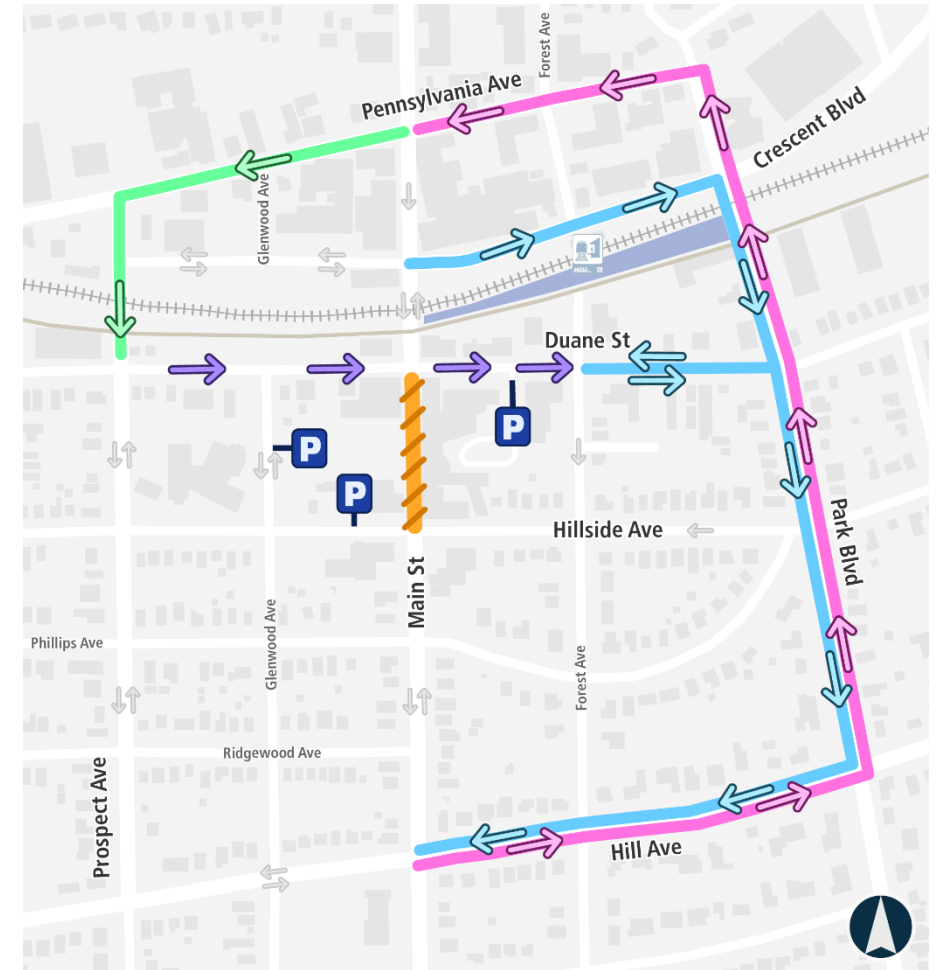
Example of Re-Visiting a Decision

Main & Duane intersection:

- Additional Design & Traffic studies to date = 3k
- Further potential studies = 5k (not pursued)
- Related changes to Plan, Specs, Estimate:
 - Intersection Details
 - Curb Ramp Details
 - Plan & Profile Sheets
 - Cross Sections
 - Drainage & Utility Sheets
 - Lighting
 - Pavement Marking & Signing
 - Erosion Control
 - Streetscape Layout
 - MOT
 - Quantities

Example MOT Additional Detail

- Original Construction Staging work hours assumed 1 plan set with staging
- Post Pandemic there is additional emphasis on keeping detour routes as close as possible to the CBD, therefore involving additional routing
- Stakeholder participation process creates additional iterations, however helpful for “buy in” from others
- 4 separate plan sets then compounds these efforts



Design Fee summary, projection & comparison

- First Phase = \$345,183.00
- Second Phase = \$1,003,174.00
- Amend #1 = \$134,082.70
- Amend #2 = \$10,000.00

- Current Tot. = \$1,492,429.70

- Est. to complete Phase 2&3 = \$339,897.48

- Projected Tot. = \$1,832,337.18

- Construction Cost Est (Phases 1-3)
= 19.5M
- Total Design % = 9.4% (includes
First Phase / Preliminary Concepts)

