

**Agenda**  
**Village of Homer Glen**  
**COMMITTEE OF THE WHOLE**  
**Wednesday, January 14, 2026- 5:30p.m.**  
**Village Board Room, 14240 W. 151<sup>st</sup> Street, Homer Glen**

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- A. Call to Order
  
- B. Pledge of Allegiance to the Flag
  
- C. Roll Call – Establish a Quorum
  
- D. Public Comment (3 Minute limit. Please sign in prior to start of meeting.)
  
- E. Discussion Regarding ComEd Substation Improvements – 13015 W. 143<sup>rd</sup> Street
  
- F. Adjournment

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***DISABLED:*** Any individual requiring special accommodations as specified by the Americans with Disabilities Act is requested to notify the Village Manager at (708) 301-0632 at least 24 hours in advance of the meeting date.



## AGENDA SUPPLEMENT SHEET

**Agenda Item Number:** E  
**Committee of the Whole Date:** January 14, 2026  
**Subject:** Case# HG-2518-SPPUD  
ComEd Substation  
**Address:** 13015 W. 143<sup>rd</sup> Street

**Item Title:** **ComEd Substation Improvements (Workshop):** Future request for a Special Use Permit for a Planned Unit Development (PUD), with certain exceptions, and Site Improvement Plans for certain real property located at 13015 W. 143<sup>rd</sup> Street, Homer Glen, Illinois [HG-2518-SPPUD].

**Staff Contact:** Christopher Gruba, Director of Planning & Zoning

### **Property Information**

**Location:** 13015 W. 143<sup>rd</sup> Street  
**Property Size:** 67 acres  
**Existing Zoning/Use:** I-1 (Industrial)  
**Adjacent Zoning:** N: C-2 (Local Business)  
E: R-2 (Single-Family Residential)  
S: E-1 (Single-Family Estate Residential), A-1  
(Agricultural)  
W: I-1 (Industrial)

### **Introduction:**

As a general note, this report reflects the plans submitted to-date. Plans and revisions continue to be sent to staff during the drafting of this report, and therefore this review should be viewed as “preliminary” and information contained herein subject to change.

Commonwealth Edison Company (ComEd) has applied for a Special Use Permit for a Planned Unit Development (PUD) to make improvements to their existing substation located on S. Bell Road, just north of Founder’s Crossing. Although more detailed information is contained in the exhibits attached to this report, the main changes to the site can be summarized as follows:

1. Construct a new, 58’ 9 ¼” tall primary building (“enclosure”) near S. Bell Road. This building would have a footprint area of 42,470 square feet. Since the building would have two floors per the submitted floor plans, the total combined gross floor area would be approximately 84,940 square feet.

2. Construct a new, 20' tall accessory building to the northwest of the primary building, measuring 9,000 square feet in gross floor area.
3. Install a 12' tall combined wall/fence to enclose the new primary building and accessory building for security.
4. Remove outdated, exposed transformers from the site.
5. Remove 11 old transmission structures (powerline poles) and install 21 new transmission structures. All new structures would be of the "monopole" construction, not lattice-towers.
6. Enlarge and deepen the existing on-site detention pond to accommodate additional stormwater runoff.
7. Install a new vehicle entrance to the site from Bell Road, approximately 150' to the south of the existing entrance. There would then be a total of 3 vehicle entrances to the site from S. Bell Road.
8. A pedestrian "rest area" would be created along the existing 10' wide bike path, near the 90° bend at the southeast corner of the site. The rest area would include benches, a trellis, bike racks and a butterfly garden with native plantings.

Section 220-901(A)(4) of the Zoning Ordinance states that any industrial development with a gross floor area that exceeds 50,000 square feet shall be processed as a PUD. The combined total of all proposed gross floor area is 93,940 square feet, triggering this requirement. This site does not currently have a special use permit for a PUD. PUD's can allow for deviations from code regulations, which are called "exceptions", otherwise known as variances. As currently proposed, the project would require several exceptions, listed later in this report. The applicant has indicated to staff that the proposed improvements are not specifically designed to serve a data center.

As part of this workshop, the applicant and staff are seeking input from the Village trustees regarding any and all aspects of this project.

### **Project History/Timeline:**

#### Older History:

- **September 14, 2010:** Ordinance 10-033 was passed which granted a Special Use Permit to expand a public utility facility. This permitted an addition to an existing control building. The building addition measured 30'x38' (1,140 square feet).
- **February 14, 2012:** Ordinance 12-011 was passed which granted a Special Use Permit to alter the landscape plan that was previously approved under Ord 10-033, in order to comply with regulations set forth by the Federal Energy Regulatory Commission regarding height and species of landscaping below or in a powerline corridor.
- **February 25, 2015:** Ordinance 15-010 was passed which approved a lease agreement between the Village and ComEd, allowing construction and maintenance of an extension of Heroes Trail, located on ComEd property.
- **June 10, 2015:** Ordinance 15-026 was passed which granted a variance for fence height from 6' to 12'.

#### Recent History

- **February 28, 2025:** An introductory meeting was held between ComEd representatives and Village employees.
- **April 29, 2025:** A follow-up informational meeting was held between ComEd representatives and Village employees.
- **November 4, 2025:** A formal application was submitted for this project and application fees were collected.

- **November 10, 2025:** An Application Conference Meeting was held between ComEd representatives, Village employees, Northwest Homer Fire District and School District 205.
- **December 4, 2025:** An informational meeting was held between ComEd representatives and Village Employees.
- **December 16, 2025:** Informational meetings were held between ComEd representatives and Village trustees, two trustees at a time, in compliance with the Illinois Open Meetings Act.

### **Public Comments**

As of the writing of this staff report, no public comments have yet been received. However, public comments are anticipated once a notice of public hearing is published in the newspaper and all property owners within 1,000' of the site are notified by mail.

### **Site Improvement Plans:**

#### **Site Characteristics**

The total area of the ComEd property is 67 acres, contained within a single parcel. ComEd does own adjacent parcels of land that contain the high-tension powerlines that radiate out from the site. There are currently four smaller buildings located on the site, along with exposed electrical equipment. The proposed site work would be confined to an approximate 4-acre area within the 67 acres and is mostly located in the southeast corner of the property, near the intersection of S. Bell Road and W. Martingale Road, near the existing Illinois American water tower. In this 4-acre area, the site slopes downward from south to north. There are no wetlands or flood hazard areas within the area of proposed work.

#### **Primary Building**

The proposed primary building would measure approximately 82' wide by 513' long. The Floor Plan submitted by the applicant illustrates that this building would contain two floors. The "Vault Plan" is essentially the lowest floor and functions like a walk-out basement. The first floor sits above the Vault Plan. The footprint of this building is approximately 42,470 square feet. With two floors, the approximate gross floor area is 84,940 square feet. This building was designed to allow for increased capacity over time. A bathroom would be located within this building.

The setbacks required for this building are 98' from the front (Bell Road) and 118' from the side (south). The Site Plan illustrates a 167.5' front setback and 97' side setback, requiring an exception for the latter. The front setback is calculated by adding the base setback of 60' and adding 2' for each 1' of building height over 40'. The building is approximately 59' tall, which is 19' over 40', requiring an additional 38' setback beyond the required 60'. The south setback is calculated by adding the base setback of 80' (when adjacent to a residential zone) and adding 2' for each 1' of building height over 40'. In this instance, the math is  $80' + 38' = 118'$ .

The maximum building height in the I-1 zone district is 35'. However, §220-809 of the Zoning Ordinance states that public utility and service buildings *may* be erected to a height not exceeding 60 feet. The use of the word "may" is critical, since it implies that approval is not guaranteed. By definition, *building height* is measured at the "*average contact ground level at the front of the building*". The proposed primary building would be built into the existing slope, so that the south end of the building is shorter than the north end of the building (51'8" and 64'8", respectively). The average contact at ground level, facing Bell Road, is 58' 9 ¼". For comparison, staff has included an illustration comparing the approximate height of the primary building to the existing Illinois American water tower. Staff has also included photographs of similar buildings that ComEd has recently constructed, in

Hoffman Estates and Itasca. The existing building in Hoffman Estates is 62' tall at the peak and the existing building in Itasca is 47' tall.

The applicant has provided four different color renderings for the primary building, not including the first rendering of a "gradient" color scheme. The color of the building is intended to *compliment* the color of the retaining wall; these two colors may not always be identical in each design. These renderings have been attached to this staff report. The walls of this building would be constructed of pre-cast brick, which the applicant has noted would be the first time this method has been applied by ComEd.

### Accessory Building

A smaller "accessory" building is proposed 96' west of the primary building. This building would measure 60' wide by 150' long, for a total of 9,000 square feet. This building would be located on a flat surface, so the overall height would be 20' above grade along all points of the perimeter.

### Wall/Fencing

A combined wall/fence would enclose the proposed primary building and accessory building on the east, south and west sides and would connect to the existing security fence that surrounds the existing equipment. The wall would form the base, with a fence on top of the wall, and 1' of barbed wire on top of the fence. The overall height of the fence would be 12', measured from grade to the top of the barbed wire. Since the site has a substantial slope, the height of the wall portion would vary; the fence portion would remain consistent. A wall and fence combination is required because the wall functions both as a security barrier and as a retaining wall for earth. For security purposes, there must be a 10' wide, unobstructed area away from the outside perimeter of the wall/fence. It should be noted that the proposed wall/fence would be located 13' from the edge of the pavement of the existing 10' wide paved pedestrian path along the south side of the site near Founder's Crossing. The existing path itself would not be changed. The wall/fence would be located approximately 19' from the edge of the pavement of the existing 10' wide bike trail along Bell Road, at the closest point. Four different color/design options have been proposed for the wall/fence, which is intended to complement the building color/design.

### Traffic & Pedestrian Circulation

The site is obviously not accessible to the public for security reasons, but on-site traffic and pedestrian circulation should be considered for authorized employees. A new driveway is proposed from S. Bell Road to access the site. This proposed driveway would be south of the two existing driveways into the site from S. Bell Road and it was designed to circulate around the primary building. The applicant has noted that they have been in contact with the Will County Highway Department regarding this proposed curb cut.

§220-1002(G)(5) states that all industrial developments over 50,000 of floor area shall submit a traffic study. The applicant has provided such study, attached to this report. Notably, it states that this substation, after improvements, would generate no more than 8 vehicle trips per day and are generally spread throughout the day.

### Parking

On-site parking is required for this development per §220-1002(B)(1), although the Site Plan does not illustrate a parking lot. Parking lots are required to be paved per code, although the existing site within the fenced area is entirely gravel. Per the Building Code, the proposed buildings shall be ADA-compliant, which includes providing ADA-compliant parking as well. Since there is no specific line item

for the amount of parking required for a public utility, the amount shall be determined in accordance with the recommendation of the Zoning Officer (§220-1002(J)(9)). As such, the Zoning Officer recommends that at least 8 parking spaces be provided, to meet the demands of the parking study that was provided. At least one of these 8 spaces must be ADA-accessible. It should be noted that ADA-accessible parking spaces are not reserved only for persons that use a wheelchair, but any person with mobility issues that may work at the site. It's staff's understanding that the applicant may request "an interpretation from the Illinois Capital Development Board (CDB)". The CDB may grant variances to the Accessibility Code, such that an ADA parking space may not be needed. However, the CDB does not have the ability to waive local government parking requirements outright. The applicant has conveyed to staff that their preference is to not install a parking lot.

The Zoning Ordinance technically requires 3 loading spaces, per §220-1003(B)(1). Loading spaces must be paved and striped, but as noted above a parking lot is not proposed. This loading requirement may be waived as an exception to the PUD.

### Trees & Landscaping

The applicant has provided a "Tree Impact Plan" and a Landscape Plan. The Tree Impact Plan illustrates the general areas of tree removal, located around the 4-acre area for the proposed primary building and around the existing detention pond. Although the Tree Preservation Ordinance applies to this property, it's only activated if more than 75% of trees over 6" in diameter are removed from the entire site, or if any trees over 24" in diameter are removed. Per the Tree Impact Plan, trees that have already been removed are clouded in red and trees scheduled for removal are clouded in green. Essentially, all trees and vegetation between the Heroes Trail path and the existing fenced-in facility would be removed. The only way to affirmatively determine whether on-site tree mitigation or restitution (payment) is required is to obtain an actual tree survey prepared by an arborist of the entire 67-acre site. However, the applicant's landscape architect has attested that it is highly unlikely that 75% of trees greater than 6" will be removed from the site and that a tree survey is unnecessary. The landscape architect has also noted that most of the removed trees are considered invasive and that he "observed a predominance of Buckthorn and Bradford Pear". The improvements will require the removal of at least 15 trees that were planted for prior work that was approved by the Village.

The Landscape Plan notes there would be a total of 20 trees, 29 ornamental trees and 33 shrubs planted at the site. Some of the landscaping would be located on property owned by ComEd and some would be planted within the county right-of-way of S. Bell Road. The Landscape Plan illustrates the right-of-way/property line as a grey dashed line. The applicant has conveyed to staff that they have received preliminary permission from the county to install said trees within the right-of-way of Bell Road, as long as ComEd maintains the trees. It should be noted that detention ponds or swales are proposed between the security fencing and the pedestrian path along Bell Road, limiting the amount of area for landscaping. Again, for security purposes, there must be a 10' wide unobstructed, clear area on the outside of the wall/fence, which also limits landscaping other than grass. None of the existing vegetation south of the Heroes Trail path would be disturbed.

A landscaped front yard of 30' is required on the subject property along Bell Road, per the Use and Bulk Table requirements for Non-Residential Districts. This landscape setback is met along most of Bell Road, but is not met where the security wall/fence bumps out and is 12' from the front property line. This "bump out" is approximately 200' long, and would require an exception as part of this PUD.

A "transition yard" is required on the ComEd property along the south property line, where it abuts E-1 (Estate Residential) zoning. Per the Use and Bulk Table for Non-Residential Uses, this transition yard must be at least 25' wide. Transition yards are defined in the Zoning Ordinance as "*An area that separates two incompatible uses dedicated to grass, trees and landscape material*". As proposed, the security wall/fence would be located 37' from the southern property line. This 37' wide area contains

the 10' wide asphalt path for Heroes Trail, and grass. Since the definition of transition yard notes that it must contain grass, trees *and* landscape material, it could be argued that this criterion has not been met. Landscaping between Heroes Trail and the security wall would be difficult due to the required 10' clear vision area along the wall, but it does appear possible to add trees along the south side of the path, between the path and the south property line. Staff recommends that a mix of trees (not ornamental) be planted within this area and reflected on the Landscape Plan. If desired as part of the PUD, the tree line could be extended along the south side of the path from Bell Road to the high-tension powerlines, a distance of approximately 1,000'. The triangular grassed area formed by the path intersection to the west could also be landscaped with trees.

### Signage

The site would receive minor signage, mostly for security and safety. A sign plan has been attached to this report. All signage may be approved as part of this PUD.

### Lighting

The applicant has provided a Lighting Plan, but additional information is required to ensure that the proposed lighting will comply with the Village's regulations.

### Fire Protection

The subject property lies within the Northwest Homer Fire Protection District, which has been notified of this project.

### Other:

The applicant has informed staff that the proposed improvements will not emit any pollution at all. There will be no off-gassing. A special use permit may be required for 24-hour operation, per §§220-711(A)(11).

Some steel structures and equipment will be removed from the open secured area and placed within one of the two proposed enclosures. Not all of the exterior equipment will be relocated indoors.

### **Planned Unit Development**

PUD's can be used to grant relief from the Code, known as "exceptions". §220-904(B)(2) of the Zoning Ordinance notes that exceptions may be granted provided that the Plan Commission finds that the projects "*provides amenities above and beyond the minimum requirements, such as outstanding design and architecture, the quantity and quality of open space and landscaping, or other similar features*". Staff has addressed the requested exceptions below. **This list of exceptions may be altered as the plans proceed through the review process.**

### PUD Exceptions Requested:

1. A side yard setback of 118' is required from the primary building to the south property line, whereas only 97' is proposed.
2. A landscape front yard of 30' is required along S. Bell Road, whereas 12' is provided where the security wall/fence bumps outward toward the street.
3. The code requires at least 8 parking spaces, including at least 1 ADA-accessible space, whereas none are provided.

4. The code requires at least 3, paved and marked loading areas, whereas none are proposed.
5. Several exceptions are required for the proposed security wall/fence combo (§220-812(B)):
  - a. Walls or fences are not permitted within any required front yard. The required front yard along S. Bell Road is 60'. The proposed wall/fence would be located approximately 12' from the front property line at its closest point. Described differently, approximately 200' of linear fencing encroaches into the required front yard setback.
  - b. All fences located within front yards shall not exceed 50% opacity. The proposed fencing is only 25% transparent.
  - c. Fencing in side yards shall not exceed 6' tall. The proposed wall/fence combo measures 12' to the top (including the 1' height of barbed wire).
  - d. Fences shall be made of the same material. The applicant is proposing a mix of masonry retaining wall and metal fencing on top.

Summary of Use & Bulk Table:

	Requirement	Proposed
Front Yard (Bell Road)	98'	167.5'
Side Yard (South)	118'	97'
Max Height	35'/60'	58' 9 3/4"
Max Lot Coverage	75%	TBD
Floor Area Ratio	0.5	TBD
Landscape Front Yard (Bell Rd.)	30'	12'
Transition Yard (along south property line)	25'	37', but not landscaped

**Conformance with other Village Regulations**

**Exterior Construction Standards (Chapter 75, Article II):** The exterior construction standards **do apply** to this request. The building would be constructed of architectural precast concrete panels with masonry veneer (thin brick). The masonry veneer (thin brick) is generally accepted to have a more “enhanced” appearance than precast concrete panels. Most of the thin brick would be used on the front and sides of the building, with much less on the rear of the building facing west.

**Outdoor Lighting (Chapter 75, Article II):** The Lighting regulations **do apply** to this request. The proposed lighting is currently being revised by the applicant and will be reviewed by the Village’s lighting consultant, per section § 75-58.

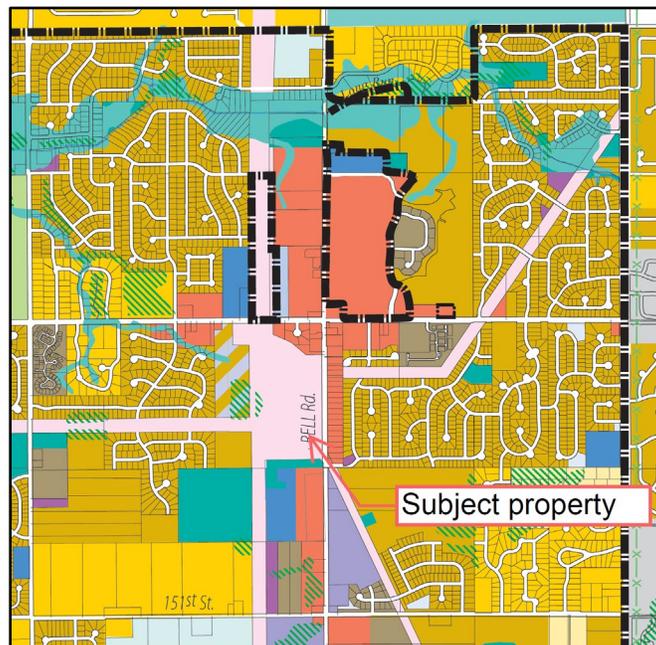
**Conservation Subdivision (Chapter 138-5(C)):** The Conservation Subdivision regulations **do not apply** to this request because it applies only to residential zone districts.

**Tree Preservation (Chapter 138-5(B)):** The Tree Preservation regulations **do apply** to this request as the subject property is under 5 acres in size. However, it’s to be determined whether any on-site tree mitigation will be required.

**Subdivision & Stormwater (Chapter 138, Article I):** The Subdivision regulations as well as the Stormwater regulations **do apply** to this request. The applicant submitted a stormwater report, which will be reviewed by the Village Engineer and the Village’s engineering consultant. Any project approval will be required to meet all *final* engineering requirements.

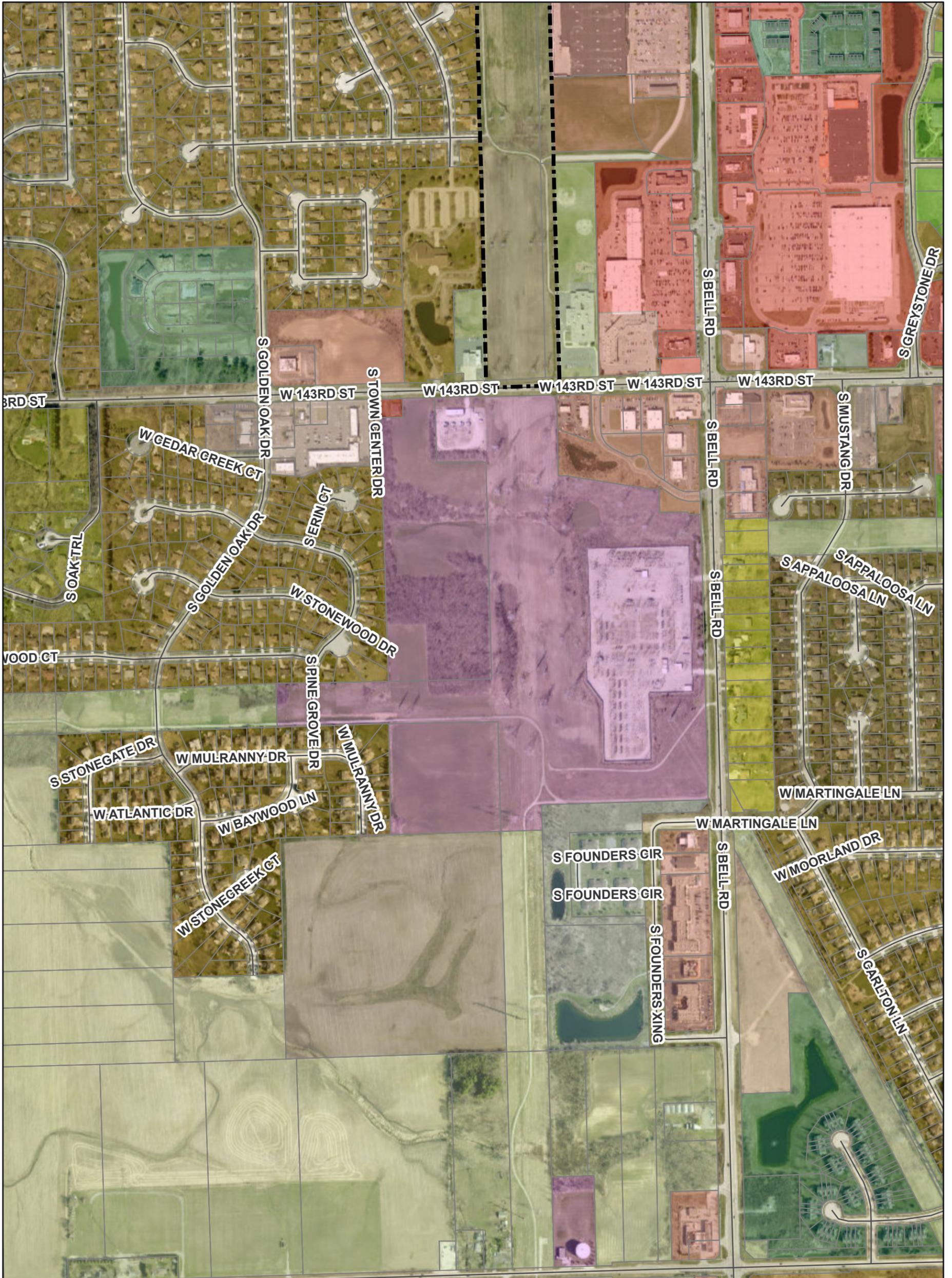
## **Conformance with Comprehensive Plan**

This property is designated as “Utility Easement/Multi-Use Trail” on the Future Land Use Map within the Village’s Comprehensive Plan. The proposed improvements would be a continuation of this use.



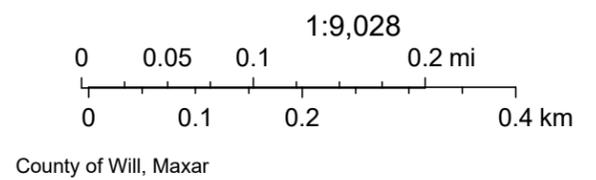
## **Attachments**

1. Aerial image of area, with zone districts overlaid, prepared by staff
2. Aerial Photograph with contour lines (elevation), Will County GIS
3. Project Narrative, received 10.29.25
4. Findings of Fact for Special Use Permits (including PUDs), received 9.23.25
5. Traffic Impact Study, received 10.17.25
6. Recently constructed ComEd buildings in Hoffman Estates and Itasca (Google Street View)
7. Height Comparison illustration between the Illinois American Water Tower (14648 S. Mustang) and the proposed primary building, prepared by staff
8. Tree Impact Plan, received 1.7.26
9. Photographs, taken by staff 1.7.26
10. Survey, received 6.12.25
11. Site Plans, received 11.5.25
12. Landscape Plan, received 1.7.26
13. Grading & Drainage Plan (excerpts), received 8.6.25
  - a. Tributary Area
  - b. Existing Topography
  - c. Proposed Conditions
14. Lighting Plan, received 9.23.25
15. Transmission structure (powerline poles) removal and replacement exhibit, received 6.12.25
16. Detail drawing of security wall/fence, received 8.6.25
17. Signage Plan and Signage Exhibit, received 9.23.25
18. Building elevation drawings of the proposed primary and accessory buildings
19. Floor Plans for proposed primary and accessory buildings, received 8.6.25
20. 3D Renderings of proposed primary building (4 color & design options), received 12.3.25



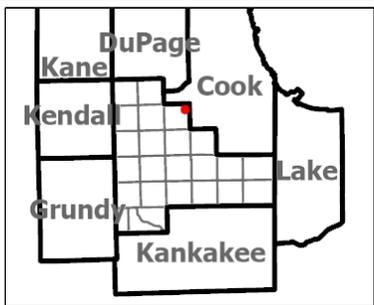
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- |                               |                                                  |
|-------------------------------|--------------------------------------------------|
| Homer Glen Boundary           | E-1 Single-family Estate Residential             |
| Street Centerlines            | R-2 Single-family Residential                    |
| Parcels - Will County Parcels | R-3 Single-family Residential                    |
| <b>Zoning Districts</b>       |                                                  |
| A-1 Agricultural              | R-4 Single-family Residential                    |
| C-1 Neighborhood Commercial   | R-5 Single-family Residential                    |
| C-2 Local Business            | R-6 Multifamily Residence District               |
| C-3 General Business          | R-6A Attached Single-Family Residential District |
| I-1 Industrial                |                                                  |





# Attachment 2

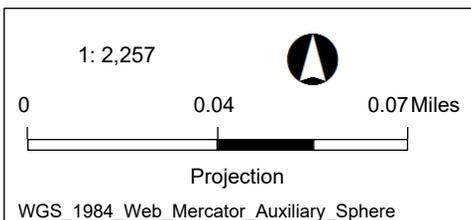


**Legend**

- Address Points
- Roadways
  - Federal
  - State
  - County
  - Local and Private
- Parcels
- Townships
- Contour 2014 (2 Ft)

**Notes**

Date: 11/10/2025



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## ComEd Application for Land Use Approvals -- Homer Glen – Project Narrative

### Executive Summary

Commonwealth Edison Company (“ComEd”) currently owns a property of approximately 67 acres (“Property”)<sup>1</sup> commonly known as 14546-14550 S. Bell Road and 13015 W. 143rd Street in the Village of Homer Glen (the “Village”) on which it operates two electrical substations. One substation known as “TDC 416” of approximately 1.7 acres is situated at 13015 W. 143rd Street and is used for transmission and distribution switching purposes. A second substation known as “TSS 116” of approximately 15 acres is situated at 14546-14550 S. Bell Road and is used for transmission purposes (the “Transmission Substation”). This application concerns only the Transmission Substation. A zoning boundary exhibit prepared by a surveyor is attached. A legal description in a Microsoft Word format is being submitted in conjunction with this application.

In order for ComEd to enhance its provision of reliable and resilient electrical transmission to the Village and surrounding areas – an enhancement supporting in turn reliable and resilient electrical distribution to electrical customers within and nearby the Village – ComEd intends to modernize the highest-voltage (345 kV) portion of the Transmission Substation primarily through expanding the fenced area of Transmission Substation by approximately four acres in the southeastern area of the Property (the “Substation Expanded Area”) and by constructing certain improvements described below (the “New Substation Improvements”) within the Substation Expanded Area. In addition, minor improvements – mostly transformer safety walls – will be added to the existing portion of the Transmission Substation (the “Existing Substation Improvements”).

ComEd intends to construct the following as the New Substation Improvements:

- a new principal equipment enclosure located within the Substation Expanded Area (the “New Substation Equipment Enclosure” or “Enclosure”).
- a new accessory equipment enclosure (the “Accessory Equipment Enclosure”) situated within the heart of the existing portion of the Transmission Substation and to the west of the New Substation Equipment Enclosure.
- the installation of required exterior fencing for security purposes within and along the boundaries of the Substation Expanded Area (the “Fence Expansion”). Along a portion of the southern and eastern sides of the Substation Expanded Area, due to changes in topography, a low retaining wall with a decorative stone external face will be installed so that a grade feasible for prudent drainage purposes is maintained within the Substation Expanded Area. The decorative retaining wall will vary in height. It will range from 0.50’ to 7.75’<sup>2</sup> along the eastern side of the Substation Expanded Area and from 0.50’ to 7.5’ along the southern side of the Substation Expanded Area. The Fence Expansion will, for consistency with the remainder of

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<sup>1</sup> The Property is a portion of Will County PIN 16-05-11-200-042-0000, which, per County assessment records, is 71.01 acres. The Property excludes a westerly extension of the applicable PIN boundaries to an area lying west of S. Pine Grove Drive. The Property’s westerly boundary is coterminous with the easterly line of the Old Oak Subdivision.

