Meeting of the Village of Buffalo Grove Planning and Zoning Commission

Regular Meeting
July 19, 2023 at 7:30 PM

Fifty Raupp Blvd
Buffalo Grove, IL 60089-2100
Phone: 847-459-2500

I. Call to Order

II. Public Hearings/Items For Consideration

Public Comment is limited to items that are not on the regular agenda. In accordance with Section 2.02.070 of the Municipal Code, discussion on questions from the audience will be limited to 5 minutes and should be limited to concerns or comments regarding issues that are relevant to Planning and Zoning Commission business. All members of the public addressing the Planning and Zoning Commission shall maintain proper decorum and refrain from making disrespectful remarks or comments relating to individuals. Speakers shall use every attempt to not be repetitive of points that have been made by others. The Planning and Zoning Commission may refer any matter of public comment to the Village Manager, Village staff or an appropriate agency for review.

1. Consideration of a Petition to the Village of Buffalo Grove for a Re-Zoning to the R-9 Multiple-Family Dwelling District with a Special Use for a Residential Planned Unit Development, Final Plat of Subdivision, Preliminary Plan and Zoning Variations to Allow the Construction of a 41-Unit Townhome Development on the Property Located at 22771-22825 N. Prairie Road. (Trustee Weidenfeld) (Staff Contact: Kelly Purvis)
2. Consideration of a Petition to the Village of Buffalo Grove for Approval of an Amendment to Ordinance No. 2021-067, an Amendment to the Planned Unit Development and the Preliminary Plan, with Approval of a Self-Storage Use, to Allow the Construction of a 112,268 Square Foot Self-Storage Facility on the Property at 105 Lexington Drive. (Trustee Stein) (Staff Contact: Kelly Purvis)
3. 4274 : Comprehensive Plan Amendment (Dane Bragg, Trustee Weidenfeld) (Staff Contact: Kelly Purvis)

III. Regular Meeting

A. Other Matters for Discussion

B. Approval of Minutes

1. Planning and Zoning Commission - Regular Meeting - Jun 21, 2023 7:30 PM

C. Chairman's Report

D. Committee and Liaison Reports

E. Staff Report/Future Agenda Schedule

F. Public Comments and Questions

Public Comment is limited to items that are not on the regular agenda. In accordance with Section 2.02.070 of the Municipal Code, discussion on questions from the audience will be limited to 5 minutes and should be limited to concerns or comments regarding issues that are relevant to Planning and Zoning Commission business. All members of the public addressing the Planning and Zoning Commission shall maintain proper

decorum and refrain from making disrespectful remarks or comments relating to individuals. Speakers shall use every attempt to not be repetitive of points that have been made by others. The Planning and Zoning Commission may refer any matter of public comment to the Village Manager, Village staff or an appropriate agency for review.

IV. Adjournment

The Planning and Zoning Commission will make every effort to accommodate all items on the agenda by 10:30 p.m. The Board, does, however, reserve the right to defer consideration of matters to another meeting should the discussion run past 10:30 p.m.

V. Action Items

The Village of Buffalo Grove, in compliance with the Americans with Disabilities Act, requests that persons with disabilities, who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the ADA Coordinator at 459-2525 to allow the Village to make reasonable accommodations for those persons.

Action Item : Consideration of a Petition to the Village of Buffalo Grove for a Re-Zoning to the R-9 Multiple-Family Dwelling District with a Special Use for a Residential Planned Unit Development, Final Plat of Subdivision, Preliminary Plan and Zoning Variations to Allow the Construction of a 41-Unit Townhome Development on the Property Located at 22771-22825 N. Prairie Road.

Recommendation of Action

Staff recommends approval of the project, subject to the conditions in the staff report.

Bloom Street Partners, LLC is the contract purchaser of the properties located at 22771-22825 N. Prairie Road. The site is an assemblage of two properties, approximately 4.25-acres in area, located at the southeast corner of Prairie Road and Half Day Road. The developer is proposing to construct a 41-unit rental townhome community. The project will require Annexation and approval of an Annexation and Development Agreement, a Special Use for a Residential Planned Unit Development, a Zoning Map Amendment to zone the property R-9 Multi-Family Dwelling District, Final Plat of Subdivision (Consolidation), Preliminary Plan approval and Variations from the Zoning Code.

The Planning & Zoning Commission (PZC) shall open the public hearing, take public testimony concerning the requests and shall make a recommendation to the Village Board regarding the project.

ATTACHMENTS:

- Staff Report - Prairie Point Townhomes 23-0713 (PDF)
- Final Plan Set (PDF)

Trustee Liaison
Weidenfeld

Staff Contact
Kelly Purvis, Community Development

Wednesday, July 19, 2023	

VILLAGE OF BUFFALO GROVE
PLANNING & ZONING COMMISSION
STAFF REPORT

MEETING DATE:	July 19, 2023
SUBJECT PROPERTY:	22771-22825 N. Prairie Road
PETITIONER:	David Schwartz, Bloom Street Partners
PROPERTY OWNERS:	Rainer Burckhardt and The P. Kronenberger Living Trust
PREPARED BY:	Kelly Purvis, Deputy Director of Community Development
REQUEST:	Petition to the Village of Buffalo Grove for a re-zoning to the R-9 Multiple-Family Dwelling District with a Special Use for a residential Planned Unit Development, Final Plat of Subdivision, Preliminary Plan and Zoning Variations.
LAND USE AND ZONING:	The subject property is located in unincorporated Lake County and zoned Estate District. One of the properties is vacant and the other is improved with a single-family home.
COMPREHENSIVE PLAN:	The 2019 Prairie View Station Area Plan calls for the property to be developed with a mixed-use building, attached single-family (primarily), and open space.

BACKGROUND

Bloom Street Partners, LLC is the contract purchaser of the properties located at 22771-22825 N. Prairie Road. The site is an assemblage of two properties, approximately 4.25-acres in area, located at the southeast corner of Prairie Road and Half Day Road. The larger northern parcel is vacant, while the southern parcel is improved with a single-family home. Both properties are zoned Estate District in unincorporated Lake County.



Site Location Map

The developer is proposing to construct a 41-unit rental townhome community. The project will require Annexation and approval of an Annexation and Development Agreement, a Special Use for a Residential Planned Unit Development, a Zoning Map Amendment to zone the property R-9 Multi-Family Dwelling District, Final Plat of Subdivision (Consolidation), Preliminary Plan approval and the following Variations from the Zoning Code:

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

1. Section 17.28.050 to allow the distance between the south property line and the townhome buildings to be less than twice the building height when abutting a different kind of use (i.e., single-family next to multi-family);
2. Section 17.28.050 to allow the spacing between front facing buildings to be less than 50 feet (between buildings 2 and 3 and between buildings 4 and 5);
3. Section 17.40.050 to allow a rear yard setback of 34 feet 8 inches for Building 4, in lieu of the 35-foot setback required; and
4. Section 17.32.020 to allow accessory structures (gazebo and deck) to be closer to the front lot line than the principal buildings and beyond the mid-point of the principal structures when located in a side yard.

The Village Board of Trustees reviewed concept plans for the project at a meeting on February 21, 2023. The Board had general questions regarding walkability, market demand, and guest parking, but was supportive of the development and referred the project to the PZC for further review. A summary of the project and the petitioner's requests follow.

PRAIRIE VIEW STATION AREA PLAN

The subject property is part of the *South Subarea* featured in the Prairie View Station Area Plan (PVSAP), which was adopted as an amendment to the Comprehensive Plan in 2019. The Plan itself is a framework, not a specific development or construction plan. In that sense, imagery and plans featured in the Prairie View Plan are meant to provide examples and ideas of how some of the main concepts could be implemented. It is expected that future redevelopment embraces and implements the vison's core principles.



South Subarea, Prairie View Station Area P

Bloom Street's proposal incorporates many of the main concepts of the plan as further discussed below. The proposed townhome development plan is an assemblage of the northern two properties shown in the Prairie View Plan. A Phase 2 Potential Site Plan illustrating how the additional two lots south of the property could be developed in the future has been included in the plan set.

PROPOSED PLAN

Bloom Street Partners is proposing to construct 41 townhome units within 7, 2 ½ - 3-story buildings (6, 6-unit buildings and 1, 5-unit building). It should be noted that much of the site will be approximately 4-5 feet below the elevation of Prairie Road. Therefore, the buildings facing Prairie Road will appear 2 ½ stories from the roadway.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



Front and Side Elevations, 3-Story, 6-Unit Building

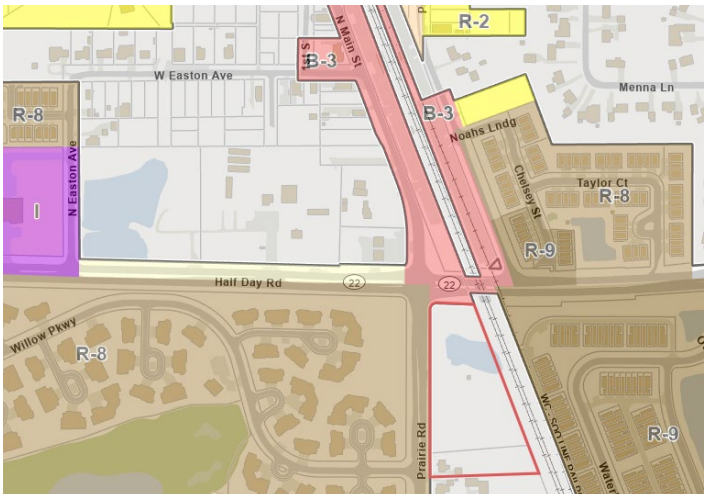
Each unit would be between 1,800-2,000 square feet and would feature 3 bedrooms, a den, 2 ½ bathrooms, and a rear-loaded two-car garage. The townhomes would be luxury rental homes with rents in the range of $3,500 - $4,000 per month and would serve young families, empty-nesters looking to downsize, or anyone looking to live in the Prairie View Metra Train Station area. The developer has indicated that "modern farmhouse" will be the architectural style of the development. A combination of Hardie Board siding and panels, with standing seam metal canopies and black framed casement windows are the proposed materials.

On the north side of the property, the developer is proposing a gathering space for the residents that would include a gazebo, landscape feature, and a deck overlooking the detention pond/wetland area. A walking path will also loop around the northern detention pond. On the east side of the property, the developer is proposing a fenced dog run, as an additional amenity for the residents.

PLANNING & ZONING ANALYSIS

Land Use & Density:

Given the proposed density of 9.64 units per acre, the surrounding uses (Commercial to the north, Single-Family Residential to the south, and Multi-Family to the east and west,) as well as the recommendations in the PVSAP, staff feels that R-9 Multiple Family zoning district with a Special Use for a Residential Planned Unit Development would be appropriate for the site. Multi-family housing serves as a transition between lower density residential properties and commercial properties. Other townhome developments in the community such as

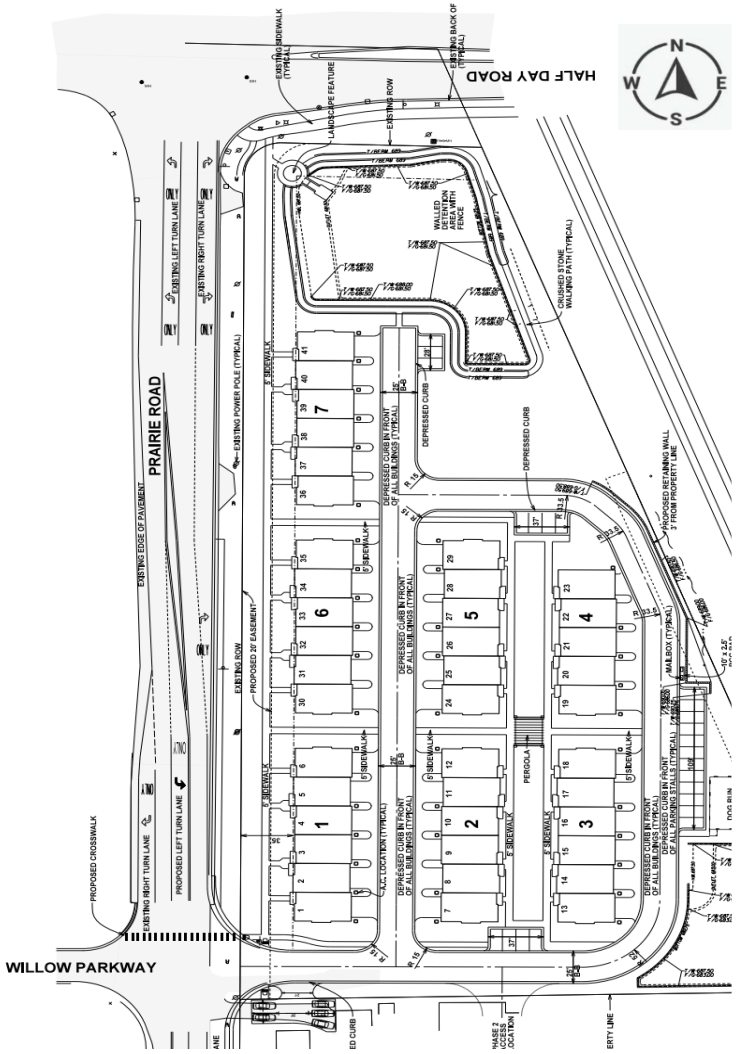


Surrounding Zoning District Map

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Roseglen, Easton Station, and Prairie Landing are also zoned R-9 and have similar densities of 9.44 , 8.2, and 11.4 units per acre, respectively.

Vehicular and Pedestrian Access:
Vehicular access to the site is proposed via one full access driveway on Prairie Road, which is aligned with Willow Parkway. No new site access is proposed to Half Day Road. The existing driveway serving the single-family residence at 22745 Prairie Road (to the south of the site) will be closed and a new driveway access will be provided within the development site. The site plan shows a "Phase 2 Access Location" which could be constructed in the event that the properties to the south are later developed. Roadways within the development are 25 feet-wide to allow for two-way circulation throughout the site.



Prairie Point Townhomes Site Plan

Sidewalks will be installed throughout the development and along the east side of Prairie Road, where they will connect to the existing path on Half Day Road. Pedestrian traffic signals and crosswalks are provided on the north, west and south legs of the intersection at Half Day Road and Prairie Road and provide pedestrian connections to the rest of the Prairie View Subareas, Prairie View Metra Station, Stevenson High School and other points of interest. There is a signalized intersection with a crosswalk at the intersection of Half Day Road and Stevenson Drive where students can safely cross Half Day Road.

Traffic:
The petitioner has provided a Traffic Impact Study, prepared by BLA, Consulting Engineers. The study indicates that the development will have no impact on the levels of service provided at intersections adjacent to the site. The traffic consultant recommended that Prairie Road be restriped and widened to create dedicated left (southbound) and right (northbound) turn lanes into the site. These recommendations have been incorporated into the plans. The report indicates new traffic generated by the development can be accommodated on the adjacent roadways. Village Engineering staff have reviewed the Traffic Impact Study and have no concerns.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Parking:
The development will include 187 parking spaces: 82 enclosed spaces within the 2-car garages, 82 spaces in the driveways in front of each garage, and an additional 23 guest parking spaces placed throughout the site. The proposed parking exceeds the minimum Zoning Code requirement of 82 parking stalls (2 per unit). The Fire Department has requested that no parking be permitted along the roadway adjacent to the east property line. This will allow fire trucks to circulate through the site without obstruction, and has been added to the list of conditions, should the Village approve the project.

Landscaping & Open Space:
The petitioner has submitted a robust landscape plan that includes shade, ornamental and evergreen trees as well as evergreen, rose and deciduous shrubs throughout the site. Each townhome unit has foundation landscaping in the front, and between the driveways. Landscaping is also proposed at the base of the freestanding development sign, as required by Code. Native plantings are proposed for the stormwater management areas. The landscaping plan has been reviewed and approved by the Village Forester. Just over half of the site (51.5%) will remain open space, including detention areas, a preserved wetland, and a dog run.

Lighting:
The proposed lighting complies with the Village illumination standards of no more than .5 footcandles at the property line. A combination of pole lights, building fixtures and under canopy lighting will be used to illuminate the property.

Signage:
The petitioner is proposing to install one freestanding development sign at the entrance to the development. The sign is compliant with all code requirements and will be landscaped around the base.