Summary

- The Civiltech will be able to complete Phase I within the current not-to-exceed amount
- Civiltech requests and staff supports approval of Amendment #3 to address the out scope items and completing construction ready plans for Phases 2 & 3
- The requested amount of contract amendment has been negotiated and reduced by \$102,092.76 from original request
- Total amount of Contact Amendment requested is \$339,897.48 in additional engineering costs
- A future design engineering fee supplement is anticipated for Phase 4, once designs are further refined for the Train Station Project

Proposed Schedules

Phase I		Phase II	
Pre-Final	9/24/2021	Pre-Final	6/1/2022
Reviews	10/15/2021	Reviews	7/15/2022
Final	11/22/2021	Final	9/2/2022
Reviews	11/15/2021	Reviews	10/14/2022
Bid Advertisement	12/1/2022	Bid Advertisement	11/15/2022
Bid Award	1/17/2022	Bid Award	1/16/2023
Start Construction	3/7/2022	Start Construction	3/6/2023



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Fax: 312.726.5911

Transportation Design

Traffic Engineering

Civil Engineering

Construction Engineering

Environmental Studies

Water Resources

Structural Design

Right of Way

Urban Design

Transportation Planning

Program Management

September 1, 2021

Mr. Richard Daubert, P.E.
Professional Engineer
Glen Ellyn Public Works Department
30 South Lambert Road
Glen Ellyn, IL 60137

Re: Proposal for Traffic Analyses
Main Street and Crescent Boulevard Intersection
Glen Ellyn, IL 60137

Dear Mr. Daubert:

It is our understanding that the Village wishes to conduct two traffic analyses at the Main Street and Crescent Boulevard intersection. The first analysis is incrementally raising the traffic volumes by a percentage basis until the movements at Main/Crescent degrade by one Level of Service using Synchro/SimTraffic. This analysis is to be conducted under non-train scenario. The second analysis is assisting the Village with a temporary/test closure of the eastbound to southbound right turn lane, and performing analysis to determine the feasibility of a permanent closure. This would include preparation of a closure layout plan, collection of drone, tube, and Miovision data before and after the closure has been in place for an acclimation period, synthesis of all data collected, and a technical memorandum summarizing findings. The test closure would occur in the Fall after school is in session and after the lane closures on Main Street due to the Apex development are lifted. The physical set-up of the closure will be performed by Village staff. This would be a follow-up to a study summarized in a December 15, 2020 memo which theoretically evaluated the operation if a closure was constructed. That analysis used 2019 traffic counts that were collected prior to the COVID-19 pandemic. Following is a proposed scope of services and fee estimate to accomplish these two goals.

I. Scope of Services

PART I: Capacity Analyses

Item 1 – Traffic Analysis

- a. Use Synchro/SimTraffic to incrementally raise traffic volume by a percentage basis until the movements at Main/Crescent degrade by one Level of Service.
- b. Process the Synchro/SimTraffic reports for all morning and evening peak hours.

Item 2 – Results - Results will be summarized in an email and submitted to the Village of Glen Ellyn for review. This email will summarize the results of the study and will highlight the break even point for a one level drop in the Level of Service. A Synchro/SimTraffic report will be included in the email.

Item 3 – Meetings and Coordination

- a. Attend one meeting with Village staff, if necessary, to discuss the results of the study.
- b. Project setup, invoicing, and internal coordination meetings.

PART II: Temporary Lane Closure Evaluation

Item 1 – Machine Count – The findings in the December 15, 2020 memo were based on one days' worth of traffic data. There are concerns among Village decision makers that this is not enough data or that the March 19, 2019 data may not have been representative of a busier traffic day. A road tube count will be conducted on the west leg of the Main Street/Crescent Boulevard intersection for a six-week period. The tubes will capture bi-directional traffic, classified into vehicle type, and will also capture speed and gap data. The tubes will be placed two weeks prior to the test closure of the EB to SB right turn lane and will be picked up four weeks after the closure is in place. This will occur in the fall after school is in session and after the Apex development lane closures on Main Street are removed. Data can be processed/formatted in-house by Civiltech staff. While it is anticipated that traffic patterns will be relatively consistent from day to day, the peak and 85th percentile traffic volume sets will be identified and used in subsequent analyses. This effort will require placement of the tubes, and then checking the installation every three days to ensure the tubes are intact and the batteries are functioning. A light post is located on the south side of Crescent Boulevard near the Young's Appliances sign. The machine can be chained to this post. There is no parking at this specific point in Crescent Boulevard on either side of the street. Coordination with Village street sweeping operations will be required. This item includes the following tasks.