<sup>2</sup> The wall heights shown on the Detailed Site Plan are a general approximation of the wall height within each segment of the wall.

the Transmission Substation and to honor national security obligations, include expanded metal fencing plus 12” of y-shaped barbed wire on top and certain posts up to 18’ tall supporting the fence and other security functions in line with the fence or a short distance inside of it. The overall height of the fence surrounding the Substation Expanded Area will vary, but, together with the height of the decorative retaining wall, will extend to approximately 11’ above external grade plus the 12” of y-shaped barbed wire on top for a total height above external grade of ±12’.<sup>3</sup>

- Additional electrical equipment (including, but not limited to, transmission and distribution equipment and similar appurtenances) supporting the New Substation Equipment Enclosure specifically and the Transmission Substation generally (the “Electrical Equipment”).
- For safety purposes, new 33-foot concrete walls deep within the Transmission Substation adjoining existing transformers.
- Adjustments to a stormwater detention basin northwest of the Transmission Substation which will be deepened to 9’ accommodate the additional impervious surface.
- The improvement of an existing curb cut and access drive so as to connect the Substation Expanded Area to Bell Road.
- Certain new transmission structures of up to 195’ in height and lightning masts of 86’ in height on the Property supporting and protecting the New Substation Improvements, including the New Substation Equipment Shelter.<sup>4</sup>
- The removal of certain existing transmission structures and other equipment rendered obsolete by the New Substation Improvements.

Collectively, the improvements described above as the New Substation Improvements and Existing Substation Improvements constitute the “Project” which is being carried out in the I-1 zoning district. Upon completion of the Project, the Transmission Substation will be fully modernized with increased reliability and resiliency. Significantly, too, transmission capacity can be efficiently expanded in the future as electrical demands increase through the installation of additional equipment within the New Substation Equipment Enclosure, minimizing the need for further future substation expansion at the Property.

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<sup>3</sup> Due to (i) the gradual decrease of the grade exterior to the retaining wall from north to south along the east side of the wall and from west to east along the south side of the wall (with the southeast corner being the lowest point of the exterior grade and the tallest area of the retaining wall); and (ii) the stepped design of the security fence installed on top of the wall which retains uniform fence height for each “step,” there may be portions of the fence/wall structure which exceed 12 feet in height above exterior grade in the southern area of each step on the east side and on the eastern area of each step on the south side. The maximum height above grade for the wall/fence structure is not expected to exceed 13 feet at any point.

<sup>4</sup> Specifically, supporting the New Substation Improvements, there are expected to be, subject to final engineering, 21 new transmission structures and one new 86’ lightning mast. In terms of height, of the 21 new transmission structures, six are 150’ or taller, 13 are between 100’ and 150’ and two are less than 100’. In addition, the New Substation Equipment Enclosure connects to the transmission system using 34’ transmission structures/equipment

To honor ComEd’s commitment to cooperation, we respectfully submit this request to the Village. We recognize that the core nature of this Project as a key component of the national bulk power electrical grid may limit the Village’s land use authority concerning the Project’s implementation at ComEd’s Transmission Substation. As an example, the electrical equipment involved -- such as transmission structures, lightning masts, transformers, breakers, and bus structures -- may be located both within and outside of the Substation’s equipment enclosures. These elements are essential to ComEd’s transmission system and are generally regulated by federal and state organizations, including but not limited to the Federal Energy Regulatory Commission (“FERC”) and Illinois Commerce Commission (“ICC”). Therefore, they, and the expanded security fence, fall outside the scope of Village land use authority and this is recognized by the first sentence of Section 220-832(B) of the Village Zoning Ordinance (the “Ordinance”) as is explained in greater detail below. We include information about the security fence, transmission structures and the other electrical equipment for transparency and reference, with their relevant locations detailed in the attached plans.

A list of requested Village land use approvals is provided following the Detailed Project Narrative which starts below.

#### Detailed Project Narrative

***A. The role of the New Substation Equipment Enclosure (and the related Accessory Equipment Enclosure) in and contribution to ComEd’s electrical grid***

The New Substation Equipment Enclosure, with its Accessory Equipment Enclosure, is part of ComEd’s initiative to implement additional physical infrastructure which will support transmission resiliency and operational flexibility, while also allowing for efficient and timely deployment of additional capacity-enhancing electrical infrastructure in the future. Part of the function of the New Substation Equipment Enclosure will be to enhance activities at both the Transmission Substation and at TDC 416 supporting ongoing electrification in the community and also existing and future community customers with larger electrical demands. The substations also contribute to residential service reliability and resiliency.

The New Substation Equipment Enclosure is designed to encompass newer technology and eliminate certain open-air equipment allowing for a greater concentration of switchgear equipment in a smaller area. This means ComEd will be able to install sufficient equipment to meet changing demands and technology over time within the small footprint of the New Substation Equipment Enclosure, rather than needing to dramatically expand the size of the Transmission Substation (even further than the four acres currently planned), to fit an equivalent amount of conventional switchgear equipment. The New Substation Equipment Enclosure allows switchgear and other electrical equipment to be installed largely within an enclosure, offering both security and reliability benefits – such as wildlife and weather protection – and aesthetic benefits over the development of outdoor switchgear equipment. Aesthetic benefits are also gained by removing certain equipment and reducing the remaining exterior equipment to the minimum necessary to support the New Substation Equipment Enclosure.

By allowing for a higher concentration of modern, networked switchgear equipment under roof, the New Substation Equipment Enclosure provides additional and more reliable transmission service

supporting, through distribution, surrounding non-residential and residential customers.

## **B. *Site Plan***

As can be noted on the Conceptual Site Plan attached and the Detailed Site Plan also attached, the New Substation Equipment Enclosure is a fairly simple improvement which is approximately 505' long and 82' wide with an approximate footprint of 42,470 square feet. There are three small "bump-outs" containing stairways connecting the basement and main levels. Based on the average grade at the front (eastern side) of the Enclosure<sup>5</sup>, the Enclosure will be 58'-9¼" tall to the top of the parapet. Given the space constraints of the Transmission Substation and the material amount of transmission lines, the need to avoid conflicts with energized equipment during the project construction (to avoid outages as much as possible), to avoid wetland areas north and west of Transmission Substation within the Property and to avoid placing the Enclosure close to residential homes west of the Property, the New Substation Equipment Enclosure has been placed in the Substation Expanded Area in the southeastern portion of the Property to minimize system and ecological disruption and create separation as much as possible from residential uses. The precise locating of the New Substation Equipment Enclosure both avoids existing Substation infrastructure (both above and below ground) and provides sufficient and safe maneuvering room for ComEd utility vehicle and employee access on all sides. The southern face of the New Substation Equipment Enclosure will be set back approximately 97' from the Property's southern lot line and the main face of the Enclosure will be set back 176' from the eastern lot line (with two small stairway protrusions along the eastern face set back approximately 168' from the eastern lot line).

Substantial efforts have been made with the input of Gensler, a global architecture, design, and planning firm, to feature for the New Substation Equipment Enclosure a design intended, through the use of shades of brick and architectural precast concrete bands, to blend seamlessly and act as a bridge between the commercially-oriented materials palette of the Village "center" at 143rd Street and Bell Road just to the north and the mixed-use/residential palette in the area to the south of Martingale Lane (including attention paid to bring consistency between the exterior architecture of the First American Bank building at 14741 S. Bell Road and the Enclosure). ComEd's careful attention to the exterior design of the Enclosure is representative of how the Project has striven to achieve design consistency within the neighborhood to the greatest extent possible given the utility-focused function of the Enclosure. A photorealistic rendering of the east elevation of the New Substation Equipment Enclosure clad primarily in brick with bands of architectural precast concrete is attached. Note, too, contributing to design consistency with the Enclosure, the transmission structures added or to be added will be installed with a weathered patina.

Additional Project components include a new 9,000-square-foot pre-cast concrete accessory equipment enclosure of not more than 20' in height within the existing portion of the Substation (providing technical support for the Enclosure), the 20-foot-wide improved access drive previously described, installation of transformer protective walls of 33' in height within the fenced portion of

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<sup>5</sup> Per the definition of "building height" in the Ordinance, the height of the Structure is calculated using the "average contact ground level at the front wall" of the Structure. The average contact ground level at the front wall of the Structure is 771'-10¾" NAVD 88. Note that the height measured from the floor of the main level to the top point of the parapet is 49 feet. The grade is approximately 14 feet higher on the south end than the north end of the Structure, so the basement of the Structure is at grade on the north side (facing only the existing portion of the Substation) and fully buried at the south end (facing the east-west portion of the bike path and the nearby retail uses).

the Transmission Substation, the addition of certain transmission structures and installation of the Electrical Equipment (including one 86-foot lightning mast and removal of unnecessary open-air equipment). Each of these additional components is also designed to be unobtrusive and blend in through coloration and minimal structure width (e.g., use of transmission steel monopoles as opposed to lattice structures) with existing Substation infrastructure.

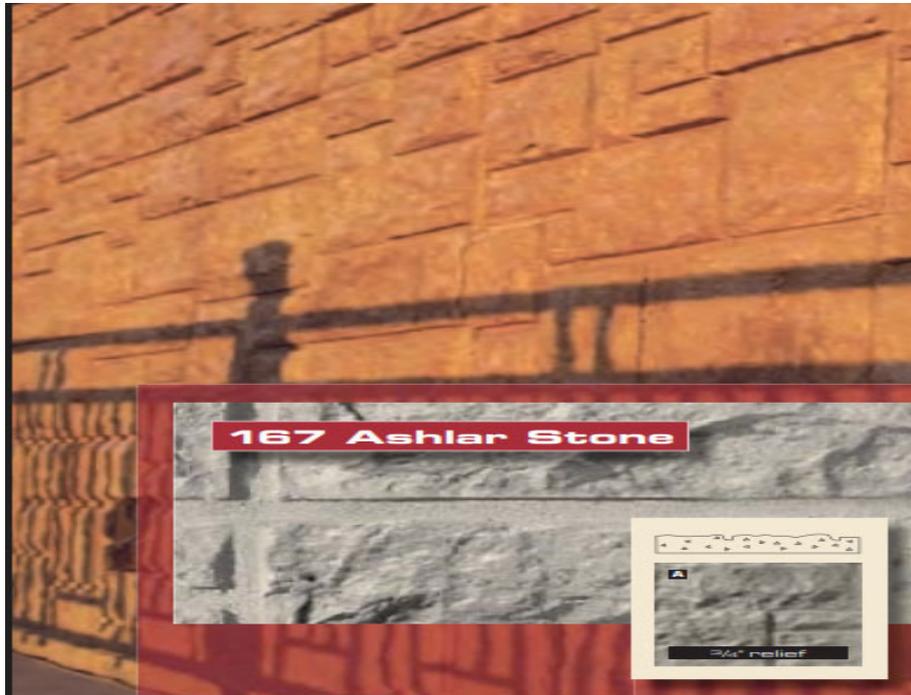
As described earlier, due to changes in existing grade in or adjacent to the Substation Expanded Area (notably the southeast corner of the Property slopes downward towards the intersection of Bell Road and Founders Crossing/Martingale Lane), ComEd needs to undertake mass grading to establish feasible and safe grades within the Substation Expanded Area.<sup>6</sup> This grading work results in the lower level of the southern portion of the New Substation Equipment Enclosure being wholly below-grade while the northern portion is above-grade and features a drive-in lower-level. The benefit of this design is that it transitions the perceived height of the Enclosure so that the lower-height portion is situated towards Founders Crossing while the walk-out basement portion of the Enclosure faces the larger portion of the Transmission Substation.

To make this siting feasible, a low-height retaining wall needs to be installed along the southeastern portion and southern portion of the Substation Expanded Area. The retaining wall will vary in height but range from 0.50' to 7.75'<sup>7</sup> along the eastern side of the Substation Expanded Area and from 0.50' to 7.5' along the southern side of the Substation Expanded Area. ComEd has conducted studies of similar nearby retaining walls and is proposing a fieldstone-styled decorative retaining wall which would be gray-colored to complement the architectural precast bands of the Enclosure and provide architectural rhythm. An image of the selected fieldstone design used for a different wall structure is provided below (please review the image below for articulation only and not color, as ComEd has selected a gray hue for the proposed retaining wall and not a reddish hue).

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<sup>6</sup> Christopher B. Burke Engineering Ltd. (“CBBEL”) has been retained by ComEd as the Project’s civil engineer. CBBEL has submitted concurrently with this land use application an engineering application for a Site Development Permit. That application includes a full Stormwater Management Report and an Issued for Approval Grading and Drainage Plan Set (plus a Landscape Plan)(collectively, the “CBBEL Submittal”). To avoid duplication, this land use application incorporates the CBBEL Submittal by reference.

<sup>7</sup> As noted earlier, the wall heights shown on the Detailed Site Plan are a general approximation of the wall height within each segment of the wall.



The Fence Expansion is necessary to meet national security standards, as has been documented previously for the Village in both 2015 (when the existing expanded metal fence was first implemented at the Transmission Substation) and in 2023 when ComEd worked with the Village on a fence (and landscaping) upgrade at TDC 416 along Bell Road.

The fence to be installed around the Substation Expanded Area will be visually identical to the fence installed around the remaining portion of the Transmission Substation – 11-foot-tall gray expanded metal fencing with 12” of y-shaped barbed wire on top. In the area of the new decorative retaining wall, the fence, together with the height of any new retaining wall, will not exceed  $\pm 12'$  from the exterior grade (except as described in more detail in footnote 2 hereof). This means the fence height in the area of greatest retaining wall height (7.75') should not exceed approximately 5' tall (4' fence plus 12” of barbed wire on top)<sup>8</sup>. A manual gate in the fence may be installed within the western line of the expanded fence at a location not yet determined. Additional background about the national requirements driving the need for the security fence design is set forth in the Land Use Approvals section below.

The Transmission Substation is today landscaped facing Bell Road. This landscaping was purposefully enhanced in conjunction with both the expansion of certain smaller substation enclosures in 2012 or so and then again in 2015-2016 or so in connection with the implementation of the more secure exterior fence, part of ComEd's Facility Enhancement Program which was rolled out system-wide.

Since the 2015-2016 landscaping improvements along Bell Road in front of the Transmission Substation, security concerns for electrical substations have become particularly acute. The severity of substation security issues ratcheted up due to a number of alarming and damaging attacks on

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<sup>8</sup> See footnote 3 for more detail on the maximum height of the wall/fence combined structure.

electric substations throughout the country. On December 3, 2022, two substations in Moore County, North Carolina were severely damaged by targeted gunfire attacks, leading to power outages for 45,000 residential and business customers, many of which were left without power for up to five days. A county-wide nightly curfew was put into place due to the power outage and local schools were closed for four days.<sup>9</sup> Additionally, a number of targeted substation attacks occurred in late 2022 in Washington and Oregon,<sup>10</sup> including the break-in and vandalization of four substations in the Tacoma, Washington area on Christmas Day which left up to 14,000 customers without power for most of the day.<sup>11</sup>

Since 2022, ComEd has updated its landscaping protocols at substations and now applies a set of protocols called Crime Prevention Through Environmental Design or “CPTEP.” Key aspects of the CPTEP protocols include the following –

- Landscaping, other than mowed grass, should not encroach within a 10’ “clear” zone from the substation fence line. Outside the 10’ clear zone area, plantings should not so dense that a person could hide between the landscaping and fence, and should be a maximum of 3’ tall or have a ground-to-sky clearance of 8’ (meaning, the leaf canopy of trees should start at 8’ from ground level).
- Landscaping should *either* have a canopy height taller than the fence for an appropriate viewshed to the substation from a street or adjoining property or be no taller than 3’ at full maturity.
- Landscaping at any substation entrance should be 10’ from the fence line and 10’ from the driveway entrance

Implementing the grading necessary for effective functioning of the Substation Expanded Area will result in the removal of existing plantings in the southeastern portion of the Property. Along the southern lot line, no landscaping is affected south of the recreational trail running east-west across the Property, while much of the planted area north of the recreational trail will become part of the Substation Expanded Area. Along Bell Road, all of the landscaping south of the existing southern driveway will be removed through grading activities.

With the CPTEP protocols in mind, ComEd has conducted an extensive analysis of how it can reinstate significant plantings as part of the Project. ComEd now proposes an adjusted landscape plan which provides both substantial community benefits and aesthetic softening of the New Substation Equipment Enclosure and other project elements falling within the Substation Expanded Area.

Here are key elements of ComEd’s landscape plan:

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<sup>9</sup> See, for example, CNN.com, *Investigators are zeroing in on two possible motives centered around extremist behavior in NC power stations attacks, sources say*, December 7, 2022, available at <https://www.cnn.com/2022/12/07/us/power-outage-moore-county-investigation-wednesday/index.html>

<sup>10</sup> See, for example, OPB.org, *String of electrical grid attacks in Pacific Northwest is unsolved*, December 8, 2022, available at <https://www.opb.org/article/2022/12/08/string-of-electrical-grid-attacks-in-pacific-northwest-are-unsolved/>

<sup>11</sup> See, for example, CBSNews.com, *Four power substations vandalized in Washington, knocking out power for at least 14,000*, December 26, 2022, available at <https://www.cbsnews.com/news/power-outages-tacoma-washington-substations-vandalized-pierce-county/>

● **New Parkway Trees:** ComEd will add 29 parkway trees along Bell Road where none exist today, including dense parkway tree spacing just east of the area within the Substation Expanded Area which has a reduced setback to the decorative retaining wall (since plantings in front of the wall is not feasible due to the mandated security buffer and related security concerns). No parkway trees exist today and a maximum of only four parkway trees are required under the Municipal Code as it exists today. ComEd has reviewed proposed changes to the Municipal Code under consideration and the extensive parkway tree plantings proposed for the Project honors the contemplated removal of a four parkway tree cap *and* reflects the reduction of parkway tree separation from 40 linear feet to 30 linear feet.<sup>12</sup> The parkway trees would include four different ornamental tree species for diversity and aesthetics (with numerous flowering trees), with the mature tree height up to 20'. ComEd has initiated discussions with the Will County Department of Transportation ("WCDOT") about the proposed addition of parkway trees to the western parkway of Bell Road (which is under WCDOT's jurisdiction). ComEd would expect to maintain the trees, not WCDOT or the Village.

● **Numerous trees and shrubs located between the north-south bike path and the eastern decorative retaining wall and fence.** All existing landscaping along Bell Road north of the existing southern-most driveway for the Transmission Substation would remain untouched. South of the existing driveway, in addition to the Bell Road parkway trees described in the paragraph above, an entirely new landscape plan is proposed. Numerous trees, shrubs, perennials and grasses are included in the new landscape plan. Taking into the account the new parkway trees and certain existing trees which must be removed to allow for the intended grading, there are 35 net new trees (with maximum heights up to 45') proposed as part of the newly proposed site landscaping improvements, plus numerous additional plantings. The Landscape Plan is attached. A mark-up of the 2015 landscape plan for the existing substation showing how the newly proposed landscape plan affects the 2015 landscape plan is also attached to this application.

● **New bike path rest area with related amenities and plantings.** As a site aesthetic enhancement and community benefit, ComEd's site and landscaping plan for its Project includes a new bike path rest area at the southeastern corner of the site. The bike path rest area is at the Bell and Martingale access point to the Village's bike path system. It will feature benches under a curved arbor to provide an opportunity for rest with shade. There will also be bike racks with pollinator images and a bike repair station. The benches are arranged around a brightly colored image of a butterfly landing on a flower. In association with the rest area a pollinator garden will be created. Over 200 native shrubs, perennials and grasses will be planted. Each plant is selected for their ability to attract and support pollinators. This enhancement will provide the community with a focal and meeting point. Although the bike paths are generally maintained by the Village as a recreational amenity, ComEd plans to maintain the bike path rest area at the Property and the plantings enveloping it. A detailed plan for the bike path rest area is attached.

An on-site existing stormwater basin will be deepened to provide detention for the additional impervious surface accompanying the Substation expansion. The CBBEL Submittal provides additional information on this and other civil engineering aspects of the Project.

As noted earlier, a number of obsolete transmission structures will be removed once the structures

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<sup>12</sup> These potential changes are set forth in the Village Board's Workshop materials of March 26, 2025.

accompanying this Project are implemented. An attached aerial map graphically depicts in a conceptual manner the various components of the Project across the Project, including certain transmission structure removals.

### **List of Land Use Approvals Requested and Applicable Exemptions**

#### 1. Applicable exemption

##### *a. Transmission structures, electrical equipment and lightning masts*

Section 220-832(B) of the Ordinance exempts from the Ordinance, to the extent required by statute, the type and location of any poles, towers, wires, cables, conduits, vaults, laterals and other similar distributing equipment.

ComEd's planned transmission structures, electrical equipment (including equipment connected to the New Substation Equipment Enclosure) and lightning masts at the Property (collectively, the "Electrical Exempt Activities") fall within this exemption since ComEd must comply with state and federal requirements when implementing the Electrical Exempt Activities as part of the Project.

ComEd has configured the height and locations of the Electrical Exempt Activities to meet or exceed safety requirements implemented ultimately by and through state and federal authorities. The Ordinance exemption reflects the Village Board's longstanding recognition that the Ordinance must avoid conflict with national standards imposed on ComEd by the ICC and others.<sup>13</sup>

The function, operation and safety criteria for public utility transmission activities -- which occur region-wide across multiple local governments -- are exclusively regulated by the ICC and the FERC. Consistent with this state-level regulation, the heights and locations of the Electrical Exempt Activities are driven by, among other requirements, ICC-mandated minimum clearance distances between transmission strength wires and nearby structures and also by the minimum allowable "sag" of transmission strength wires. These design minimums for the bulk power grid, of which the Transmission Substation is a part, apply to ComEd through State regulations and through federally approved, regionally implemented design criteria focused on safety.

Requesting discretionary municipal approval for the heights and locations of the Electrical Exempt Activities (as distinguished from other non-electrical, non-safety substation improvements described in the Village land use requests below, such as the exterior appearance of equipment enclosures) in light of safety criteria imposed on ComEd by state

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<sup>13</sup> For example, ComEd is mandated by state legal requirements of the ICC to design and construct its electric supply lines and equipment in accordance with specific national standards to "enable service to be safe, adequate and dependable." 83 Ill. Admn. Code 305.30. With respect to transmission structure heights specifically, the Illinois General Assembly granted the ICC the power to "...establish uniform...standards of equipment." 220 ILCS 5/8-505. Pursuant to this grant of authority, the ICC promulgated official rules (the "ICC Rules") specifically obligating ComEd to comply with Sections 23 through 27 of the 2017 National Electrical Safety Code as per Section 305.20(b)(3) of Title 83 of the Illinois Administrative Code (83 Ill. Admn. Code 305.20(b)(3)).

law and under federal oversight creates a potential conflict with these important safety-focused design obligations.

Avoiding this conflict, the Ordinance contains the Section 220-832(B) exemption. The application of the Ordinance exemption to the Electrical Exempt Activities which are part of this Project is consistent with the Village's previous application of the exemption with respect to various now-completed transmission improvements at the Substation, including those undertaken at the Property about a decade ago for which Village land use approvals were not required and were not to our knowledge requested.

*b. Security fence exempt activity*

ComEd is undertaking the extension of the security fence portion of the Project (up to 11' expanded metal fence plus 12" of Y-shaped barbed wire), matching the existing security fence and also installing certain taller posts of up to 18' tall addressing fence and related security needs (collectively, the "Fence Exempt Activity"), in light of the company's national security obligations at critical infrastructure facilities like the Substation. The Fence Exempt Activity, like the Electrical Exempt Activities, is within the scope of the Section 220-832(B) exemption in that the fence is required by legal obligations and, as a key part of an integrated security system, part and parcel of the Substation's equipment.

The Fence Exempt Activity is being undertaken at a critical infrastructure site (which includes substations such as this one comprising the electrical grid) as required by the FERC and the North American Electric Reliability Corporation ("NERC"). FERC (the federal agency that regulates the interstate transmission of electricity) oversees NERC in the United States. Both FERC and NERC regulate ComEd's activities and impose obligations on ComEd with regard to securing the bulk power system.

In February 2013, President Obama issued Presidential Policy Directive 21 ("PPD-21"), which established national policy on critical infrastructure security and resilience.<sup>14</sup> PPD-21 identified energy and communications systems (among other things) as uniquely critical due to the enabling functions they provide across all critical infrastructure sectors, and it required federal departments and agencies to implement the directive. Following the April 2013 "Metcalf" sniper attack on a transmission substation near San Jose, California, FERC started official regulatory proceedings which resulted ultimately (as explained below) in the promulgation of NERC's CIP-014 mandatory physical security standards.

In March 2014, as part of its ongoing oversight of the bulk power system, FERC ordered NERC to submit proposed reliability standards requiring transmission owners meeting certain criteria to take steps or demonstrate that they have taken steps to address physical security risks and vulnerabilities related to the reliable operation of the electric power grid.<sup>15</sup> On May 23, 2014, NERC filed with FERC (as it was mandated to do by federal law) its

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<sup>14</sup> See Presidential Policy Directive, "Critical Infrastructure Security and Resilience," Presidential Policy Directive-21, February 12, 2013, available at <https://obamawhitehouse.archives.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil>

<sup>15</sup> *Reliability Standards for Physical Security Measures*, 146 FERC ¶ 61,166 (Mar. 7, 2014).

proposal for mandatory physical security standards.<sup>16</sup> This reliability standard (Physical Security) requires transmission owners or operators to perform a risk assessment of their systems to identify critical facilities (including transmission substations), evaluate the potential threats and vulnerabilities to those identified facilities, and develop and implement a security plan designed to protect against physical attacks on those identified critical facilities. On November 20, 2014, FERC approved the proposed standard, with minor changes, as NERC's new Physical Security Reliability Standard (CIP-014-1).<sup>17</sup> FERC approved a revised version of the standard (CIP-014-2) on July 14, 2015.<sup>18</sup> FERC's order ("FERC Order 802") made these physical security obligations compulsory.

With oversight by FERC, NERC has the authority to develop, oversee, and enforce implementation of the CIP-014-2 Physical Security Reliability Standard. The stated purpose of NERC's Physical Security Reliability Standard is to "protect transmission stations and transmission substations, and their associated primary control centers, that if rendered inoperable or damaged as a result of a physical attack could result in instability, uncontrolled separation, or cascading within an interconnection."<sup>19</sup> This standard applies to transmission owners, including ComEd, that own transmission substations meeting certain criteria.<sup>20</sup> The Fence Exempt Activity, as it has been designed, is part of a consistent security plan carried out by Exelon (ComEd's parent company) public utilities nationwide—of which ComEd is one—pursuant to NERC (and FERC) mandatory requirements as explained herein.

CIP-014-2 is one of NERC's mandatory and enforceable reliability standards. This standard is enforced by NERC under a penalty review policy for mandatory reliability standards approved by FERC, and it is subject to FERC's enforcement authority and oversight under the Energy Policy Act of 2005.<sup>21</sup> FERC certified NERC as the electric reliability organization in accordance with Section 215 of the Federal Power Act on July 20, 2006.<sup>22</sup> NERC has authority to monitor compliance with its reliability standards and impose penalties for non-compliance.<sup>23</sup>

In sum, the Fence Exempt Activity at the Substation is being carried out in accordance with FERC and NERC requirements, implementing a mandatory federal reliability requirement

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<sup>16</sup> NERC, Petition of the North American Electric Reliability Corporation for Approval of Proposed Reliability Standard CIP-014-1, May 23, 2014,

<http://www.nerc.com/FilingsOrders/us/NERC%20Filings%20to%20FERC%20DL/Petition%20-%20Physical%20Security%20CIP-014-1.pdf>

<sup>17</sup> *Physical Security Reliability Standard*, 149 FERC ¶ 61,140 (Nov. 20, 2014).

<sup>18</sup> *N. Am. Elec. Reliability Corp.*, FERC Docket No. RD15-4-000 (July 14, 2015) (delegated letter order) (approving Reliability Standard CIP-014-2).

<sup>19</sup> NERC, CIP-014-2 – Physical Security, available at

<https://www.nerc.com/layouts/15/PrintStandard.aspx?standardnumber=CIP-014-2&title=Physical%20Security&Jurisdiction=United%20States>

<sup>20</sup> *Id.*

<sup>21</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, 123 FERC ¶ 61,046 (Apr. 17, 2008).

<sup>22</sup> *North American Electric Reliability Corporation*, 116 FERC ¶ 61,062 (2006)

<sup>23</sup> See 16 U.S.C. § 824o(e)(1); 18 C.F.R. 39.7.

for electric transmission owners to protect transmission substations.

## 2. Land use requests for Project components other than the Electrical Exempt Activities and Fence Exempt Activity

a) A Planned Development (“PD”) to authorize an electrical substation expansion in the I-1 zoning district. This PD, approved as a special use, would build upon the prior special use approval granted in 2010 and amended in 2012.

b) The following PD exceptions and/or variations:

1. To reduce the required front yard setback from 60’ to 12’ given the presence of a 7.75’-tall decorative retaining wall at approximately 12’ from the front (eastern) property line (Table 2B). Note that the Enclosure remains set back approximately 168’ from the front property line.

2. To reduce the required south side yard setback from 80’<sup>24</sup> to 35’-8” to allow for installation of a 7.5’-tall decorative retaining wall. Note that the Enclosure remains set back approximately 97’ from the side (southern) property line.

3. To allow a south setback variation from Section 220-809-A so that the 58’-9¼”-tall public utility Enclosure may be situated 97’ from the southern property line as opposed to the otherwise required 117.51’.<sup>25</sup>

4. To allow a minimum landscaped front yard of 12’ as opposed to the 30’ otherwise required (Table 2A).

5. To amend the variation granted by Ordinance 15-026 so as to substitute the amended landscape plan proposed as part of this Project in lieu of the landscape plan which forms a condition of approval within Ordinance 15-026. This variation request is made given that the southern part of the 2015 landscape plan will be changed by this Project.

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<sup>24</sup> The Village’s Zoning Map shows the zoning district to the immediate south as E-1, which we have presumed to be a residential zoning district in assuming a required side yard setback of 80’ as opposed to 40’. Notwithstanding this zoning district designation, our review of an applicable recorded document suggests that the area immediately south of the ComEd property is part of a platted blanket easement which must remain open space and is therefore not available for residential building uses as per the approved plat for this immediately adjacent property. As a practical matter, we suggest that a 40’ minimum south side yard setback is an appropriate practical regulation from which to consider a side yard variation request as opposed to 80’.

<sup>25</sup> Section 220-809-A of the Ordinance allows public utility buildings, when permitted in a zoning district to extend to 60’ in height so long as an additional setback is provided, beyond the “typical” setback, equal to any height above 40’ multiplied by two. ComEd’s proposed Structure is 58’-9¼” in height as measured from the average contact ground level on the eastern side of the enclosure. Section 220-809-A suggests that a 58’-9¼”-tall public utility enclosure must be set back at minimum of 37.51 additional feet from each property line. The eastern setback required is 97.51’ and approximately 167’ is provided. The southern setback required is 117.51’ (based on an 80’ underlying setback requirement – putting aside for a moment our suggestion that a 60’ setback requirement should apply as explained in footnote 24 -- plus a 37.51-foot additional setback). The setback provided is 97’, explaining this variation request.