Freestanding Sign Proposed at Entrance

Engineering & Stormwater:
The site does include wetlands, and wetland mitigation will occur through wetland credits purchased for the property by a previous entity and onsite remediation. Lake County and the Army Corps of Engineers have jurisdiction over the wetlands and will be involved in the permitting process.

Staff will continue to work with the development engineer in reviewing the forthcoming stormwater management report and making minor changes to the site. At this point, the Village Engineers have minimal concerns related to access, stormwater, and utilities as necessary. These minimal concerns will be addressed during the final engineering stage.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Zoning Variations:
The following is a summary of the variations associated with the development request:

1. Variation to Section 17.28.050 to allow the distance between the south property line and the townhome buildings to be less than twice the building height when abutting a different kind of use. The PUD standards require increased spacing between single-family homes and other kinds of uses. In this case, a setback of approximately 75 feet is required from the south property line and the townhome buildings. As depicted on the site plan, the closest building is approximately 54 feet from the property line. Due to the location of the wetland and required site detention, the buildings cannot be shifted further to the north.

2. *Variation to* Section 17.28.050 to allow the spacing between front facing buildings to be less than 50 feet. The PUD standards require a minimum of 50 feet between front facing buildings. As depicted on the site plan, buildings 2 and 3 and buildings 5 and 6 are front facing buildings with 38 feet between them. Due to the shape of the site, the required building setbacks, and the required street widths, additional space cannot be provided between the buildings.

3. *Variation* Section 17.40.050 to allow a rear yard setback of 34 feet 8 inches for Building 4, in lieu of the 35-foot setback required. The Zoning Ordinance requires a minimum rear yard setback of 35 feet. Building five, as shown on the site plan, will encroach approximately 4 inches into the required rear yard setback. This variation is largely due to the shape of the property, which tapers inward on the eastern edge as the property line runs north.

4. *Variation to* Section 17.32.020 to allow accessory structures (gazebo and deck) to be closer to the front lot line than the principal buildings and beyond the mid-point of the principal structures when located in a side yard. The Code requires accessory structures to be placed behind the mid-point of the principal structure when located in a side yard. The gazebo and deck have been placed in their proposed location to make use of the view of the open space, and to provide an anchor/amenity feature on the corner of the site.

DEPARTMENTAL REVIEWS

Village Department	Comments
Engineering	The Village Engineer has reviewed the preliminary engineering plans and does not have any concerns.
Forestry	The Village Forester has reviewed the tree preservation and landscape plans and does not have any concerns.
Building	The Building Division has reviewed the plans and does not have any concerns.
Fire	The Fire Department has reviewed the plans and the truck turn exhibit and does not have any concerns.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

IMPLEMENTATION OF THE PRAIRIE VIEW METRA STATION AREA PLAN

The proposed plan implements the following core concepts of the Prairie View Metra Station Area Plan:

- Provides the dense multi-family housing envisioned in the Prairie View Metra Station Area's south subarea
- Offers a housing option that is attractive to the emerging demographics, such as millennials, young families, baby boomers and empty nesters
- Leverages one of the area's greatest assets (Prairie View Train Station) by creating a housing and transportation nexus
- Begins to build a multi-modal road network infrastructure and thereby enhances connectivity and accommodates vehicular, pedestrian, and bicycle traffic
- Anticipates and integrates into future developments (residential, mixed use, and commercial) shown in the Prairie View Metra Station Area Plan
- Utilizes materials and landscaping that is in alignment with the tone established by the area's historical architecture, character, and charm
- Helps transform the Prairie View Metra Station Area into a destination and creates an identity

SURROUNDING PROPERTY OWNERS

Pursuant to Village Code, the surrounding property owners within 250 feet were notified by mail, notice was published in the Daily Herald, and a public hearing sign was posted on the subject property. All notifications were completed within the prescribed timeframe as required. As of the date of this Staff Report, the Village has one (1) call with a general inquiry regarding the project.

The developer held a remote neighborhood meeting via Zoom on Wednesday, May 24, 2023 at 7:00pm. Property owners within 350 feet of the site received notice of the meeting by mail. The developer reviewed the proposed plans and elevations and fielded questions from the neighbors. The neighbors had general questions about the project (widening of Prairie Road, price points, project timeframe), but no objections were verbalized. Nine people were in attendance (including two Village staff members).

STUDENT GENERATION & IMPACT FEES

A Fiscal Impact Analysis (FIA) prepared by The Perman Group, has been included in the developer's project submittal. The analysis indicates that the project will be complete and fully occupied by the end of 2025. It is anticipated that the development will have 98 residents when fully occupied and will yield six K-8th grade students and three high school students and yield a positive fiscal impact for the school. Staff has been in communication with both school districts (District 103 and District 125) as this project has progressed. Both districts were given a copy of the site plan and fiscal impact. At this time, no concerns have been expressed.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

STANDARDS

The Planning & Zoning Commission is authorized to make a recommendation to the Village Board on requested Planned Unit Developments based upon the following criteria:

1. That the PUD has the minimum areas as set forth in Section 17.16.060.
2. The uses permitted in such development are not of such a nature or so located as to exercise an undue detrimental influence or effect upon the surrounding neighborhood;
3. The plan effectively treats the developmental possibilities of the subject property, making appropriate provisions for the preservation of streams, wooded areas, scenic views, floodplain areas, and similar physical features;
4. All requirements pertaining to commercial, residential, institutional or other uses established in the planned unit development conform to the requirements for each individual classification as established elsewhere in this Title, except as may be specifically varied for the proper planning of the planned unit development;
5. The Planning and Zoning Commission shall determine that the area and width of the lot shall be sufficient for the proposed use, and that the development of the property in the proposed manner creates no outlots which will be difficult to develop in an appropriate manner.

Planned Unit Developments are also Special Uses, and therefore must meet the Special Use criteria as follows:

1. The special use will serve the public convenience at the location of the subject property; or 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;
2. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with said special use, the size of the subject property in relation to such special use, and the location of the site with respect to streets giving access to it shall be such that it will be in harmony with the appropriate, orderly development of the district in which it is located;
3. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning district, nor substantially diminish and impair other property valuations with the neighborhood;
4. The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder or discourage the development and use of adjacent land and buildings in accord with the zoning district within which they lie;
5. Adequate utilities, access roads, drainage, and/or other necessary facilities have been or will be provided;
6. Parking areas shall be of adequate size for the particular special use, which areas shall be properly located and suitably screened from adjoining residential uses, and the entrance and exit driveways to and from these parking areas shall be designed so as to prevent traffic hazards, eliminate nuisance and minimize traffic congestion in the public streets.

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

The petitioner has provided written responses to both sets of standards, which are included in the attached packet.

The Planning & Zoning Commission is authorized to make a recommendation to the Village Board on requested Zoning Variations based on the following criteria:

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations of the zoning district in which it is located except in the case of residential zoning districts;
2. The plight of the owner is due to unique circumstances;
3. The proposed variation will not alter the essential character of the neighborhood.

The petitioner has provided written responses to each of the standards, which are included in the attached packet.

STAFF RECOMMENDATION

Staff recommends **approval** of the requested Special Use for a Residential Planned Unit Development, the Zoning Map Amendment to zone the property R-9 Multi-Family Dwelling District, the Final Plat of Subdivision (Consolidation), the Preliminary Plan, and the above noted Zoning Variations, subject to the conditions in the suggested PZC Motion below.

ACTION REQUESTED

The Planning & Zoning Commission (PZC) shall open the public hearing and take public testimony concerning the requests for approval of the Special Use for a Residential Planned Unit Development, the Zoning Map Amendment to zone the property R-9 Multi-Family Dwelling District, the Final Plat of Subdivision (Consolidation), the Preliminary Plan, and the above noted Zoning Variations to accommodate the construction of the 41-unit townhome development on the properties located at 22771-22825 N. Prairie Road. The PZC shall make a recommendation to the Village Board concerning the requests. It should be noted, the annexation agreement and annexation of the property are separate matters to be considered by the Village Board.

Suggested PZC Motion:
The PZC recommends approval of the Special Use for a Residential Planned Unit Development, the Zoning Map Amendment to zone the property R-9 Multi-Family Dwelling District, the Final Plat of Subdivision (Consolidation), the Preliminary Plan, and the above noted Zoning Variations, to accommodate the construction of a 41-unit townhome development on the properties located at 22771-22825 N. Prairie Road, subject to the following conditions:

a. *The proposed development of 41 attached single-family units shall conform to the plans and conditions provided in the staff report and in the Planned Development Ordinance.*

b. *Prior to the approval of the final engineering plans, the Developer shall provide approval from the Lake County Stormwater Commission concerning*

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

the impacts to the existing wetland.

c. *The Final Engineering plans shall be submitted in a manner acceptable to the Village Engineer.*

d. *The Plat of Subdivision and Annexation Plat shall be submitted in a manner acceptable to the Village Engineer and the Village Attorney.*

e. *Prior to the issuance of building permits for construction of the development, the Developer shall obtain all necessary permits from the IEPA, Lake County Department of Transportation, Lake County Stormwater Management Commission, and the US Army Corps of Engineers*

f. *Signage prohibiting parking on the roadway on the east side of the property shall be installed as required by the Village of Buffalo Grove Fire Department. All associated pavement markings or signage shall be maintained by the property owner.*

g. *Any directional or incidental signage added to the sign package shall be reviewed administratively by staff.*

h. *All landscaping shall be maintained in accordance with the approved landscaping plan in perpetuity.*

i. *The proposed development is subject to the storm water utility.*

ATTACHMENTS

- Narrative Description
- Plat of Consolidation
- Architectural Plans
- Color Elevations
- Renderings
- Phase 2: Potential Development Plan
- Preliminary Civil Engineering Plans
- Landscape Plans
- Photometric Plan
- Responses to PUD & Special Use Standards
- Response to Zoning Variation Standards
- Fiscal Impact Analysis
- Traffic Impact Study

Attachment: Staff Report - Prairie Point Townhomes 23-0713 (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Bloom Street PARTNERS

PRAIRIE POINT

PROJECT NARRATIVE

Developer Bloom Street Partners, LLC is the contract purchaser of the +/-4.27 Acre site at the southeast corner of Prairie Rd and Rt. 22 for the purpose of developing a 41-unit attached single family built-for-rent townhome community. The property, 22771-22825 N. Prairie Rd., Prairie View is currently Zoned E ("Estate") in unincorporated Lake County, however we intend to annex the property into the Village of Buffalo Grove. Through a PUD process, we plan to re-zone the property with bulk and density substantially in accordance with the R9 zoning district.

All units will be 3-story, three-bedroom townhomes with a rear-loaded two-car attached garage. There will be an additional 105 exterior parking spaces provided. We plan a "Modern Farmhouse" architectural style which will fit in well with the context of the immediate neighborhood and provide a stylish alternative to existing rental housing stock.

As proposed, the project will consist of 41 townhomes spread across seven 2.5—3-story buildings set amongst landscaped drives and courtyards. All interior drives will be built to public road standards and each unit shall have rear balconies and room for two car "Driveway" parking behind their garage.

The bulk of the site is approximately 4-5 feet below the elevation of Prairie Rd. We plan to utilize the existing conditions so that units facing Prairie Rd will have a front entrance at street level, presenting a 2.5 story façade towards the public road. Interior drive isles will slope down towards the established grade for the rear loaded garages. Interior facing units will have a more traditional 3-story façade.

All interior drives and courtyards will be extensively landscaped and hardscaped. The existing wetland on the property will be partially remediated and the remaining portion of it will serve as part of our site detention. Additional detention as required will also be incorporated into the landscape design. A gazebo and raised overlook are planned for the northeast corner of Prairie Rd and Rt. 22 and will serve as welcoming gateway to the Prairie View Station area.

Each 3-bedroom unit will range in size from 1800—2000 square feet (excluding garage) and are expected to appeal to everyone from those just starting families, young empty-nesters looking to downsize and anyone seeking a convenient, transit served location in an area with outstanding amenities and school systems.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

PRAIRIE POINTE SUBDIVISION

PERMANENT INDEX NUMBERS:
15 - 21 - 200 - 032
15 - 21 - 200 - 014

BEING PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS.

KNOWN AS: **22825 N. PRAIRIE ROAD, BUFFALO GROVE, ILLINOIS**
22771 N. PRAIRIE ROAD, BUFFALO GROVE, ILLINOIS

TOTAL SUBDIVISION AREA: 185,831 S.F. OR 4.266 ACRES

BEARINGS BASED ON NAD83 (2011)
ILLINOIS STATE PLANE, EAST ZONE

0' 10' 20' 50'

NORTH LINE OF NORTHWEST 1/4 OF SECTION 21-43-11

NORTH LINE OF NORTHEAST 1/4 OF SECTION 21-43-11

CENTER OF SECTION 21

(R)521.456'

P.O.B. OF PARCEL 1

INTERSECTION OF THE NORTH-SOUTH CENTER OF SECTION 21-43-11 WITH THE CENTER LINE OF ILLINOIS ROUTE 22

CENTERLINE OF IL. RT. 22

(D)171.17'
(M)168.70'

HALF DAY ROAD

54.00'

HERETOFORE DEDICATED PER DOC. 2670567

TAKING PER DOC. 5193231

(M)100.79'
(D)100.80'

(M&D)80.73'

R=25.00'
A=38.48' (M)
A=39.80(D)
CH=34.79'
N44°16'02"E

S88°31'34"E
(D)134.39'
(M)134.30'

112.94'
S88°31'34"E

21.36'
N88°31'34"W

A=39.32'
R=25.00'
CH=35.39'
N46°25'01"E

51.00'

40.00'

AREA OF PERMANENT DEED RESTRICTION AND STORMWATER DETENTION EASEMENT
HEREBY GRANTED

71.86'
N0°15'52"E

100.00'

N89°44'21"W
98.50'

N89°44'21"W
15.00'

N0°15'39"E
4.00'

30.00'
N0°15'39"E

ARC=3.14'
R=2.00'
CH=2.83
N44°44'21"W

ARC=3.14'
R=2.00'
CH=2.83
N45°15'39"E

15.00'
S89°44'21"E

HEREBY GRANTED
BLANKET EASEMENT

20.00'

ROAD

WISCONSIN CENTRAL RAILROAD

S21°23'00"E
312.74'

S89°44'21"E
39.00'

N0°15'39"E
106.50'

HEREBY GRANTED
TO VILLAGE OF BUFFALO GROVE
20' PUBLIC UTILITIES & DRAINAGE EASEMENT

N0°15'39"E
134.00'

NON-EASEMENT AREA

S0°15'39"W
134.00'

N89°44'21"W
39.00'

A=19.63'
R=12.50'
CH=17.68'
N44°44'21"W

N89°44'21"W
82.76'

PARCEL 1

LOT 1

AREA = 185,831 S.F OR 4.266 ACRES

A=35.76'
R=47.99'
CH=34.96'
N68°23'03"W

16.17'
N46°48'01"W

S21°23'00"E
(D)10.05'
(M)691.97'

A=21.29'
R=48.00'
CH=21.12'
N34°05'28"W

S88°31'00"W
4.00'

WESTERLY R.O.W. LINE OF WISCONSIN CENTRAL LTD.

15' SEWER EASEMENT PER DOC. 5919670

HEREBY GRANTED
BLANKET EASEMENT

N0°15'39"E
25.00'

N0°15'40"E
628.97'

N0°15'39"E
629.32'

(D)9.93 CHS.

CTY. HWY. W17

PRAIRIE ROAD

EAST LINE OF THE NE 1/4 OF SEC. 21-43-11

WEST R.O.W. LINE OF PRAIRIE ROAD, BY DOC. 2670564

EAST R.O.W. LINE OF PRAIRIE ROAD, BY DOC. 957784 REC., JULY 16, 1957.