- a. Place tube counter two weeks prior to temporary closure.
- b. Check tube counter operation every three days for six weeks. Replace machine and/or tubes as necessary. Batteries are long-lasting (5-year) batteries and should not need replacing. Pick up machine on last visit. The time for this effort is included in Item 2b.
- c. Process and format the machine counter data to identify traffic patterns and the peak & 85th percentile volume days.

Item 2 – Video Camera Data Collection – Miovision traffic cameras can serve multiple purposes. The video files can be uploaded to Miovision for automatic traffic count processing for a direct cost per hour or per 24 hours. In addition, the actual video files can be used for in-house viewing by Civiltech staff to identify queuing patterns, train gate down times, pedestrian behavior, etc. There is only staff labor involved with the latter. It is proposed that up to four Miovision cameras will be placed at the intersection of Main Street and Crescent Boulevard. At least one camera will be focused on the intersection itself for count processing. Another will focus on the RR crossing to determine gate-down timing. The third and fourth cameras will be placed to determine the extent of queuing on the EB and SB approaches to the intersection. It is assumed that three 24-hour periods of video data will be processed by Miovision; perhaps one day prior to the closure, one day after the closure is in place for several weeks, and one day to be determined. The days to be processed will be based on the results of the tube counts in Item 1. This item includes the following tasks:

- a. Place Miovision cameras.
- b. Check Miovision cameras every three days for six weeks during the same visit to check on the tube counters. At the Miovision cameras, data cards and batteries will be swapped each visit. Pick up cameras on last visit.

- c. Store six weeks worth of hourly traffic count videos for viewing/analysis (covered in subsequent Items) and/or sharing with Village staff. Upload three 24-hour periods to Miovision for processing. Download and format data. Create peak hour diagrams and associated data tables.

Item 3 – Drone Video Data Collection – It is proposed that drones be used to collect video data during two one-hour periods to be determined, covering the area outlined in blue. The video data will primarily be used for information and



visual inspection only. The goal will be to capture traffic operation during a peak commuter hour (5 P.M.) to observe operations during Metra trains, and one hour outside but near the peak hour when a freight train is anticipated. This information will supplement the video and count data obtained from the tubes and Miovision cameras. This effort will require two drones and two drone pilots. A drone battery lasts approximately 20 minutes. With two drones and two battery packs each, the drones can be sent up in an alternating fashion in order to gather a seamless one-hour period. This item includes the following tasks:

- a. Gather and prepare drone equipment.
- b. Travel to location and gather video data.
- c. Process/format video data.

Item 4 – Field Observations – This item will be completed on a typical weekday approximately three to four weeks after the temporary closure of the right turn lane to provide for an acclimation period for area motorists. Operations will be observed during a freight train just prior to the evening peak hour, and also during the 5 PM peak commuter hour.

Item 5 – Temporary Lane Closure Concept Plan – Civiltech will develop a concept plan for a temporary right turn lane closure in CAD on aerial photography background.

Item 6 – Traffic Analysis

- a. Compare Fall 2021 traffic data (24 hour counts) to data collected in March of 2019 (that was used in the December 2020 memo) to make an educated determination if traffic volumes have returned to “normal” following the COVID pandemic.
- b. Review Miovision video data to quantify the number, type, and direction of trains at the Main Street crossing between 6 AM and 8 PM, and the gate-down time (by train and total). Do this for three dates as follows:
 - i. The March 19, 2019 date, to determine how many eastbound through motorists “are” being blocked by queues that extend through the current right turn lane into the through lane, and also the additional number of motorists that “would be” blocked by queues if the right turn lane was removed,
 - ii. A weekday during the two-week period prior to the temporary closure, to see how close these results are to the March 19, 2019 date, and
 - iii. A weekday approximately three to four weeks after the temporary closure is in place, to determine how many actual eastbound through motorists “are” blocked due to the temporary closure. For this effort, also estimate the amount of delay experienced by motorists who are blocked.

Item 7 – Crash Analysis – This item includes coordination with the Village to obtain and review police crash reports for any collisions that might occur while the right turn lane is closed to traffic.