6. The necessity, given this unmanned facility, for a designated “parking lot” and mandatory minimum off-street parking and loading requirements.

c) Site plan review approval pursuant to Section 220-1001. We expect this review to occur concurrently with the Village’s review of the PD application materials.

D) Other Municipal Code provisions (outside the Zoning Ordinance) potentially necessitating variations, waivers or adjustments

*(The following is a preliminary list, to be supplemented if/as needed.)*

1. A modification granted under Chapter 138-6-K-4-c to allow for a maximum detention basin “bounce” of 9’ as opposed to the allowable 7’ maximum stated in the Municipal Code.

2. Possible modifications or technical amendments to address certain fire prevention matters unique to the Substation. Technical fire prevention matters have already been discussed preliminarily with the applicable Fire Protection District. Code provisions potentially relevant here include Sections 901.6, 901.6.1 and 901.7.1 of the 2024 International Building Code), and Sections 503 and 507.5 of the 2024 International Fire Code.

## Standards for Special Use

The standards for Special Use, as outlined in Section 220-1209-D of the Zoning Ordinance are set forth below.

*No special use shall be recommended by the Plan Commission unless such Commission shall find that:*

*(1) The establishment, maintenance or operation of the special use will not be detrimental to, or endanger, the public health, safety, morals, comfort or general welfare.*

ComEd's Project is not detrimental to and, in fact, directly enhances public health, safety, morals, comfort and general welfare in important ways. Importantly, the New Substation Equipment Enclosure, with its Accessory Equipment Enclosure, is part of ComEd's initiative to implement additional physical infrastructure supporting transmission resiliency and operational flexibility, while also allowing for efficient and timely deployment of additional capacity-enhancing electrical infrastructure in the future. Part of the function of the New Substation Equipment Enclosure will be to enhance activities at both the Transmission Substation and at the nearby TDC 416 within the Village (and within the same zoning lot) supporting ongoing electrification in the community and also existing and future community customers with larger electrical demands. Both substations also contribute to residential service reliability and resiliency.

The New Substation Equipment Enclosure is designed to encompass newer technology and eliminate certain open-air equipment allowing for a greater concentration of switchgear equipment in a smaller area. This means ComEd will be able to install sufficient equipment to meet changing demands and technology over time within the small footprint of the New Substation Equipment Enclosure, rather than needing to dramatically expand the size of the Transmission Substation (even further than the four acres currently planned), to fit an equivalent amount of conventional switchgear equipment. The New Substation Equipment Enclosure allows switchgear and other electrical equipment to be installed largely within an enclosure, offering both security and reliability benefits – such as wildlife and weather protection – and aesthetic benefits over the development of outdoor switchgear equipment. Aesthetic benefits are also gained by removing certain equipment and reducing the remaining exterior equipment to the minimum necessary to support the New Substation Equipment Enclosure.

By allowing for a higher concentration of modern, networked switchgear equipment under roof, the New Substation Equipment Enclosure provides additional and more reliable transmission service supporting, through distribution, surrounding non-residential and residential customers.

The New Substation Equipment Enclosure and other Project components will have minimal impacts on surrounding properties. The Substation will be unmanned (except during occasional maintenance/repair periods), minimizing any disturbance to existing neighboring uses. In essence, the New Substation Equipment Enclosure will act as an integral piece of infrastructure that will not alter the essential nature and function of the Substation or be injurious to nearby property or improvements.

Given the space constraints within the Property due to mandatory safety clearances from overhead lines, avoidance of wetlands impact and siting efforts away from residential uses to the west, constructing the New Substation Improvements within the Substation Expanded Area (in addition

to undertaking the Existing Substation Improvements) pursuant to a special use permit for a Planned Development (“PD”) at the same location of existing, longstanding electrical infrastructure *without the need for construction of an entirely new and separate electrical substation within the Village to address the same electrical grid needs* is an efficient, reliable and proactive way ComEd can serve present and future electrical needs of the Village while minimizing any negative impacts.

*(2) The proposed use at the proposed location will not have an undue or substantial adverse effect, above and beyond that inherently associated with such use, irrespective of the location in the particular zoning district, upon adjacent property, or the character of the neighborhood.*

As noted in the response to standard (1) above, given the space constraints of the Transmission Substation and the material amount of transmission lines, the need to (i) avoid conflicts with energized equipment during the project construction (to avoid outages as much as possible), to (ii) avoid wetland areas north and west of Transmission Substation within the Property and to (iii) avoid placing the Enclosure close to residential homes west of the Property, the New Substation Equipment Enclosure has been placed in the Substation Expanded Area in the southeastern portion of the Property. This location minimizes system and ecological disruption and creates separation as much as possible from residential uses.

In terms of sensitivity to the character of the neighborhood, substantial efforts have been made with the input of Gensler, a global architecture, design, and planning firm, to feature for the New Substation Equipment Enclosure a design intended, through the use of shades of terra cotta or brick and concrete bands, to blend seamlessly and act as a bridge between the commercially-oriented materials palette of the Village commercial “center” at 143rd Street and Bell Road just to the north and the mixed-use/residential palette in the area to the south of Martingale Lane (including attention paid to bring consistency between the exterior architecture of the First American Bank building at 14741 S. Bell Road and the Enclosure). ComEd’s careful attention to the exterior design of the Enclosure is representative of how the Project has striven to achieve design consistency within the neighborhood to the greatest extent possible given the utility-focused function of the Enclosure.

Further, the grading work has been designed to contain stormwater run-off within the Property and route it to the existing detention basin which will be deepened. The grading plan results in the lower level of the southern portion of the New Substation Equipment Enclosure being wholly below-grade while the northern portion is above-grade and features a drive-in lower-level. The benefit of this design is that it transitions the perceived height of the Enclosure so that the lower-height portion is situated towards Founders Crossing while the walk-out basement portion of the Enclosure faces only the larger portion of the Transmission Substation.

Finally, as a site aesthetic enhancement and community benefit and in recognition that the Project will occupy a portion of the Property’s southeastern corner which is currently undeveloped (although zoned I-1 and available to be developed), ComEd is implementing a significant landscaping plan in the southeast corner of the Property which: (1) preserves the north-south and east-west recreational paths along the eastern and southern property lines and all existing plantings south of east-west recreational path; (2) implements numerous plantings as part of a landscaping plan for its Project, with such plan including a new bike path rest area at the southeastern corner of the site and parkway trees along Bell Road. The bike path rest area is at

the Bell and Martingale access point to the Village's bike path system. It will feature benches under a curved arbor to provide an opportunity for rest with shade. There will also be bike racks with pollinator images and a bike repair station. The benches are arranged around a brightly colored image of a butterfly landing on a flower. In association with the rest area a pollinator garden will be created. Over 200 native shrubs, perennials and grasses will be planted. Each plant is selected for their ability to attract and support pollinators. This enhancement will provide the community with a focal and meeting point. Although the bike paths are generally maintained by the Village as a recreational amenity, ComEd plans to maintain the bike path rest area at the Property and the plantings enveloping it.

*(3) The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.*

ComEd has made significant efforts to design improvements to its Transmission Substation which are necessary to accomplish the required electrical grid enhancements while remaining sensitive to the surrounding neighborhood. The special use PD would allow for implementation of these improvements. Details of these efforts are described in the responses to standards (1) and (2). For brevity, those details are incorporated into this response by reference. Key summary points include:

- Siting of the New Substation Improvements within the Property as far away as possible from the residential uses to the west.
- Cladding of the New Substation Equipment Enclosure in brick or terra cotta, along with concrete bands, to reflect the architectural vocabulary of nearby commercial uses.
- Preservation of community recreational paths and enhancement of the southeastern portion of the Property through carefully selected and arranged plantings with a bike path rest area as a new community amenity.
- Incorporation of a decorative retaining wall along the southeastern portion of the Property with a fieldstone styling consistent with similar walls within the Village.

In addition to these features, the Project and Property remains unmanned except for periodic or emergent maintenance, meaning the Property will continue to have a minimal impact within the neighborhood. The New Substation Equipment Enclosure has an overall height of just under 59' (the specific height is 58'-9¼")', within the maximum of 60' allowed for public utility buildings. The Enclosure has been sited so as to be set back substantially further from the eastern property line than the minimum required (the minimum required setback is 97.51' and the setback provided is 167') and has been situated as far north as possible from the southern property line, with the area just south of the Property set aside for open space resulting in a significant distance from the Enclosure to any residential and commercial uses within Founders Crossing.

Finally, impacts on the use and enjoyment of nearby properties and property should be further mitigated by ComEd's planned removal of obsolete transmission structures once the structures accompanying this Project are implemented.

(4) The proposed use at the particular location is deemed necessary for the public convenience and the gain to the public and all or a part of the community exceeds the hardship imposed upon the property owner.

The substance of this Finding of Fact is set forth in the response to standard (1) above and the key points in that response are incorporated here by reference for brevity.

In essence, there are significant gains to the public convenience and public by ComEd's continued investment in the Transmission Substation at the Property – particularly within the Substation Expanded Area in the southeastern quadrant – when compared to the necessary alternatives: Construction of an entirely new substation nearby meeting the necessary transmission improvement requirements or the expansion of the footprint of the Substation to the west closer to the residential subdivisions bordering the Property on the west.

Through the Project, ComEd is implementing additional physical infrastructure supporting transmission resiliency and operational flexibility, while also allowing for efficient and timely deployment of additional capacity-enhancing electrical infrastructure in the future. This is achieved by construction of the Enclosure which encompasses newer technology eliminating the need for certain open-air equipment and allowing for a greater concentration of switchgear equipment in a smaller area. Simply put: As more equipment is needed in the future, it can be easily incorporated within the Equipment Enclosure.

The improvements to the Transmission Substation also support nearby “Bell Road” substation, within the same zoning lot, supporting ongoing electrification in the community and also existing and future community customers with larger electrical demands. Both substations also contribute to residential service reliability and resiliency.

These and other substantial public benefits would not be realized if the Project, which ComEd is obligated by statute and regulation to carry out, did not proceed.

(5) The proposed use is generally suitable for the particular zoning district and will not adversely affect development of adjacent properties in accord with the applicable district regulations.

ComEd's use, an electrical substation, is an authorized I-1 special use. The substation use has long existed at this location, for approximately 70 years or so, and was established as a use on the Property long before incorporation of the Village. Numerous improvements at the Transmission Substation have been made over time before and during the period of Village incorporation and none of those improvements have hindered the residential growth to the west (given the existing and continued honoring of substantial setbacks to the Transmission Substation), the healthy commercial and retail growth to the north (including, by way of example, the new commercial project proposed just to the north of the Transmission Substation along Bell Road), and the retail and residential uses to the south which have been implemented through the Founders Crossing project. The Project is being implemented in a manner, as described elsewhere in the responses to these standards and in this application, so as to avoid adverse impacts on any adjacent properties. District regulations will be adhered to except those necessitating minor PD exceptions to address certain aspects of the Project which, due to electrical needs, do not neatly fit all aspects

of the Ordinance (land use rules not written in anticipation of these unique electrical technical and safety requirements).

(6) The establishment of the special use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

In the interests of brevity, the text of responses made to previous standards is incorporated here. The Project reflects the implementation of modern engineering best practices at the Transmission Substation – in which ComEd is obligated to invest per State of Illinois regulatory obligations and obligations to the Village reflected in Article VI of its Franchise Agreement -- undertaken through sensitive exterior design, grading and landscaping. The planned new retail and commercial investments that have been proposed just outside the fence line of the Transmission Substation along Bell Road reflect the acceptance of the Transmission Substation as an institutional feature of the community, not as a disincentive to continued orderly development. The Enclosure is sensitively situated along Bell Road, as far away as possible from undeveloped or residential land to the west, and should not affect Founders Crossing to the south which appears to be fully built out. The substantial setback of the Enclosure with its enhanced exterior design, coupled with the enhanced east-facing landscaping and new Bell Road parkway trees of up to 20 feet in mature height, should mitigate any impact on future development of properties along the east side of Bell Road which, although zoned residential today, are identified for commercial future use in the Land Use-Plan included in the current Village Comprehensive Plan.

(7) The adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided.

The Expanded Substation is served by adequate public facilities. No new Village services are needed. On-site stormwater detention will be implemented. There are no new curb cuts or access roads connecting to public rights-of-way proposed. As described in the response below and elsewhere in this application, one existing Bell Road curb cut will be used for an additional secured access point to the Transmission Substation while all other access points along Bell Road will remain unchanged.

(8) Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

The Expanded Substation will be, intentionally, a highly secure unmanned facility. Occasionally ComEd employees and contractors may visit but typically for short periods related to maintenance and other emergent public utility purposes. There will be three vehicular entry points – two are existing and one, as described in response to standard (7) above and elsewhere in this application, will be established as a 20-foot access drive using an existing Bell Road curb cut. Given the Project will be unmanned except for occasional personnel visits generally for specific repair, monitoring and maintenance activities, no dedicated parking or loading spaces are needed and an exception from any mandatory minimum parking and loading requirements will be requested as part of the special use PD request.

(9) The proposed use has been considered in relation to the location, goals and objectives of the Village's Comprehensive Plan and is in general accord with the guidelines of the plan.

The Village's Comprehensive Plan appears to consist of two documents: A formal Comprehensive Plan adopted by the Village Board in March 2005 (the "2005 Comprehensive Plan") and a Strategic Plan adopted by the Village Board on August 22, 2018 (the "2018 Strategic Plan"). Collectively, the 2005 Comprehensive Plan and 2018 Strategic Plan are referred to herein as the "Comprehensive Plan."

The Project's use (and the Project itself) complies with numerous aspects of the Comprehensive Plan. Those aspects are listed below with commentary.

- Objectives 7 and 8 of the Village's Community Image and Character Goal (pg. 11 of the 2005 Comprehensive Plan): *"Require high standards of design and construction for all new development within the Village" and "Undertake design and appearance improvements along the major roadways that pass through Homer Glen, including landscaping, lighting, public signage, and community 'gateway' features"*

*Response:* The Enclosure's exterior architecture has been carefully designed so as to reflect the neighboring commercial palette while contributing positively to the Bell Road streetscape. Significant plantings are proposed along Bell Road and a bike path rest area at the intersection of two important pedestrian/bike paths is being installed and maintained by ComEd as part of its proposal.

- Objectives 3 and 9 of the Village's Commercial and Business Development Goal (pgs. 12-13 of the 2005 Comprehensive Plan): *"Locate new commercial development along the primary roadways that pass through the community" and "Minimize and mitigate any negative impacts of commercial and business uses activities on neighboring land use areas"*

*Response:* The Project is focused in the southeastern corner of the Property, along Bell Road, adjacent to commercial development and as far away as possible from the residential subdivisions to the west of the Property. Negative impacts on neighboring land use areas have been achieved by careful siting of the Enclosure, use of grading to reduce the Enclosure height as viewed from the south, careful attention to architectural detailing and rhythm on the Enclosure exterior, the installation of significant new plantings and the use of a decorative retaining wall.

- Objectives 8, 10 and 11 of the Village's Parks and Recreation Goal (pg. 14 of the 2005 Comprehensive Plan): *"Promote the development of attractive and usable public open spaces within the Village's commercial and business areas", "Undertake more extensive landscaping and 'greening' programs along major street corridors" and "Investigate the possibility of using the utility easements that pass through Homer Glen for low-intensity recreational uses"*

*Response:* ComEd's proposed bike path rest area, with its shaded benches and bicycle repair equipment, provides an improved public open space at the intersection of two pedestrian/bicycle trails, with one such trail proceeding west from the proposed rest area through the Village using ComEd's Property. ComEd has carefully designed the Project to avoid any impact to the existing east-west bike path which connects the residential subdivisions west of the Property to Bell Road and then to the commercial center at Bell Road and 143rd Street using the north-south recreational path. Consistent with the major street "greening" program objective, ComEd has proposed

numerous parkway trees along Bell Road. These trees provide shade for the users of the north-south recreational path along Bell Road, improve the aesthetics of Bell Road and serve as visual screening for the Enclosure.

- Objectives 4 and 11 of the Village’s Transportation Goal (pg. 16 of the 2005 Comprehensive Plan): *“Develop a comprehensive network of multi-use trails to link residential subdivision with schools, parks, shopping areas, public facilities, open spaces, forest preserves, and other multi-use trails in the area”, “Plan for truck movements and through traffic that will serve the commercial and business needs of Homer Glen and minimize impacts on residential areas”*

Response: ComEd’s Project preserves the existing multi-use trail network and enhances it through the installation maintenance of a community bike path rest area. Access to the Substation will be from Bell Road only, allowing continued avoidance of impact of the Substation on the residential subdivisions to the west and on Founders Crossing to the south.

- Figure 3: Land-Use Plan (2005 Comprehensive Plan, Figure 3): The Land-Use Plan designates the Property for “Utility Easement/Multi-Use Trail”

Response: The Project is fully consistent with this designation on the Land-Use Plan.

- The 2005 Comprehensive Plan states that Bell Road should provide sites for “public and institutional facilities” among other uses (2005 Comprehensive Plan, pg. 24)

Response: The Project advances this planning goal by situating the Substation expansion and its principal Enclosure so as to create an institutional visual anchor along Bell Road, transitioning to the immediately adjacent commercial/business uses along Bell Road within Founders Crossing.

- The 2005 Comprehensive Plan, on page 35, in describing Homer Glen’s “Other Park, Open Space and Recreational Features,” notes that although the presence of overhead electric transmission lines are in “stark contrast” to the area’s natural character, these rights-of-way create open space corridors with *“potential for use as recreational pathways, landscape treatments, and aesthetic enhancements, particularly at locations where they cross major roadways.”*

Response: ComEd’s Project design preserves the existing recreational paths along the eastern Property line and near the southern Property line and enhances both paths. Parkway trees are newly proposed along Bell Road providing both shade and aesthetic enhancement to path users. Landscaping is preserved along the south side of the east-west recreational path and a decorative retaining wall will be installed along the path’s north side. The proposed bike path rest area, with its butterfly garden, at the intersection of the two paths and near Bell Road represents precisely the type of landscape treatment and aesthetic enhancement encouraged by the 2005 Comprehensive Plan.

- The 2005 Comprehensive Plan, on page 48 in the “Public Utilities” section of the “Community Facilities Plan” (Section 4), urges developers to consider transmission corridors as development is recommended.

*Response:* The Project brings reliability and resiliency improvements to the transmission system which ultimately benefits both larger and small electricity users in the Village. The Project reflects the vision of the 2005 Comprehensive Plan that the presence of transmission assets within the Village – and by extension the improvement of such assets – is ultimately a Village strength and the Project undergirds and promotes this existing Village inherent strength.

- Figure 7 (“Public Utilities”) of the 2005 Comprehensive Plan designates the Property as a ComEd Substation and Transformer Yard.

*Response:* As noted earlier, ComEd is further investing in the Property given its existing use and Village-designated use in the 2005 Comprehensive Plan. The new investment by ComEd is going precisely to a parcel where the Village has envisioned it would go and along Bell Road as encouraged. Further, ComEd is using technology which should allow additional future equipment to be added efficiently in a manner minimizing external impacts.

- The “Street Corridors” portion of the “Community Character Plan” section of the 2005 Comprehensive Plan (page 61) recommends that “more attractive treatments should be undertaken along key roadways, particularly Bell Road...” and that such improvements might include, among others, new street trees.

*Response:* ComEd’s proposed new Bell Road parkway trees advance this objective.

- Point 4.11 of the “Commercial Development” portion of the 2005 Comprehensive Plan’s “Planning and Design Guidelines” (pg. 66) states that “new commercial and public construction should reflect an architectural style that distinguishes Homer Glen’s unique community image and character.”

*Response:* The Enclosure’s exterior architecture has been carefully designed by Gensler to be distinctive yet consistent with the architectural palette of the nearby Village commercial corridor.

- Point 7.1 of the “Architectural Design for Non-residential Structures” portion of the 2005 Comprehensive Plan’s “Planning and Design Guidelines” (pg. 69) provides that “materials such as standard size brick, stone and glass should be encouraged as the dominant exterior cladding” on all four sides of new public and non-residential buildings.

*Response:* Although glass as a material is incompatible with an electrical substation use, the Enclosure design is highly articulated using a carefully

selected mixture of terra cotta or brick veneer together with architectural precast.

- The 2018-2021 Strategic Plan Summary (pg. 2 of the 2018 Strategic Plan) calls for (1) the expansion of residential and commercial development as an Economic Development Strategic Priority; (2) the expansion of the trails system as an Recreational Amenities strategic initiative

*Response:* ComEd's significant continued investment in the Substation and its reliability and resiliency helps the Village carry out its Economic Development Strategic Priority. The preservation and enhancement of the recreational trails within and adjoining the Property, including ComEd's investment in the newly proposed bike path rest area, helps the Village realize its Recreational Amenities strategic initiative.

*(10) The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, including planned developments, except as such regulations may, in each instance, be modified by the Village Board, pursuant to the recommendations of the Plan Commission.*

ComEd's Project will comply with the Ordinance except with respect to matters addressed by requested PD exceptions or, to the extent needed in lieu of or in addition to PD exceptions, variations granted pursuant to the Ordinance. Certain aspects of the Project are not within the jurisdiction of the Ordinance due to the necessity for compliance with federal and/or state mandated standards applicable to electric utilities. These Project aspects are focused on safety and security requirements and are further detailed in the core application text.

MEMORANDUM TO: Dave Buckley, P.E., CFM, CPSWQ  
Christopher B. Burke Engineering, Ltd.

FROM: Javier Millan  
Principal

Luay R. Aboona, PE, PTOE  
Principal

DATE: October 16, 2025

SUBJECT: Traffic Impact Statement  
Proposed ComEd Substation Expansion  
Homer Glen, Illinois

This memorandum summarizes the methodologies, results, and findings of a traffic impact statement conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed expansion of the existing unmanned ComEd substation located on the west side of Bell Road in Homer Glen, Illinois. The plans call for building two new substation enclosures (one principal and one accessory) near and within the southern portion of the existing station with primary access provided off Bell Road via an existing service drive. **Figure 1** shows an aerial view of the site.

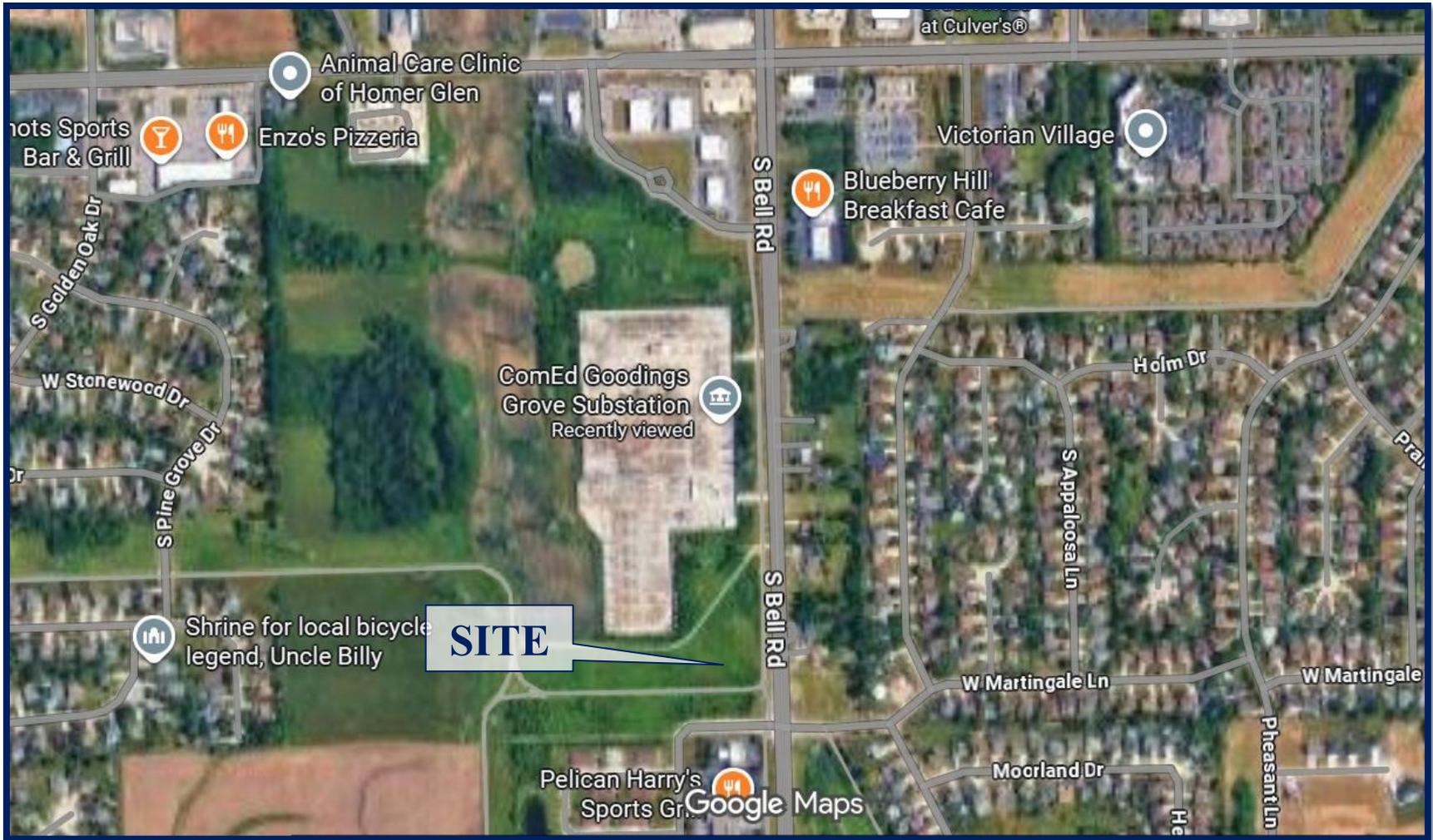
The purpose of this study was to examine background traffic conditions, assess the impact that the proposed expansion will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the proposed expansion.

### Existing Roadway System Characteristics

*Bell Road* is a north-south other principal arterial roadway that provides one lane in each direction in the vicinity of the site. The roadway is under the jurisdiction of the Will County Division of Transportation (WCDOT) and has a posted speed limit of 45 miles per hour. Bell Road carries an annual average daily traffic (AADT) volume of 11,200 vehicles (IDOT 2023).

### Proposed Bell Road Improvements

WCDOT has started the reconstruction and widening of Bell Road from 151<sup>st</sup> Street to north of Martingale Road to provide a continuous two through lanes in each direction with exclusive left-turn lanes provided at the signalized intersections with 151<sup>st</sup> Street, Founder's Crossing, and Martingale Lane. The project is anticipated to be completed by 2026. A copy of the proposed striping plan is included in the Appendix.



Site Location

Figure 1

## Proposed Site and Development Plan

As proposed, the existing substation will be expanded to the south providing two unmanned enclosures for typical electrical equipment. The proposed expansion will have secondary access via an existing access drive off Bell Road. This access is currently a gravel drive but under the proposed plans it will be improved and paved. In addition, an additional gate controlling access to the substation through this secondary access will be provided approximately 100 feet west of the future widened Bell Road. The substation's primary entrance and exit will remain at its current location, approximately 190 feet (centerline to centerline) north of the secondary access drive to be improved as part of the project.

### Existing Substation Operating Characteristics

Based on Year 2023 and 2024 data provided by the operator, the existing substation generates, on average, approximately eight (8) inbound trips and eight (8) outbound trips on a daily basis. Furthermore, the data indicated that there is no surge in trip generation but it is rather spread throughout the day. The substation, existing and as proposed, is unmanned and no employees are assigned to report daily to the property, with the daily trips indicated generated by typical daily substation activities which include, but are not limited to, as-needed testing, switching, maintenance and repair tasks.

In order to corroborate this data, KLOA, Inc. conducted 24-hour traffic counts on Tuesday September 9, 2025 at the primary access drive intersection with Bell Road. Based on the traffic counts, the facility on a daily basis generated approximately five (5) inbound trips and five (5) outbound trips. In addition, the average daily traffic on Bell Road was approximately 14,380 vehicles. In addition and based on KLOA, Inc.'s observations, the design and location of the existing gate at the primary substation entrance and exit is adequate, especially given that traffic is spread out and therefore does not back up to Bell Road. As such, the collected data is consistent with the data provided and indicates that the substation generates very limited traffic. Copies of the traffic counts are included in the Appendix.

### Proposed Enclosed Substation Operating Characteristics

KLOA, Inc. received and reviewed a full year worth of traffic data (2024) of an existing substation in Bedford Park with a similar primary enclosure. Based on this data, the analogous substation generates, on average, approximately eight (8) inbound trips and eight (8) outbound trips on a daily basis. Furthermore and similar to the operation of the existing substation, the data also indicated that there is no surge in trip generation but rather it is spread throughout the day.

## Traffic and Access Evaluation

Based on the above, the proposed substation enclosure will not result in a net increase in the traffic volumes currently generated by the existing substation. When the daily trip generation is compared to the existing daily traffic along Bell Road, the substation traffic amounts to approximately 0.0014 percent. This minimal volume of traffic does not have a measurable impact on the traffic flow along Bell Road especially taking into consideration WCDOT current widening of Bell Road to provide two through lanes in each direction. Furthermore, given the infrequent/low trip generation, the provision of exclusive left-turn or right-turn lanes on Bell Road at its intersection with the existing access drive (to be paved and improved) will not be necessary.

Lastly, the 100-foot distance between the proposed gate and the widened Bell Road will be more than adequate to accommodate the infrequent incoming vehicles without them queueing into Bell Road.

## On-Site Parking and Circulation

Based on the fact that both the existing substation and the proposed enclosures are unmanned facilities coupled with the infrequent number of trips generated by the substation, a dedicated surface parking lot or parking spaces will not be necessary. Furthermore, given that the fence on the south side of the existing substation will be removed, vehicles will be able to circulate internally between the existing substation and proposed substation enclosures without any conflicts and easily access the primary access drive.