S89°44'21"E
72.34'

N0°15'39"E
46.18'

(D&M)116.20'
124.26'
S21°23'00"E

(D)6.55 CHAINS
(M)412.09'
(D)413.30'

(R&M)40.13'

S89°44'21"E
35.00'

N89°44'21"W
39.00'

S89°44'21"E
60.00'

N89°44'21"W
39.00'

S89°44'21"E
38.00'

N89°44'21"W
39.00'

PARCEL 2

HEREBY GRANTED
BLANKET EASEMENT

HEREBY GRANTED
TO VILLAGE OF BUFFALO GROVE
STORMWATER DETENTION EASEMENT

A=70.44'
R=397.50'
CH=70.35'
N3°09'28"E

N0°53'25"W
14.04'

(R&M) 84.62'

DEDICATED PER DOC NO 969799 FROM OCT. 24, 1957

(R)86.87'
(M)86.98'

59.01'

P.O.B. OF PARCEL 2

S89°06'35"W
20.00'

(D)454.70'
413.75'
S89°06'35"W

S89°06'35"W
151.46'

(R&M)40.02'

40.00'

(D.1382.3'

CENTER OF SECTION 21

SOUTH LINE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 21 - 43 - 11

BLANKET EASEMENT PROVISIONS
AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND COMMUNICATION SERVICE IS HEREBY RESERVED FOR AND GRANTED TO COMMONWEALTH EDISON COMPANY, AT&T COMMUNICATIONS, SBC TELEPHONE COMPANY GRANTEES AND NORTH SHORE GAS COMPANY, THEIR RESPECTIVE LICENSEES, SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO CONSTRUCT, OPERATE, REPAIR, MAINTAIN, MODIFY, RECONSTRUCT, REPLACE, SUPPLEMENT, RELOCATE AND REMOVE, FROM TIME TO TIME, POLES, GUYS, ANCHORS, WIRES, CABLES, CONDUITS, MANHOLES, TRANSFORMERS, PEDESTALS, EQUIPMENT CABINETS, PIPES OR OTHER FACILITIES USED IN CONNECTION WITH OVERHEAD AND UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, COMMUNICATIONS, SOUNDS AND SIGNALS AND GAS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) ON THE PLAT AND MARKED "BLANKET EASEMENT", "B.U.E" (OR SIMILAR DESIGNATION), THE PROPERTY DESIGNATED IN THE DECLARATION OF CONDOMINIUM AND/OR ON THIS PLAT AS "COMMON ELEMENTS", AND THE PROPERTY DESIGNATED ON THE PLAT AS "COMMON AREA OR AREAS", AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHTS TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS, THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES, ROOTS AND SAPLINGS AND TO CLEAR OBSTRUCTIONS FROM THE SURFACE AND SUBSURFACE AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER OR UNDER GRANTEES' FACILITIES WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

THE TERM "COMMON ELEMENTS" SHALL HAVE THE MEANING SET FORTH FOR SUCH TERM IN THE "CONDOMINIUM PROPERTY ACT", CHAPTER 765 ILCS 605/2(C), AS AMENDED FROM TIME TO TIME. THE TERM "COMMON AREA OR AREAS" IS DEFINED AS A LOT, PARCEL OR AREA OF REAL PROPERTY, THE BENEFICIAL USE AND ENJOYMENT OF WHICH IS RESERVED IN WHOLE OR AS AN APPURTENANCE TO THE SEPARATELY OWNED LOTS, PARCELS OR AREAS WITHIN THE PLANNED DEVELOPMENT, EVEN THOUGH SUCH BE OTHERWISE DESIGNATED ON THE PLAT BY TERMS SUCH AS "OUTLOTS", "COMMON ELEMENTS", "OPEN SPACE", "OPEN AREA", "COMMON GROUND", "PARKING" AND "COMMON AREA". THE TERM "COMMON AREA OR AREAS", AND "COMMON ELEMENTS" INCLUDE REAL PROPERTY SURFACED WITH INTERIOR DRIVEWAYS AND WALKWAYS, BUT EXCLUDES REAL PROPERTY PHYSICALLY OCCUPIED BY A BUILDING MARKED "NON EASEMENT AREA", SERVICE BUSINESS DISTRICT OR STRUCTURES SUCH AS A POOL, RETENTION POND OR MECHANICAL EQUIPMENT. RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT COST OF THE GRANTOR/LOT OWNER, UPON WRITTEN REQUEST.

EASEMENT PROVISIONS
AN BLANKET EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC SOUNDS AND SIGNALS AND COMMUNICATIONS SERVICE IS HEREBY GRANTED TO **VILLAGE OF BUFFALO GROVE**
ITS SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE, MAINTAIN AND REMOVE, FROM TIME TO TIME, FACILITIES USED IN CONNECTION WITH UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, SOUNDS AND SIGNALS, INCLUDING BUT NOT LIMITED TO, TELEVISION, DATA AND RADIO SIGNALS AND COMMUNICATIONS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) ON THE PLAT AND MARKED "BLANKET EASEMENT", "B.U.E" (OR SIMILAR DESIGNATION), THE PROPERTY DESIGNATED IN THE DECLARATION OF CONDOMINIUM AND/OR ON THIS PLAT AS "COMMON ELEMENTS", AND THE PROPERTY DESIGNATED ON THE PLAT AS "COMMON AREA OR AREAS", AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHTS TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS, AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTION UNDER THE SURFACE OF EACH LOT TO SERVE IMPROVEMENTS THEREON, THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE DOTTED LINES MARKED "NON EASEMENT AREAS" WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

LEGEND
- 15' SEWER EASEMENT PER DOC. 5919670
- PROPOSED LOT LINE
- LOT - PROPOSED LOT NUMBER
- LOT - EXISTING LOT NUMBER
- TRAFFIC FLOW DIRECTIONAL'S

PROJECT No.: 2022-30698-1	PLAT PREPARED FOR: **CORNERSITE LLC** 3190 DOOLITTLE DR. NORTHBROOK, IL 60062 TEL. 847-230-1344	PLAT PREPARED BY: UNITED SURVEY SERVICE, LLC CONSTRUCTION AND LAND SURVEYORS 7710 CENTRAL AVENUE, RIVER FOREST, IL 60305 TEL.: (847) 299 - 1010 FAX : (847) 299 - 5887 E-MAIL: USURVEY@USANDCS.COM
ISSUE DATE: 05/01/2023		
SCALE: 1"=30'		
SHEET NUMBER 2 OF 2		

NO.	REVISIONS	DATE
1		
2		
3		
4		
5		
6		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

SEND TAX BILL TO :
BLOOM STREET PARTNERS, LLC
3190 DOOLITTLE DR
NORTHBROOK, IL 60062

PRAIRIE POINTE SUBDIVISION

MAIL PLAT TO:
VILLAGE OF BUFFALO GROVE
50 RAUPP BOULEVARD,
BUFFALO GROVE, IL 60089

BEING PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS.

KNOWN AS: **22825 N. PRAIRIE ROAD, BUFFALO GROVE, ILLINOIS**
22771 N. PRAIRIE ROAD, BUFFALO GROVE, ILLINOIS

TOTAL SUBDIVISION AREA: 185,831 S.F. OR 4.266 ACRES

OWNER'S CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

THIS IS TO CERTIFY THAT **BLOOM STREET PARTNERS, LLC** IS THE OWNER OF THE LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE/SHE HAS CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS INDICATED HEREON FOR THE USES AND PURPOSES HEREIN SET FORT, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON INDICATE.

ADDITIONALLY, WE HEREBY CERTIFY THAT THE PROPERTY HEREON DESCRIBED IS LOCATED WITHIN THE BOUNDARIES OF:

STEVENSON HIGH SCHOOL DISTRICT #125
LINCOLNSHIRE-PRAIRIE VIEW SCHOOL DISTRICT #103

DATED THIS _____DAY OF _____, A.D. 20___.

BY:_____
OWNER'S SIGNATURE TITLE:

ADDRESS: **BLOOM STREET PARTNERS, LLC**
3190 DOOLITTLE DR
NORTHBROOK, IL 60062

NOTARY CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

I,_____, A NOTARY PUBLIC IN AND FOR SAID COUNTY IN THE STATE AFORESAID DO HEREBY CERTIFY THAT _____

_____

PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AS OWNER OF THE PROPERTY DESCRIBED HEREON, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED _____ SIGNED THE SAID INSTRUMENT AS _____ OWN FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS_____DAY OF _____, 20___.

BY:_____
NOTARY PUBLIC

COMMISSION EXPIRES_____

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

THE INSTRUMENT FILED FOR RECORD IN THE RECORDER'S OFFICE OF LAKE COUNTY, ILLINOIS, ON THIS _____ DAY OF _____20__, A.D., AT _____ O'CLOCK ___M.
AND RECORDED AS DOCUMENT NUMBER _____

_____
COUNTY RECORDER

CERTIFICATE OF THE COUNTY CLERK

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, _____, COUNTY CLERK OF LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, UNPAID CURRENT GENERAL TAXES, DELINQUENT SPECIAL ASSESSMENTS OR UNPAID CURRENT SPECIAL ASSESSMENTS AGAINST ANY OF THE LAND INCLUDED IN THE DESCRIBED PROPERTY.
I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF LAKE COUNTY, ILLINOIS.

DATED THIS _____ DAY OF _____20__, A.D., AT _____ O'CLOCK, AT _____, ILLINOIS.

BY: _____
LAKE COUNTY CLERK

APPROVED BY THE PLAN COMMISSION OF THE CITY OF HIGHLAND PARK, THIS DAY OF _____ A.D.

_____
CHAIR

DRAINAGE STATEMENT:

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF THE SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISIONS HAVE BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS _____DAY OF _____,A.D. 20___.

_____
OWNER

_____
OWNER

BY:_____
ENGINEER

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT OF §2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS," AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL, BE REQUIRED BY THE DEPARTMENT.

_____
JOSE RIOS, P.E.
REGION ONE ENGINEER

EASEMENT PROVISIONS:
AN EASEMENT FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, WATER SUPPLY AND DISTRIBUTION, SEWERAGE, STORM SEWER AND DRAINAGE, AND STREET LIGHTING, IS HEREBY RESERVED FOR AND GRANTED TO
VILLAGE OF BUFFALO GROVE ITS SUCCESSORS AND ASSIGNS TO INSTALL. OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES USED FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, WATER SUPPLY AND DISTRIBUTION, SEWERAGE, STORM SEWER AND DRAINAGE, AND STREET LIGHTING IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE DOTTED LINES ON THE PLAT AND MARKED "EASEMENT," . ALSO GRANTED HEREWITH IS THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES, OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN. UPON OR OVER THE PROPERTY WITHIN THE BLANKET EASEMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF. DETENTION BASIN AND WETLANDS WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION, AND THE VILLAGE SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO PERFORM MAINTENANCE SHOULD THE HOA FAIL TO DO SO, AND THE VILLAGE SHALL BE REIMBURSED FOR ANY COSTS INCURRED.

CORPORATE AUTHORITY'S CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF LAKE)

APPROVED AND ACCEPTED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, AT A MEETING HELD THIS_____ DAY _____, A.D. 20____.

BY:_____
VILLAGE PRESIDENT

ATTEST:_____
VILLAGE CLERK

PLAN COMMISSION'S CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF LAKE)

APPROVED AND ACCEPTED BY THE PLAN COMMISSION OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, AT A MEETING HELD THIS_____ DAY _____,A.D. 20___.

BY:_____
CHAIRMAN OF THE PLAN COMMISSION

ATTEST:_____
SECRETARY

VILLAGE COLLECTOR CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF LAKE)

I, _____ COLLECTOR FOR THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, DO HEREBY CERTIFY THAT I FIND NO DELINQUENT GENERAL TAXES, DELINQUENT SPECIAL ASSESSMENTS OR UNPAID CURRENT SPECIAL ASSESSMENTS DUE AGAINST THE LAND INCLUDED IN THE PLAN HEREON DRAWN.

DATED THIS_____ DAY OF_____, A.D. 20____.

BY:_____
VILLAGE COLLECTOR

VILLAGE ENGINEER'S CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF LAKE)

I, _____ENGINEER OF THE VILLAGE OF BUFFALO GROVE DO HEREBY APPROVE THIS PLAT WHICH MEETS THE MINIMUM REQUIREMENTS OF THE SAID CITY.

COOK AND LAKE COUNTIES, ILLINOIS, THIS_____DAY OF_____,A.D.20__.

BY:_____
CITY ENGINEER

CERTIFICATE OF THE COUNTY ENGINEER:
STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)
I,_____, COUNTY ENGINEER OF SAID COUNTY, DO HEREBY CERTIFY THAT THE ANNEXED PLAT HAS BEEN EXAMINED BY ME AND FOUND TO COMPLY WITH THE HIGHWAY REQUIREMENTS AS SET FORTH IN THE REGULATIONS GOVERNING PLATS OF SUBDIVIDED LANDS ADOPTED BY THE COUNTY BOARD OF LAKE COUNTY, ILLINOIS.
DATED THIS ____ DAY OF_____, A.D. 20_____ AT .

_____
COUNTY ENGINEER

CERTIFICATE OF HIGHWAY ACCESS AUTHORITY:
STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)

THIS PLAT IS HEREBY APPROVED THIS_____ DAY OF_____, A.D. 20
BY THE COUNTY ENGINEER OF LAKE COUNTY PURSUANT TO CHAPTER 765, ACT 205, SECTION 2 OF THE ILLINOIS COMPILED STATUTES, AS AMENDED, AS TO ROADWAY ACCESS TO COUNTY HIGHWAY W17 ALSO KNOWN AS N. PRIAIRIE ROAD. DIRECT ACCESS EITHER TO OR FROM COUNTY HIGHWAY_____SHALL BE RESTRICTED AS SHOWN ON THIS PLAT AND SHALL BE SUBJECT TO THE LAKE COUNTY HIGHWAY ACCESS REGULATION ORDINANCE WHICH REQUIRES, IN PART, THAT APPLICATION BE MADE AND AN ACCESS PERMIT BE OBTAINED FROM THE COUNTY ENGINEER OF LAKE COUNTY PRIOR TO ANY ACCESS INSTALLATION.