Item 8 – Technical Memorandum

- a. A draft written report in the form of a technical memorandum will be prepared and electronically submitted to the Village of Glen Ellyn for review. This memorandum will summarize the results of the study and will recommend whether the eastbound right turn lane should be permanently closed to traffic. Queue length exhibits, plotted on an aerial photograph, will be included in the report.
- b. Civiltech will revise the report one time based on Village comments and will submit a final report to the Village.

Item 9 – Meetings and Coordination

- a. Attend one meeting with Village staff, if necessary, to discuss the results of the study.
- b. Project setup, invoicing, and internal coordination meetings.

II. PROJECT STAFF

The staff members who we will assign to this project have experience on project which involved all of the elements which will be encountered on this project. We proposed to employ the following staff on this project:

QC/QA:	James R. Woods, P.E., PTOE
Project Manager:	James R. Woods, P.E., PTOE
Project Engineer:	Anmol Shrivastava, P.E., PTOE

III. PROJECT SCHEDULE

PART I: Capacity Analyses

A draft written report in the form of an email will be submitted to the Village within four weeks of obtaining the notice to proceed.

PART II: Temporary Lane Closure Evaluation

It is understood that Village Board approval for the trial right turn lane closure implementation may occur later in the summer. A draft report will be submitted to the Village within four weeks of obtaining the post-closure traffic data.

IV. FEE CALCULATION

We propose to perform the work using a direct labor multiplier, with a not-to-exceed maximum. The not-to-exceed fee will include reimbursement of direct labor costs for the scope of services described above, overhead and indirect costs, fringe benefit and salary burden costs, plus profit. We will assume an average hourly rate of \$40 to \$42 per hour and use a billing factor of 2.8. Direct expenses will be reimbursed at their actual cost. The workhour estimates and fee calculations shown below.

PART I: Capacity Analyses

Item	Task	Workhours	Direct Costs
1.	Traffic Analysis	6	\$ 0
2.	Report	4	\$ 0
3.	Meetings and Coordination	4	\$ 0
Total		14	\$ 0

Fee Estimate: 14 hrs. x \$42/hour x 2.4001 = \$ 1,411.25
 Direct Costs = \$ 0
Part I Fee Estimate (Rounded) = \$ 1,410

PART II: Temporary Lane Closure Evaluation

Item	Task	Workhours	Direct Costs
1.	Machine Count	10	\$ 150 (mileage)
2.	Video Camera Data Collection	40	\$ 1,200 (Miovision)
3.	Drone Video Data Collection	24	\$ 150 (mileage)
4.	Field Observations	6	\$ 50 (mileage)
5.	Temporary Lane Closure Concept Plan	16	\$ 0
6.	Traffic Analysis	18	\$ 0
7.	Crash Analysis	6	\$ 0
8.	Technical Memorandum	18	\$ 0
9.	Meetings & Coordination	8	\$ 0
Total		146	\$ 1,550

Fee Estimate: 146 hrs. x \$40/hour x 2.4001 = \$ 14,017
 Direct Costs = \$ 1,550
Part II Fee Estimate (Rounded) = \$ 15570

Note that direct costs for processing three 24 hour Miovision counts are included above. The direct cost for processing of each additional 24-count is \$400. Civiltech labor for each additional count is 1 hour per 24 hour count processed.

Additional Services:

During the course of the project, it may become necessary to perform additional services beyond the scope of this contract including but not limited to attendance at additional meetings, additional traffic counts, analysis of additional phases of development, additional traffic analyses, additional geometric analyses/plans, or additional plan, exhibit, and report revisions. Should some of this work become necessary, the additional fee for extra work would be billed on a time-and-material basis. No additional work would be commenced without obtaining client approval. Billing rates are as follows:

QC/QA:	$\$61.50/\text{hour} \times 2.4001 = \$147.20/\text{hour}$
Project Manager:	$\$61.50/\text{hour} \times 2.4001 = \$147.20/\text{hour}$
Traffic Engineer:	$\$38.25/\text{hour} \times 2.4001 = \$91.80/\text{hour}$

Thank you for considering Civiltech for this assignment. We look forward to continuing our relationship with the Village and assisting you and your staff with this and future assignments. If you have any questions or require additional information, please call me at (630) 735-3942.

Very truly yours,

James R. Woods, P.E., PTOE
Project Manager
Civiltech Engineering, Inc.