## Conclusions

- The existing substation as well as the proposed substation enclosures generate on average a minimal volume of daily traffic with no surges in its trip generation.
- Based on data of a substation with a similar primary enclosure, the daily trip generation, on average, is eight (8) vehicles in and eight (8) vehicles out.
- The proposed substation enclosure will not result in a net increase in the traffic volumes generated by the existing substation.
- When the trip generation is compared to the existing daily traffic along Bell Road, the substation traffic amounts to approximately 0.0014 percent.
- The minimal volume of traffic that is generated by the substation will not have a measurable impact on the traffic flow along Bell Road especially taking into consideration WCDOT current widening of Bell Road to provide two through lanes in each direction.
- An existing gravel access drive will be improved and paved and a gate will be located approximately 100 feet west of the widened Bell Road. This distance will be more than adequate to accommodate the inbound vehicles without extending onto Bell Road.

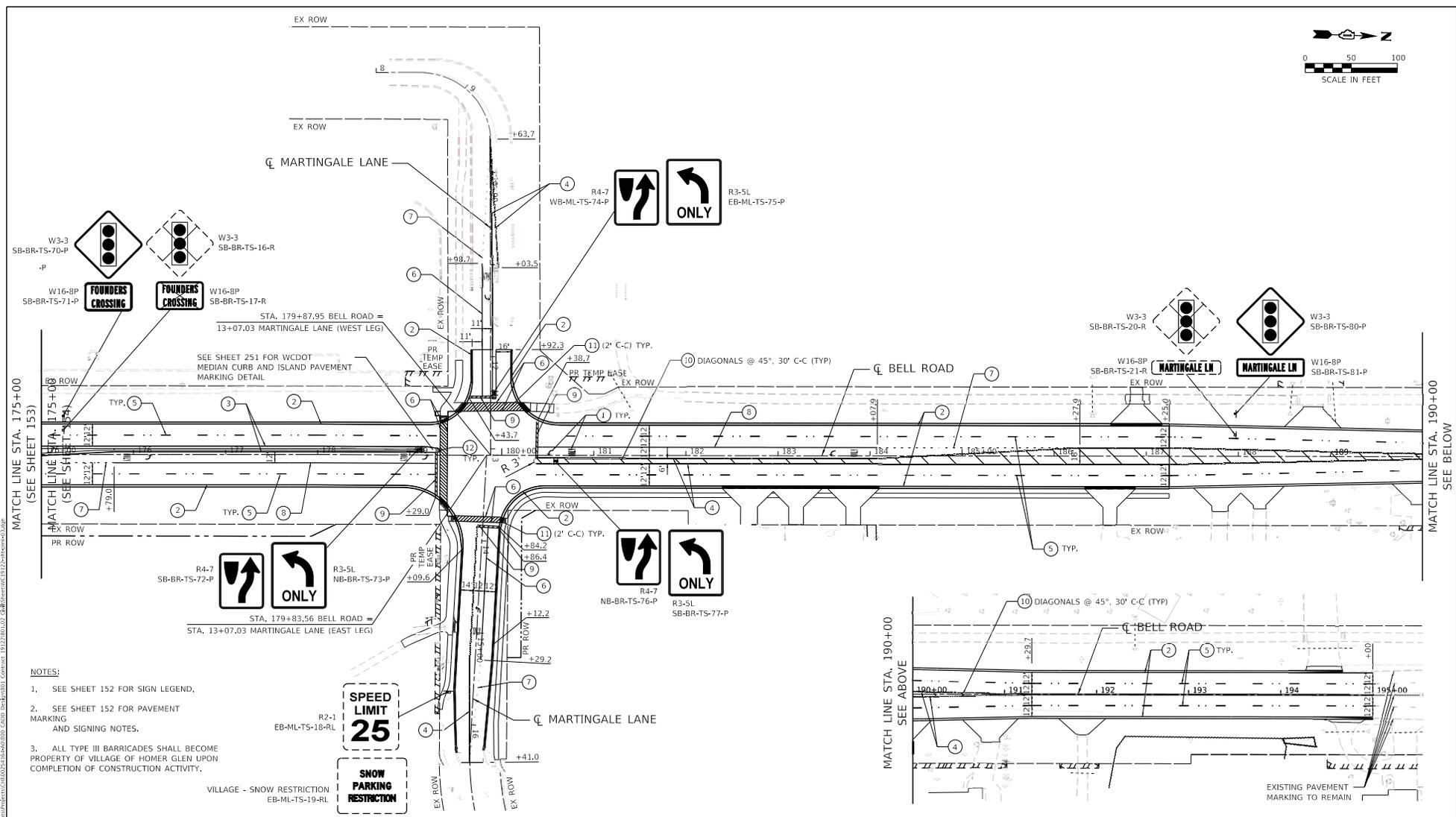
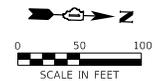
- Given the infrequent/low trip generation, the provision of exclusive left-turn or right-turn lanes on Bell Road at its intersection with the existing access drive (to be improved and paved) will not be necessary.
- Based on the fact that both the existing substation and the proposed enclosure are unmanned facilities coupled with the infrequent number of trips generated by the substation, a dedicated surface parking lot or parking spaces is not necessary.

# Appendix

## Striping Plan Traffic Count Summary Sheets

## Striping Plan





- NOTES:**
- SEE SHEET 152 FOR SIGN LEGEND.
  - SEE SHEET 152 FOR PAVEMENT MARKING AND SIGNING NOTES.
  - ALL TYPE III BARRICADES SHALL BECOME PROPERTY OF VILLAGE OF HOMER GLEN UPON COMPLETION OF CONSTRUCTION ACTIVITY.

**SPEED LIMIT**  
25

**SNOW PARKING RESTRICTION**

**PAVEMENT MARKING LEGEND**

- |                                                                                          |                                                                                                                                                                                  |                                                                                                                  |                                                                                                                         |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| ① THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (78000100)                        | ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 4" SKIP DASH WHITE, 30" SKIP - 10' DASH (78000200) WITH RAISED REFLECTIVE PAVEMENT MARKERS, ONE-WAY CRYSTAL SPACED AT 60" C-C (78100100) | ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 6" SOLID WHITE (78000400) ONE-WAY, CRYSTAL, SPACED AT 40" C-C (78100100) | ⑫ POLYUREA PAVEMENT MARKING TYPE 1 - LETTERS AND SYMBOLS YELLOW (78008200) TO BE APPLIED ON CURBS PER SHEET 251 AND 252 |
| ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" SOLID WHITE (78000200)                        | ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 6" SOLID WHITE (78000400)                                                                                                                | ⑨ THERMOPLASTIC PAVEMENT MARKING - LINE 24" SOLID WHITE (78000650)                                               |                                                                                                                         |
| ③ THERMOPLASTIC PAVEMENT MARKING - LINE 4" SOLID YELLOW (78000200)                       | ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 6" SKIP-DASH WHITE, 6" SKIP - 2' DASH (78000400)                                                                                         | ⑩ THERMOPLASTIC PAVEMENT MARKING - LINE 12" SOLID YELLOW (78000600)                                              |                                                                                                                         |
| ④ THERMOPLASTIC PAVEMENT MARKING - LINE 4" SOLID DUAL YELLOW, 11" SPACING C-C (78000200) |                                                                                                                                                                                  | ⑪ THERMOPLASTIC PAVEMENT MARKING - LINE 12" SOLID WHITE (78000600)                                               |                                                                                                                         |

FILE NAME: W19122-vh-rm-03.dgn	USER NAME: mbart	DESIGNED: JP	REVISIONS:	<b>WILL COUNTY DIVISION OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND SIGNING PLANS BELL ROAD</b>	F.A.P. SITE: 0356	SECTION: 19-00147-14-FP	COUNTY: WILL	TOTAL SHEETS: 334	SHEET NO.: 154
EXP. U.S. Services Inc.   Chicago, IL	PLOT SCALE: 1/8" = 100.0000' / 1" = 800.0000'	CHECKED: JR	DATE: 3/14/2025			SCALE: 1"=50'	SHEET: SCV019X0F	SHEETS: STA. 175+00 TO STA. 190+00	ILLINOIS FED. AID PROJECT	

# Traffic Count Summary Sheets

Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	North Southbound		South Northbound		
Time	T	App	T	App	Int
2025-09-09 12:00AM	24	24	20	20	44
1:00AM	21	21	17	17	38
2:00AM	11	11	14	14	25
3:00AM	5	5	28	28	33
4:00AM	28	28	70	70	98
5:00AM	91	91	219	219	310
6:00AM	151	151	307	307	458
7:00AM	288	288	426	426	714
8:00AM	301	301	395	395	696
9:00AM	360	360	434	434	794
10:00AM	378	378	402	402	780
11:00AM	437	437	527	527	964
12:00PM	477	477	462	462	939
1:00PM	475	475	446	446	921
2:00PM	511	511	479	479	990
3:00PM	566	566	533	533	1099
4:00PM	708	708	515	515	1223
5:00PM	690	690	563	563	1253
6:00PM	533	533	476	476	1009
7:00PM	421	421	391	391	812
8:00PM	292	292	243	243	535
9:00PM	196	196	149	149	345
10:00PM	121	121	89	89	210
11:00PM	56	56	30	30	86
<b>Total</b>	7141	7141	7235	7235	14376
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	49.7%	49.7%	50.3%	50.3%	-
<b>Lights</b>	6967	6967	7029	7029	13996
<b>% Lights</b>	97.6%	97.6%	97.2%	97.2%	97.4%
<b>Single-Unit Trucks</b>	89	89	101	101	190
<b>% Single-Unit Trucks</b>	1.2%	1.2%	1.4%	1.4%	1.3%
<b>Articulated Trucks</b>	69	69	69	69	138
<b>% Articulated Trucks</b>	1.0%	1.0%	1.0%	1.0%	1.0%
<b>Buses</b>	16	16	36	36	52
<b>% Buses</b>	0.2%	0.2%	0.5%	0.5%	0.4%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

Full Length (12 AM-12 AM (+1))

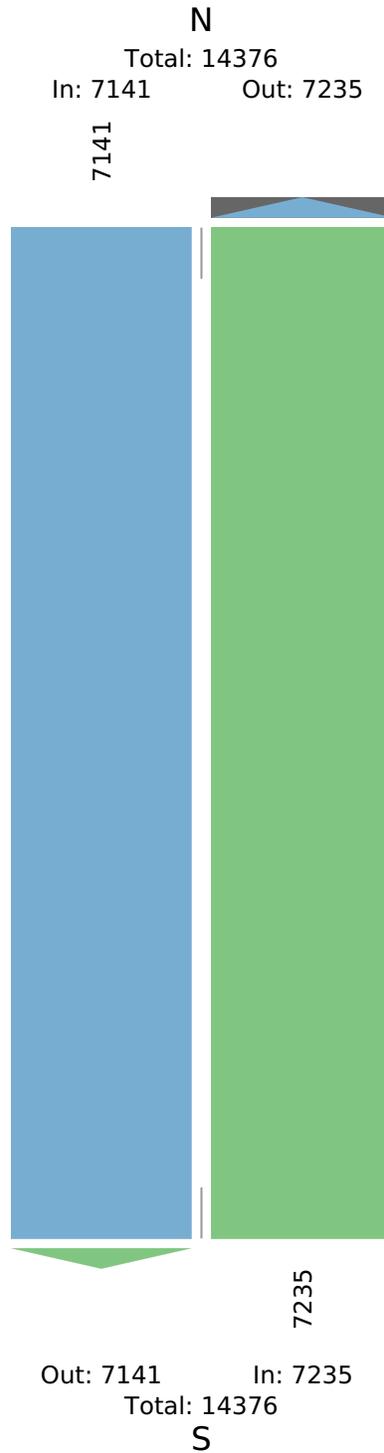
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US



**Holmer Glen (north and south) - ATR**

Tue Sep 9, 2025

AM Peak (8:45 AM - 9:45 AM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	North Southbound		South Northbound		
Time	T	App	T	App	Int
2025-09-09 8:45AM	99	99	141	141	240
9:00AM	91	91	112	112	203
9:15AM	92	92	105	105	197
9:30AM	77	77	110	110	187
<b>Total</b>	359	359	468	468	827
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	43.4%	43.4%	56.6%	56.6%	-
<b>PHF</b>	0.907	0.907	0.830	0.830	0.861
<b>Lights</b>	353	353	452	452	805
<b>% Lights</b>	98.3%	98.3%	96.6%	96.6%	97.3%
<b>Single-Unit Trucks</b>	4	4	9	9	13
<b>% Single-Unit Trucks</b>	1.1%	1.1%	1.9%	1.9%	1.6%
<b>Articulated Trucks</b>	2	2	3	3	5
<b>% Articulated Trucks</b>	0.6%	0.6%	0.6%	0.6%	0.6%
<b>Buses</b>	0	0	4	4	4
<b>% Buses</b>	0%	0%	0.9%	0.9%	0.5%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

AM Peak (8:45 AM - 9:45 AM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US



Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

Midday Peak (11:15 AM - 12:15 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	North Southbound		South Northbound		
Time	T	App	T	App	Int
2025-09-09 11:15AM	127	127	133	133	260
11:30AM	110	110	128	128	238
11:45AM	108	108	138	138	246
12:00PM	108	108	118	118	226
<b>Total</b>	453	453	517	517	970
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	46.7%	46.7%	53.3%	53.3%	-
<b>PHF</b>	0.892	0.892	0.937	0.937	0.933
<b>Lights</b>	440	440	501	501	941
<b>% Lights</b>	97.1%	97.1%	96.9%	96.9%	97.0%
<b>Single-Unit Trucks</b>	8	8	10	10	18
<b>% Single-Unit Trucks</b>	1.8%	1.8%	1.9%	1.9%	1.9%
<b>Articulated Trucks</b>	4	4	6	6	10
<b>% Articulated Trucks</b>	0.9%	0.9%	1.2%	1.2%	1.0%
<b>Buses</b>	1	1	0	0	1
<b>% Buses</b>	0.2%	0.2%	0%	0%	0.1%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

Midday Peak (11:15 AM - 12:15 PM)

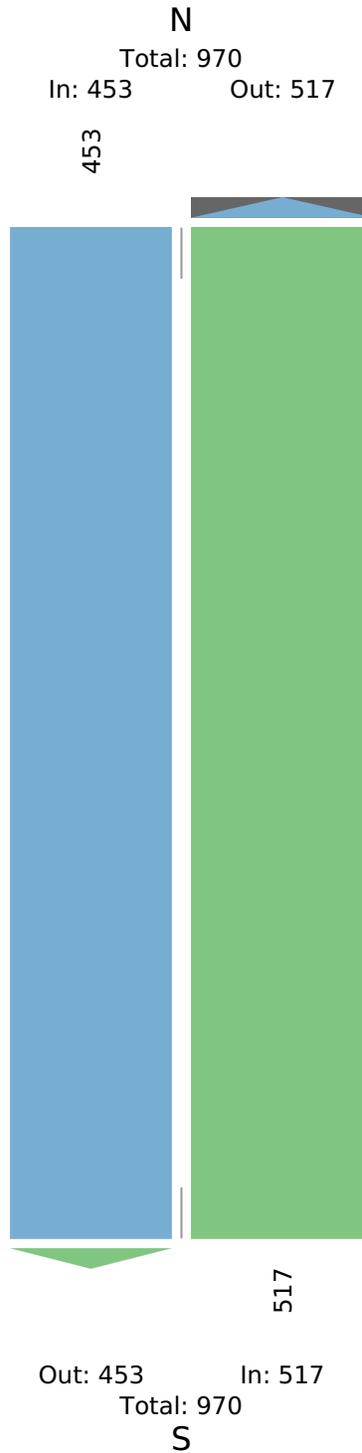
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US



**Holmer Glen (north and south) - ATR**

Tue Sep 9, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	North Southbound		South Northbound		
Time	T	App	T	App	Int
2025-09-09 5:00PM	177	177	151	151	328
5:15PM	175	175	128	128	303
5:30PM	176	176	136	136	312
5:45PM	162	162	148	148	310
<b>Total</b>	690	690	563	563	1253
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	55.1%	55.1%	44.9%	44.9%	-
<b>PHF</b>	0.975	0.975	0.932	0.932	0.955
<b>Lights</b>	682	682	555	555	1237
<b>% Lights</b>	98.8%	98.8%	98.6%	98.6%	98.7%
<b>Single-Unit Trucks</b>	4	4	2	2	6
<b>% Single-Unit Trucks</b>	0.6%	0.6%	0.4%	0.4%	0.5%
<b>Articulated Trucks</b>	4	4	6	6	10
<b>% Articulated Trucks</b>	0.6%	0.6%	1.1%	1.1%	0.8%
<b>Buses</b>	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

Holmer Glen (north and south) - ATR

Tue Sep 9, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

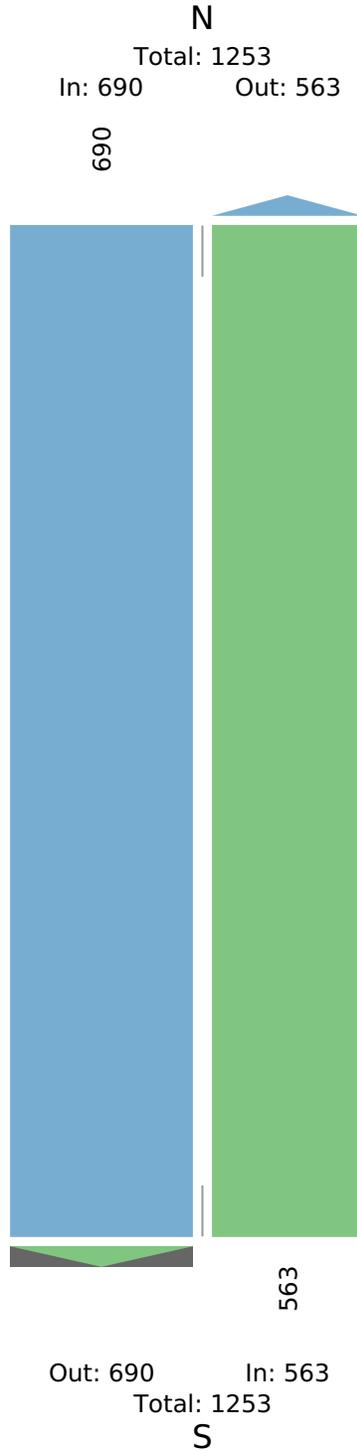
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340715, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US



Homer Glen (east and west) - ATR

Tue Sep 9, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	App	T	App	Int
2025-09-09 12:00AM	0	0	0	0	0
1:00AM	0	0	0	0	0
2:00AM	0	0	0	0	0
3:00AM	0	0	0	0	0
4:00AM	0	0	0	0	0
5:00AM	0	0	0	0	0
6:00AM	0	0	0	0	0
7:00AM	1	1	0	0	1
8:00AM	0	0	1	1	1
9:00AM	1	1	1	1	2
10:00AM	2	2	1	1	3
11:00AM	1	1	1	1	2
12:00PM	0	0	0	0	0
1:00PM	0	0	0	0	0
2:00PM	0	0	0	0	0
3:00PM	0	0	0	0	0
4:00PM	0	0	0	0	0
5:00PM	0	0	0	0	0
6:00PM	0	0	0	0	0
7:00PM	0	0	0	0	0
8:00PM	0	0	0	0	0
9:00PM	0	0	0	0	0
10:00PM	0	0	0	0	0
11:00PM	0	0	0	0	0
<b>Total</b>	5	5	4	4	9
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	55.6%	55.6%	44.4%	44.4%	-
<b>Lights</b>	5	5	4	4	9
<b>% Lights</b>	100%	100%	100%	100%	100%
<b>Single-Unit Trucks</b>	0	0	0	0	0
<b>% Single-Unit Trucks</b>	0%	0%	0%	0%	0%
<b>Articulated Trucks</b>	0	0	0	0	0
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%
<b>Buses</b>	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

Homer Glen (east and west) - ATR

Tue Sep 9, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US



Homer Glen (east and west) - ATR

Tue Sep 9, 2025

AM Peak (8:30 AM - 9:30 AM) - Overall Peak Hour

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	App	T	App	Int
2025-09-09 8:30AM	0	0	1	1	1
8:45AM	0	0	0	0	0
9:00AM	1	1	1	1	2
9:15AM	0	0	0	0	0
<b>Total</b>	1	1	2	2	3
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	33.3%	33.3%	66.7%	66.7%	-
<b>PHF</b>	0.250	0.250	0.500	0.500	0.375
<b>Lights</b>	1	1	2	2	3
<b>% Lights</b>	100%	100%	100%	100%	100%
<b>Single-Unit Trucks</b>	0	0	0	0	0
<b>% Single-Unit Trucks</b>	0%	0%	0%	0%	0%
<b>Articulated Trucks</b>	0	0	0	0	0
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%
<b>Buses</b>	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

**Homer Glen (east and west) - ATR**

Tue Sep 9, 2025

AM Peak (8:30 AM - 9:30 AM) - Overall Peak Hour

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
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Rosemont, IL, 60018, US



Homer Glen (east and west) - ATR

Tue Sep 9, 2025

Midday Peak (11 AM - 12 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US

Leg Direction	East		West		Int
	Westbound		Eastbound		
Time	T	App	T	App	
2025-09-09 11:00AM	1	1	0	0	1
11:15AM	0	0	1	1	1
11:30AM	0	0	0	0	0
11:45AM	0	0	0	0	0
<b>Total</b>	1	1	1	1	2
<b>% Approach</b>	100%	-	100%	-	-
<b>% Total</b>	50.0%	50.0%	50.0%	50.0%	-
<b>PHF</b>	0.250	0.250	0.250	0.250	0.500
<b>Lights</b>	1	1	1	1	2
<b>% Lights</b>	100%	100%	100%	100%	100%
<b>Single-Unit Trucks</b>	0	0	0	0	0
<b>% Single-Unit Trucks</b>	0%	0%	0%	0%	0%
<b>Articulated Trucks</b>	0	0	0	0	0
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%
<b>Buses</b>	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%
<b>Bicycles on Road</b>	0	0	0	0	0
<b>% Bicycles on Road</b>	0%	0%	0%	0%	0%

\*T: Thru

**Homer Glen (east and west) - ATR**

Tue Sep 9, 2025

Midday Peak (11 AM - 12 PM)

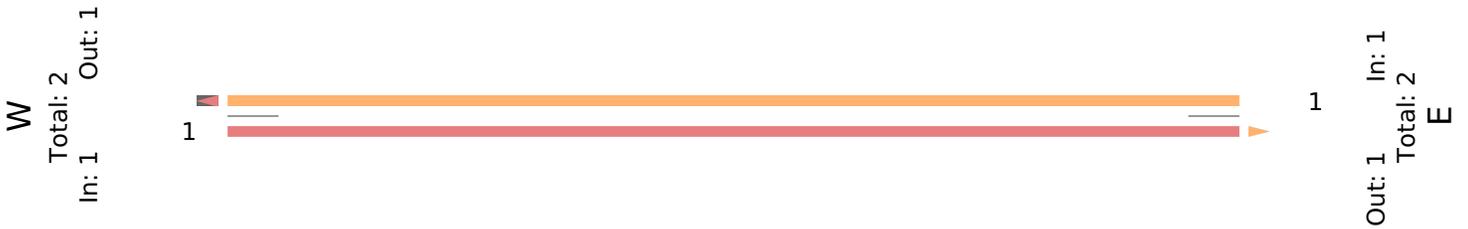
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)

All Channels

ID: 1340716, Location: 41.624339, -87.93093



Provided by: Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400,  
Rosemont, IL, 60018, US





Pace I-90/Barrington  
Road Kiss-n-Ride

Barrington Rd

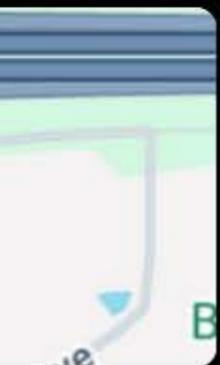
ComEd Substation

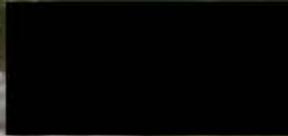


Pembroke Ave

S. Himmelstein

Hoffman Estates,  
62' tall to the peak







Itasca, Illinois

Google Street View

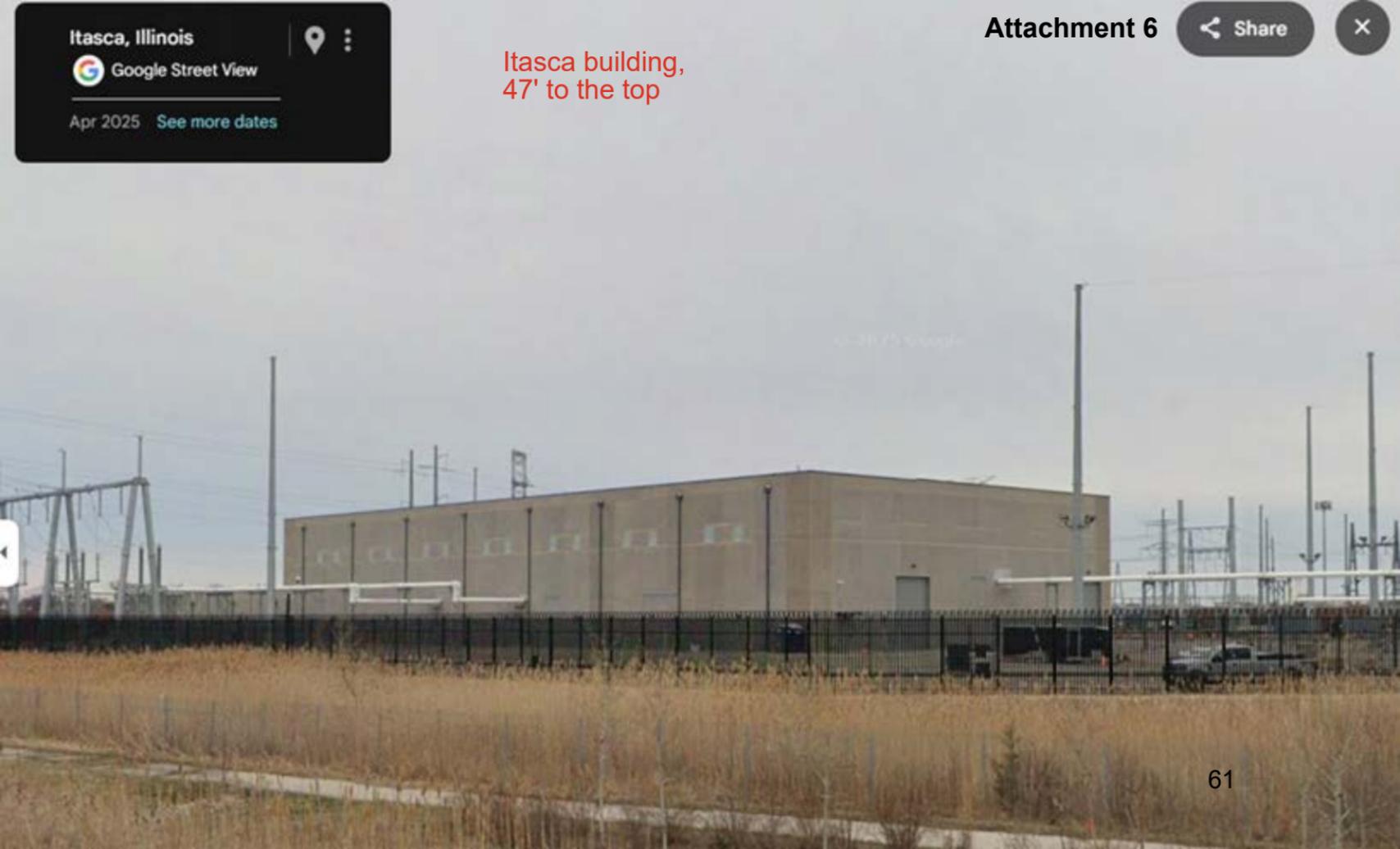
Apr 2025 [See more dates](#)