_____
COUNTY ENGINEER

STATE OF ILLINOIS)
) SS:
COUNTY OF LAKE)
PERMANENT DEED RESTRICTION COVENANT BY PLAT

AS DESCRIBED ON THIS PLAT, FEE OWNER OF THE FOLLOWING DESIGNATED AND DESCRIBED REAL PROPERTY DESCRIBED HEREON AS PARCEL 1 AND 2 IN THE SURVEYORS CERTIFICATE, LOCATED IN THE VILLAGE OF BUFFALO GROVE, COUNTY OF LAKE, STATE OF ILLINOIS: HEREBY MAKES THE FOLLOWING DECLARATIONS AS TO LIMITATIONS, RESTRICTIONS AND USES TO WHICH THOSE AREAS DESIGNATED AS AREA OF PERMANENT DEED RESTRICTION AND STORMWATER DETENTION EASEMENT IN SAID PROPERTY MAY BE PUT, AND SPECIFIES THAT SUCH DECLARATIONS SHALL CONSTITUTE COVENANTS TO RUN WITH ALL THE LAND, AS PROVIDED BY LAW, AND SHALL BE BINDING ON ALL PARTIES AND THEIR SUCCESSORS, AND ALL PERSONS CLAIMING UNDER THEM, AND FOR THE BENEFIT OF AND LIMITATIONS ON ALL FUTURE OWNERS OF SAID PROPERTY AND THE SURROUNDING AND DOWNSTREAM AND UPSTREAM AREAS, THIS DECLARATION BEING IN COMPLIANCE WITH APPLICABLE WETLAND REGULATIONS, STORMWATER AND DRAINAGE RULES, AND ORDINANCES AS SPECIFIED HEREIN:
1. PURPOSE.
THE PURPOSE OF THIS RESTRICTIVE COVENANT IS TO PERPETUALLY PRESERVE THE WETLAND(S) AND ASSOCIATED BUFFER(S) IN THEIR NATURAL CONDITION. SPECIFICALLY, THIS COVENANT WILL SERVE TO PROTECT THE WETLAND AND BUFFER AREAS IDENTIFIED IN THE PERMIT DOCUMENTS_____.
2. PROHIBITED ACTIONS. ANY ACTIVITY ON, OR USE OF, THE WETLAND AND BUFFER THAT IS INCONSISTENT WITH THE PURPOSE OF THIS COVENANT IS EXPRESSLY PROHIBITED. BY WAY OF EXAMPLE, BUT NOT BY WAY OF LIMITATION, THE FOLLOWING ACTIVITIES AND USES ARE EXPLICITLY PROHIBITED:
i. DIVISION. ANY DIVISION OR SUBDIVISION OF THE WETLAND AND BUFFER AREAS IS PROHIBITED.
ii. COMMERCIAL ACTIVITIES. ANY COMMERCIAL ACTIVITY ON THE WETLAND AND BUFFER AREAS, EXCEPT FOR PASSIVE RECREATIONAL ACTIVITY, IS PROHIBITED.
iii. INDUSTRIAL ACTIVITIES. ANY INDUSTRIAL ACTIVITY ON THE WETLAND AND BUFFER AREAS IS PROHIBITED.
iv. CONSTRUCTION. THE PLACEMENT OR CONSTRUCTION OF ANY HUMAN-MADE STRUCTURE OR FEATURE ON THE
WETLAND AND BUFFER AREAS INCLUDING, BUT NOT LIMITED TO, BUILDINGS, FENCES, ROADS, AND PARKING LOTS IS PROHIBITED.
v. VEGETATION. ANY CUTTING, MOWING, PLOWING, OR REMOVAL OF TREES OR OTHER VEGETATION IN THE WETLAND AND BUFFER AREAS IS PROHIBITED, EXCEPT FOR THE CUTTING OR REMOVAL OF TREES WHICH POSE A THREAT TO HUMAN LIFE OR PROPERTY. REMOVAL OF NON-NATIVE VEGETATION FROM THE WETLAND AND BUFFER AREAS IS PERMITTED, IF CONDUCTED IN ACCORDANCE WITH AN APPROVED MAINTENANCE PLAN.
vi. LAND SURFACE ALTERATION. ANY ALTERATION OF THE LAND SURFACE IN THE WETLAND AND BUFFER AREAS IS PROHIBITED, INCLUDING, BUT NOT LIMITED TO, THE PLACEMENT OF DREDGED OR FILL MATERIAL, EXCAVATION, AND GRADING. IN ADDITION, MINING OF ANY SUBSTANCE THAT MUST BE QUARRIED OR REMOVED BY METHODS THAT WILL CONSUME OR DEPLETE THE SURFACE ESTATE, INCLUDING, BUT NOT LIMITED TO, THE REMOVAL OF TOPSOIL, SAND, GRAVEL, ROCK, AND PEAT, AND EXPLORING FOR, DEVELOPING, AND EXTRACTING OIL, GAS, HYDROCARBONS, OR PETROLEUM PRODUCTS ARE ALL PROHIBITED ACTIVITIES IN THE WETLAND AND BUFFER AREAS.
vii. UTILITIES. UNLESS INCLUDED AS PART OF THE PERMITTED PLANS, NO UNDERGROUND OR OVERHEAD UTILITY LINES SHALL BE ALLOWED IN THE WETLAND AND BUFFER AREAS, INCLUDING, BUT NOT LIMITED TO SEWER, WATER, ELECTRICAL, GAS, TELEPHONE, AND CABLE TELEVISION. EXISTING LINES MAY REMAIN, BUT ANY PROPOSED MAINTENANCE WORK REQUIRING INTRUSION INTO WETLAND AND BUFFER AREAS SHALL REQUIRE PRIOR WRITTEN AUTHORIZATION FROM THE LAKE COUNTY STORMWATERMANAGEMENT COMMISSION ("SMC"), EXCEPT FOR EMERGENCY REPAIR OF UTILITY LINES THAT POSE A THREAT TO HUMAN HEALTH AND SAFETY.
viii. DUMPING. WASTE, DEBRIS, AND UNSIGHTLY OR OFFENSIVE MATERIAL IS NOT ALLOWED AND MAY NOT BE ACCUMULATED ON THE WETLAND AND BUFFER AREAS.
ix. WATER COURSES. NATURAL WATER COURSES, LAKES, WETLANDS, OR OTHER BODIES OF WATER MAY NOT BE ALTERED. OFF-ROAD RECREATIONAL VEHICLES. MOTORIZED OFF-ROAD VEHICLES INCLUDING, BUT NOT LIMITED TO, SNOWMOBILES, DUNE BUGGIES, ALL-TERRAIN VEHICLES, AND MOTORCYCLES MAY NOT BE OPERATED ON THE WETLAND AND BUFFER AREAS, EXCEPT ON DESIGNATED TRAILS SHOWN ON THE PERMITTED PLANS.
xi. SIGNS AND BILLBOARDS. BILLBOARDS ARE PROHIBITED. SIGNS ARE PROHIBITED, EXCEPT THE FOLLOWING SIGNS MAY BE DISPLAYED TO SPECIFICALLY STATE: 1) THE NAME AND ADDRESS OF THE PROPERTY OR THE OWNER'S NAME;.2) THE AREA IS A PROTECTED WETLAND/CONSERVATION AREA; 3) PROHIBITION OF ANY UNAUTHORIZED ENTRY OR USE; OR 4) AN ADVERTISEMENT FOR THE SALE OR RENT OF THE PROPERTY.
3. TERM. THIS COVENANT IS TO RUN WITH THE LAND AND SHALL BE BINDING ON ALL PARTIES AND THEIR SUCCESSORS AND ALL PERSONS CLAIMING UNDER THEM, AND ALL PUBLIC AGENCIES, FOR PERPETUITY FROM THE DATE THESE COVENANTS ARE RECORDED.
4. ENFORCEMENT. ENFORCEMENT SHALL BE BY PROCEEDINGS AT LAW OR IN EQUITY AGAINST ANY PERSON VIOLATING OR THREATENING TO VIOLATE ANY COVENANT EITHER TO RESTRAIN VIOLATION OR TO RECOVER DAMAGES. ENFORCEMENT MAY BE UNDERTAKEN BY ANY GRANTOR OR GRANTEE IN THE CHAIN OF TITLE, ANY ADJOINING PROPERTY OWNER, ANY PROPERTY OWNER LYING DOWNSTREAM OR UPSTREAM ADVERSELY EFFECTED BY ANY VIOLATION OR THREAT TO VIOLATE THIS COVENANT,
THE HOST MUNICIPALITY, THE SMC, OR THE U.S. ARMY CORPS OF ENGINEERS ("USACE").
5. REFERENCE. THIS RESTRICTIVE COVENANT SHALL BE REFERENCED ON THE DEED OR OTHER INSTRUMENTS OF CONVEYANCE
FOR SAID PROPERTY.

PERMISION TO RECORD CERTIFICATE:

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)
I, ROY G. LAWNICZAK, A REGISTERED PROFESSIONAL ILLINOIS LAND SURVEYOR NO. 35 - 2290, DO HEREBY CERTIFY GRANT PERMISSION _____ TO RECORD THIS PLAT AND PROVIDE A COPY OF SAME.

DATED THIS DAY OF _____, A.D. 20___,

BY:_____
ROY G. LAWNICZAK, REGISTERED ILLINOIS LAND SURVEYOR NO. 35-2290
LICENSE EXPIRES: NOVEMBER 30, 2024
PROFESSIONAL DESIGN FIRM LICENSE NO.: 184-004576
LICENSE EXPIRES: APRIL 30, 2025

ROY G. LAWNICZAK 35-002290 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS CHICAGO, IL

LAND SURVEYOR'S CERTIFICATION:

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

I, ROY G. LAWNICZAK, A REGISTERED PROFESSIONAL ILLINOIS LAND SURVEYOR NO. 35 - 2290, DO HEREBY CERTIFY THAT I HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

PARCEL 1
A PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, AND DESCRIBED AS FOLLOWS: BEGINNING AT THE CENTER OF THE HALF DAY AND MCHENRY ROAD AND THE QUARTER SECTION LINE RUNNING NORTH AND SOUTH THROUGH THE ABOVE MENTIONED SECTION 21; THENCE RUNNING SOUTH ALONG SAID QUARTER SECTION LINE 9.93 CHAINS; THENCE EAST 6.55 CHAINS TO THE WEST LINE OF THE RIGHT OF WAY OF THE WISCONSIN CENTRAL RAILWAY (NOW CALLED MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RAILWAY); THENCE NORTHWESTERLY ALONG SAID WEST LINE OF SAID RIGHT OF WAY 10.50 CHAINS TO THE CENTER OF THE ABOVE MENTIONED HALF DAY AND MCHENRY ROAD; THENCE WEST 2.64 CHAINS TO THE POINT OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

PARCEL 2
THAT PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE WEST LINE OF THE NORTHEAST 1/4, 1382.3 FEET NORTH OF THE SOUTHWEST CORNER THEREOF; THENCE NORTH ON SAID WEST LINE OF THE NORTH EAST 1/4, 84.62 FEET; THENCE NORTHEASTERLY WITH AN ANGLE OF 85 DEGREES 09 MINUTES TO THE RIGHT OF THE LAST MENTIONED LINE, AS PRODUCED NORTHERLY 413.3 FEET TO THE WESTERLY RIGHT OF WAY LINE OF THE SOO LINE RAILROAD; THENCE SOUTHEASTERLY ON THE WESTERLY LINE OF SAID RAILROAD RIGHT OF WAY, 116.2 FEET; THENCE WESTERLY 454.7 FEET TO THE POINT OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

I FURTHER CERTIFY THAT THE SUBJECT PROPERTY IS DESIGNATED AS UNSHADED ZONE -"X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN IN THE FLOOD INSURANCE RATE MAP (FIRM) THE VILLAGE OF BUFFALO GROVE, ILLINOIS, COMMUNITY NUMBER 170357, PANEL NUMBER 0286K, MAP 17097C0254K EFFECTIVE DATE SEPTEMBER 18, 2013, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

THE PLAT HEREON DRAWN IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY AND ACCURATELY DEPICTS SAID PROPERTY. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. I FURTHER CERTIFY THAT THE PROPERTY SHOWN ON THE PLAT HEREON DRAWN IS SITUATED WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS ADOPTED A COMPREHENSIVE PLAN AND WHICH IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE.

I FURTHER CERTIFY THAT NO PART OF THE PROPERTY COVERED BY THIS PLAT OF SUBDIVISION IS SITUATED WITHIN 500 FEET OF A SURFACE DRAIN OR WATER COURSE SERVING A TRIBUTARY AREA OF 640 ACRES OR MORE.

I FURTHER CERTIFY THAT MONUMENTS DESIGNATED IRON PIPES AND / OR CONCRETE MONUMENTS ON THIS PLAT HAVE BEEN SET AT ALL LOT CORNERS.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF AND ARE CORRECTED TO A TEMPERATURE OF 68 DEGREES FAHRENHEIT.

GIVEN UNDER MY HAND AND SEAL THIS 1st DAY OF MAY, 2023 AT RIVER FOREST, ILLINOIS.

BY:_____
ROY G. LAWNICZAK, REGISTERED ILLINOIS LAND SURVEYOR NO. 35-2290
LICENSE EXPIRES: NOVEMBER 30, 2024
PROFESSIONAL DESIGN FIRM LICENSE NO.: 184-004576
LICENSE EXPIRES: APRIL 30, 2025

ROY G. LAWNICZAK 35-002290 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS CHICAGO, IL

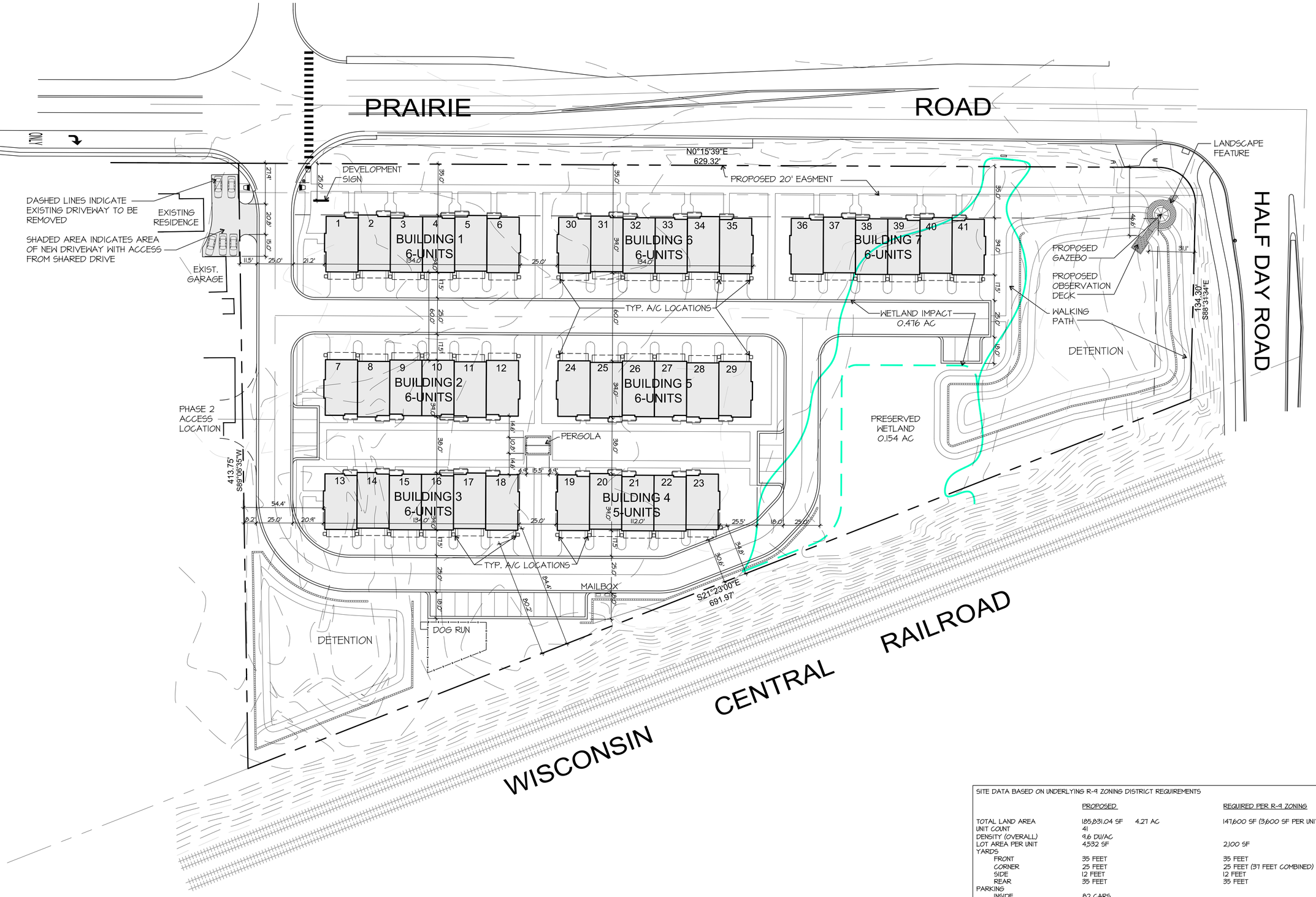
PROJECT No.:	2022-30698-1
ISSUE DATE:	05/01/2023
SCALE:	1"=30'
SHEET NUMBER	1 OF 2

PLAT PREPARED FOR:
CORNERSITE LLC
3190 DOOLITTLE DR.
NORTHBROOK, IL 60062
TEL. 847-230-1344

PLAT PREPARED BY:
UNITED SURVEY SERVICE, LLC
CONSTRUCTION AND LAND SURVEYORS
7710 CENTRAL AVENUE, RIVER FOREST, IL 60305
TEL.: (847) 299 - 1010 FAX : (847) 299 - 5887
E-MAIL: USURVEY@USANDCS.COM

NO.	REVISIONS	DATE
1		
2		
3		
4		
5		
6		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



SITE DATA BASED ON UNDERLYING R-9 ZONING DISTRICT REQUIREMENTS			
	PROPOSED		REQUIRED PER R-9 ZONING
TOTAL LAND AREA	185,831.04 SF	4.27 AC	147,600 SF (3,600 SF PER UNIT)
UNIT COUNT	41		
DENSITY (OVERALL)	9.6 DU/AC		
LOT AREA PER UNIT	4,532 SF		2,100 SF
YARDS			
FRONT	35 FEET		35 FEET
CORNER	25 FEET		25 FEET (37 FEET COMBINED)
SIDE	12 FEET		12 FEET
REAR	35 FEET		35 FEET
PARKING			
INSIDE	82 CARS		
OUTSIDE	105 CARS		
TOTAL	187 CARS	4.56 PER UNIT	2 CARS PER UNIT
BUILDING HEIGHT	3 STORIES		45' OR 4 STORIES
PERVIOUS SPACE	95,743.98 SF	51.5 SF	