PART I: Capacity Analyses

Approved (Print Name): _____

Title: _____

Signature: _____

Date: _____

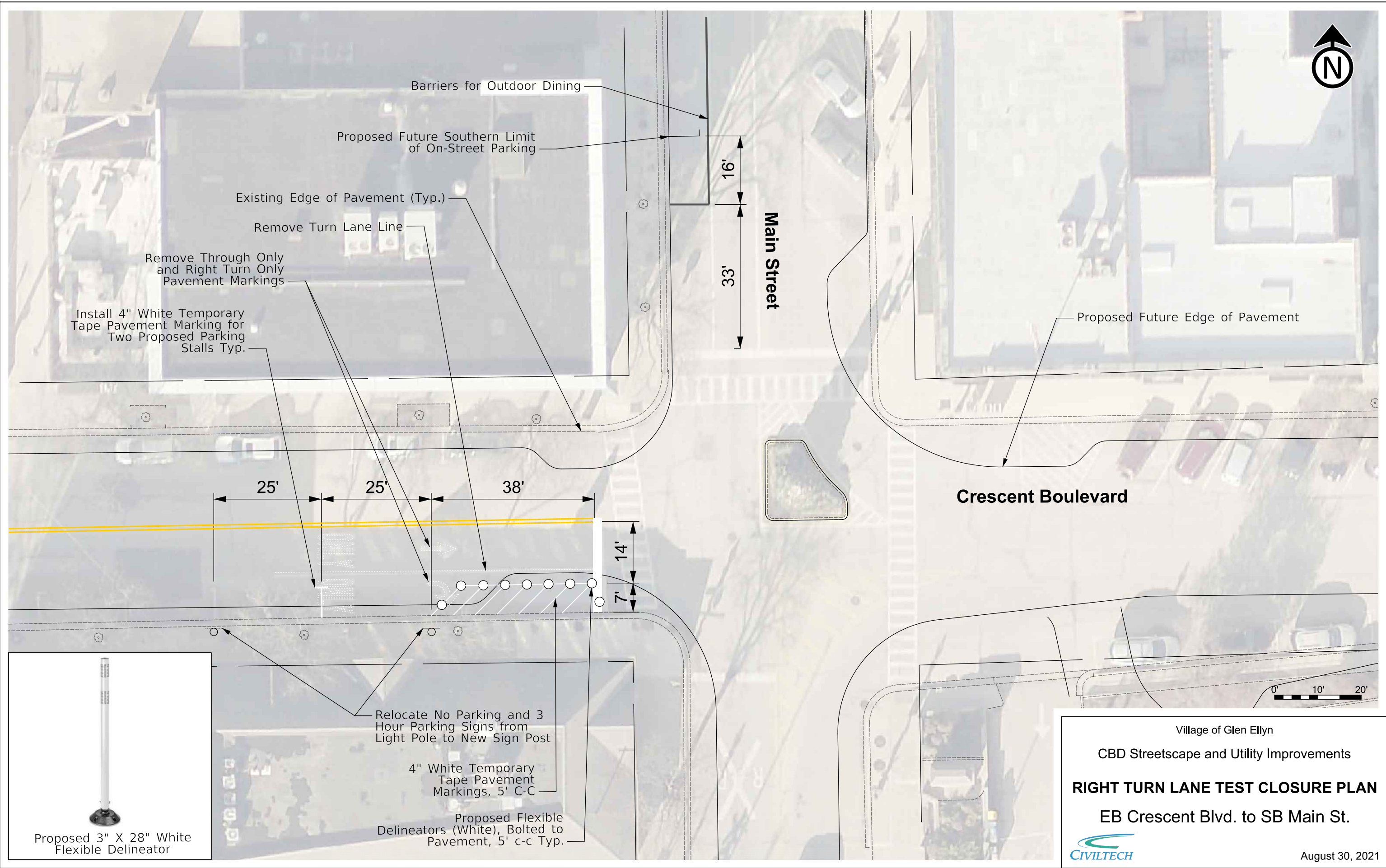
PART II: Temporary Lane Closure Evaluation

Approved (Print Name): _____

Title: _____

Signature: _____

Date: _____





**Glen Ellyn Capital Improvements
Commission**

535 Duane Street
Glen Ellyn, IL 60137

Meeting 9/14/2021 7:00 PM

Department: Public Works

Department Head:

Category: Report

Prepared By:

AGENDA ITEM (ID # 2021-1409)

DOC ID: 2021-1409

Engineering Project Activity Report Dated September 10, 2021

Statement of the Issue:

The Public Works Engineering Division Project Report Dated September 10, 2021 is attached hereto for review by the Capital Improvements Commission.