Attachment 6

Share

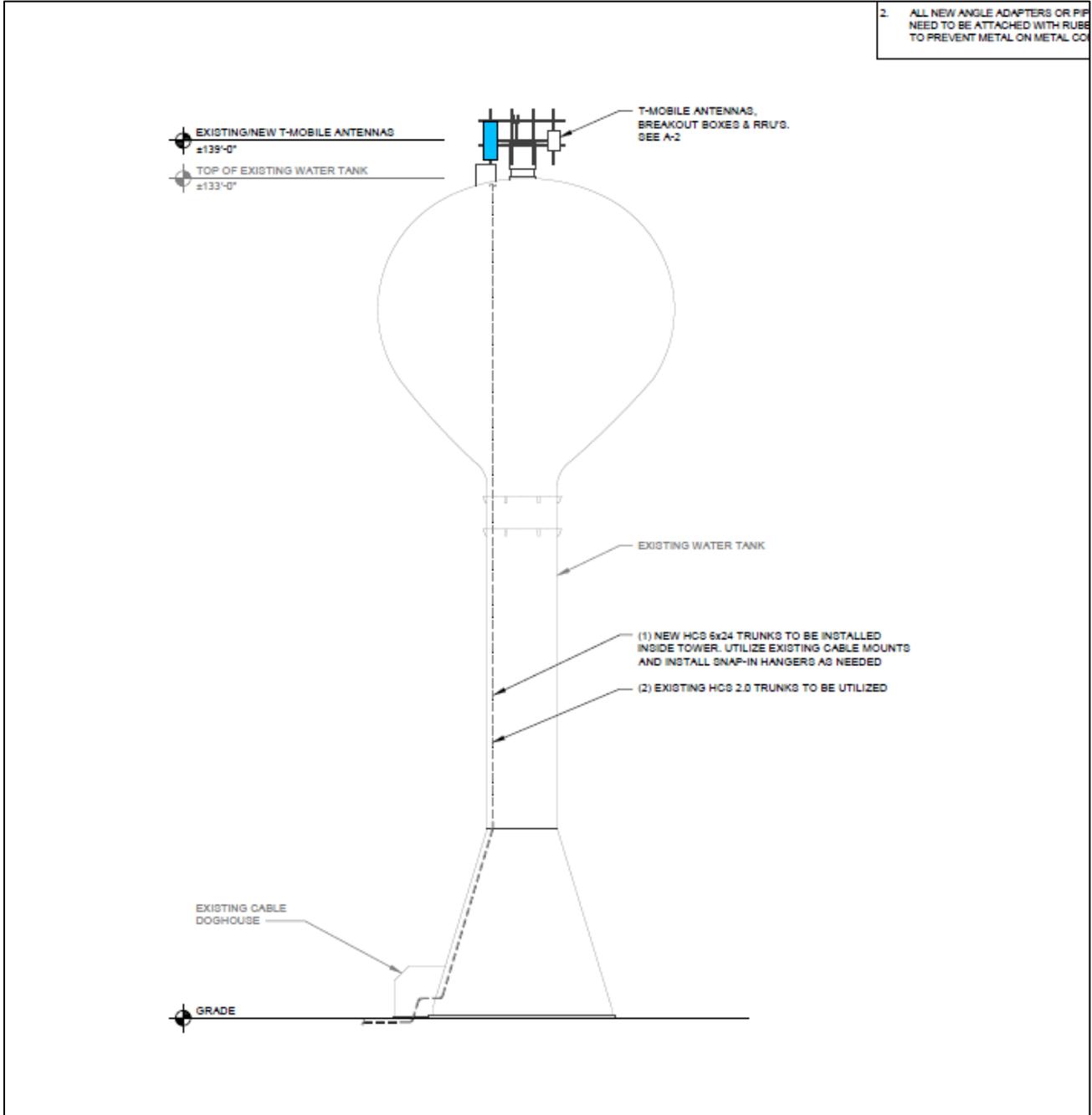
X

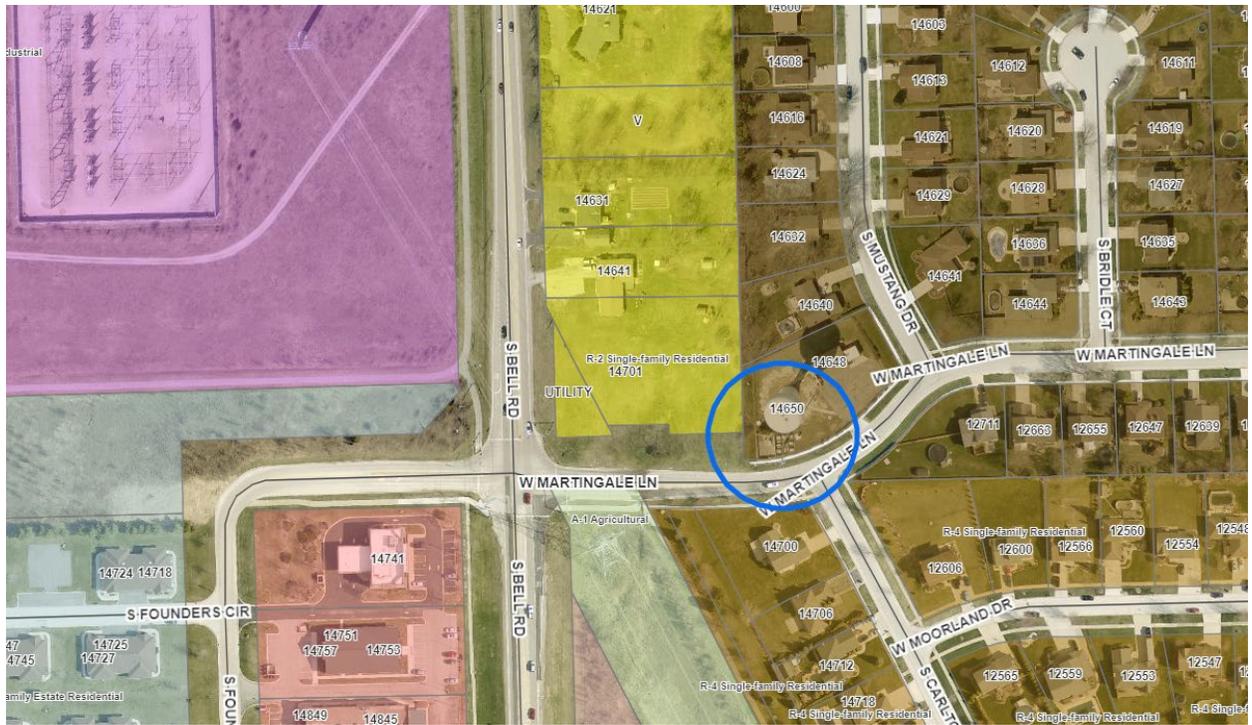
Itasca building,  
47' to the top



**HEIGHT COMPARISON:**

- THE ILLINOIS-AMERICAN WATER TOWER: 133' (NOT INCLUDING WIRELESS CARRIER'S EQUIPMENT)
- PROPOSED COMED SUBSTATION PRIMARY BUILDING: 59' 9 3/4" TO TOP (44% the height of the water tower)

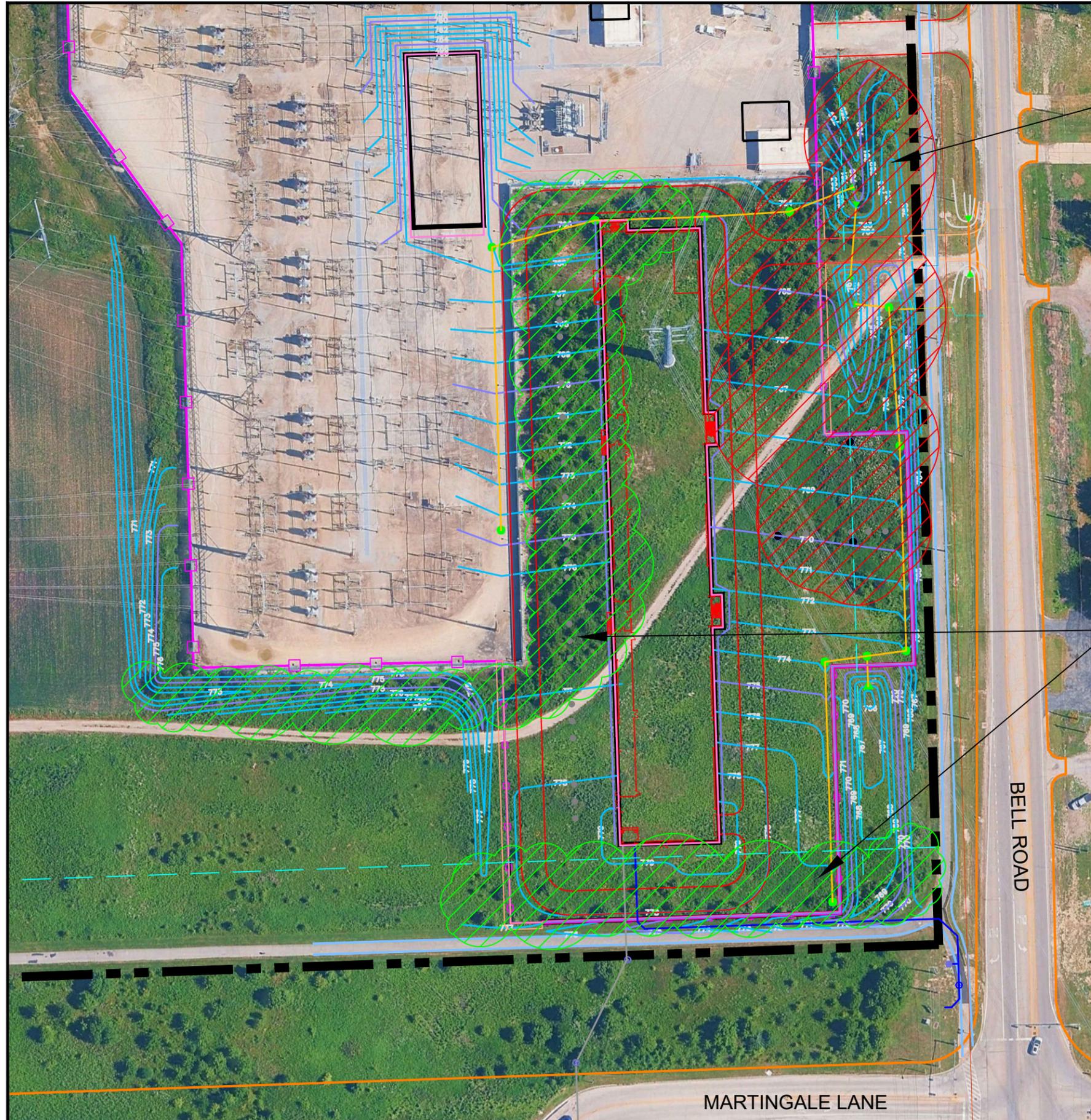






**RECEIVED**

By Christopher Gruba at 4:41 pm, Jan 07, 2026



VEGETATION CURRENTLY IMPACTED BY TRANSMISSION LINE RELOCATION

VEGETATION THAT WILL BE IMPACTED BY FACILITY CONSTRUCTION

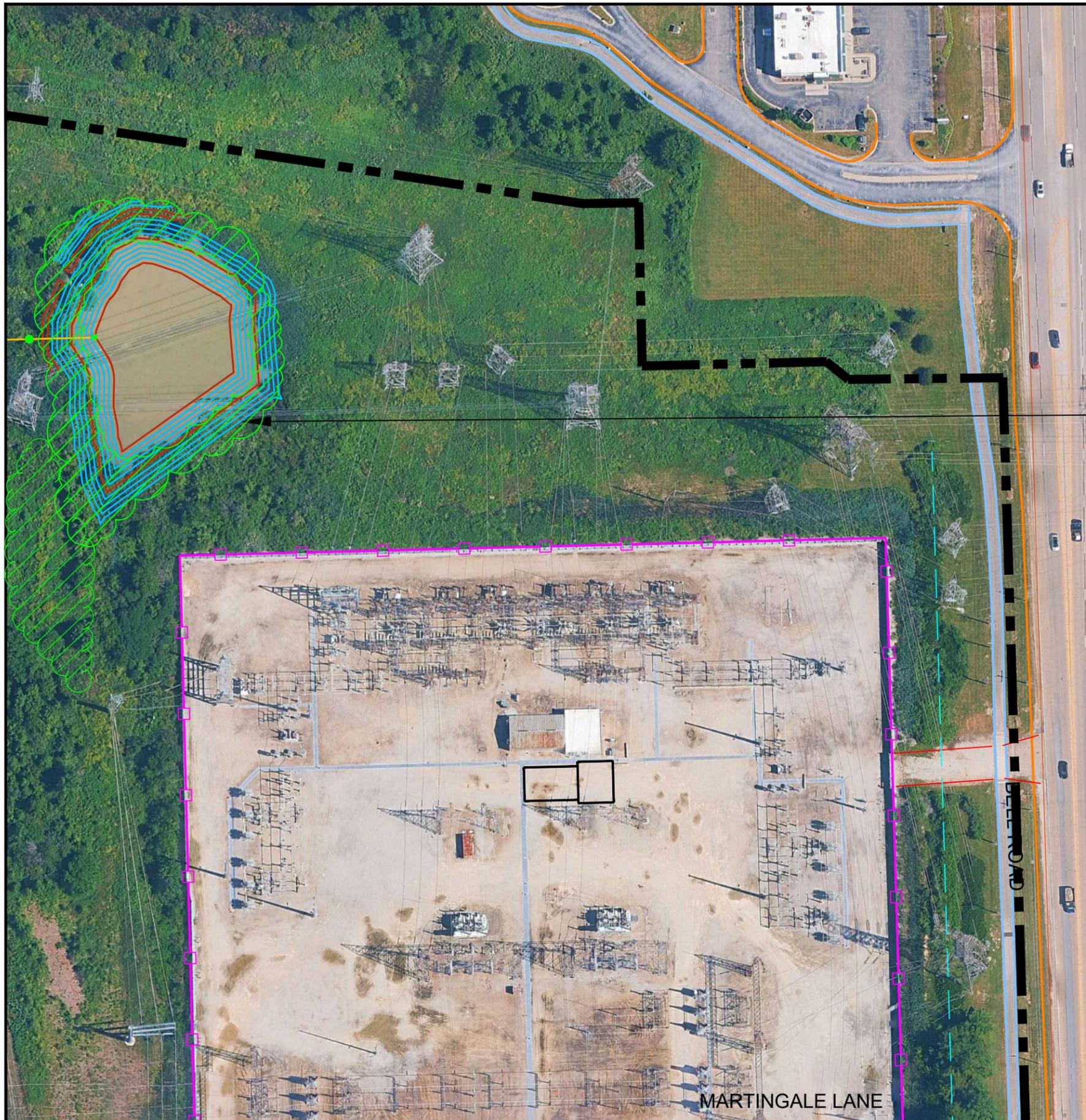
**TSS116 GOODINGS GROVE  
IMPACT TO EXISTING VEGETATION  
SOUTH PORTION**

**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(847) 823-0500

PROJ#: 04-0532.02223  
DATE: 11/3/25

**RECEIVED**

By Christopher Gruba at 4:41 pm, Jan 07, 2026



VEGETATION THAT WILL BE IMPACTED BY FACILITY CONSTRUCTION

**TSS116 GOODINGS GROVE  
IMPACT TO EXISTING VEGETATION  
SOUTH PORTION**

**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(647) 823-0500

PRO.#: 04-0532.02223  
DATE: 11/3/25

ACROSS THE STREET NEAR WATER TOWER



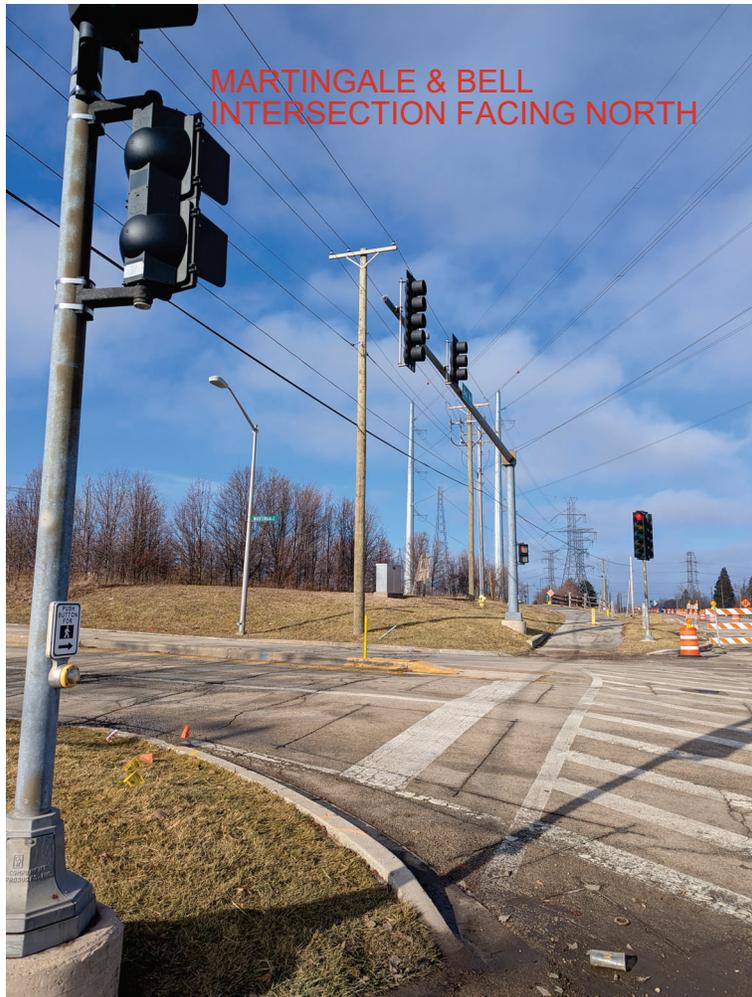
ACROSS THE STREET FACING WEST



CORNER OF MARTINGALE & BELL



MARTINGALE & BELL  
INTERSECTION FACING NORTH





ALONG TRAIL PARALLEL TO BELL FACING NORTH



ON TRAIL FACING EAST



LANDSCAPING ALONG TRAIL FACING WEST TOWARD HIGH-TENSION POWERLINES



LANDSCAPING AND POWERLINES ALONG TRAIL FACING WEST



CREW DRIVEWAY AND POWERLINES ALONG TRAIL FACING WEST



HEROES TRAIL WITH LANDSCAPING FACING SOUTH



LANDSCAPING ALONG TRAIL FACING SW



GRASS AREA ALONG TRAIL FACING WEST



TRAIL ENTRANCE WITH LANDSCAPING FACING SOUTH



TRAIL RUNNING EAST TO WEST, FACING WEST



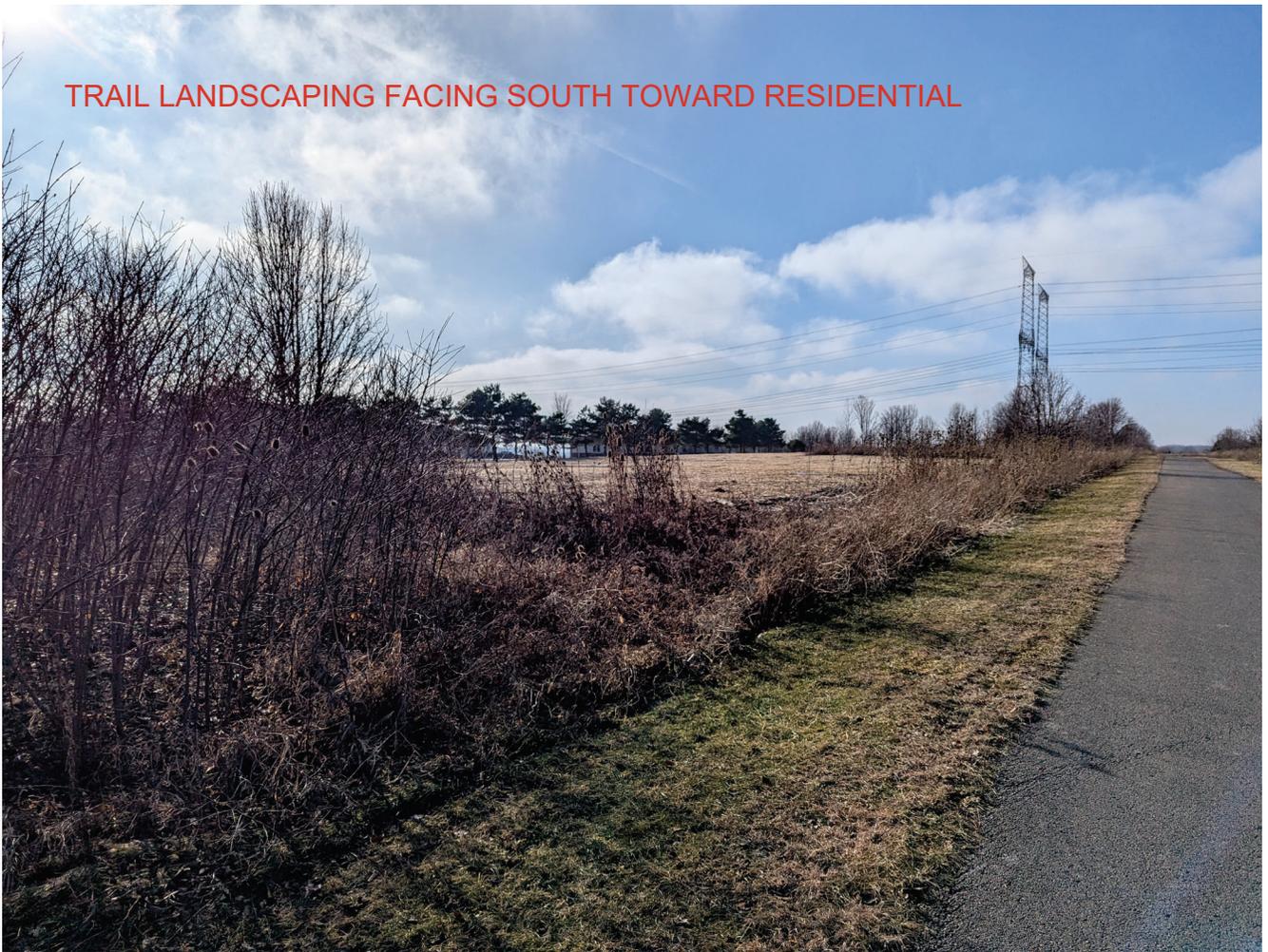
GRASS AREA WITH SOME BUSHES FACING NORTH



TRAIL FACING WEST WITH SOME LANDSCAPING



TRAIL LANDSCAPING FACING SOUTH TOWARD RESIDENTIAL



COMED AREA ALONG TRAIL FACING NORTH



TRAIL FACINGG EAST TOWARD WATER TOWER



SOUTH PART OF HEROES TRAIL FACING BANK





INTERSECTION OF MARTINGALE AND BELL  
FACING COMED



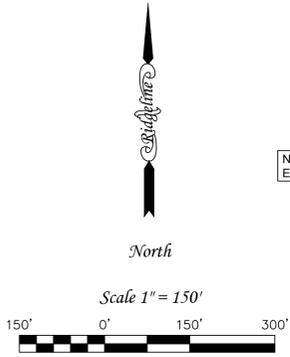
VIEW OF COMED FROM KINGSTON HILLS FACING NORTHWEST

# Zoning and Boundary Exhibit

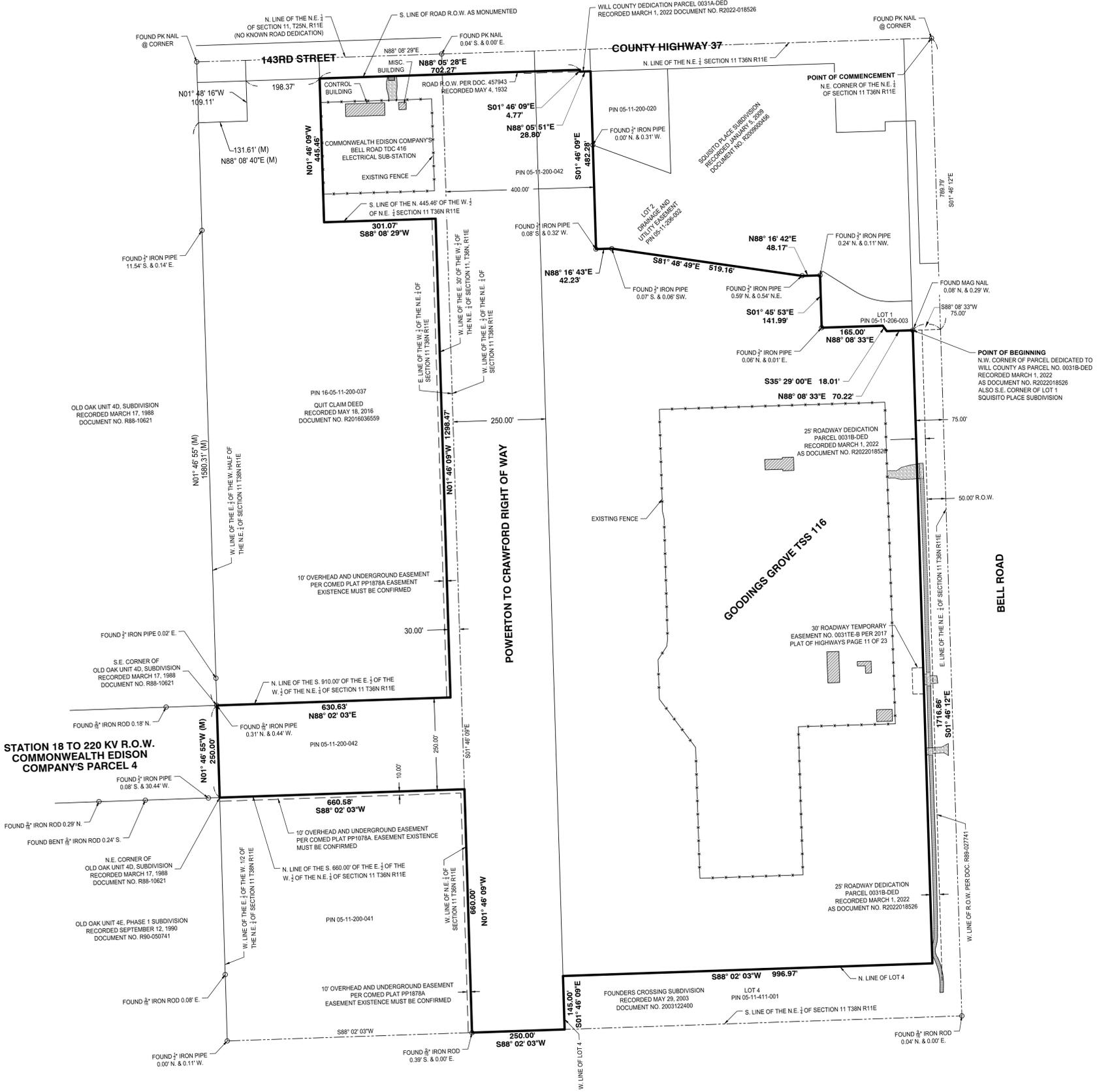
PART OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 36 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN WILL COUNTY, ILLINOIS



Vicinity Map  
(No Scale)

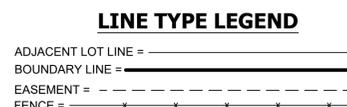


NAD 83 ILLINOIS EAST STATE PLANE COORDINATES (2011 CORRECTION)  
= AS DETERMINED BY USE OF GPS EQUIPMENT USING TRIMBLE'S VRS NETWORK AND EQUIPMENT.

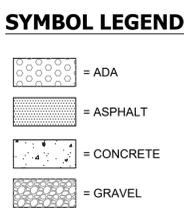


- NOTES:
- 1) ALL MEASURED BEARINGS SHOWN HEREON ARE BASED ON NAD 83 ILLINOIS COORDINATE SYSTEM, EAST ZONE (2011 CORRECTION) AS DETERMINED BY USE OF GPS EQUIPMENT USING TRIMBLE'S VRS NETWORK AND EQUIPMENT ALONG WITH THE RECORDED PLAT OF SUBDIVISION.
  - 2) CONTOUR INTERVAL = 1.0'
  - 3) A CURRENT TITLE REPORT WAS NOT FURNISHED, THEREFORE, ALL RESTRICTIONS, ROAD DEDICATIONS, ROAD VACATIONS, AND EASEMENTS MAY NOT BE SHOWN.
  - 4) ALL UTILITIES ARE NOT SHOWN. CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATION OF UNDERGROUND UTILITY LINES PRIOR TO ANY DIGGING OR CONSTRUCTION.
  - 5) THIS PROPERTY MAY BE WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF HOMER GLEN AND AS SUCH IS SUBJECT TO ZONING AND BUILDING RESTRICTIONS.
  - 6) SURVEY FIELD WORK COMPLETED ON JANUARY 4, 2024.
  - 7) ALL MONUMENT TIES ARE MEASURED PERPENDICULAR TO THE PROPERTY LINE(S).
  - 8) ALL IMPROVEMENTS AND FACILITIES ARE NOT SHOWN HEREON.