PRELIMINARY SITE PLAN

1"=30'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4.12.2023	SF	CIVIL COORDINATION
4.18.2023	SF	PUD REVIEW PACKAGE
5.17.2023	SF	REVISED PUD PACKAGE
5.30.2023	SF	PLAN REVIEW #2 REVISIONS
6.27.2023	SF	REVIEW #3

2022-0184
PROJECT NUMBER

01-30-2023
DATE

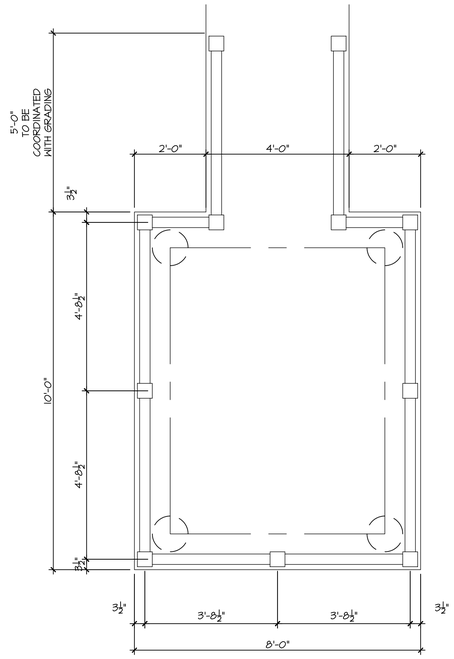
SF
DRAWN BY FINAL REVIEW

COPYRIGHT - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOCUMENTS ARE PROPRIETARY AND ARE THE EXCLUSIVE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
S-1.0
SHEET

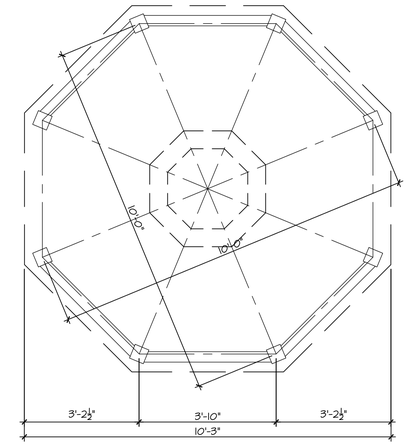
P:\2022\2022-0184\Drawing Files\Site-Land-Zoning\2022-0184_Site Plan 20230627.dwg 6/29/2023 12:57 PM SPARKES S-1.0
COPYRIGHT LINDEN GROUP INC.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



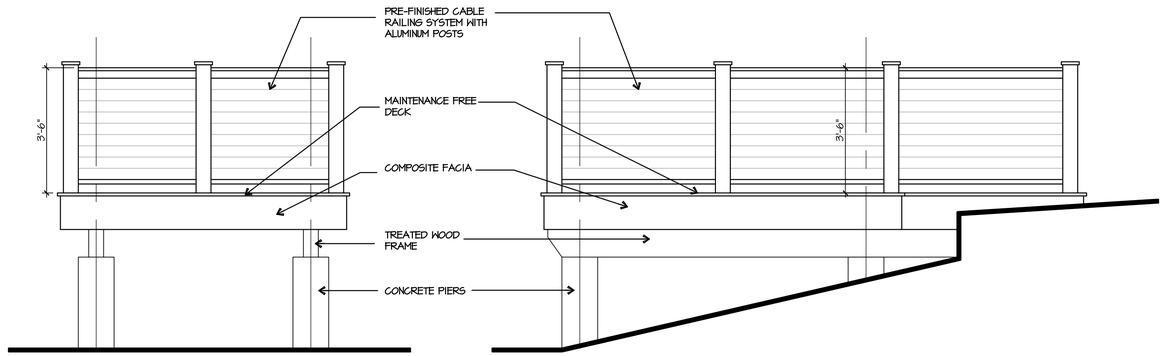
OBSERVATION DECK PLAN

1/2"=1'-0"



GAZEBO PLAN

1/2"=1'-0"

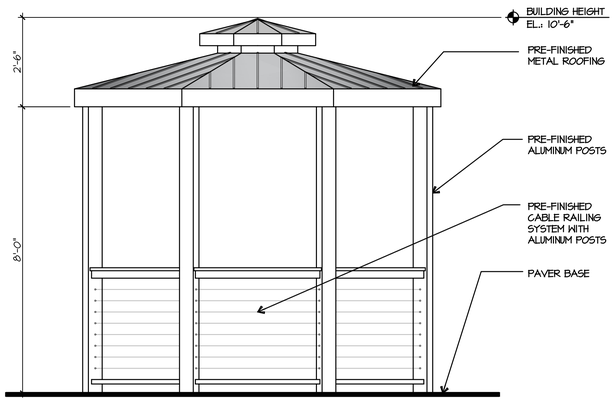


OBSERVATION DECK FRONT ELEVATION

1/2"=1'-0"

OBSERVATION DECK SIDE ELEVATION

1/2"=1'-0"



GAZEBO ELEVATION

1/2"=1'-0"

SITE AMENITIES PLAN

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	PUD REVIEW PACKAGE
5-17-2023	SF	REVISED PUD PACKAGE
5-30-2023	SF	PLAN REVIEW #2 REVISIONS
6-27-2023	SF	REVIEW #3

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED, OR REFERRED TO IN THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-2.0
SHEET

P:\2022\2022-0184\Drawing Files\Preliminary\2022-0184_Site Amenities.dwg 6/27/2023 1:36 PM SPARKES A-2.0
LINDEN GROUP INC

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



TYPICAL
REAR ELEVATION - 6 UNIT BUILDING

3/16" = 1'-0"



3-STORY
FRONT ELEVATION - 6 UNIT BUILDING

3/16" = 1'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	BID REVIEW PACKAGE
5-17-2023	SF	REVISED BID PACKAGE
5-30-2023	SF	PLAN REVIEW # 2 REVISIONS

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.0
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

P:\2022\2022-0184\Drawing Files\Preliminary\2022-0184_Elevation Design 20230530.dwg 5/30/2023 4:07 PM SPARKS 1=1.0
Plotted with PDFelement for Mac



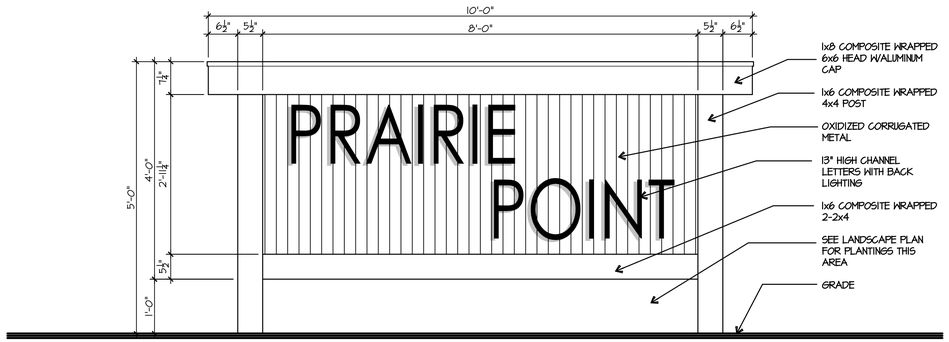
3-STORY
SIDE ELEVATION - UNIT A

3/16" = 1'-0"



3-STORY
ALTERNATE SIDE ELEVATION - UNIT A

3/16" = 1'-0"



SIGNAGE ELEVATION

3/4" = 1'-0"

ELEVATION KEY NOTES

1	ARCHITECTURAL ASPHALT SHINGLES
2	METAL ROOFING
3	1X6 ALUMINUM WRAPPED FASCIA
4	1x4 COMPOSITE TRIM
5	PRE-FINISHED METAL CANOPY WITH SUPPORT STRUTS
6	VINYL WINDOWS
7	JAMES HARDIE PANEL SIDING
8	JAMES HARDIE BOARD AND BATTEN SIDING
9	VINYL PATIO DOOR
10	JULIET BALCONY METAL RAILING
11	INSULATED / GLASS ENTRY DOOR
12	JAMES HARDIE LAP SIDING
13	WALL-MOUNTED LIGHT FIXTURE
14	PRE-FINISHED ALUMINUM DOWNSPOUT
15	PREFINISHED INSULATED OVERHEAD DOOR
16	CARPENTER-BUILT COMPOSITE WOOD DECK W/METAL RAILING
17	PRE-FINISHED ALUMINUM GUTTER ON 1x6 ALUMINUM WRAPPED FASCIA
18	INSULATED DOOR

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-19-2023	SF	BID/PERMIT PACKAGE
5-17-2023	SF	REVISED BID PACKAGE
5-30-2023	SF	PLAN REVIEW #2 REVISIONS

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT. - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.1
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

P:\2022\2022-0184\Drawing Files\Preliminary\2022-0184_Elevation Design 20230530.dwg 5/30/2023 4:07 PM SPARKES A-4.1



2 1/2-STORY
SIDE ELEVATION - UNIT C

1/4" = 1'-0"



2 1/2-STORY
FRONT ELEVATION - 6 UNIT BUILDING

1/4" = 1'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	PUD REVIEW PACKAGE
5-17-2023	SF	REVISED PUD PACKAGE
5-30-2023	SF	PLAN REVIEW #2 REVISIONS

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT – LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR RETURNED TO IN THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.2
SHEET

P:\2022\2022-0184\Drawing Files\Preliminary\2022-0184_Elevation Design 20230530.dwg 5/30/2023 4:27 PM SPENCER A-4.2
Spencer Linden Group Inc.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



TYPICAL
REAR ELEVATION - 5 UNIT BUILDING

3/16" = 1'-0"



3-STORY
FRONT ELEVATION - 5 UNIT BUILDING

3/16" = 1'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	BID REVIEW PACKAGE
5-17-2023	SF	REVISED BID PACKAGE
5-30-2023	SF	PLAN REVIEW #2 REVISIONS

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT. - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. NONE OF THE ABOVE MAY BE DISCLOSED TO ANY PERSONS FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.3
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

P:\2022\2022-0184\Drawing Files\Preliminary\2022-0184_Elevation Design 20230530.dwg 5/30/2023 4:27 PM SPARKS A-4.3
Plotted: 30x42 Xerox 6...



TYPICAL
REAR ELEVATION - 6 UNIT BUILDING
3/16" = 1'-0"



3-STORY
FRONT ELEVATION - 6 UNIT BUILDING
3/16" = 1'-0"

LINDENGROUP
ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTU
LANDSCAPE ARCHITECT
10100 ORLAND PARKWAY SUITE
ORLAND PARK, ILLINOIS 6(
(708) 799-4400
WWW.LINDENGROUPINC.CO

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	HUB REVIEW PACKAGE

2022-0184
PROJECT NUMBER
01-30-2023
DATE
SF
DRAWN BY
FINAL RE

COPYRIGHT - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANG
AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOC
ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROP
LINDEN GROUP INC., AND SHALL NOT BE USED IN WHOLE
WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.0
SHEET

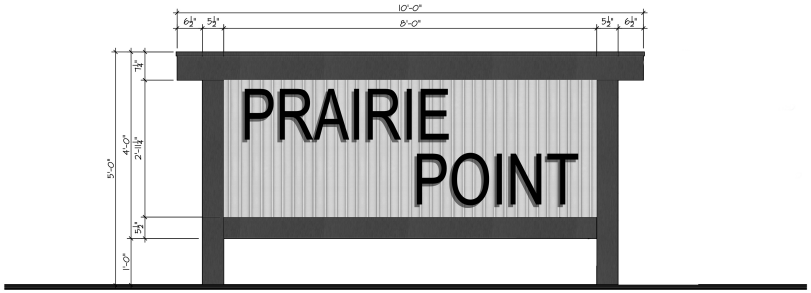
Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



3-STORY
SIDE ELEVATION - UNIT A
3/16" = 1'-0"



3-STORY
ALTERNATE SIDE ELEVATION - UNIT A
3/16" = 1'-0"



SIGNAGE ELEVATION
3/4" = 1'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTU
LANDSCAPE ARCHITECT

10100 ORLAND PARKWAY, SUITE
ORLAND PARK, ILLINOIS, 6(
(708) 799-4400
WWW.LINDENGROUPINC.CO

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD

DATE	DRAWN	DESCRIPTION
4.12.2022	SF	CIVIL COORDINATION
4.18.2022	SF	PUD REVIEW PACKAGE

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL RE

COPYRIGHT © LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANG
AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOC
ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROP
AND COPYRIGHT OF LINDEN GROUP INC. THESE DOCUMENTS MAY NO
BE REUSED OR USED FOR ANY PURPOSES WITHOUT THE EXPRESS
AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.1
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



2 1/2-STORY
SIDE ELEVATION - UNIT C
1/4" = 1'-0"



2 1/2-STORY
FRONT ELEVATION - 6 UNIT BUILDING
1/4" = 1'-0"

LINDENGROUP
ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTU
LANDSCAPE ARCHITECT
10100 ORLAND PARKWAY SUITE
ORLAND PARK, ILLINOIS 6
(708) 799-4400
WWW.LINDENGROUPINC.CO

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD

DATE	DRAWN	DESCRIPTION
4-12-2023	SF	CIVIL COORDINATION
4-18-2023	SF	HOA REVIEW PACKAGE

2022-0184
PROJECT NUMBER
01-30-2023
DATE
SF
DRAWN BY
FINAL RE

COPYRIGHT - LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANG
AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOC
ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROP
LINDEN GROUP INC., AND SHALL NOT BE USED IN WHOLE OR
PART FOR ANY PURPOSE WHATSOEVER WITHOUT THE EXPRESS
AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.2
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



TYPICAL
REAR ELEVATION - 5 UNIT BUILDING
3/16" = 1'-0"



3-STORY
FRONT ELEVATION - 5 UNIT BUILDING
3/16" = 1'-0"

LINDENGROUP
ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTU
LANDSCAPE ARCHITECT
10100 ORLAND PARKWAY SUITE
ORLAND PARK, ILLINOIS 6
(708) 799-4400
WWW.LINDENGROUPINC.CO

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD

DATE	DRAWN	DESCRIPTION
1-12-2023	SF	CIVIL COORDINATION
1-16-2023	SF	PUD REVIEW PACKAGE

2022-0184
PROJECT NUMBER
01-30-2023
DATE
SF
DRAWN BY
FINAL RE

COPYRIGHT © LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANG
AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOC
ARE INSTRUMENTS OF SERVICE, AND THEREFORE ARE THE PROP
AND COPYRIGHT OF LINDEN GROUP INC. THEY ARE NOT TO BE
ANY PURPOSE FOR ANY PURPOSE WITHOUT THE EXPRESS
AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
A-4.3
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

PRAIRIE ROAD

HALF DAY ROAD

CONTINUED SINGLE-FAMILY LOTS
OR TRADITIONAL FRONT-LOAD TOWNHOMES
THIS AREA

BUILDING 13
3-UNITS
27 28 29

BUILDING 14
4-UNITS
30 31 32 33

BUILDING 1
6-UNITS
1 2 3 4 5 6

BUILDING 6
6-UNITS
30 31 32 33 34 35

BUILDING 7
6-UNITS
36 37 38 39 40 41

BUILDING 2
6-UNITS
7 8 9 10 11 12

BUILDING 5
6-UNITS
24 25 26 27 28 29

BUILDING 3
6-UNITS
13 14 15 16 17 18

BUILDING 4
5-UNITS
19 20 21 22 23

BUILDING 9
6-UNITS
12 11 10 9 8 7

BUILDING 8
6-UNITS
6 5 4 3 2 1

BUILDING 10
4-UNITS
13 14 15 16

BUILDING 11
5-UNITS
17 18 19 20 22

BUILDING 12
4-UNITS
23 24 25 26

N0°15'39"E
629.32'

S89°08'35"W
413.75'

S21°23'00"E
691.97'

134.30'
S88°31'34"E

DETENTION

DETENTION

DETENTION

PRESERVED
WETLAND

WISCONSIN CENTRAL RAILROAD

PHASE 2 ALTERNATE
PRELIMINARY SITE PLAN

1"=40'-0"

LINDENGROUP

ARCHITECTURE
LAND PLANNING
INTERIOR ARCHITECTURE
LANDSCAPE ARCHITECTURE

10100 ORLAND PARKWAY SUITE 110
ORLAND PARK, ILLINOIS 60467
(708) 799-4400
WWW.LINDENGROUPINC.COM

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
Buffalo Grove, Illinois

DATE DRAWN DESCRIPTION

2022-0184
PROJECT NUMBER

01-30-2023
DATE

SF
DRAWN BY FINAL REVIEW

COPYRIGHT — LINDEN GROUP INC.
ALL RIGHTS RESERVED.
ALL DRAWINGS, SPECIFICATIONS, PLANS, CONCEPTS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFERRED TO IN THESE DOCUMENTS (INSTRUMENTS OF SERVICE), AND THEREFORE ARE THE PROPERTY OF LINDEN GROUP INC. (LGI) WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF LINDEN GROUP INC.