Analysis:

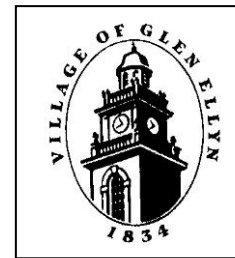
Budget Impact:

Action Requested:

Attachments:

1. Engineering Project Report 9-10-21

September 10, 2021



ENGINEERING DIVISION PROJECT ACTIVITY REPORT

CONSTRUCTION PROJECTS

UTILITY AND ROADWAY REHABILITATION PROJECT 20001 – Phase 1

Contractor: Copenhaver

(Project No. 20001; Value of Construction Contract = \$3,052,890)

The first phase of the project involves the rehabilitation of roadways in the central-west portion of the Village including: Phillips Avenue (Lorraine to Vine), Vine Street (Ridgewood to Hillside), Ridgewood (Kenilworth to Brandon), Evergreen (Hillside to Duane), and Center (Evergreen to Lorraine). The work includes sanitary sewer main line repairs and service line replacement, water main and service line replacement, storm sewer/drainage improvements, and reconstruction of the roadways. Nicor is also implementing some limited gas main and service line replacement work as part of the project.

All sanitary sewer main and service line replacement work throughout the project streets is complete. It is anticipated that all water main and service line installation work will be completed in the Phillips, Vine, and Ridgewood project area by Wednesday, September 15. Storm sewer work is complete on Ridgewood Avenue and in progress on Vine Street. It is anticipated that all storm sewer work on Phillips, Vine, and Ridgewood will be completed by the end of the month.

The Contractor's roadway crew is currently preparing Ridgewood Avenue for the installation of the new curb the week of September 13th. Driveway approach replacement work on Ridgewood Avenue will also commence the week of the 13th. Paving of the first layers of asphalt on Ridgewood is anticipated to occur on Tuesday, September 21st and Wednesday, September 22nd. Similar road building operations will follow suit on Vine Street and Phillips Avenue as the storm sewer installation work progresses and is completed on each street.

The Contractor is completing the installation of water main on Evergreen and Center. The water main is anticipated to undergo pressure testing, disinfection and water sampling in two phases, Evergreen first then Center. The installation of new water services will advance upon each section passing testing, disinfection, sampling, and permitting protocols. It is anticipated that water service installation work on Evergreen and Center will commence mid-month and be completed by the end of September. Installation of storm sewer main and services on Evergreen and Center will commence thereafter and be completed in early October as to allow the road building activities on these streets to commence immediately thereafter.

**Pictured Below Is Earth Excavation/Undercutting For
Ridgewood Avenue Roadway Subgrade and Sub-Base Improvements**



2021 STREET IMPROVEMENTS PROJECT – Contractor: R.W. Dunteman

(Project No. 21002; Value of Construction Contract = \$1,624,277)

This project involves more limited utility (repairs) and roadway improvements (resurfacing) along approximately 3 miles of roadways generally located in northeast Glen Ellyn to be improved in 2021. The project has been split into two construction phases, with one being the concentrated project area within Crescent Boulevard, Roger Road, Park Row, and the Union Pacific railroad, while the second phase consists of all other streets included in the contract.

All concrete and asphalt paving work is now substantially completed, with the exception of punch list concrete re-pours. Paving was completed in the first phase the week of August 9th, in advance of Glenbard West returning to session. The remaining streets were all paved by August 18th, with line striping occurring the following week. The contractor is planning to complete a final batch of concrete pours by early next week, and to begin parkway restorations shortly after. All sod restorations are still anticipated to be completed by the end of September. Any outstanding punch list items must then be completed by the contract deadline of October 30th.

OTHER AGENCY PROJECTS IN GLEN ELLYN

BLOOMINGDALE ROAD AT GENEVA ROAD INTERSECTION IMPROVEMENT AND SIGNAL MODERNIZATION – Contractor: Schroeder Asphalt Services

This project is being implemented by DuPage County and involves the widening of Bloomingdale Road at Geneva Road. The widening will support the addition of a secondary left turn lane for southbound Bloomingdale Road to eastbound Geneva Road. The project includes the installation of temporary traffic signal equipment which will allow for all the traffic signal equipment to be removed and replaced as part of the project (Traffic Signal Modernization). Staff attended the project preconstruction meeting on July 9th. Utility relocation work is planned to advance in the next week with the County and its Contractor reviewing the timing for the commencement of the roadway widening work.