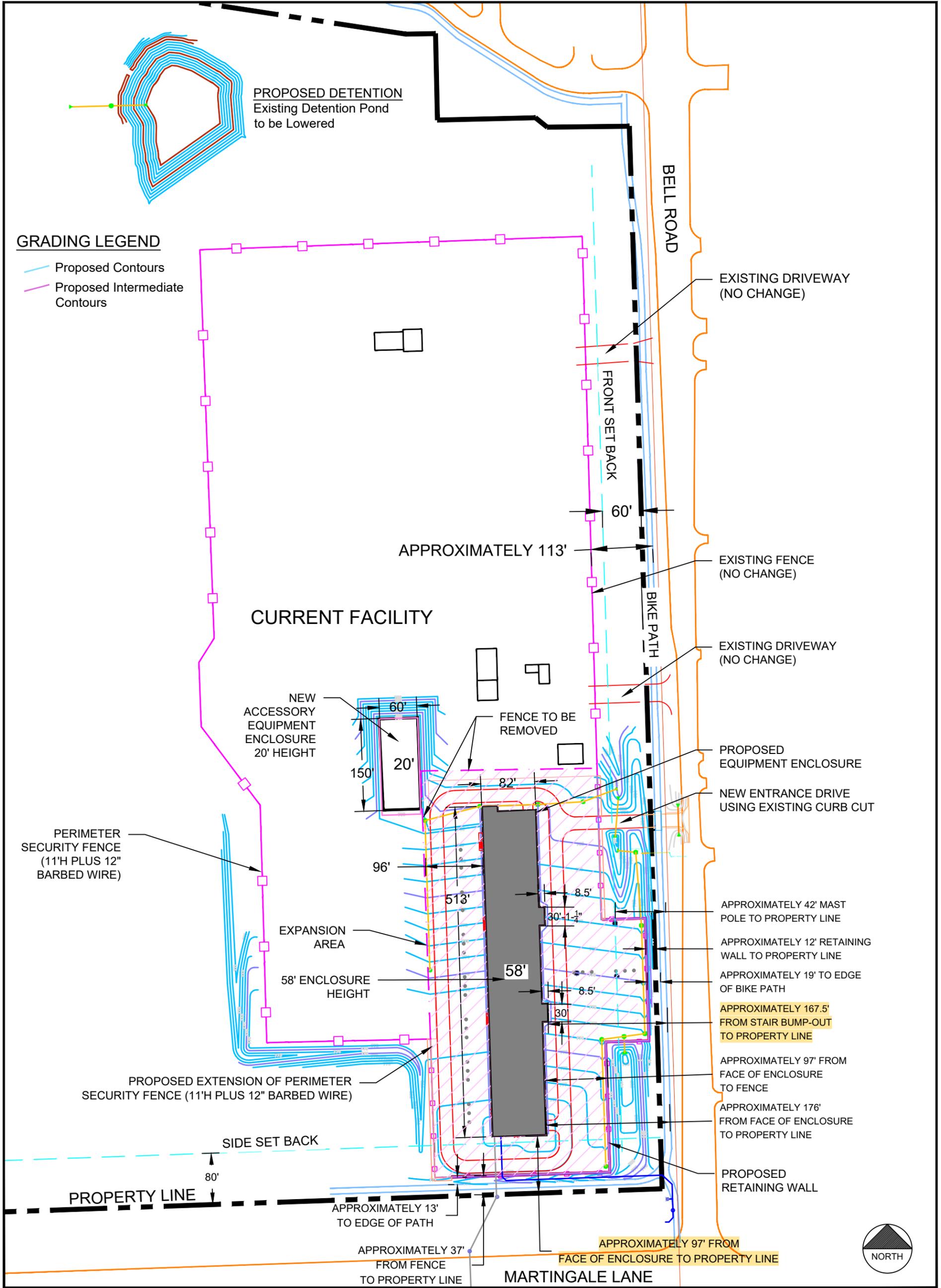
PREPARED BY:  
*Stacy L. Stewart*  
STACY L. STEWART  
P.L.S. 035-003415 EXPIRATION DATE 11/30/2024  
PREPARED ON MARCH 10, 2025



- ABBREVIATION LEGEND**
- CHB = CHORD BEARING
  - CHL = CHORD LENGTH
  - (D) = DEED
  - E = EAST
  - ELY = EASTERLY
  - (M) = MEASURED DISTANCE
  - N = NORTH
  - NLY = NORTHERLY
  - (R) = RECORD DISTANCE
  - R.O.W. = RIGHT OF WAY
  - S = SOUTH
  - W = WEST
  - WLY = WESTERLY



<b>GOODINGS GROVE TSS 116</b>	
<b>PART OF SECTION 11, T36N, R11E OF THE 3RD P.M., WILL COUNTY, ILLINOIS</b>	
APP'D BY: <b>SLS</b> FIELD: <b>SS / RS</b> DWG. NO.: <b>2025-0068</b>	SHT. NO.: <b>1 OF 1</b> ORDER NO.: <b>02119309</b> CAD: <b>TLC</b> DATE: <b>3/7/25</b> SCALE: <b>1" = 150'</b>
RIDGELINE CONSULTANTS 1661 AUCUTT ROAD MONTGOMERY, IL 60538 (630) 801-7927	
 CONSULTING ENGINEERS LAND SURVEYORS PROFESSIONAL DESIGN FIRM NO. 18487674	
 AN EXELON COMPANY	



CLIENT:	TITLE:	ESD#:	2023-111
	<b>TSS116 GOODINGS GROVE</b>	PROJ#:	04-0532.02223
	<b>CONCEPTUAL SITE PLAN</b>	DATE:	11/3/25
<b>CHRISTOPHER B. BURKE ENGINEERING, LTD.</b> 9575 W. Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500	DSGN: [ ] DWN: DJG CHKD: [ ] FILE NAME: J:\040532.2200\040532.02223\Landscaping\Exhibits	SCALE: [ ] USER: [ ] PLOT DATE: [ ]	



**Legend**

- MUNICIPAL BOUNDARY
- PROPOSED EQUIPMENT ENCLOSURE
- PROPOSED RETENTION WALL
- PROPOSED SUBSTATION EXPANSION
- PROPOSED ACCESSORY ENCLOSURE
- PROPOSED DETENTION BASIN (TO BE LOWERED)
- WILL COUNTY TAX PARCELS
- COMED PROPERTY

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

CLIENT:  **comed**<sup>SM</sup>  
AN EXELON COMPANY

TITLE: **TSS116 GOODINGS GROVE  
SITE PLAN WITH THE OWNERS OF ADJACENT  
PROPERTIES ACCORDING TO TAX PAYER**

ESD#	2023-111
PROJ#	04-0532.02223
DATE:	7/9/2025

 **CHRISTOPHER B. BURKE Engineering, Ltd.**  
9575 W. Higgins Road, Suite 600,  
Rosemont, Illinois 60018  
(847)823-0500

DSGN.		SCALE:	1" = 300'
DWN.	KEK	USER:	tbernal
CHKD.	JRG	PLOT DATE:	7/9/2025
FILE NAME:	040532.02223_adjacent owners_listed tax payer site plan		



**Legend**

- PROPOSED DETENTION BASIN (TO BE LOWERED)
- PROPOSED ACCESSORY ENCLOSURE
- MUNICIPAL BOUNDARY
- PROPOSED EQUIPMENT ENCLOSURE
- PROPOSED RETENTION WALL
- PROPOSED SUBSTATION EXPANSION
- COMED PROPERTY
- WILL COUNTY TAX PARCELS

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

CLIENT: **comed**<sup>SM</sup>  
AN EXELON COMPANY

TITLE: **TSS116 GOODINGS GROVE  
SITE PLAN WITH ZONING AND  
PRESENT USE OF ADJOINING PROPERTIES**

ESD#	2023-111
PROJ#	04-0532.02223
DATE:	7/15/2025

**CHRISTOPHER B. BURKE Engineering, Ltd.**  
9575 W. Higgins Road, Suite 600,  
Rosemont, Illinois 60018  
(847)823-0500

DSGN.		SCALE:	1" = 300'
DWN.	KEK	USER:	tbernal
CHKD.	JRG	PLOT DATE:	7/15/2025
FILE NAME:	040532.02223_zoning and present use of adjoining properties site plan		

E

D

C

B

A

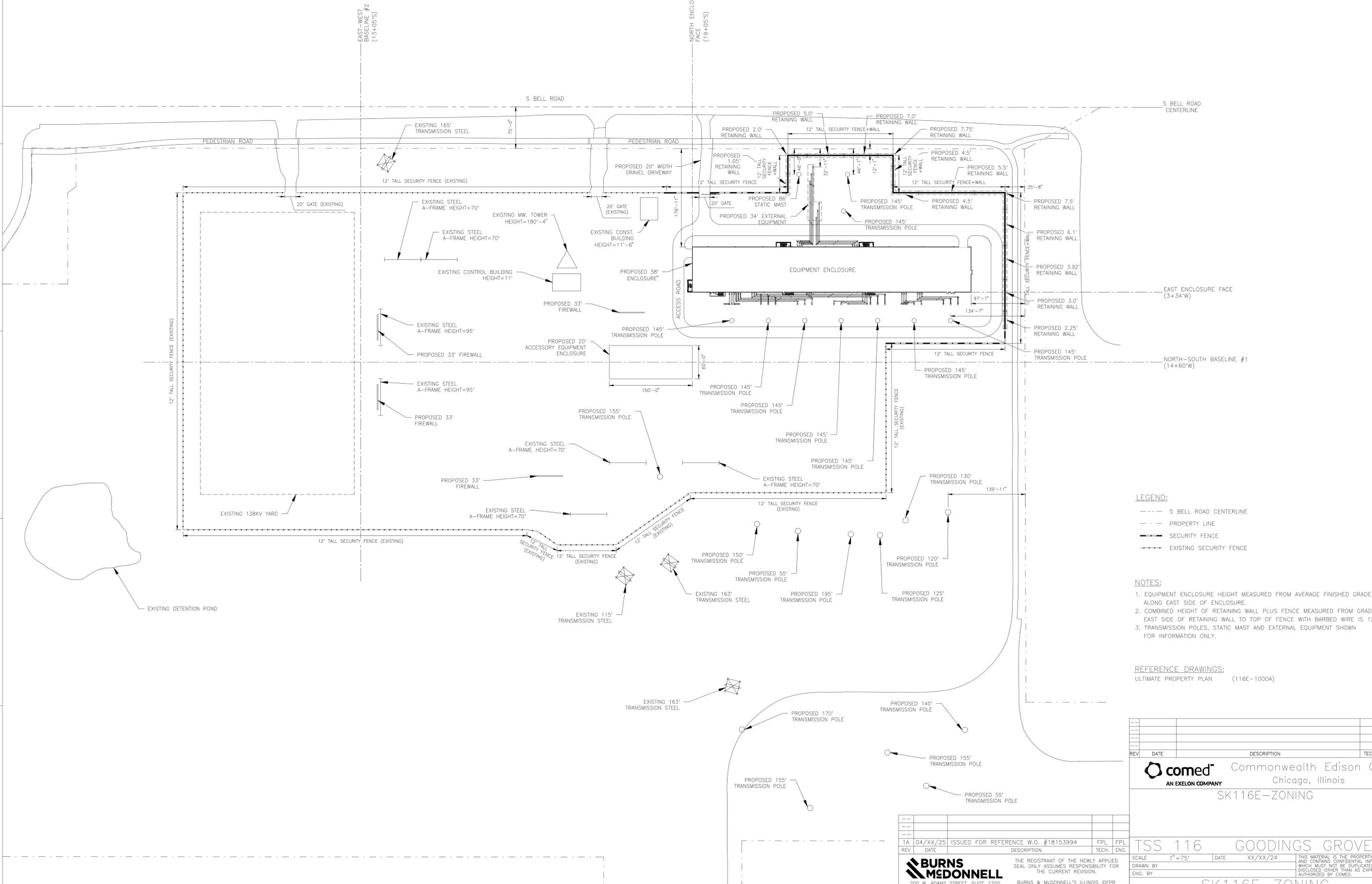
E

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LEGEND:

- S BELL ROAD CENTERLINE
- - - PROPERTY LINE
- SECURITY FENCE
- - - EXISTING SECURITY FENCE

NOTES:

1. EQUIPMENT ENCLOSURE HEIGHT MEASURED FROM AVERAGE FINISHED GRADE ALONG EAST SIDE OF ENCLOSURE.
2. COMBINED HEIGHT OF RETAINING WALL PLUS FENCE MEASURED FROM GRADE ON EAST SIDE OF RETAINING WALL TO TOP OF FENCE WITH BARBED WIRE IS 12 FEET.
3. TRANSMISSION POLES, STATIC MAST AND EXTERNAL EQUIPMENT SHOWN FOR INFORMATION ONLY.

REFERENCE DRAWINGS:

ULTIMATE PROPERTY PLAN (116E-1000A)

REV	DATE	DESCRIPTION	TECH.	ENG.

**comed** Commonwealth Edison Co.  
 AN EXELON COMPANY Chicago, Illinois

SK116E-ZONING

TSS 116 GOODINGS GROVE DC 00  
 SC -

SCALE 1"=75' DATE XX/XX/24 THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.

SK116E-ZONING

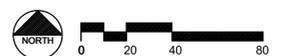
1A 04/XX/25 ISSUED FOR REFERENCE W.O. #18153994 FPL FPL  
 REV DATE DESCRIPTION TECH. ENG.

**BURNS & MCDONNELL**  
 200 W. ADAMS STREET, SUITE 2700  
 CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.  
 BURNS & MCDONNELL'S ILLINOIS IDFPR REGISTRATION NUMBER IS 184-001310



OVERALL LANDSCAPE PLAN



**RECEIVED**  
 By Christopher Gruba at 4:36 pm, Jan 07, 2026

TSS 116 GOODINGS GROVE

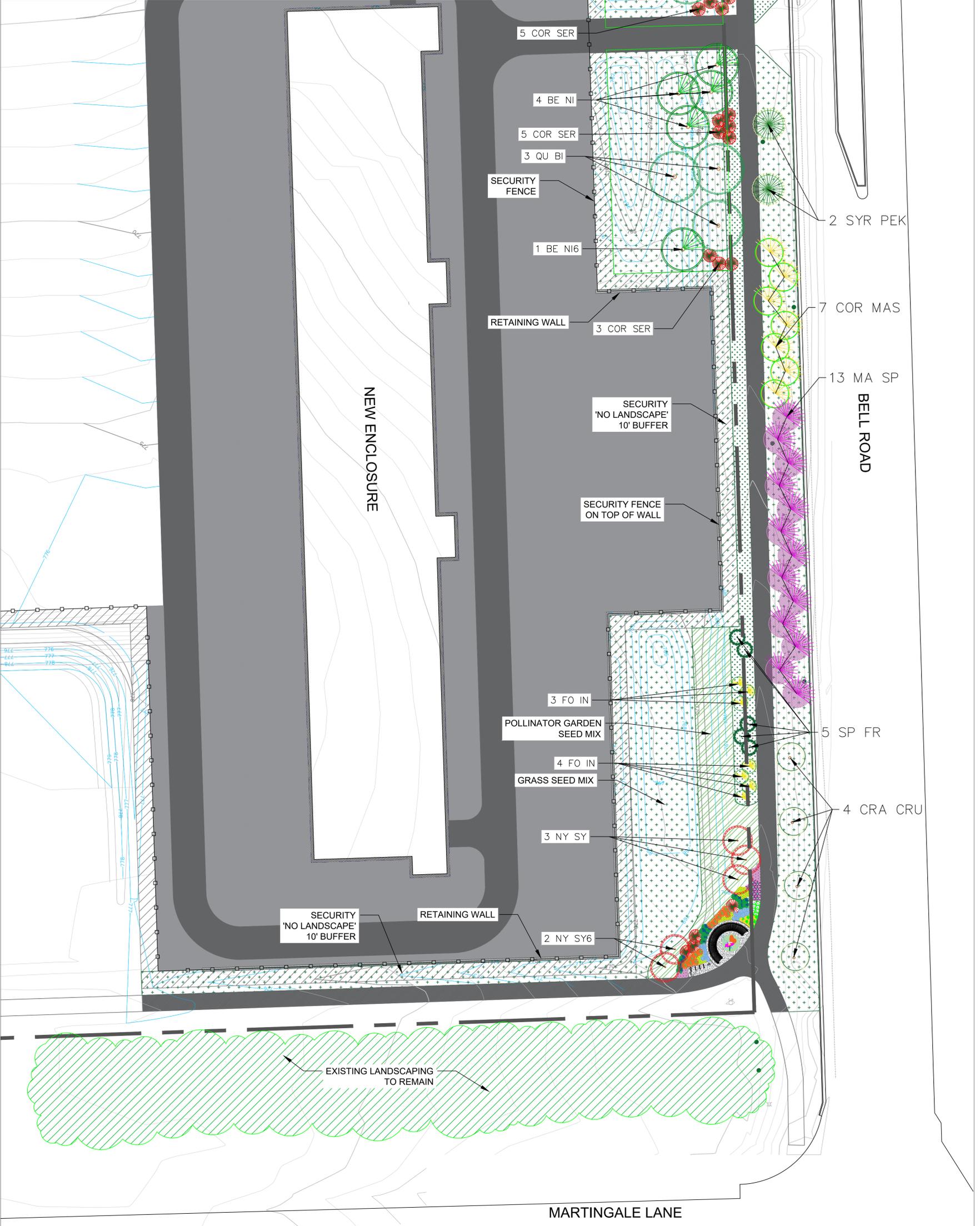


Commonwealth Edison Co.  
 Chicago, Illinois  
 Transmission and Distribution Operations



**PLANTPALETTE**

TREES	BOTANICAL NAME	COMMON NAME	QTY.	INSTALL SIZE	CONDITIONS	MATURE HEIGHT
BENI	Betula nigra 'Whit XXV'	City Slicker Birch	4	3" Caliper	B & B	35'H x 25'W
BENI6	Betula nigra 'Whit XXV'	City Slicker Birch	4	6" Caliper	B & B	35'H x 20'W
NYSY	Nyssa sylvatica 'David Odom'	Afterburner Tupelo	5	3" Caliper	B & B	35'H x 20'W
NYSY6	Nyssa sylvatica 'David Odom'	Afterburner Tupelo	2	6" Caliper	B & B	35'H x 20'W
QU BI	Quercus bicolor	Swamp White Oak	5	3" Caliper	B & B	45'H x 45'W
ORNAMENTAL TREES						
CORMAS	Cornus mas	Cornelian-cherry Dogwood	7	2" Caliper	B & B	15'H x 10'W
CRA CRU	Crataegus crus-galli var. inermis	Thornless Cockspur Hawthorn	4	2" Caliper	B & B	15'H x 15'W
MA SP	Malus 'JFS-KA5'	Royal Raindrops Crabapple	13	2" Caliper	B & B	20'H x 15'W
SYR PEK	Syringa pekinensis 'Morton'	China Snow Lilac	5	2" Caliper	B & B	15'H x 15'W
SHRUBS						
COR SER	Cornus sericea 'Cardinal'	Cardinal Dogwood	21	4' Height	Container	6'H x 6'W
FO IN	Forsythia x intermedia	Border forsythia	7	4' Height	Container	6'H x 4'W
SP FR	Spirea fritschiana	Korean spirea	5	2' Height	Container	4'H x 3'W



**TREE AND SEEDING PLANTING PLAN**

Specific tree locations subject to minor adjustment based on final overhead line design.

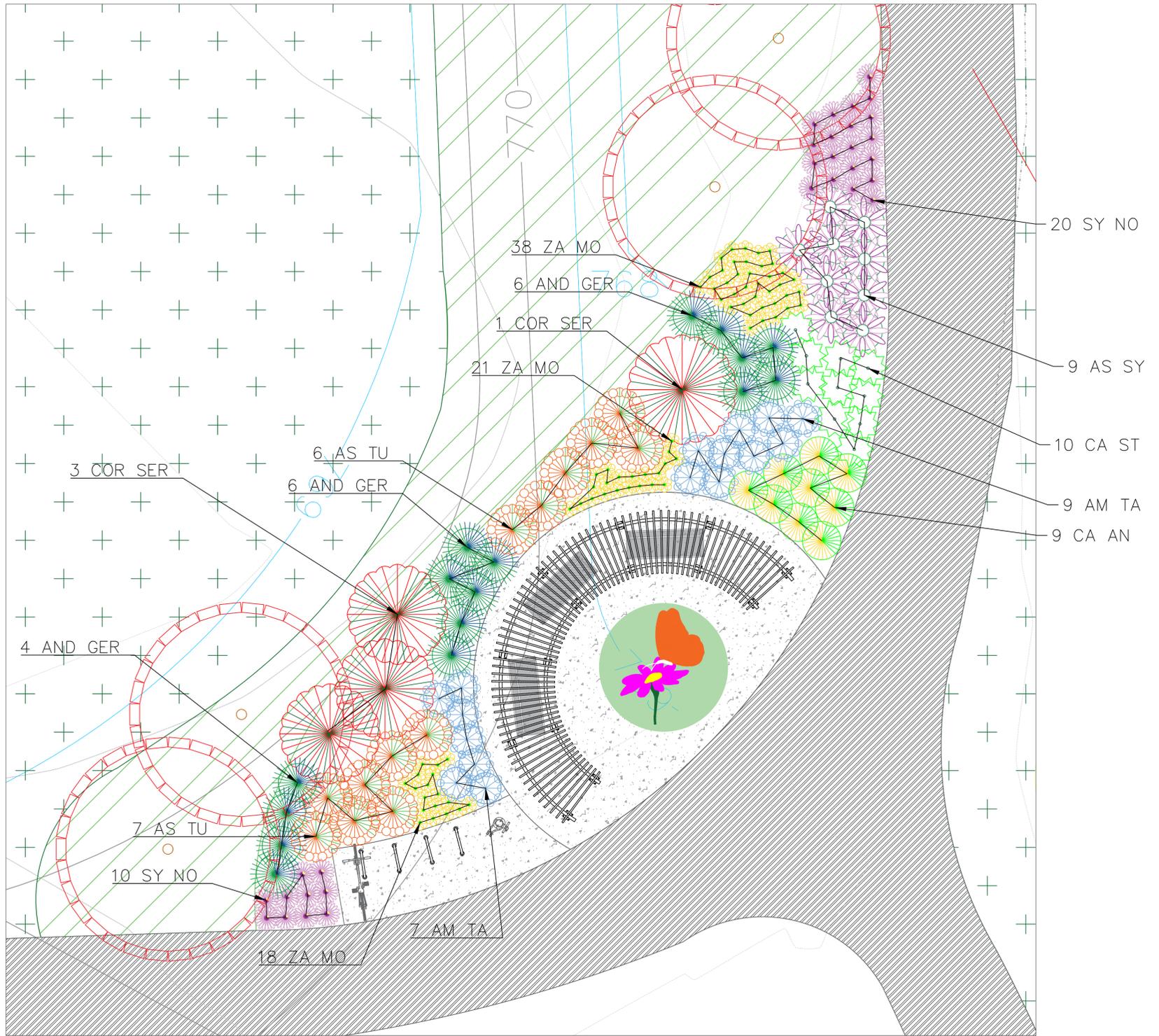
**TSS 116 GOODINGS GROVE**



Commonwealth Edison Co.  
Chicago, Illinois  
Transmission and Distribution Operations



3/21/25 REV 12/24/25  
J:\040532.2200\040532.02223\Landscaping



BIKE PATH REST AREA DETAILED LANDSCAPE PLAN



SHRUBS						
COR SER	Cornus sericea 'Cardinal'	Cardinal Dogwood	21	4' Height	Container	6'Hx6'W
FO IN	Forsythia x intermedia	Border forsythia	7	4' Height	Container	6'Hx4'W
SP FR	Spirea fritschiana	Korean spirea	5	2' Height	Container	4'Hx3'W
GRASSES						
AND GER	Andropogon gerardii	Big Bluestem	16	2' Height	Container	6'Hx36'W
CA AN	Carex annectens	Yellow Fox Sedge	9	6"-1' Height	Container	24"Hx24"W
CA ST	Carex stipata	Fox Sedge	10	6"-1' Height	Container	24"Hx24"W
PERENNIALS						
AM TA	Amsonia tabernaemontana	Eastern Blue Star	16	2' Height	Container	18"Hx24"W
ASSY	Asclepias syriaca	Swamp Milkweed	9	2' Height	Container	4'Hx2'W
ASTU	Asclepias tuberosa	Butterfly Milkweed	13	2' Height	Container	4'Hx2'W
SY NO	Symphotrichum novae-angliae 'Purple Dome'	Purple Dome New England Aster	30	6"-1' Height	Container	24"Hx36'W
ZAMO	Zagreb 'Moonbeam'	Moonbeam Coreopsis	77	6"-1' Height	Container	24"Hx24"W

TSS 116 GOODINGS GROVE



Commonwealth Edison Co.  
Chicago, Illinois  
Transmission and Distribution Operations



3/21/25 REV 12/24/25  
J:\040532.2200\s\040532.02223\Landscaping

# ENTIRE EXPANSION AREA PLANT AND MATERIALS PALETTE

## PLANT PALETTE

TREES						
SYM.	BOTANICAL NAME	COMMON NAME	QTY.	INSTALL SIZE	CONDITIONS	MATURE HEIGHT
BENI	Betula nigra 'Whit XXV'	City Slicker Birch	4	3' Caliper	B & B	35'Hx25'W
BENIG	Betula nigra 'Whit XXV'	City Slicker Birch	4	6' Caliper	B & B	35'Hx20'W
NYSY	Nyssa sylvatica 'David Odom'	Afterburner Tupelo	5	3' Caliper	B & B	35'Hx20'W
NYSY6	Nyssa sylvatica 'David Odom'	Afterburner Tupelo	2	6' Caliper	B & B	35'Hx20'W
QUIB	Quercus bicolor	Swamp White Oak	5	3' Caliper	B & B	45'Hx45'W
ORNAMENTAL TREES						
CORMAS	Cornus mas	Cornelian -cherry Dogwood	7	2' Caliper	B & B	15'Hx 10'W
CRA CRU	Crataegus crus-galli var. inermis	Thornless Cockspur Hawthorn	4	2' Caliper	B & B	15'Hx 15'W
MA SP	Malus 'JFS-KW5'	Royal Raindrops Crabapple	13	2' Caliper	B & B	20'Hx 15'W
SYRPEK	Syringa pekinensis 'Morton'	China Snow Lilac	5	2' Caliper	B & B	15'Hx 15'W
SHRUBS						
COR SER	Cornus sericea 'Cardinal'	Cardinal Dogwood	21	4' Height	Container	6'Hx6'W
FO IN	Forsythia x intermedia	Border forsythia	7	4' Height	Container	6'Hx4'W
SP FR	Spiraea fritschiana	Korean spirea	5	2' Height	Container	4'Hx3'W
GRASSES						
AND GER	Andropogon gerardii	Big Bluestem	16	2' Height	Container	6'Hx36"W
CA AN	Carex annectens	Yellow Fox Sedge	9	6"-1' Height	Container	24"Hx24"W
CA ST	Carex stipata	Fox Sedge	10	6"-1' Height	Container	24"Hx24"W
PERENNIALS						
AM TA	Amsonia tabernaemontana	Eastern Blue Star	16	2' Height	Container	18"Hx24"W
ASSY	Asclepias syriaca	Swamp Milkweed	9	2' Height	Container	4'Hx2'W
ASTU	Asclepias tuberosa	Butterfly Milkweed	13	2' Height	Container	4'Hx2'W
SYNO	Symphotrichum novae-angliae 'Purple Dome'	Purple Dome New England Aster	30	6"-1' Height	Container	24"Hx36"W
ZAMO	Zagreb 'Moonbeam'	Moonbeam Coreopsis	77	6"-1' Height	Container	24"Hx24"W

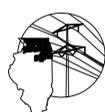
## PLANT AND MATERIAL PALETTE IMAGES



## TSS 116 GOODINGS GROVE

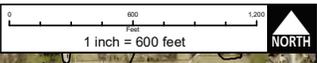


Commonwealth Edison Co.  
Chicago, Illinois  
Transmission and Distribution Operations



3/21/25 REV 12/24/25  
J:\040532.2200\s\040532.02223\Landscaping

# Attachment 13



CLIENT:  **comed**  
AN EXELON COMPANY

 **CHRISTOPHER B. BURKE Engineering, Ltd.**  
9575 W. Higgins Road, Suite 600,  
Rosemont, Illinois 60018  
(847)823-0500

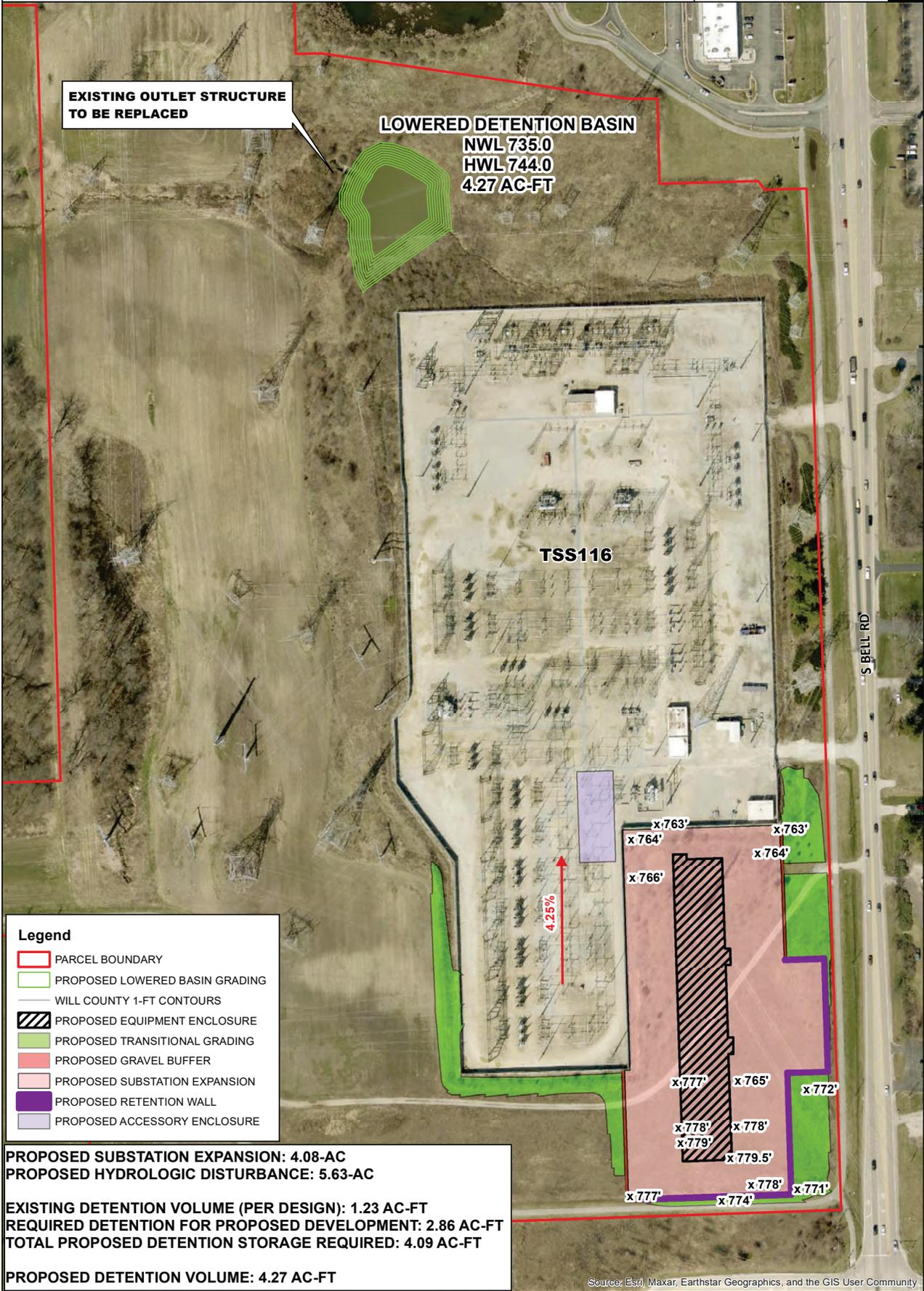
TITLE: **TSS116 GOODINGS GROVE  
EXISTING TOPOGRAPHY**

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CHKD.	DRB	PLOT DATE:	6/8/2025
FILE NAME:	J:\040532.2200\040532.02223\GIS\Exhibits\040532.02223_Vicinity.mxd		

ESD# 2023-111  
PROJ# 04-0532.02223  
DATE: 6/8/2025

**EXH 6**

88



**Legend**

- PARCEL BOUNDARY
- PROPOSED LOWERED BASIN GRADING
- WILL COUNTY 1-FT CONTOURS
- PROPOSED EQUIPMENT ENCLOSURE
- PROPOSED TRANSITIONAL GRADING
- PROPOSED GRAVEL BUFFER
- PROPOSED SUBSTATION EXPANSION
- PROPOSED RETENTION WALL
- PROPOSED ACCESSORY ENCLOSURE

**PROPOSED SUBSTATION EXPANSION: 4.08-AC**  
**PROPOSED HYDROLOGIC DISTURBANCE: 5.63-AC**

**EXISTING DETENTION VOLUME (PER DESIGN): 1.23 AC-FT**  
**REQUIRED DETENTION FOR PROPOSED DEVELOPMENT: 2.86 AC-FT**  
**TOTAL PROPOSED DETENTION STORAGE REQUIRED: 4.09 AC-FT**