SHEET NAME
S-1.1
SHEET

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

C:\Users\JSteen\Desktop\2022-0184\Planning Files\Site-Land_Zoning\2022-0184_Site Base with all parcel 20230202.dwg 2/3/2023 12:28 AM STEK S-1.1

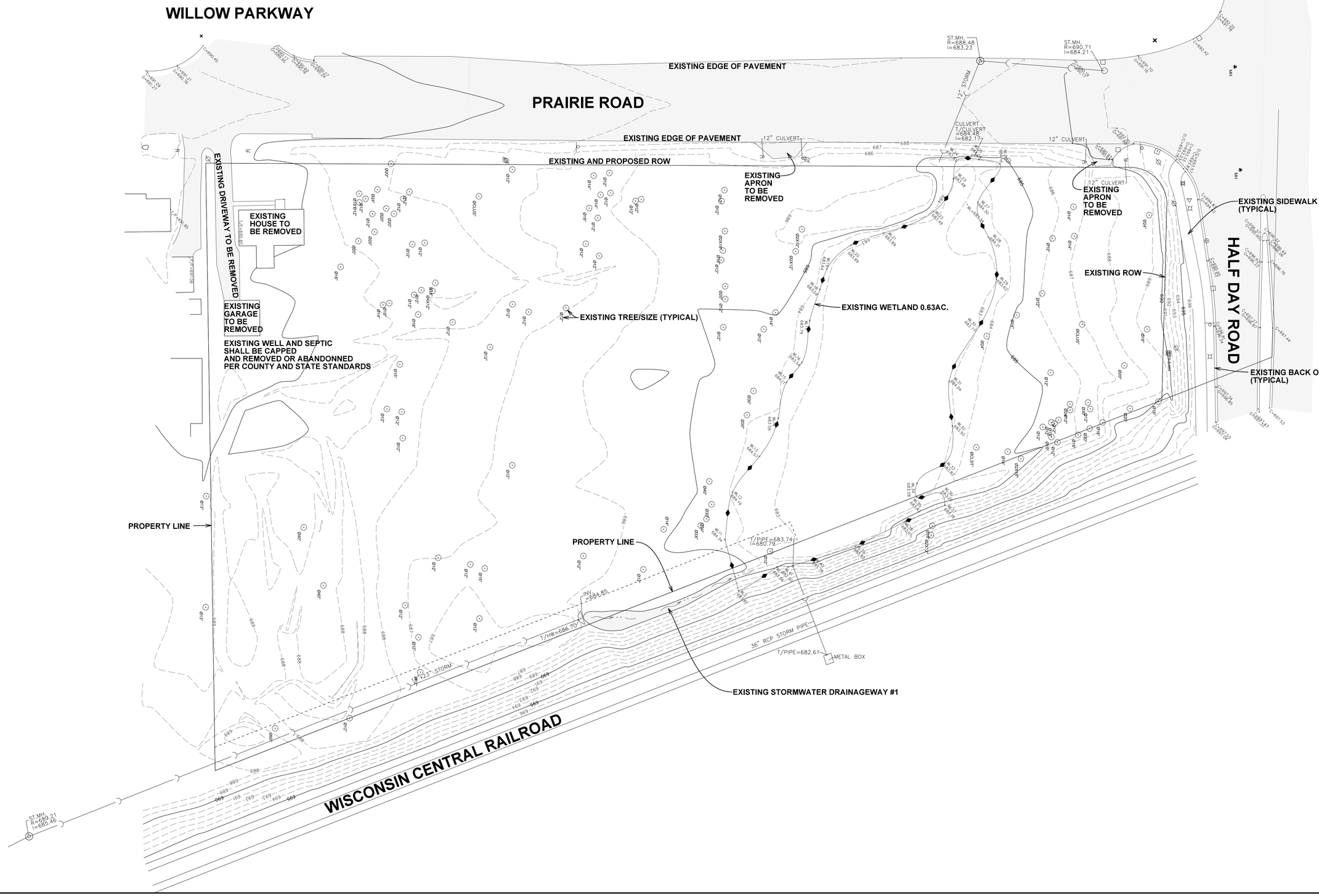
PRELIMINARY ENGINEERING

22825 N.PRAIRIE ROAD TOWNHOMES

BUFFALO GROVE, ILLINOIS

LOCATION MAP NORTH


PROJECT LOCATION
W Half Day Rd
W Half Day
22
Willow Pkwy
Willow Pkwy
Willow Pkwy



NORTH

SCALE: 1" = 30'

22825 N. PRAIRIE ROAD

BUFFALO GROVE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-6707
FAX: (847) 367-2267
E-MAIL ADDRESS: pba@pbaengineers.com

© COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

DESIGNED BY: D.S.H.
DRAWN BY: A.Z.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

REVISIONS

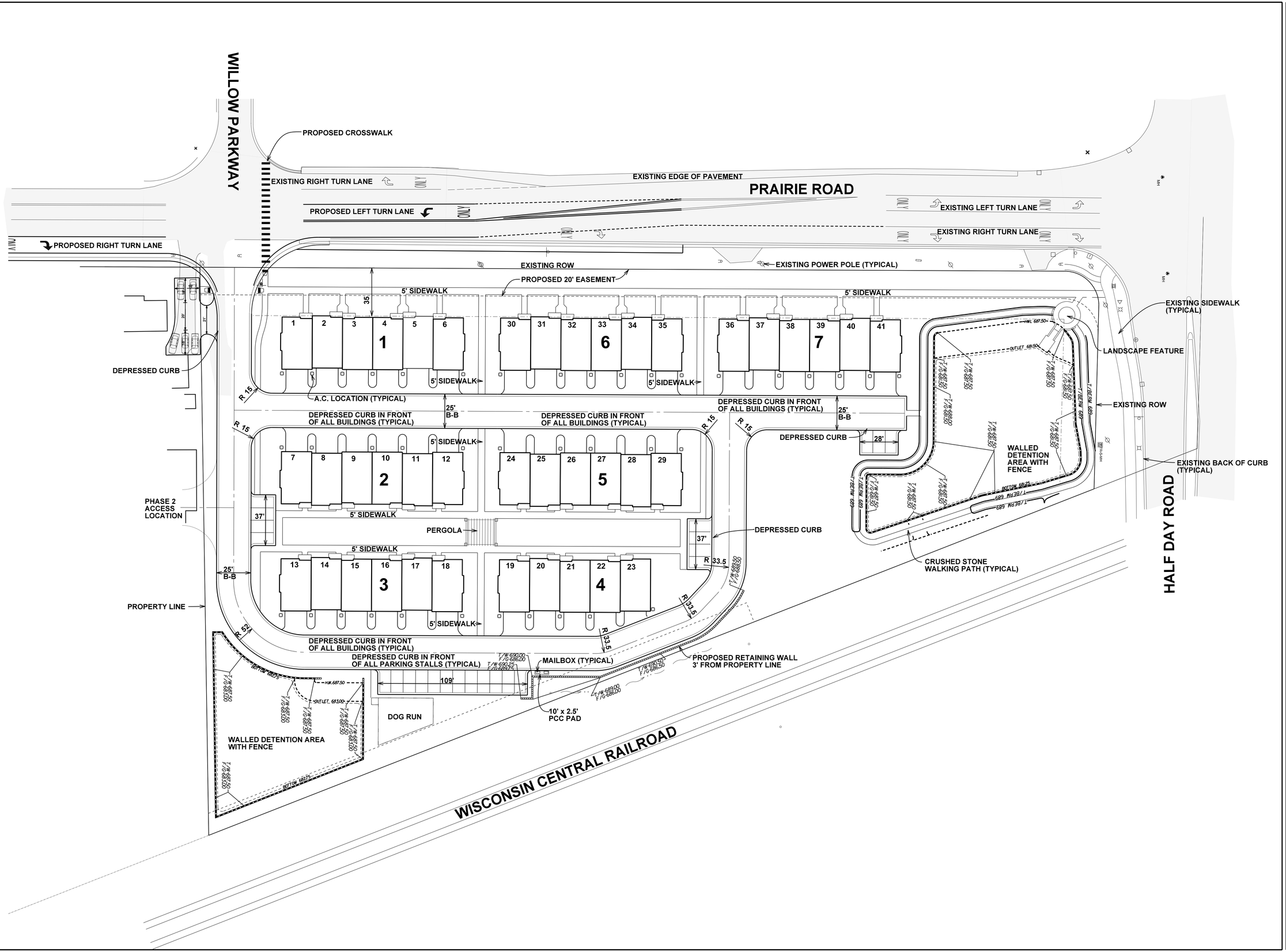
DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET NUMBER 2 OF 6 SHEETS

JOB No. 23102

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



NORTH

SCALE: 1" = 30'

22825 N. PRAIRIE ROAD

BUFFALO GROVE, ILLINOIS

DESIGNED BY: D.S.H.
DRAWN BY: A.Z.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-6707
FAX: (847) 367-2867
E-MAIL ADDRESS: pba@pbaengineers.com

© COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

REVISIONS

GEOMETRICS PLAN

SHEET NUMBER 3 OF 6 SHEETS

JOB No. 23102

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

22825 N. PRAIRIE ROAD

BUFFALO GROVE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-6707
FAX: (847) 367-2267
E-MAIL ADDRESS: pba@pbaengineers.com

© COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

DESIGNED BY: D.S.H.
DRAWN BY: A.Z.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

NORTH

SCALE: 1" = 30'

DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

REVISIONS

GRADING PLAN

HALF DAY ROAD

PRAIRIE ROAD

WILLOW PARKWAY

WISCONSIN CENTRAL RAILROAD

WALLED DETENTION AREA WITH FENCE
0.91 AC-FT

WALLED DETENTION AREA WITH FENCE
1.34 AC-FT

AREA OF WETLAND TO BE PRESERVED 0.54 AC

12" CULVERT

36" RCP STORM PIPE

T/PIPE=682.61

METAL BOX

14"x23" STORM

ST.MH. R=688.48 I=683.23

ST.MH. R=690.71 I=684.21

ST.MH. R=689.21 I=685.46

F/G 691.00

F/G 690.80

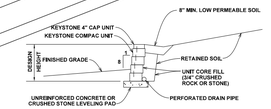
Description	Area (sf)	
6 unit bldgs	30648	
5 unit bldg	4292	
6 unit aprons	11640	
5 unit aprons	1691	
roadways	42598	
stoops	1558	
walks/paths	10800	
ac pads	369	
dog run	1050	
pergola slab	435	
landscape feature	515	
total	**105696**	**sf**
	2.42	**ac**
site area	4.27	ac
subtract area of w/l undisturbed (onsite)	-0.12	ac
add offsite widening dist. (added imp.)	0.16	ac
Total hydrologic disturbed area =	**4.31**	**ac**

Total proposed impervious = 2.42 ac (onsite) + 0.16 ac (offsite) = 2.58 ac

Composite CN determination using CN = 98 for impervious and CN = 80 (open space, good cond, HSG = "D")

	CN	mult
2.58	98	252.84
1.73	80	138.4
4.31		391.24
composite CN	**91**	

TYPICAL GRAVITY WALL SECTION (INTERLOCKING BLOCK)

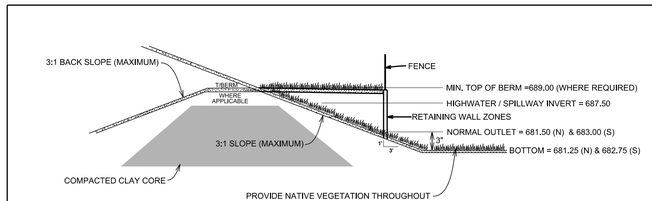


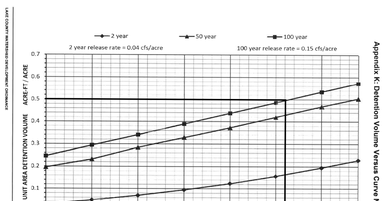
NOTE:
PROVIDE WEEP HOLES AT 20' INTERVALS

COMPACT UNIT - 1" MINIMUM SETBACK

NOTE: PROPOSED WALLS ABOVE 10" IN HEIGHT WILL REQUIRE STRUCTURAL DESIGN BY LICENSED ENGINEER IN ILLINOIS AND SPECIFIC SHOP DRAWINGS AND ALSO SAFETY RAILS/FENCES.

STORMWATER BASIN DETAIL - NATURALIZED TWO INTER-CONNECTED ZONES - SINGLE SYSTEM





REQUIRED DETENTION VOLUME
(4.31 AC) x (0.50 AC-FT/AC) = 2.16 AC-FT
VOLUME PROVIDED = 2.25 AC-FT

SHEET NUMBER
4
OF 6 SHEETS

JOB No. 23102

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

NOTE:

Temporary stabilized construction entrance located in proposed driveway, and a concrete washout, shall be required at the time of each building permit/construction.

PROJECT NOTES:

1. Topography provided by United Survey Service, LLC.
2. Contractor shall call JULIE at least 48 hours prior to start of construction.
3. Silt fence shall be installed by the contractor and inspected by the Village prior to start of construction.
4. Contractor shall verify the location and elevation of all wet and dry utilities prior to the start of construction. Exploratory digging may be necessary. The contractor shall notify the design engineer immediately of any discrepancies that are found.
5. Full depth saw-cut is required for all removals
6. Pavement restoration shall match the existing by type and thickness
7. Contractor shall remove and relocate, or reinstall any signs as needed for proposed improvements.
8. All disturbed areas shall be restored with minimum 4-inches of topsoil, seed and NAG S75 blanket, or approved equal.
9. All excavated material not used for site grading/respread shall be removed from the site.

Provide temporary removable inlet basket and monofilament fabric barrier until distrubed areas have been stabilized. (Typical)

Silt Fence (Typical)

Provide temporary removable inlet basket until disturbed areas have been stabilized. (Typical)

Approximate location of temporary topsoil stockpile surrounded with silt fence

DOUBLE-ROW Silt Fence (Typical)

AREA OF WETLAND TO BE PRESERVED 0.54 AC

36" RCP STORM PIPE

T/PIPE=682.61

METAL BOX

NORTH

SCALE: 1" = 30'

22825 N. PRAIRIE ROAD

BUFFALO GROVE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-6707
FAX: (847) 367-2267
E-MAIL ADDRESS: pba@pbaengineers.com

© COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

DESIGNED BY: D.S.H.
DRAWN BY: A.Z.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

REVISIONS

EROSION CONTROL PLAN

SHEET NUMBER **5** OF 6 SHEETS

JOB No. 23102

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

EXISTING 8" SANITARY SEWER

EXISTING SANITARY
INV. 682.30+/-

WILLOW PARKWAY

AUGER & PUSH 8" SANITARY SEWER
(TYPICAL)

EXISTING 8" WATERMAIN

CUT-IN TEE FOR CONNECTION

AUGER & PUSH 8" WATERMAIN
(TYPICAL)

ONLY

PRAIRIE ROAD

ST.MH.
R=688.48
I=683.23

ST.MH.
R=690.71
I=684.21

12" CULVERT

R-690.00
I-683.65 +/-

1 2 3 4 5 6 30 31 32 33 34 35 36 37 38 39 40 41

8" WATERMAIN (TYPICAL)

FIRE HYDRANT (TYPICAL)

8" WATERMAIN LOOP

R-690.00
I-686.30

R-690.30
I-684.10

7 8 9 10 11 12 24 25 26 27 28 29

4' VALVE VAULT (TYPICAL)

8" SANITARY SEWER (TYPICAL)

POTENTIAL
CONFLICT
MANHOLE
LOC.