CONSTRUCTION PROJECTS IN CLOSE-OUT

PENNSYLVANIA AVE. IMPROVEMENT PROJECT – Contractor: John Neri Construction

(Project No. 15006 & 16005; Value of Construction Contract = \$252,502)

The project includes both underground utility improvements (storm sewer, sanitary sewer service line, water service line, and street lighting conduit and wiring upgrades) and sidewalk widening from 7' to 16.5' on the south side of Pennsylvania, just east of Main Street and will allow for A Toda Madre restaurant outdoor dining expansion. The project is substantially completed with two punch list items remaining to be addressed by the contractor. The A Toda Madre restaurant deck is completed as well.

VILLAGE GREEN STORM SEWER PROJECT– Contractor: Mauro Sewer Construction

(Project No. 16007; Value of Construction Contract = \$169,715)

This project involved the replacement of approximately 1,200 linear feet of 12-inch storm sewer from Village Green Park to Lambert Lake. Construction has been completed including installation of top soil, seed, and erosion control blanket. Next steps for the project involves preparation of the final pay estimate, balancing change order, and invoicing the park district for their share of the project costs. The construction cost is anticipated to be approximately \$9,000 under the construction contract award amount.

ROADWAY REHABILITATION PROJECT 20002– Contractor: Schroeder Asphalt Services

(Project No. 19007; Value of Construction Contract = \$1,298,381)

The final balancing change order and invoicing for the project have been completed. In summary, the project closed out \$35,434.14 below the Contract Award Amount.

NORTH PARK BLVD. / MAIN STREET IMPROVEMENTS – Contractor: R.W. Dunteman

(Project No. 13001; Value of Construction Contract = \$2,945,000)

Staff and the Resident Engineer have addressed all of IDOT's requests with project closeout in the court of IDOT District 1 Materials.

TAYLOR AVENUE PEDESTRIAN TUNNEL – Contractor: "D" Construction

(Project No. 15009; Value of Construction Contract = \$2,745,521)

The Engineer has transmitted the final pay estimate to IDOT.

CRESCENT BOULEVARD RECONSTRUCTION – Contractor: Martam Construction

(Project No. 13002; Value of IDOT Contract = \$3,153,000; Local Share = \$1,480,000)

All paperwork is complete. Awaiting final invoicing from IDOT.

ENGINEERING PROJECTS

HILL AVENUE UTILITY IMPROVEMENTS – Engineer: Walter E. Deuchler Associates

(Project No. 00511)

A meeting was held with Elliot Construction to facilitate investigatory work of water services on the property which will need to be reinstated with the project. General water service line routing, sizing, and material information was collected with additional locating of lines to be completed by Public Works Operations Personnel. Upon completion of locating the services and confirming the desired alignment of the water main through the Elliot Construction, the Engineer will be directed to finalize the drawings for the improvements on the Elliot property.

GLEN ELLYN/IL AMERICAN WATER INTERCONNECT– Engineer: Donohue

This project involves the design of an emergency use interconnection between the Village and Illinois American Water Company (ILAWC) distributions systems, near Glenbard South High School. The interconnection would significantly reduce the water outage areas for the respective utilities in the event of water main breaks. Staff has provided the engineer with comments on the 90% plans which will be revised and submitted to the IEPA for permitting.

CENTRAL BUSINESS DISTRICT PROJECTS

TRAIN STATION / PEDESTRIAN TUNNEL – Engineer: CDM Smith/KMI Architects

(Project No. 16016)

Staff met with Union Pacific Railroad Real Estate personnel to engage discussions on the conflicting interests between UP's potential sale of the Depot property to a developer. Staff strongly suggested that UP protect both the Village and Railroad's interests through continued commitment to support the Village's project. Staff is awaiting follow up from UPRR.

CBD UTILITY AND STREETScape IMPROVEMENTS – Engineer: Civiltech Engineering, Inc.

(Project No. 15006)

The design engineer is proceeding with engineering plans preparation for Phase 1 of the project. Prefinal plans and specs are due to the Village submittal by September 24th.