**PROPOSED DETENTION VOLUME: 4.27 AC-FT**

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

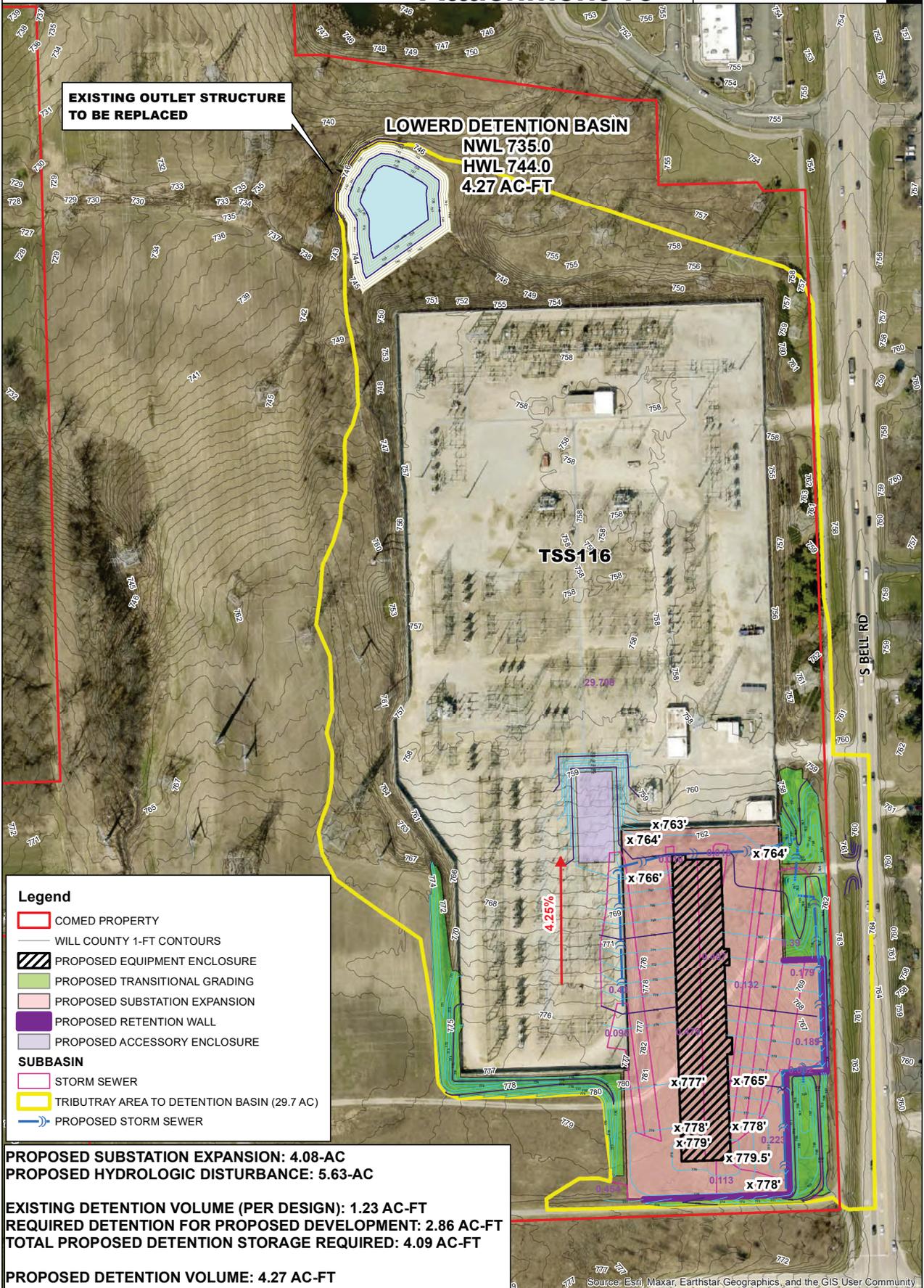
CLIENT: **comed**  
AN EXELON COMPANY

TITLE: **TSS116 GOODINGS GROVE  
PROPOSED CONDITIONS**

ESD# 2023-111  
 PROJ# 04-0532.02223  
 DATE: 6/8/2025

**CHRISTOPHER B. BURKE Engineering, Ltd.**  
 9575 W. Higgins Road, Suite 600,  
 Rosemont, Illinois 60018  
 (847)823-0500

DSGN.		SCALE:	1" = 150'
DWN.	KDB	USER:	dbuckley
CHKD.	DRB	PLOT DATE:	6/8/2025
FILE NAME:	J:\040532.2200\9\040532.02223\GIS\Exhibits\Exh7_PrConditions_060225.mxd		



**Legend**

- COMED PROPERTY
- WILL COUNTY 1-FT CONTOURS
- PROPOSED EQUIPMENT ENCLOSURE
- PROPOSED TRANSITIONAL GRADING
- PROPOSED SUBSTATION EXPANSION
- PROPOSED RETENTION WALL
- PROPOSED ACCESSORY ENCLOSURE

**SUBBASIN**

- STORM SEWER
- TRIBUTARY AREA TO DETENTION BASIN (29.7 AC)
- PROPOSED STORM SEWER

**PROPOSED SUBSTATION EXPANSION: 4.08-AC**  
**PROPOSED HYDROLOGIC DISTURBANCE: 5.63-AC**

**EXISTING DETENTION VOLUME (PER DESIGN): 1.23 AC-FT**  
**REQUIRED DETENTION FOR PROPOSED DEVELOPMENT: 2.86 AC-FT**  
**TOTAL PROPOSED DETENTION STORAGE REQUIRED: 4.09 AC-FT**

**PROPOSED DETENTION VOLUME: 4.27 AC-FT**

CLIENT:  AN EXELON COMPANY	TITLE: <b>TSS116 GOODINGS GROVE TRIBUTARY AREA PROPOSED CONDITIONS</b>	ESD# 2023-111 PROJ# 04-0532.02223 DATE: 6/7/2025																
<b>CHRISTOPHER B. BURKE Engineering, Ltd.</b> 9575 W. Higgins Road, Suite 600, Rosemont, Illinois 60018 (847)823-0500	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DSGN.</td> <td></td> <td>SCALE:</td> <td>1" = 150'</td> </tr> <tr> <td>DWN.</td> <td>KDB</td> <td>USER:</td> <td>dbuckley</td> </tr> <tr> <td>CHKD.</td> <td>DRB</td> <td>PLOT DATE:</td> <td>6/7/2025</td> </tr> <tr> <td>FILE NAME:</td> <td colspan="3">J:\040532.2200\040532.02223\GIS\Exhibits\Exh8_PrConditions_060225 total tributary area.mxd</td> </tr> </table>	DSGN.		SCALE:	1" = 150'	DWN.	KDB	USER:	dbuckley	CHKD.	DRB	PLOT DATE:	6/7/2025	FILE NAME:	J:\040532.2200\040532.02223\GIS\Exhibits\Exh8_PrConditions_060225 total tributary area.mxd			<b>EXH 8 90</b>
DSGN.		SCALE:	1" = 150'															
DWN.	KDB	USER:	dbuckley															
CHKD.	DRB	PLOT DATE:	6/7/2025															
FILE NAME:	J:\040532.2200\040532.02223\GIS\Exhibits\Exh8_PrConditions_060225 total tributary area.mxd																	

NOTES:

1. NEW AND EXISTING ITEM A INSTALLED AT 9' HEIGHT.
2. EXISTING ITEM B INSTALLED AT 29'-6" HEIGHT.
3. EXISTING ITEM C INSTALLED AT 9' HEIGHT.
4. EXISTING ITEM D INSTALLED AT 10'-6" HEIGHT.
5. EXISTING ITEM E INSTALLED AT 8'-6" HEIGHT.
6. EXISTING ITEM L1 INSTALLED AT 16' HEIGHT.
7. EXISTING ITEM L2 INSTALLED AT 16' HEIGHT OVER THE 138KV YARD.
8. EXISTING ITEM L2 INSTALLED AT 24' HEIGHT OVER THE 345KV YARD.
9. NEW ITEM L3 INSTALLED AT 16' HEIGHT OVER THE PERIMETRAL FENCE.
10. NEW ITEM L3 INSTALLED AT 25' HEIGHT OVER THE 345KV YARD.
11. NEW ITEM L4 INSTALLED AT 24' HEIGHT OVER THE 345KV YARD.
12. NEW ITEM L4 INSTALLED AT 25' HEIGHT AT THE 345KV YARD ENTRANCE GATE.
13. NEW ITEM L5 INSTALLED AT 10' HEIGHT AT THE PRINCIPAL ENCLOSURE DOORS.
14. ITEM A, C AND L5 WILL BE ALWAYS TURNED ON AT NIGHTS.
15. ITEM B, D, E AND YARD L3 WILL BE ONLY TURNED ON BY POWER SWITCH.
16. PERIMETER SECURITY SYSTEM ITEM L1 AND L3 WILL BE TURNED ON BY PHOTOCONTROL/TIMER SWITCH.
17. YARD SECURITY SYSTEM ITEM L2 AND L4 WILL BE TURNED ON BY PHOTOCONTROL/TIMER SWITCH.
18. ENTRANCE GATE ITEM L4 WILL BE TURNED ON BY MOTION SENSOR.

**RECEIVED**

By Christopher Gruba at 8:51 am, Sep 23, 2025

Attachment 14

E

D

C

B

A

E

D

C

B

A

NORTH-SOUTH  
BASELINE #1  
4+60W

EAST-WEST BASELINE #2  
13+05S

LEGEND:

- LUMINAIRE, POST TYPE, LED, 213W, EXISTING SECURITY PERIMETRAL INSTALLATION (ITEM L01)
- LUMINAIRE, POST TYPE, LED, 209W, EXISTING SECURITY YARD INSTALLATION (ITEM L02)
- LUMINAIRE, FLOODLIGHT, LED, 405W, ENCLOSURE, STATIC, POLES AND DEAD-ENDS (ITEM L03)
- LUMINAIRE, FLOODLIGHT, LED, 183W, GATE POLE (ITEM L04)
- LUMINAIRE, EMERGENCY LIGHTING, LED, 73W, ENCLOSURE EXTERIOR DOORS (ITEM L05)
- LUMINAIRE, HPS WALLPACK, 175W, EXISTING ENCLOSURE WALLS (ITEM A)
- LUMINAIRE, MERCURY VAPOR, 250W, EXISTING YARD INSTALLATION (ITEM B)
- MOTION SENSOR (ITEM M)
- LUMINAIRE, INCANDESCENT OUTDOOR FLOOD PAR38, 150W, EXISTING YARD INSTALLATION (ITEM C)
- LUMINAIRE, INCANDESCENT OUTDOOR AREA, 300W, EXISTING YARD INSTALLATION (ITEM D)
- LUMINAIRE, INCANDESCENT OUTDOOR AREA, 100W, EXISTING YARD INSTALLATION (ITEM E)
- FOOT CANDLE
- PROPERTY LINE
- PEDESTRIAN ROAD
- S BELL ROAD

NEW LUMINAIRE SCHEDULE

LABEL	QTY	CATALOG NO.	DESCRIPTION	LAMP SOURCE	FILE	LUMENS	LLF	WATTS
L3	39	HLF2 LED P2 50K WFL MVOLT	HLF SERIES FLOOD SIZE 2, P2, 5000K, WITH NEMA 7X7 DISTRIBUTION	LED STATIC	HIGH LUMEN FLOOD SIZE 2 - HLF2	ABSOLUTE	0.81	405
L4	3	DSXF3 LED 6 P1 50K WFL MVOLT	2015 D-SERIES FLOOD SIZE 3 WITH 6 COBS, P1, 5000K CCT, WFL DISTRIBUTION	6 COB LED ENGINES	D-SERIES FLOOD SIZE 3	ABSOLUTE	0.81	183
L5	9	DSXW1 LED 10C 530 30K T3M MVOLT	DSXW1 LED WITH 1 LIGHT ENG 10 LEDS 3000K LED TYPE 3 MEDIUM OPTIC, INTEGRAL PHOTOCELL, BATTERY BACKUP	1 LED ENGINES	D-SERIES WALL SIZE 1	ABSOLUTE	0.81	73

1A 08/28/25 ISSUED FOR REFERENCE W.O. #18153994 FPL FPL  
REV DATE DESCRIPTION TECH. ENG.

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED  
SEAL ONLY ASSUMES RESPONSIBILITY FOR  
THE CURRENT REVISION.

BURNS & MCDONNELL'S ILLINOIS IDFP  
REGISTRATION NUMBER IS 184-001310

Commonwealth Edison Co.  
Chicago, Illinois

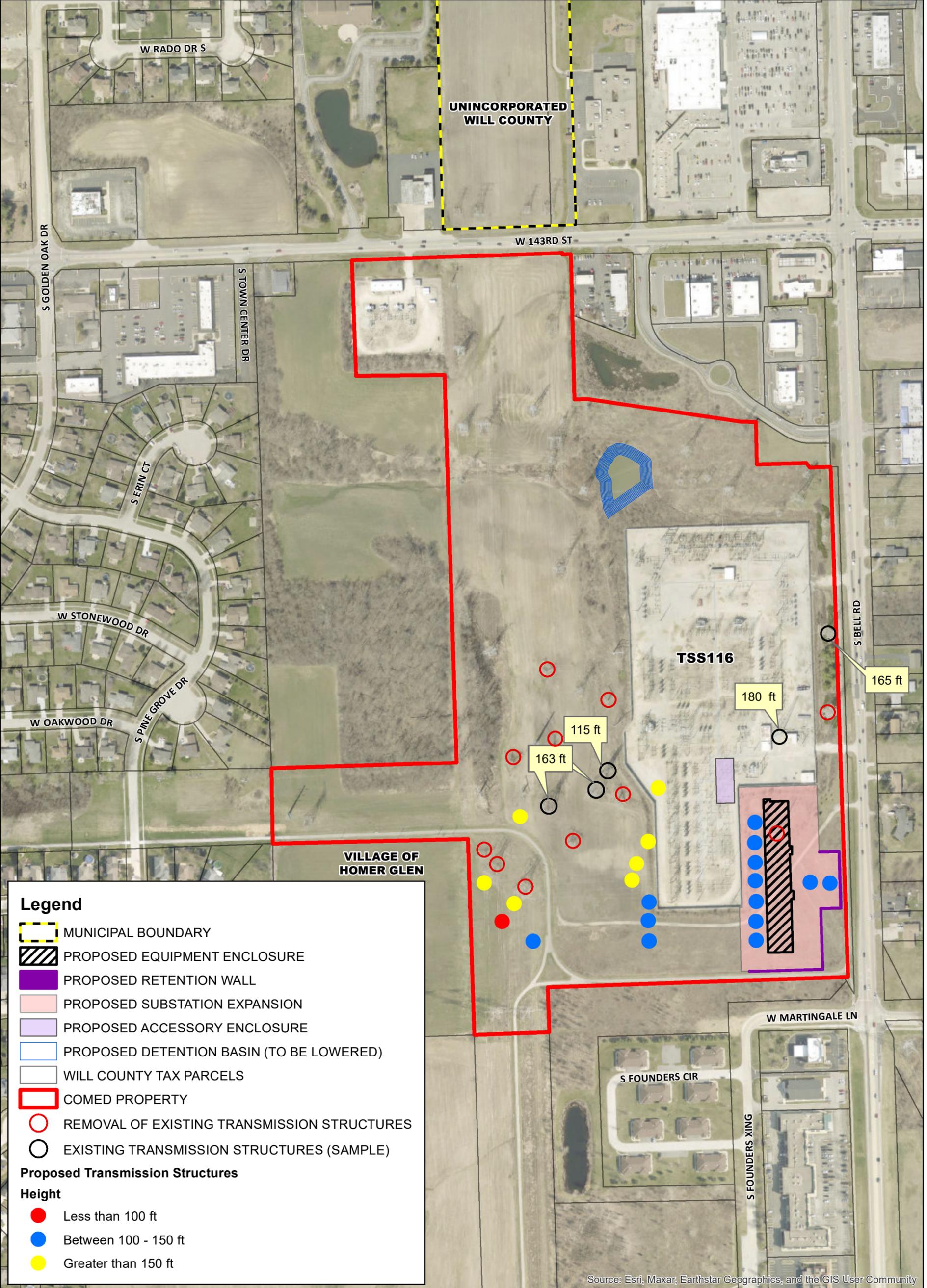
**SK116E-COMLETE LIGHTING**

TSS 116 GOODINGS GROVE DC 28  
SC

SCALE 1" = 50'-0" DATE 08/22/24  
DRAWN BY  
ENG. BY

THIS MATERIAL IS THE PROPERTY OF COMED  
AND CONTAINS CONFIDENTIAL INFORMATION  
WHICH MUST NOT BE DUPLICATED, USED OR  
DISCLOSED OTHER THAN AS EXPRESSLY  
AUTHORIZED BY COMED.

**SK116E-COMLETE LIGHTING**



**Legend**

- MUNICIPAL BOUNDARY
- PROPOSED EQUIPMENT ENCLOSURE
- PROPOSED RETENTION WALL
- PROPOSED SUBSTATION EXPANSION
- PROPOSED ACCESSORY ENCLOSURE
- PROPOSED DETENTION BASIN (TO BE LOWERED)
- WILL COUNTY TAX PARCELS
- COMED PROPERTY
- REMOVAL OF EXISTING TRANSMISSION STRUCTURES
- EXISTING TRANSMISSION STRUCTURES (SAMPLE)

**Proposed Transmission Structures**

**Height**

- Less than 100 ft
- Between 100 - 150 ft
- Greater than 150 ft

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

CLIENT: **comed**<sup>SM</sup>  
AN EXELON COMPANY

TITLE: **TSS116 GOODINGS GROVE  
AERIAL MAP WITH SITE PLAN**

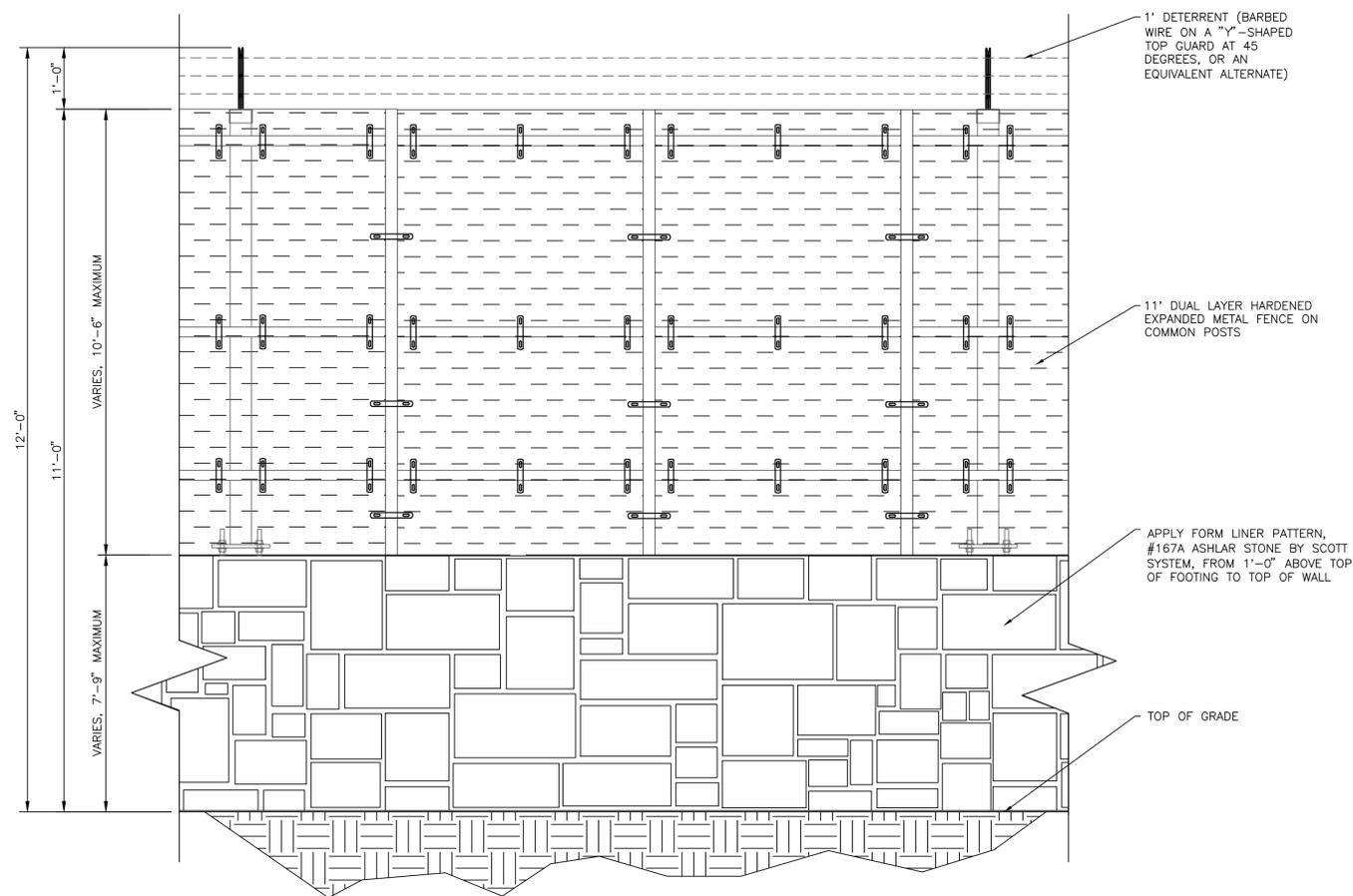
ESD#	2023-111
PROJ#	04-0532.02223
DATE:	6/11/2025

**CHRISTOPHER B. BURKE Engineering, Ltd.**  
9575 W. Higgins Road, Suite 600,  
Rosemont, Illinois 60018  
(847)823-0500

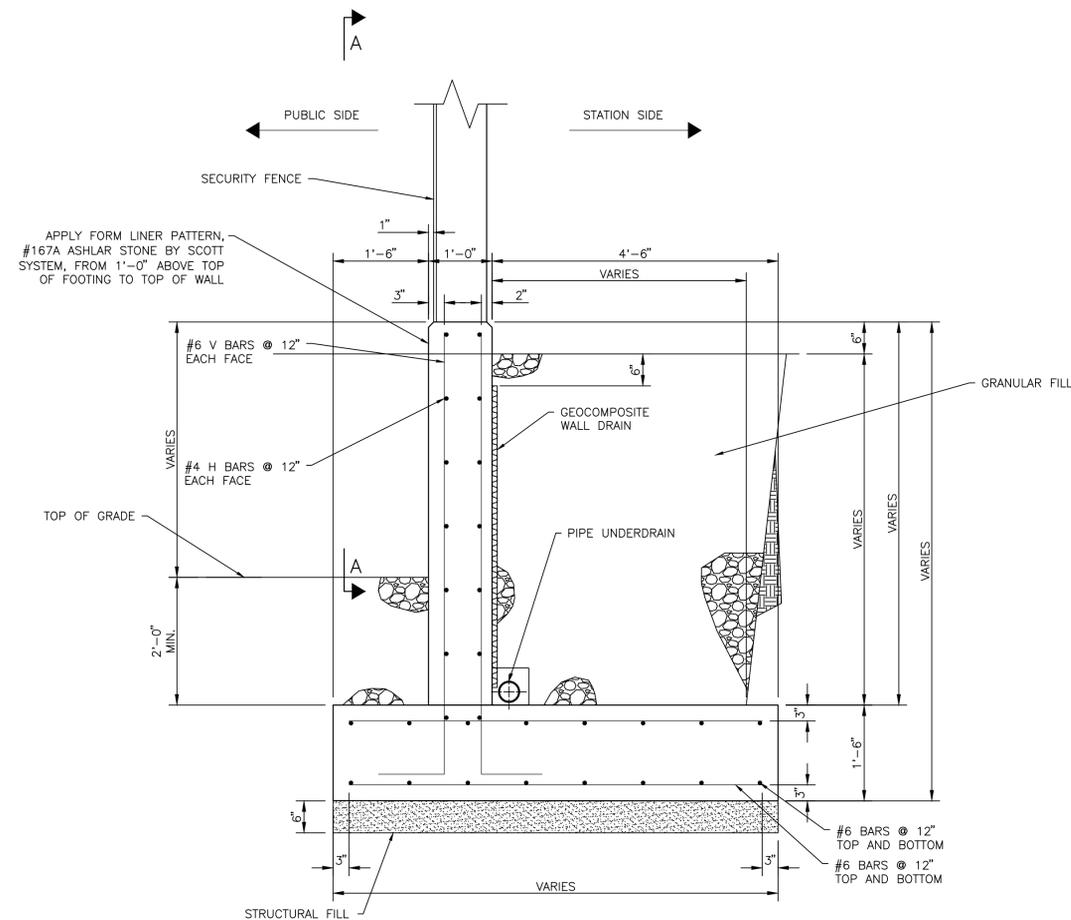
DSGN.		SCALE:	1" = 300'
DWN.	KEK	USER:	dbuckley
CHKD.	JRG	PLOT DATE:	6/11/2025
FILE NAME:	040532.02223_Aerial with Site Plan		

ESD#	2023-111
PROJ#	04-0532.02223
DATE:	6/11/2025

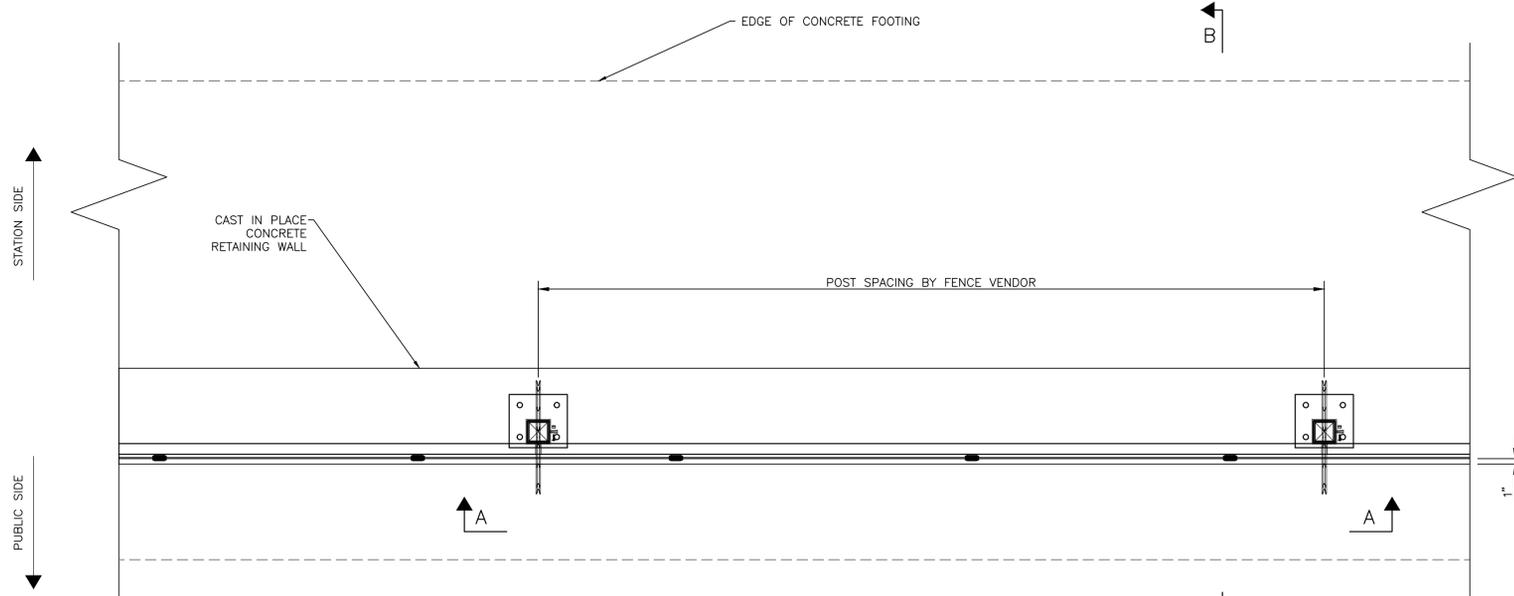
# Attachment 16



SECTION A-A



SECTION B-B



WALL PLAN

**RECEIVED**  
 By Christopher Gruba at 5:15 pm, Aug 06, 2025

1A	XX/XX/25	ISSUED FOR XXXX W.O. #XXXXXXXX	MLM	YMM
REV	DATE	DESCRIPTION	TECH.	ENG.