Public Works worked on following general tasks last month:

- Completed review of the streetscape concept plans for all phases of the project
- Coordinated with Glenwood Station Development on uniting the designs for both projects
- Coordinated with utility companies on options for overhead lines at Hillside and Main
- Provided support to the design engineer on utility and roadway design questions
- Coordinated with Nicor on timing of gas main replacement on Main St from Hillside to Duane
- Requested and received quotes for parkway trees from the nurseries in the Suburban Tree Consortium
- Continued to review the understory plants to be included in the tree planter beds

Public Works has finalized a request for amendment (no. 3) to professional engineering services with Civiltech Engineering. The requested will be presented for review at the September 14 CIC meeting and the September 20 Village Board workshop meeting.

PROCUREMENT OF GOODS AND SERVICES

Public Works seeks the best vendor prices for various annual municipal and utility maintenance and operations activities. This effort includes local bidding of projects or joint purchasing initiatives, including the Municipal Partnering Initiative (MPI), a consortium of DuPage County communities.

Project	Estimated Glen Ellyn Cost	Status
2021 Sidewalk and Concrete Street Repairs	\$325,475 (2021)	This annual program includes repairs to deteriorated or damaged sidewalk and concrete roadway infrastructure throughout the Village. A first batch consisting of over 120 locations was poured the week of August 6, 2021 with asphalt patching and restorations completed the week of August 9, 2021. Sidewalk installations segments on Western Avenue and High Road were constructed the week of August 23rd. Related storm sewer work is scheduled to be completed the week of September 6th, with final grading and landscaping occurring shortly after. A second and final batch of repairs is targeted to be completed in early October. <u>New Sidewalk Installation along Western Avenue between Amy Court and Geneva Road</u> 

Project	Estimated Glen Ellyn Cost	Status
2021 Parking Lot Resurfacing and Asphalt Roadway Patching	\$210,700 (2021)	Project scope includes roadway patching throughout the Village and resurfacing of the Park & Montclair parking lot. The contract was advertised on January 29, 2021 with bids opened on February 10, 2021. Award to the low bidder, J.A. Johnson Paving Company, was made at the February 22, 2021 Village Board meeting. Resurfacing and restriping of the Park & Montclair parking lot was completed the week of May 24, 2021 and the lot was reopened on May 29, 2021. Roadway patching work started on May 26, 2021 with all but four roadway patches being completed as of June 2, 2021. The remaining patches were completed on July 9, 2021. A list of pavement markings disturbed by roadway patching was restriped the week of July 26, 2021. The project is now proceeding to closeout.
2021 Pavement Markings	\$30,000 (2021)	This contract is annually intended to be awarded to the low bidder of either the DuPage County contract or the Suburban Purchasing Cooperative. Staff recommended that the Village Manager execute a contract with the lower bidder of the two programs, Precision Pavement Markings, Inc. This contract was executed on June 30, 2021. Staff will now work to compile a list of striping locations and schedule the work to be completed sometime in September or early October.
2021 Crack Sealing	\$25,000 (2021)	This year's program is anticipated to be procured once staff has compiled candidate locations using upcoming Pavement Condition Index (PCI) Study data. The 2021 PCI Study is discussed below.
2021 Asphalt Surface Rejuvenation	\$40,000 (2021)	Candidate locations include streets that have been resurfaced one to three years prior. Staff has finalized target locations and quantities and requested pricing from single source vendor Corrective Asphalt Materials. Recommendation and award for a single-source purchase was made at the August 23 rd Village Board Meeting. Staff has executed a contract and will now proceed to schedule the work for completion in by late September.
2021 Pavement Condition Index (PCI) Study	\$50,000 (2021)	The Village has obtained pavement condition data for all Village streets every four years since 2004. Unfortunately, COVID-19 caused staff to recommend deferral of a 2020 Study due to financial concerns at the time. However, on a positive note, Staff applied for participation in CMAP's Pavement Management Program and recently learned that CMAP was able to secure additional State Planning and Research Grants and has included Glen Ellyn in its next round of assisting communities with completing PCI Studies and developing Pavement Maintenance Programs. The Village will in turn receive an updated Pavement Condition Index Survey of all the Village's streets as well as a 5-year pavement management program; <u>both at no cost to the Village.</u> Staff met with ARA on June 9 to discuss preliminary results of the field data collection and provide feedback. Staff then met again with ARA on August 12, 2021 to review a draft report and again provide feedback

Project	Estimated Glen Ellyn Cost	Status
		for various report output scenarios. Staff is anticipating receiving a final report in September. To fulfill part of the CMAP grant requirement, staff and members of the ARA team also plan to present the report's findings at October meetings of the CIC and Village Board.

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