**BURNS & MCDONNELL**  
 200 W. ADAMS STREET, SUITE 2700  
 CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.  
 BURNS & MCDONNELL'S ILLINOIS IDFPF REGISTRATION NUMBER IS 184-001310

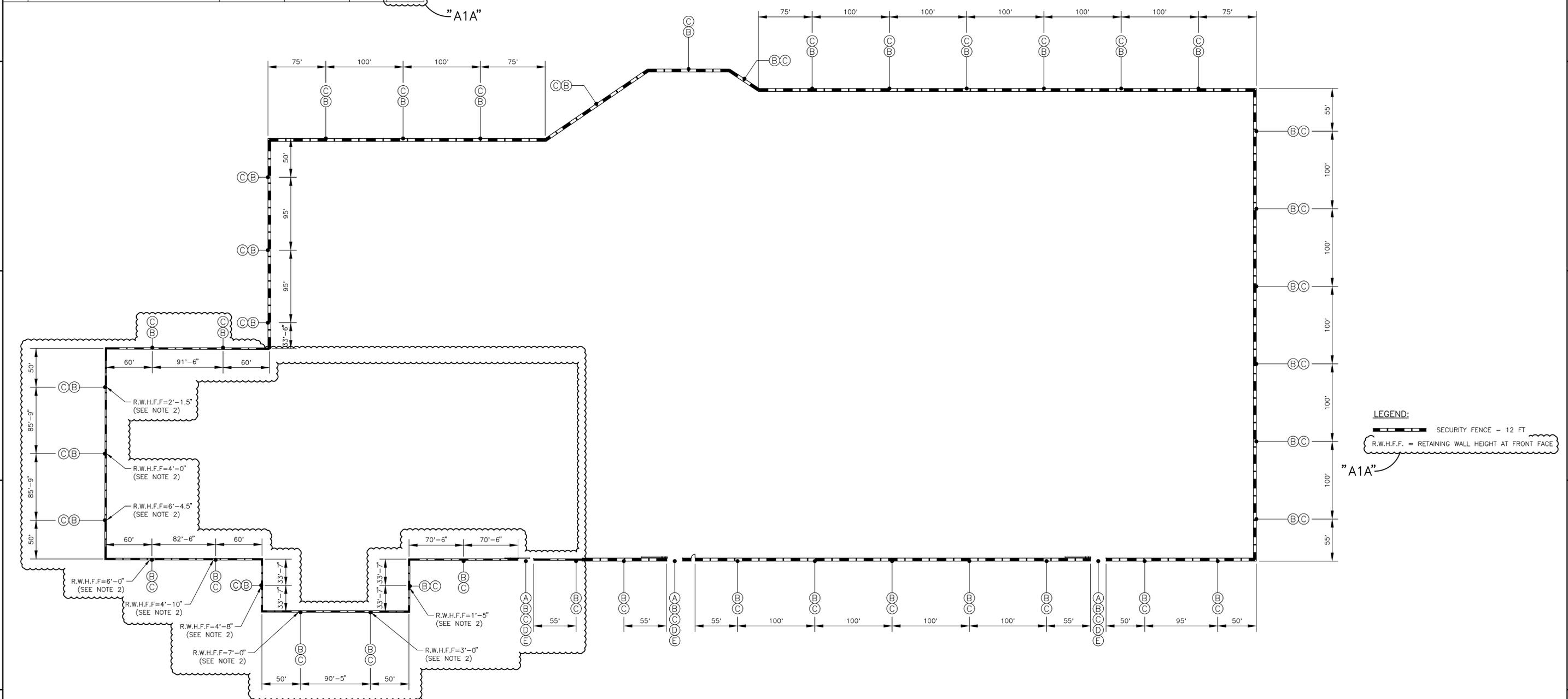
REV	DATE	DESCRIPTION	TECH.	ENG.
		<b>Commonwealth Edison Co.</b> Chicago, Illinois		
<b>SECTIONS AND DETAILS OF RETAINING WALL</b>				
<b>TSS 116</b>		<b>GOODINGS GROVE</b>		DC 00 SC
SCALE	NONE	DATE	07/22/25	THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.
DRAWN BY	B&M			
ENG. BY	B&M			
<b>SK116.35-1</b>				

Attachment 17

RECEIVED

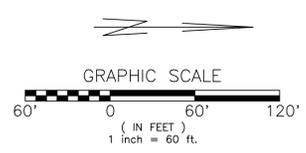
By Christopher Gruba at 8:52 am, Sep 23, 2025

ITEM	DESCRIPTION	TYPE OF SIGN	COMED S.I. #	QTY. EXISTING	QTY. (PROPOSED NEW)
(A)	SUBSTATION ADDRESS SIGN	INFORMATION	116718	2	1
(B)	DANGER HIGH VOLTAGE - KEEP OUT	DANGER	1608123	37	13
(C)	WARNING NO TRESPASSING	WARNING	715581	37	13
(D)	PPE SIGN - SAFETY SHOES, HARD HAT, SERVICEABLE WORK SHOES, FLAME RESISTANT CLOTHING REQUIRED UPON ENTERING SUBSTATION	NOTICE	1601286	2	1
(E)	NOTICE, KEEP GATES CLOSED AND LOCKED AT ALL TIMES	NOTICE	195804	2	1



LEGEND:  
 SECURITY FENCE - 12 FT  
 R.W.H.F.F. = RETAINING WALL HEIGHT AT FRONT FACE

- NOTES
1. SUBSTATION SIGN INSTALLATION SHOULD CONFORM TO C-SPEC C0650 DTD. 05-12-2010.
  2. THE SIGN MOUNTING HEIGHT MUST INCLUDE THE RETAINING WALL HEIGHT AND WILL BE INSTALLED ON THE FENCE.



REV	DATE	DESCRIPTION	TECH.	ENG.
A	05/31/16	FOR RECORD W.O. #08083289	S&L	S&L
Commonwealth Edison Co. Chicago, Illinois <b>SUBSTATION FENCE SIGNAGE</b>				
TSS 116		GOODINGS GROVE		DC 28
SCALE 1" = 60'-0"		DATE 08-31-15		THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.
<b>116E-1000B_S2024-0556</b>				

REV	DATE	DESCRIPTION	TECH.	ENG.
A1A	08/20/25	ISSUED FOR APPROVAL W.O. #18153994	FPL	FPL
 THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION. 200 W. ADAMS STREET, SUITE 2700 CHICAGO, IL 60606 BURNS & McDONNELL'S ILLINOIS IDFP REGISTRATION NUMBER IS 184-001310				

**RECEIVED**  
By Christopher Gruba at 8:53 am, Sep 23, 2025



September 22, 2025

# ComEd Goodings Grove Signage Exhibit

# Substation Address Sign (Type A)



Dimensions – 24” x 18”

# Danger High Voltage – Keep Out (Type B)



Dimensions – 14" x 10"

# Warning No Trespassing (Type C)



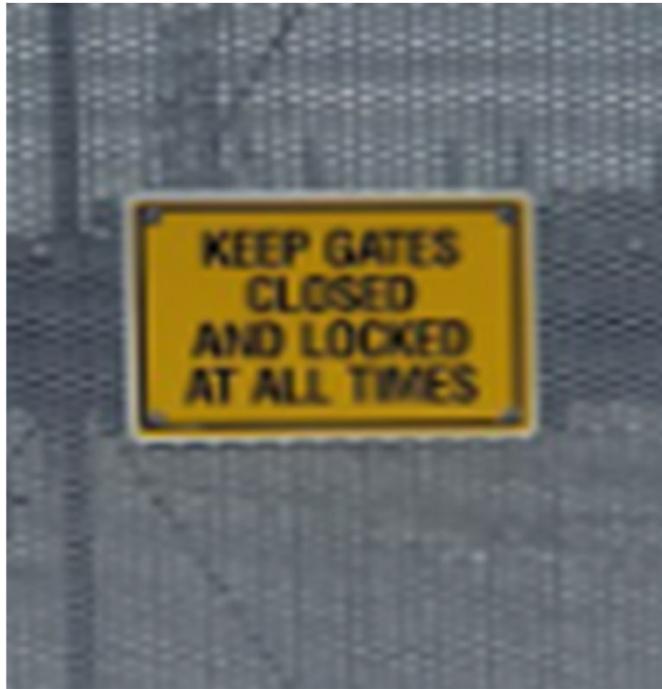
Dimensions – 24" x 18"

# PPE Sign – Safety Glasses, Hard Hat, Serviceable Work Shoes, Flame Resistant Clothing, Required Upon Entering Substation (Type D)



Dimensions – 10” x 7”

# Notice, Keep Gates Closed And Locked At All Times (Type E)



Dimensions – 14" x 10"

# Sign Types B and C in context mounted on fence



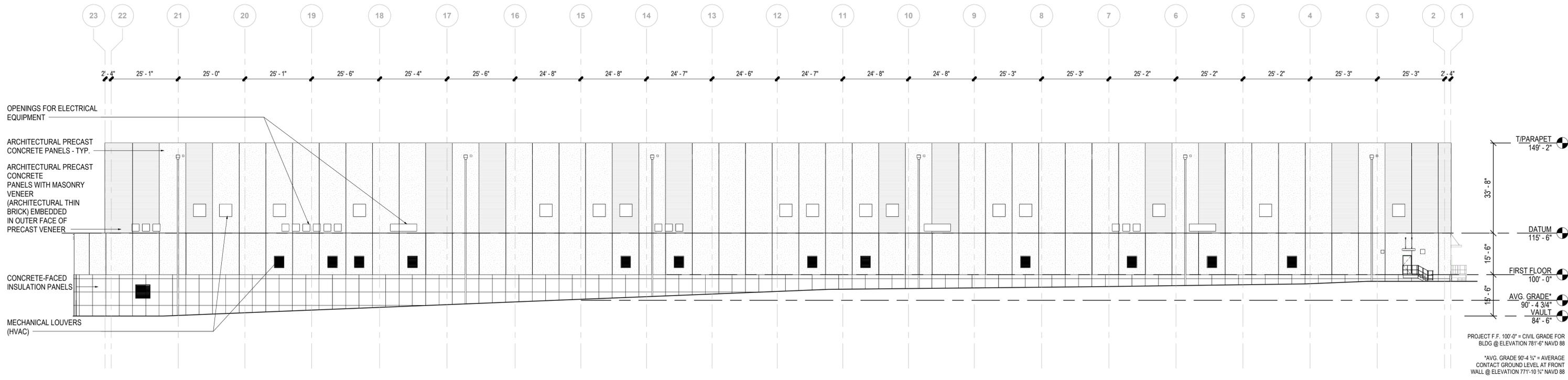
# Sign Types A through D in context on vehicular gate



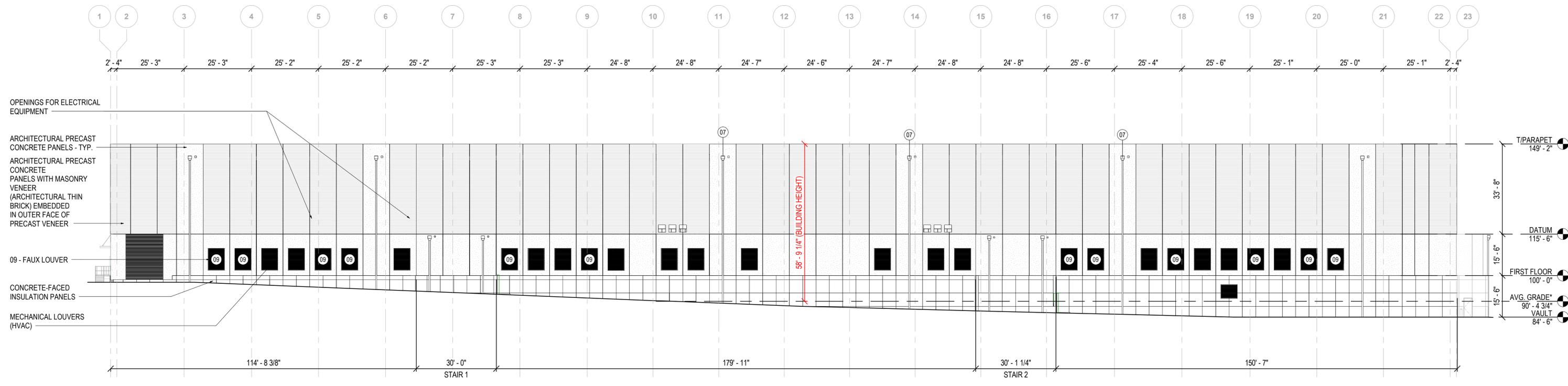
RECEIVED  
By Christopher Gruba at 1:44 pm, Nov 05, 2025

ASK-02  
Project: ComEd Goodings Grove  
Description: Elevations - East and West  
Prepared by: ZVS  
Scale: 1:200

Project Number: 021.1402.000  
Issue No:  
Date:

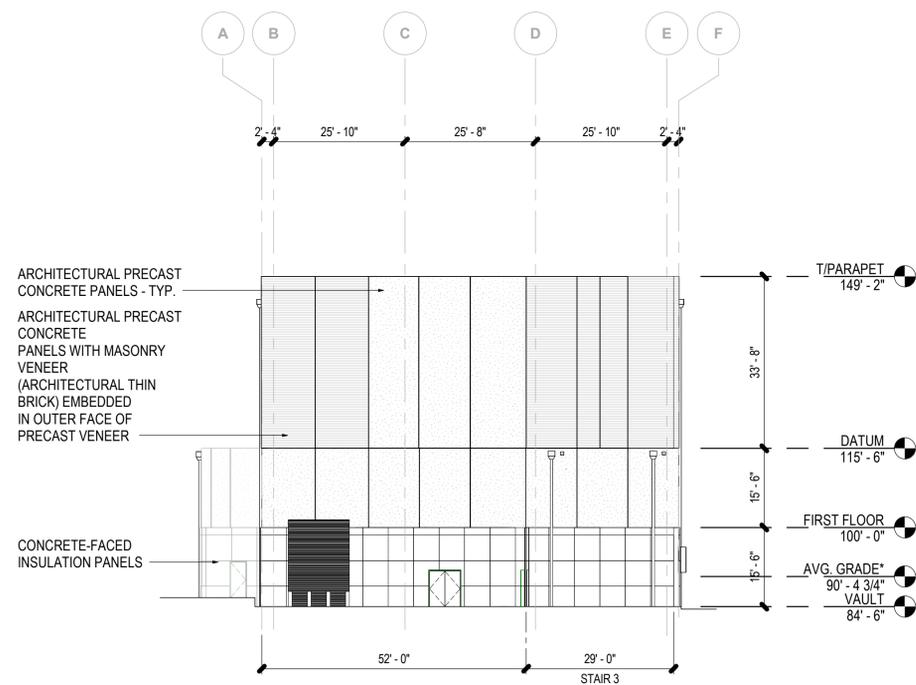


2 CITY RESPONSE - WEST ELEVATION  
SCALE: 1:200

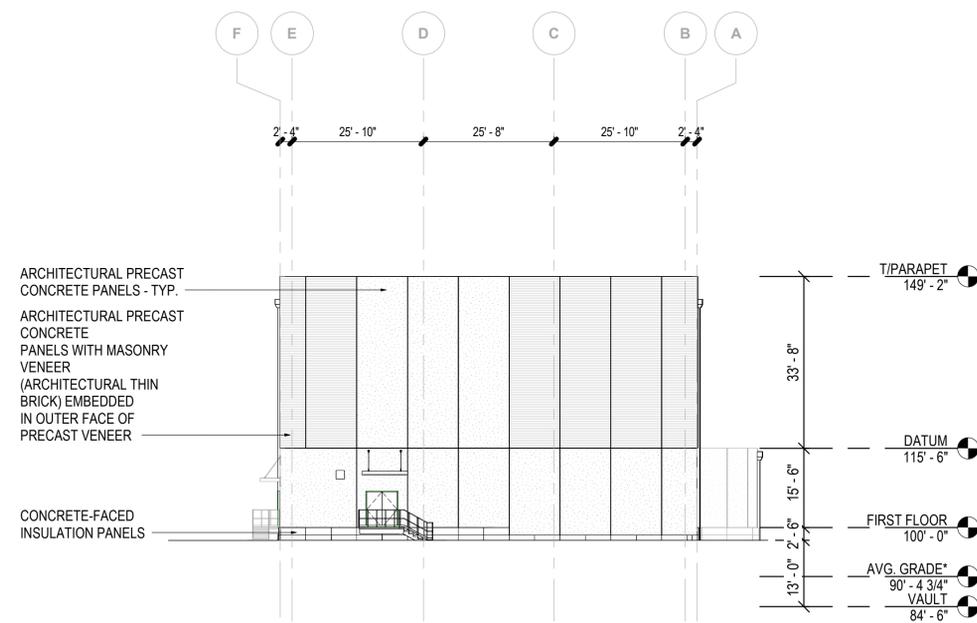


1 CITY RESPONSE - EAST ELEVATION  
SCALE: 1:200

PROPOSED PRINCIPAL EQUIPMENT ENCLOSURE



2 CITY RESPONSE - NORTH ELEVATION  
SCALE: 1:200



1 CITY RESPONSE - SOUTH ELEVATION  
SCALE: 1:200

# PROPOSED PRINCIPAL EQUIPMENT ENCLOSURE

E

D

C

B

A

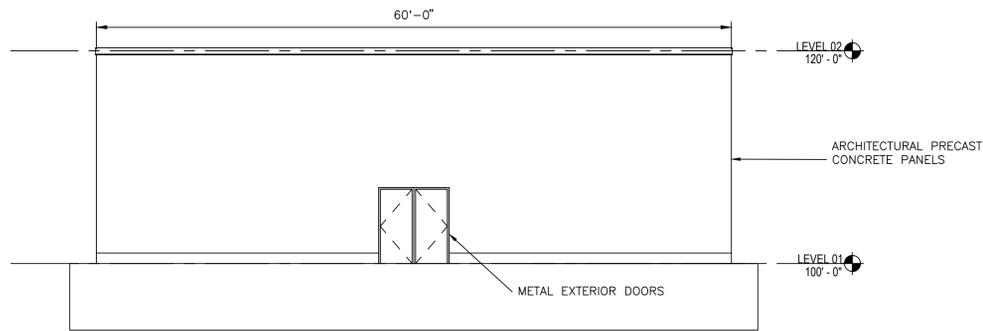
E

D

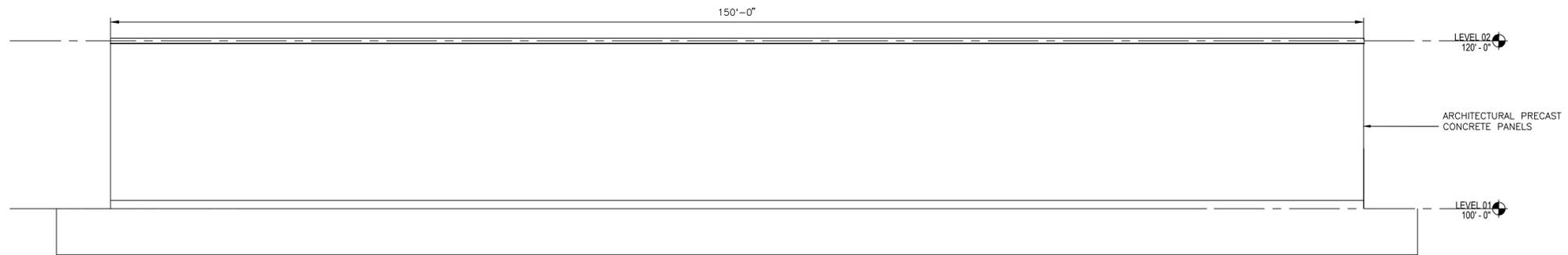
C

B

A



SECTION "B-B"  
(SK116E-ZONING)



SECTION "A-A"  
(SK116E-ZONING)

REV	DATE	DESCRIPTION	TECH.	ENG.

**comed** Commonwealth Edison Co.  
AN EXELON COMPANY Chicago, Illinois

EXTERIOR ELEVATIONS  
PROPOSED ACCESSORY EQUIPMENT ENCLOSURE

TSS 116 GOODINGS GROVE DC 00  
SC -

SCALE 1/8"=1'-0" DATE 07/05/23  
DRAWN BY B&M  
ENG. BY B&M

SK116E-ZONING

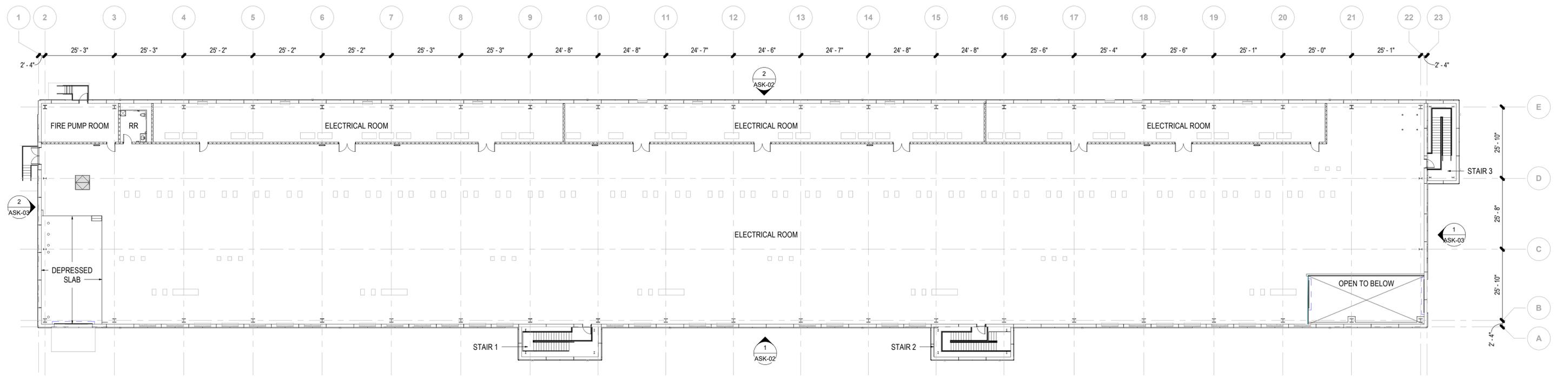
REV	DATE	DESCRIPTION	TECH.	ENG.

**BURNS & McDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

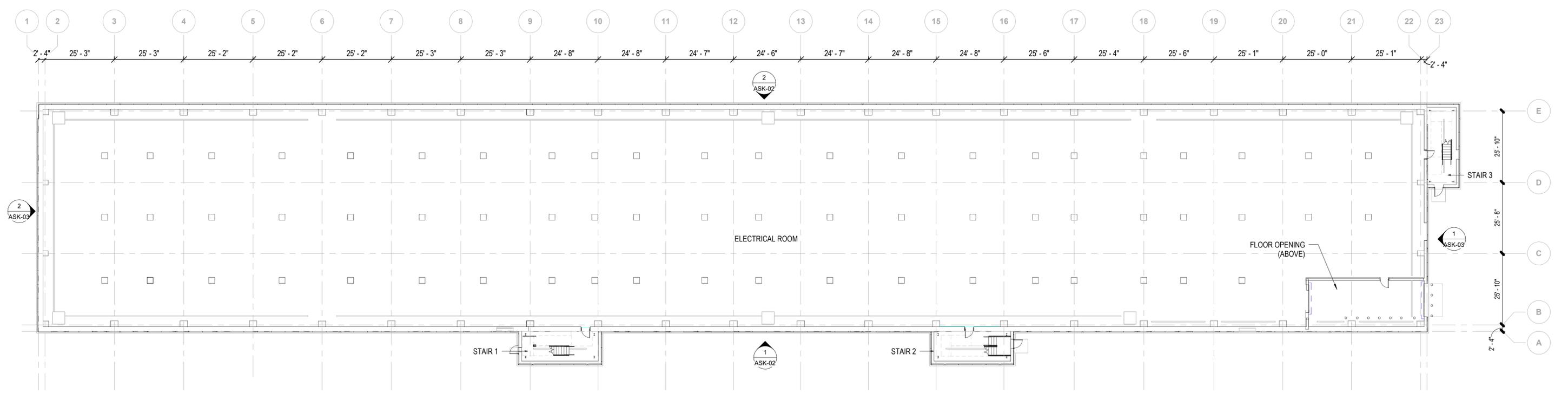
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**RECEIVED**  
By Christopher Gruba at 5:15 pm, Aug 06, 2025



**2 CITY RESPONSES - FIRST FLOOR PLAN**  
SCALE: 1:200



**1 CITY RESPONSES - VAULT PLAN**  
SCALE: 1:200

**PROPOSED PRINCIPAL EQUIPMENT ENCLOSURE**

E

E

D

D

C

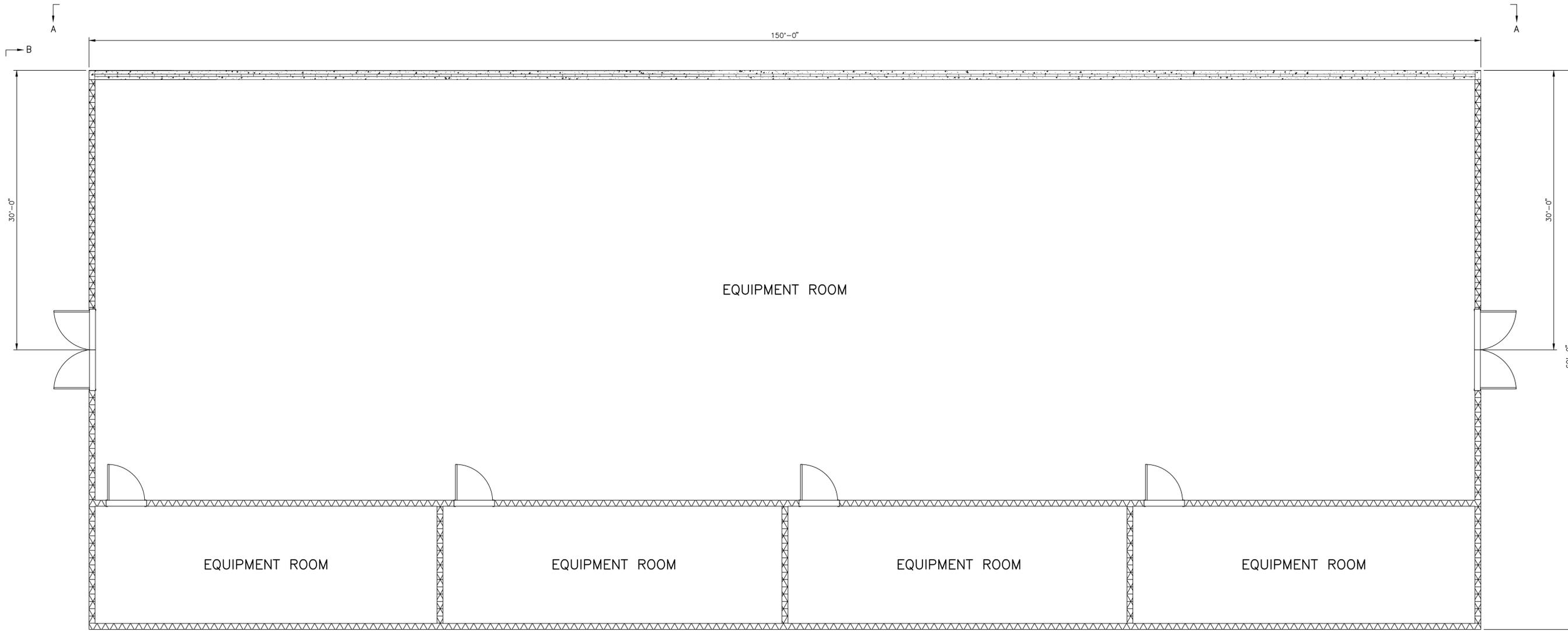
C

B

B

A

A



30'-0"

150'-0"

30'-0"

30'-0"

60'-0"

EQUIPMENT ROOM

EQUIPMENT ROOM

EQUIPMENT ROOM

EQUIPMENT ROOM

EQUIPMENT ROOM

REV	DATE	DESCRIPTION	TECH.	ENG.

**BURNS & McDONNELL**  
 200 W. ADAMS STREET, SUITE 2700  
 CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.  
 BURNS & McDONNELL'S ILLINOIS IDFPR REGISTRATION NUMBER IS 184-001310

REV	DATE	DESCRIPTION	TECH.	ENG.

**comed** Commonwealth Edison Co.  
 AN EXELON COMPANY Chicago, Illinois

**PLAN OF PROPOSED ACCESSORY EQUIPMENT ENCLOSURE**

**TSS 116 GOODINGS GROVE** DC XX  
 SC -

SCALE 1/4" = 1'-0" DATE XX-XX-XX  
 DRAWN BY B&M  
 ENG. BY B&M

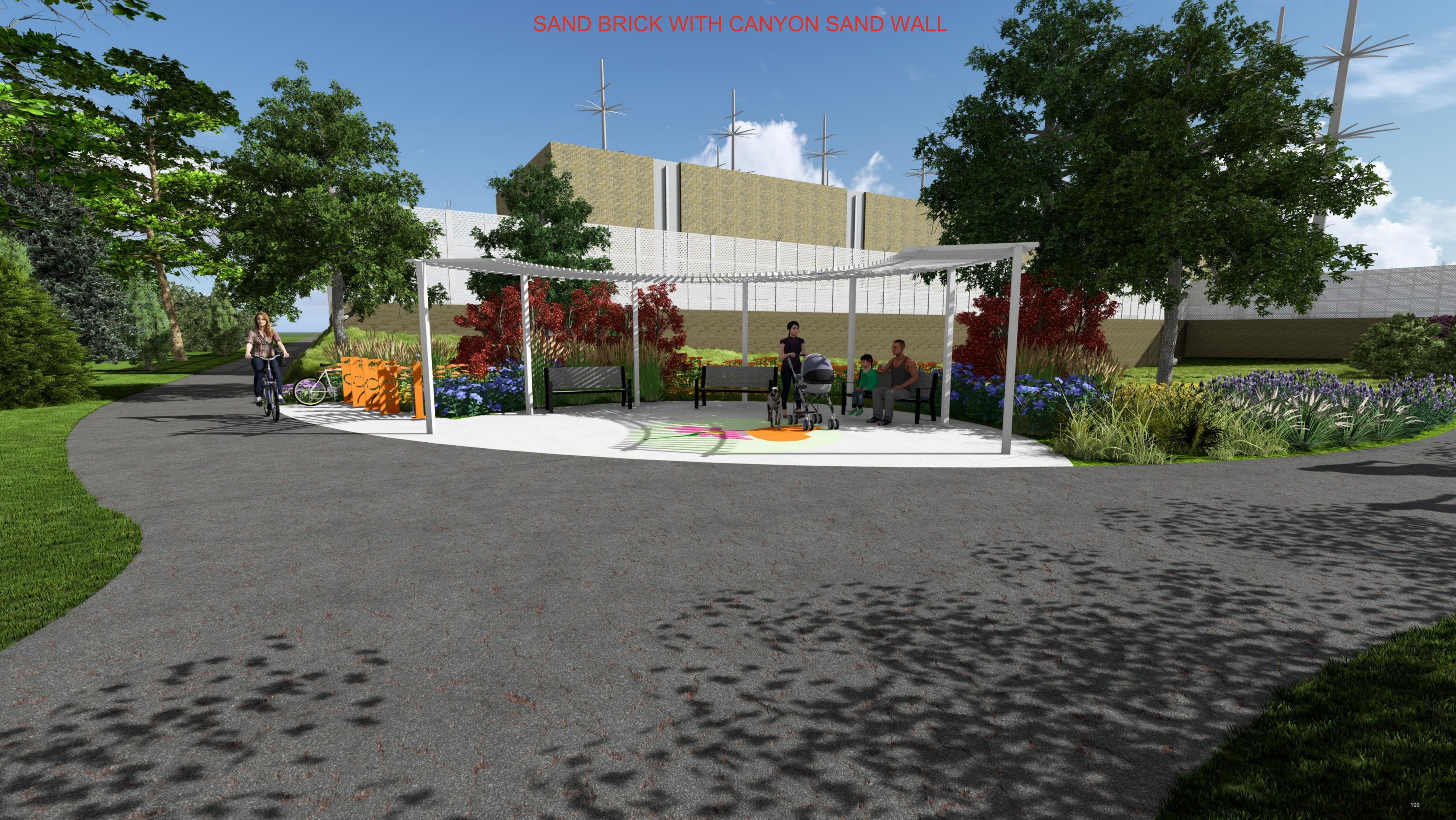
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**SK116E-ZONING**

\*Staff note: Powerline poles in this illustration are 145' tall



SAND BRICK WITH CANYON SAND WALL



SAND BRICK WITH CANYON SAND WALL



DARK GREEN BRICK WITH CANYON SAND WALL



DARK GREEN BRICK, CANYON SAND WALL



Gradient Brick with Sound Wall Color and Pattern



# Gradient Brick with Sound Wall Color and Pattern



Mid Century Moss Brick with Dark Green Wall



Mid Century Moss Brick with Dark Green Wall