24" STORM
TO OUTLET
CONTROLS

AREA OF WETLAND
TO BE PRESERVED
0.54 AC

SPILLWAY CREST 687.50

8" WATERMAIN STUB
FOR FUTURE CONNECTION

13 14 15 16 17 18 19 20 21 22 23

R-689.60
I-685.70

FIRE HYDRANT (TYPICAL)

OUTLET
CONTROL
STRUCTURE

12" F.E.S.

WISCONSIN CENTRAL RAILROAD

HALF DAY ROAD

BYPASS STORM OUTLET

18" STORM

36" RCP STORM PIPE

T/PIPE=682.61

METAL BOX

NOTE:
ALL STORM SEWER TO PROPOSED BASINS
SHALL BE 100 YEAR DESIGN INCLUDING INLET CAPACITY

NORTH

SCALE: 1" = 30'

22825 N. PRAIRIE ROAD

BUFFALO GROVE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-6707
FAX: (847) 367-2267
E-MAIL ADDRESS: pba@pbaengineers.com

© COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

DESIGNED BY: D.S.H.
DRAWN BY: A.Z.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

REVISIONS

DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

UTILITY PLAN

SHEET NUMBER 6 OF 6 SHEETS

JOB No. 23102

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

PRELIMINARY LANDSCAPE PLAN FOR:

22825 N. PRAIRIE ROAD

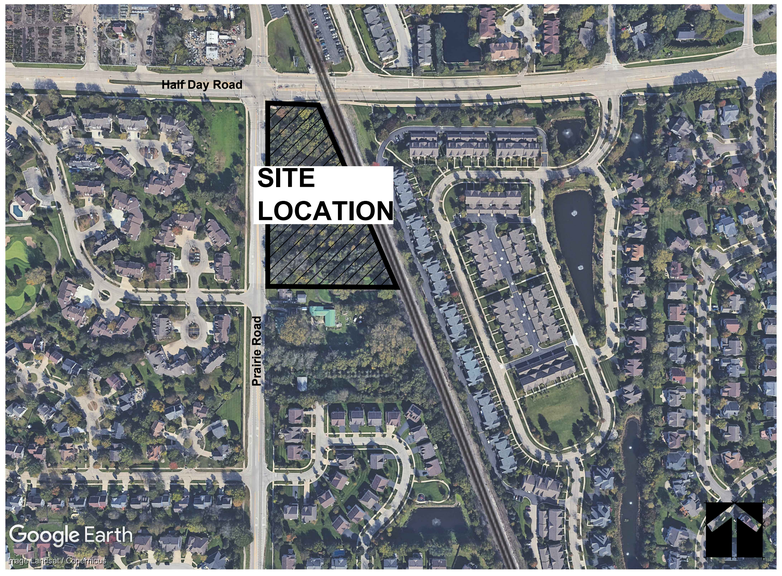
Buffalo Grove, IL

Engineer:
Pearson, Brown & Associates, Inc.
1850 W. Winchester Rd. Suite 205
Libertyville, IL 60048
847.367.6707

Architect:
Linden Group Architects, Inc.
10100 Orland Parkway, Suite 110
Orland Park, IL 60467
708.799.4400

Landscape Architect:
Metz & Company
826 E. Maple Street
Lombard, IL 60148
630.561.3903

Site Location Map



SHEET INDEX

SHEET	DESCRIPTION
CS-1.0	COVER SHEET
L-1.0	LANDSCAPE PLAN
L-2.0	NATURALIZED LANDSCAPE REQUIREMENTS
L-3.0	LANDSCAPE SPECIFICATIONS & DETAILS

Know what's below. Call before you dig.

REVISIONS

3	Gazebo Dimensions	6-27-23
2	New Site Plan	5-30-23
1	New Site Plan/Village Review	5-18-23

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
BUFFALO GROVE, ILLINOIS

SEAL:
STATE OF ILLINOIS
RANDY F. METZ
no. 157-000422
REGISTERED
LANDSCAPE ARCHITECT

METZ & COMPANY
LANDSCAPE ARCHITECTURE/SITE PLANNING
826 East Maple Street
Lombard, Illinois 60148
PH: 630.561.3903
www.metz-company.com

TITLE
LANDSCAPE PLAN

PROJECT NO.:
23-227

DATE: 4-27-2023

SCALE: 1"=40'

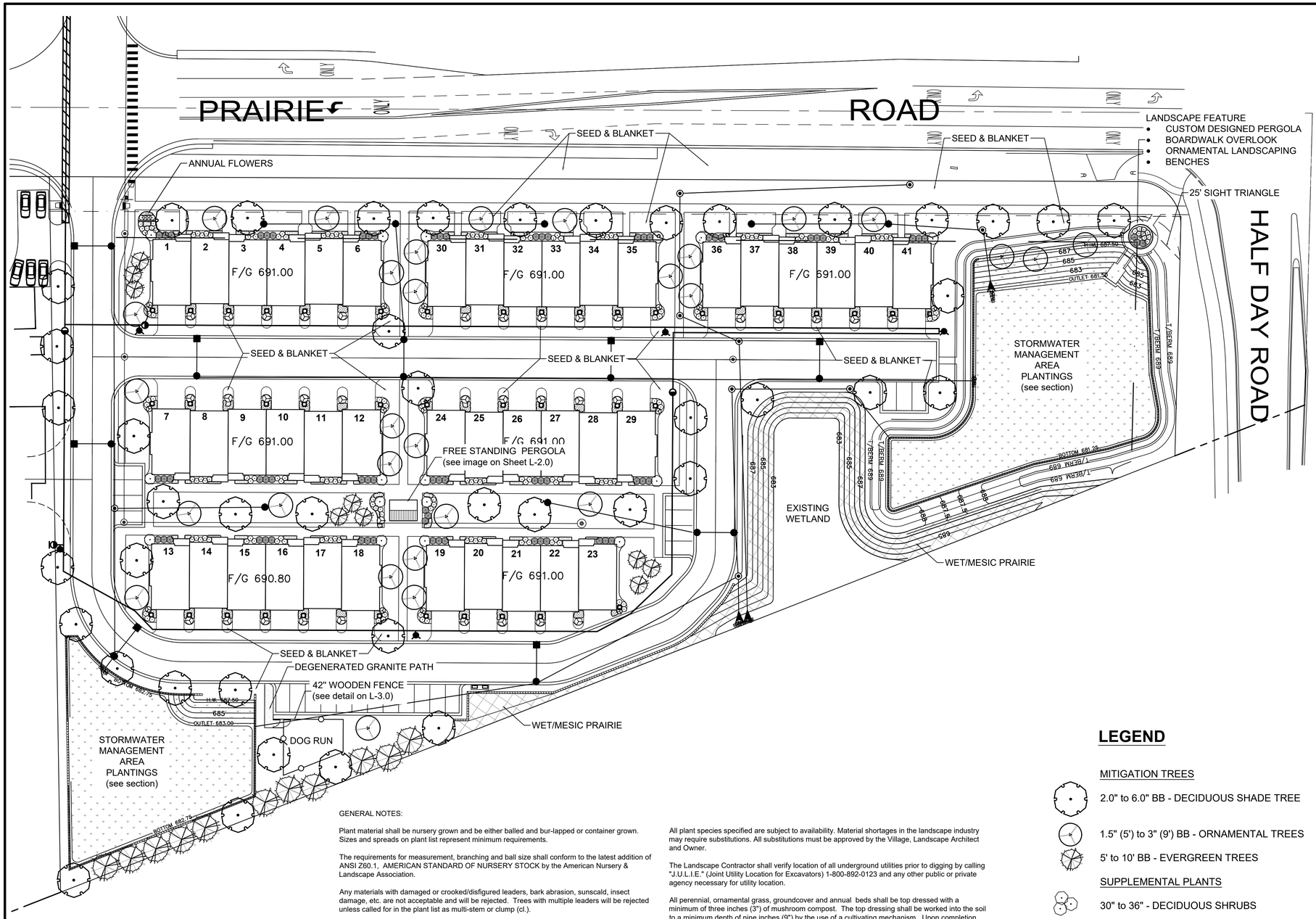
SHEET
CS-1.0

If this plan is not 24" x 36" in size, then it is a reproduction that may not be to scale

Any reproduction of the design or the concept embodied herein in any form, in whole or in part, without consent from Metz & Company is prohibited.

© Copyright 2023 all rights reserved. The design and any and all ideas contained herein are the sole property of Metz & Company.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



GENERAL NOTES:

Plant material shall be nursery grown and be either balled and bur-lapped or container grown. Sizes and spreads on plant list represent minimum requirements.

The requirements for measurement, branching and ball size shall conform to the latest addition of ANSI Z60.1, AMERICAN STANDARD OF NURSERY STOCK by the American Nursery & Landscape Association.

Any materials with damaged or crooked/disfigured leaders, bark abrasion, sunscald, insect damage, etc. are not acceptable and will be rejected. Trees with multiple leaders will be rejected unless called for in the plant list as multi-stem or clump (cl.).

If any mistakes, omissions, or discrepancies are found to exist with the work product, the Landscape Architect shall be promptly notified so that they have the opportunity to take any steps necessary to resolve the issue. Failure to promptly notify the Landscape Architect and the Owner of such conditions shall absolve them from any responsibility for the consequences of such failure.

Under no circumstances should these plans be used for construction purposes without examining actual locations of utilities on site, and reviewing all related documents mentioned herein, including related documents prepared by the project Civil Engineer and Architect.

Civil Engineering or Architectural base information has been provided by others. The location of various site improvements on this set of drawings is only illustrative and should not be relied upon for construction purposes.

Quantity lists are supplied as a convenience. However, Bidders and the Installing Contractor should verify all quantities. The drawings shall take precedence over the lists. Any discrepancies shall be reported to the Landscape Architect.

Actions taken without the knowledge and consist of the Owner and the Landscape Architect or in contradiction to the Owner and the Landscape Architect's work product or recommendations, shall become the responsibility not of the Owner and the Landscape Architect, but for the parties responsible for the taking of such action.

Refer to Civil Engineering documents for detailed information regarding size, location, depth and type of utilities, as well as locations of other site improvements, other than landscape improvements,

Plant symbols illustrated on this plan are a graphic representation of proposed plant material types and are intended to provide for visual clarity. However, the symbols do not necessarily represent actual plant spread at the time of installation.

All plant species specified are subject to availability. Material shortages in the landscape industry may require substitutions. All substitutions must be approved by the Village, Landscape Architect and Owner.

The Landscape Contractor shall verify location of all underground utilities prior to digging by calling "J.U.L.I.E." (Joint Utility Location for Excavators) 1-800-892-0123 and any other public or private agency necessary for utility location.

All perennial, ornamental grass, groundcover and annual beds shall be top dressed with a minimum of three inches (3") of mushroom compost. The top dressing shall be worked into the soil to a minimum depth of nine inches (9") by the use of a cultivating mechanism. Upon completion perennials & ornamental grasses shall be mulched with an additional two inch (2") layer of shredded wood mulch; Annuals & groundcovers shall be covered with a two inch (2") layer of southern pine bark fines mulch.

All other planting beds and tree saucers shall be mulched with a minimum of three inches (3") of shredded wood mulch.

Planting beds adjacent to building shall be mulched in their entirety to the building foundation. Plant materials shall not be installed under building overhangs and other such areas which do not receive natural rainfall.

Mulch beds at the time of planting shall extend a minimum of two feet (2') beyond the center of a shrub.

All bed lines and tree saucers shall require a hand spaded edge between lawn and mulched areas.

Grading shall provide slopes which are smooth and continuous. Positive drainage shall be provided in all areas.

Sod shall be mineral base only.

Seed mixes shall be applied mechanically so that the seed is incorporated into the top one-half inch (1/2") of the seed bed. The seed shall then be covered with the specified blanket (installed per manufacturer's. specs) or Hydro-mulch.

All plant material shall be guaranteed for one (1) year from the date of acceptance.

Know what's **below.** **Call** before you dig.

NORTH

0' 15' 30' 60'

The following list of quality trees and shrubs will be used for final plant selections:

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME
		DECIDUOUS SHADE TREES	
AFJ		Acer f.'Jeffersred'	Autumn Blaze Freeman Maple
AFM		Acer f.'Marmo'	Marmo Freeman Maple
AMM		Acer m. 'Morton'	State Street Maple
ACF		**Aesculus x c 'R McNair'**	**Fort McNair Horsechestnut**
CS		Catalpa speciosa	Northern Catalpa
CO		**Celtis occidentalis**	**Hackberry**
GAG		**Ginkgo b. 'Autumn Gold'**	**Autumn Gold Ginkgo**
GPS		**Ginkgo b. 'Princeton Sentry'**	**Princeton Sentry Ginkgo**
GTS		Gleditsia t.i.'Skyline'	Skyline Honeylocust
GD		Gymnocladus dioicus	Kentucky Coffeetree
GDE		**Gymnocladus d. 'Espresso'**	**Espresso Kentucky Coffeetree**
PMC		Platanus x a. "Morton Circle'	Exclamation London Planetree
QB		Quercus bicolor	Swamp White Oak
QI		Quercus imbricaria	Shingle Oak
QBR		**Quercus macrocrapa**	**Burr Oak**
QM		Quercus muehlenbergi	Chinkapin Oak
QR		**Quercus rubra**	**Red Oak**
QRP		**Quercus r. 'Long'**	**Regal Prince English Oak**
TSB		Taxodium d. 'Mickelson'	Shawnee Brave Bald Cypress
TAR		**Tilia a.'Redmond'**	**Redmond Linden**
TCG		**Tilia c. "Greenspire'**	**Greenspire Liden**
UF		**Ulmus 'Frontier'**	**Frontier Elm**
UA		**Ulmus 'Morton'**	**Accolade Elm**
		BOLD: TREES TO BE USED WITHIN PARKWAYS	
		EVERGREEN TREES	
PA		Picea abies	Norway Spruce
PGD		Picea g. 'Densata'	Black Hills Spruce
PP		Picea pungens	Colorado Green Spruce
PPG		Picea p. "Glauca'	Colorado Blue Spruce
PFA		Picea p. 'Fat Albert'	Fat Albert Colorado Spruce
PFV		Pinus f. 'Vanderwolf's Pyramid'	Vanderwolf's Pyramid Limber Pine
PS		Pinus strobus	Eastern White Pine
PSF		Pinus s. 'Fastigiata'	Fastigiate White Pine
PM		Pseudotsuga menziesii	Douglas Fir
TGG		Thuja o. 'Green Giant'	Green Giant Arborvitae
TC		Tsuga canadensis	Canadian Hemlock
		DECIDUOUS ORNAMENTAL TREES	
AAB		Amelanchier g. "Autumn Brilliance'	Autumn Brilliance Serviceberry
BN		Betula n. 'Cully'	Heritage River Birch
CC		Carpinus caroliniana	American Hornbeam
CCN		Cercis canadensis	Eastern Redbud
CPD		Cornus alternifolia	Pagoda Dogwood
CCI		Crataegus c. inermis	Thornless Cockspur Hawthorn
MJ		Magnolia x 'Jane'	Jane Magnolia
MDW		Malus 'Donald Wyman'	Donald Wyman Crabapple
MRJ		Malus 'Red Jewel'	Red Jewel Crabapple
MPF		Malus 'Prairie Fire'	Prairie Fire Crabapple
MSF		Malus s. 'Select A'	Sargent Firebird Crabapple
MST		Malus s. 'Tina'	Sargent Tina Crabapple
OV		Ostrya virginiana	American Hophornbeam
SIS		Syringa r. 'Ivory Silk'	Ivory Silk Tree Lilac
SPM		Syringa p. 'Morton'	China Snow Tree Lilac
SZZ		Syringa p. 'Zhing Zhiming'	Beijing Gold Tree Lilac
		DECIDUOUS SHRUBS & SHRUB ROSES	
AM		Aronia melanocarpa	Black Chokeberry
ALSH		Aronia m. UCONNAM166'	Low Scape Hedger Chokeberry
CSC		Clethra a. 'Sixteen Candles'	Sixteen Candles Summersweet
CR		Cornus racemosa	Grey Dogwood
CAH		Corylus americana	American Hazelnut
CAP		Cotoneaster acutifolia	Peking Cotoneaster
CH		Cotoneaster 'Hessei'	Hessei Cotoneaster
DKB		Diervilla r. 'SMDNDRSF'	Black Kodiak Diervilla
DKO		Diervilla r. 'G2X88544'	Orange Kodiak Diervilla
DKR		Diervilla r. 'G2X885411'	Red Kodiak Diervilla
DSB		Diervilla s. 'Butterfly'	Butterfly Bush Honeysuckle
DCS		Diervilla s. 'LPDC Podaras'	Cool Splash Bush Honeysuckle
DS		Diervilla splendens	Splendens Bush-Honeysuckle
HVW		Hamamelis vernalis	Ozark Witch Hazel
HAA		Hydrangea a. 'Annabella'	Annabelle Hydrangea
HAI		Hydrangea a. 'Abetwo'	Incrediball Hydrangea
HB		Hydrangea p. 'ILVOBO'	Bobo Hydrangea
HLL		Hydrangea p. 'Jane'	Little Lime Hydrangea
HPL		Hydrangea p. 'Limelight'	Limelight Hydrangea
HQF		Hydrangea p. 'Bulk'	Quick Fire Hydrangea
HLQF		Hydrangea p. 'SMHPLQF'	Little Quick Fire Hydrangea
HQPW		Hydrandea q. 'Pee Wee'	Pee Wee Oakleaf Hydrangea
HTTS		Hydrangea s. 'MAKD"	Tiny Tuff Stuff Hydrangea
HBF		Hypericum k. 'SMHKBF'	Blue Festival St. Johnswort
PLD		Physocarpus o. 'Little Devil'	Little Devil Ninebark
PGW		Physocarpus o. 'Ginger Wine'	Ginger Wine Ninebark
POS		Physocarpus o. 'Seward'	Summer Wine Ninebark
RGL		Rhus a.'Gro-Low'	Gro-Low Sumac
RDA		Rosa species	Shrub Roses
SBF		Spiraea species	Spirea
SMP		Syringa m. 'Palibin'	Dwarf Korean Lilac
SMK		Syringa p. 'Miss Kim'	Miss Kim Lilac
SDP		Syringa 'SMSJBP7'	Boomerang Dark Purple Lilac
VSB		Viburnum c. 'SMVCB'	Spice Baby Viburnum
VC		Viburnum 'Cayuga'	Koreanspice Viburnum
VBM		Viburnum d. 'Christom'	Blue Muffin Arrowwood Viburnum
VD		Viburnum dentatum	Arrowwood Viburnum
VP		Viburnum prunifolium	Blackhaw Viburnum
VDS		Viburnum d. 'Synnestvedt'	Chicago Lustre Viburnum
VRS		Viburnum d. 'Ralph Senior'	Autumn Jazz Viburnum
VJ		Viburnum x. 'Juddii'	Judd Viburnum
VLM		Viburnum l. 'Mohican'	Mohican Viburnum
VRA		Viburnum x rhytidophylloides	Alleghany Viburnum
WDH		Weigela x. 'Dark Horse'	Dark Horse Weigela
WFW		Weigela florida species	Weigela
		EVERGREEN SHRUBS	
JDF		Juniperus chinensis species	Chinese Juniper
JHH		Juniperus horizontalis species	Horizontal Juniper
TMD		Taxus m. 'Densiformis'	Dense Yew
TME		Taxus m. 'Everlow'	Everlow Yew
TMH		Taxus m. 'Hicksii'	Hicks Yew
TOS		Thuja o. 'Smaragd'	Emerald Green Arborvitea
		BROADLEAF EVERGREENS	
BW		Buxus m var.Koreana 'Wintergreen'	Wintergreen Boxwood
EEG		Euonymus f "Emerald Gaiety'	Emerald Gaiety Euonymus
EENG		Euonymus f "Emerald 'n' Gold'	Emerald 'n' Gold Euonymus
EFS		Euonymus f "Sarcoxie'	Sarcoxie Euonymus
EFV		Euonymus f. 'Vegetus Low'	Low Bigleaf Euonymus

LEGEND

MITIGATION TREES

2.0" to 6.0" BB - DECIDUOUS SHADE TREE

1.5" (5') to 3" (9') BB - ORNAMENTAL TREES

5' to 10' BB - EVERGREEN TREES

SUPPLEMENTAL PLANTS

30" to 36" - DECIDUOUS SHRUBS

#3 or #5 - DWARF DECIDUOUS SHRUBS

24"/#5 - EVERGREEN SHRUBS

4' BB - UPRIGHT EVERGREEN SHRUB

#1 - PERENNIALS or ORNAMENTAL GRASSES

from flats - GROUNDCOVERS

NATIVE PLANTINGS

STORMWATER DETENTION PLANTINGS
(see Typical Stormwater Detention Section)

WET TO MESIC PRAIRIE SEED MIXTURE

NOTE: All turf areas shall seeded with IDOT Class 1-A salt tolerant turf seed mixture & covered with straw blanket

REVISIONS

3	Gazebo Dimensions	6-27-23
2	New Site Plan	5-30-23
1	New Site Plan/Village Review	5-18-23

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
BUFFALO GROVE, ILLINOIS

SEAL:

STATE OF ILLINOIS
RANDY F. METZ
no. 157-000422
REGISTERED LANDSCAPE ARCHITECT

METZ & COMPANY
LANDSCAPE ARCHITECTURE/SITE PLANNING
826 East Maple Street
Lombard, Illinois 60148
PH: 630.561.3903
www.metz-company.com

TITLE
PRELIMINARY LANDSCAPE PLAN

PROJECT NO.: 23-227

DATE: 4-27-2023

SCALE: 1"=30'

SHEET
L-1.0

If this plan is not 24" x 36" in size, then it is a reproduction that may not be to scale

Any reproduction of the design or the concept embodied herein in any form, in whole or in part, without consent from Metz & Company is prohibited.

© Copyright 2023 all rights reserved. The design and any and all ideas contained herein are the sole property of Metz & Company.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Wetland Edge Seed Mix
Apply @ 33.00 PLS pounds per acre

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges:		
Bolboschoenus fluviatilis	River Bulrush	2.00
Carex comosa	Bristly Sedge	1.50
Carex cristatella	Crested Oval Sedge	0.50
Carex frankii	Bristly Cattail Sedge	4.00
Carex stricta	Common Tussock Sedge	0.50
Carex vulpinoidea	Brown Fox Sedge	2.00
Eleocharis palustris	Great Spike Rush	0.50
Elymus virginicus	Virginia Wild Rye	16.00
Glyceria striata	Fowl Manna Grass	1.00
Juncus effusus	Common Rush	0.50
Leersia oryzoides	Rice Cut Grass	0.50
Schoenoplectus pungens	Chairmaker's Rush	1.00
Schoenoplectus tabernaemontani	Great Bulrush	2.50
Scirpus atrovirens	Dark Green Rush	1.00
Scirpus cyperinus	Wool Grass	0.50
	Total	**34.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Acorus americanus	Sweet Flag	1.00
Alisma subcordatum	Common Water Plantain	2.00
Asclepias incarnata	Swamp Milkweed	2.00
Bidens spp.	Bidens Species	2.00
Boehmeria cylindrica	False Nettle	1.00
Doellingeria umbellata	Flat-Top Aster	0.25
Eupatorium perfoliatum	Common Boneset	1.00
Helenium autumnale	Sneezeweed	1.00
Iris virginica v. shrevei	Blue Flag	4.00
Lobelia cardinalis	Cardinal Flower	0.25
Lobelia siphilitica	Great Blue Lobelia	0.25
Lycopus americanus	Common Water Horehound	0.25
Mimulus ringens	Monkey Flower	0.50
Penthorum sedoides	Ditch Stonecrop	0.50
Persicaria spp.	Pinkweed Species	2.00
Rudbeckia laciniata	Wild Golden Glow	1.00
Sagittaria latifolia	Common Arrowhead	2.00
Senna hebecarpa	Wild Senna	2.00
Sparganium eurycarpum	Common Bur Reed	4.00
Symphyotrichum puniceum	Bristly Aster	1.00
Thalictrum dasycarpum	Purple Meadow Rue	0.50
Verbena hastata	Blue Vervain	1.50
Verbesina alternifolia	Wingstem	2.00
Vernonia fasciculata	Common Ironweed	2.00
	Total	**34.00**

Low-Profile Prairie Seed Mix
Apply @ 38.50 PLS pounds per acre

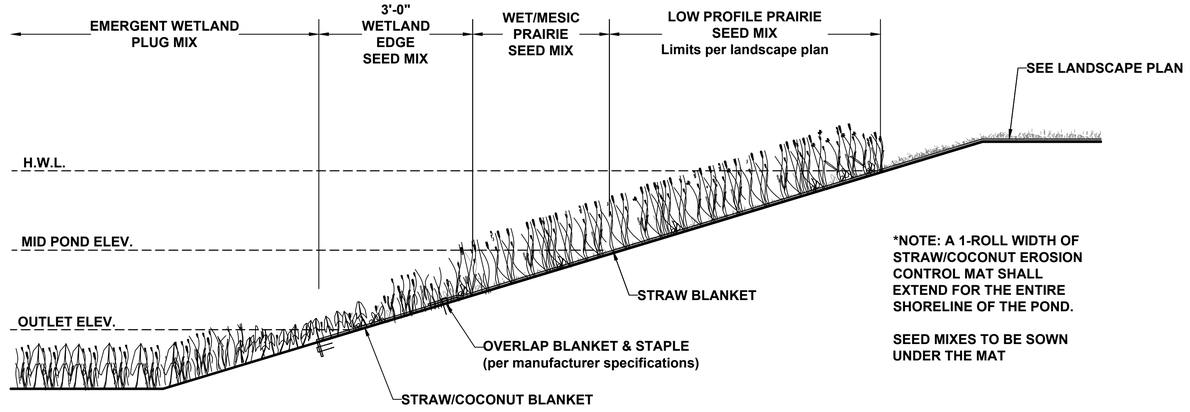
Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses:		
Bouteloua curtipendula	Side-Oats Grama	16.00
Carex spp.	Prairie Sedge Species	4.00
Elymus canadensis	Canada Wild Rye	32.00
Koeleria macrantha	June Grass	1.00
Panicum virgatum	Switch Grass	1.00
Schizachyrium scoparium	Little Bluestem	36.00
	Total	**90.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Amorpha canescens	Lead Plant	0.50
Asclepias syriaca	Common Milkweed	2.00
Asclepias tuberosa	Butterfly Weed	2.00
Baptisia alba	White Wild Indigo	2.00
Chamaecrista fasciculata	Partridge Pea	10.00
Coreopsis lanceolata	Sand Coreopsis	5.00
Coreopsis palmata	Prairie Coreopsis	1.00
Dalea candida	White Prairie Clover	1.50
Dalea purpurea	Purple Prairie Clover	1.50
Desmanthus illinoensis	Illinois Sensitive Plant	3.00
Echinacea purpurea	Broad-Leaved Purple Coneflower	8.00
Eryngium yuccifolium	Rattlesnake Master	2.00
Lespedeza capitata	Round-Headed Bush Clover	2.00
Liatris aspera	Rough Blazing Star	0.50
Lupinus perennis v. occidentalis	Wild Lupine	4.00
Monarda fistulosa	Wild Bergamot	0.50
Oligoneuron rigidum	Stiff Goldenrod	1.00
Parthenium integrifolium	Wild Quinine	1.00
Penstemon digitalis	Foxglove Beard Tongue	0.50
Penstemon hirsutus	Hairy Beard Tongue	1.00
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-Eyed Susan	5.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Solidago speciosa	Showy Goldenrod	0.50
Symphyotrichum ericoides	Heath Aster	0.25
Symphyotrichum laeve	Smooth Blue Aster	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Tradescantia ohiensis	Common Spiderwort	1.00
Verbena stricta	Hoary Vervain	1.00
Vernonia gigantea	Smooth Tall Ironweed	1.50
Veronicastrum virginicum	Culver's Root	0.25
	Total	**66.00**

Wet-to-Mesic Prairie Seed Mix
Apply @ 36.19 PLS pounds per acre

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses:		
Andropogon gerardii	Big Bluestem	16.00
Calamagrostis canadensis	Bluejoint Grass	1.00
Carex lurida	Bottlebrush Sedge	3.00
Carex stricta	Common Tussock Sedge	1.00
Carex vulpinoidea	Brown Fox Sedge	1.00
Elymus virginicus	Virginia Wild Rye	24.00
Juncus canadensis	Canadian Rush	0.50
Panicum virgatum	Switch Grass	2.00
Scirpus cyperinus	Wool Grass	0.50
Sorghastrum nutans	Indian Grass	8.00
Spartina pectinata	Prairie Cord Grass	3.00
	Total	**60.00**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs:		
Asclepias syriaca	Common Milkweed	2.00
Baptisia alba	White Wild Indigo	1.00
Chamaecrista fasciculata	Partridge Pea	10.00
Coreopsis lanceolata	Sand Coreopsis	4.00
Coreopsis tripteris	Tall Coreopsis	2.00
Desmodium illinoense	Illinois Tick Trefoil	0.50
Doellingeria umbellata	Flat-Top Aster	0.50
Echinacea purpurea	Broad-Leaved Purple Coneflower	4.00
Eryngium yuccifolium	Rattlesnake Master	2.00
Helenium autumnale	Sneezeweed	2.00
Helianthus grosseserratus	Sawtooth Sunflower	0.50
Lespedeza capitata	Round-Headed Bush Clover	1.50
Liatris spicata	Marsh Blazing Star	1.00
Monarda fistulosa	Wild Bergamot	1.00
Oligoneuron rigidum	Stiff Goldenrod	1.00
Parthenium integrifolium	Wild Quinine	1.00
Physostegia virginiana	Obedient Plant	0.25
Pycnanthemum virginianum	Common Mountain Mint	0.50
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-Eyed Susan	4.00
Rudbeckia laciniata	Wild Golden Glow	1.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	0.50
Senna hebecarpa	Wild Senna	2.25
Silphium integrifolium	Rosin Weed	1.00
Silphium laciniatum	Compass Plant	2.00
Silphium perfoliatum	Cup Plant	2.00
Silphium terebinthinaceum	Prairie Dock	3.00
Solidago juncea	Early Goldenrod	0.25
Solidago rugosa	Rough Goldenrod	0.25
Symphyotrichum novae-angliae	New England Aster	0.50
Tradescantia ohiensis	Common Spiderwort	1.25
Vernonia fasciculata	Common Ironweed	3.00
Veronicastrum virginicum	Culver's Root	0.25
Zizia aurea	Golden Alexanders	1.00
	Total	**61.00**

Emergent Plug Mix
Plug Spacing @ 24" o.c.

Botanical Name	Common Name	%	Quantity
Calamagrostis canadensis	Blue Joint Grass	1.50	0
Carex comosa	Bristly Sedge	5.00	0
Carex lacustris	Common Lake Sedge	2.00	0
Carex lupulina	Common Hop Sedge	1.50	0
Carex stricta	Common Tussock Sedge	2.00	0
Carex trichocarpa	Hairy-fruited Lake Sedge	5.00	0
Carex vulpinoidea	Brown Fox Sedge	5.50	0
Juncus effusus	Common Rush	1.00	0
Leersia oryzoides	Rice Cut Grass	2.00	0
Schoenoplectus acutus	Hardstem Bulrush	1.00	0
Schoenoplectus tabernaemontani	Great Bulrush	3.00	0
Scirpus pungens	Chairmakers Rush	5.00	0
Scirpus atrovirens	Dark Green Rush	1.00	0
Scirpus cyperinus	Wool Grass Rush	2.00	0
	Grass/Sedge/Rush Subtotal	**37.50**	**0**
Acornus calamus	Sweet Flag	3.00	0
Alisma subcordatatum	Common Water Plaintain	1.00	0
Asclepias incarnata	Swamp Milkweed	3.00	0
Eutrochium maculatum	Spotted Joe Pye Weed	2.00	0
Hibissus moscheutos	Swamp Rosemallow	3.00	0
Iris virginica shrevei	Blue Flag	12.00	0
Lobelia cardinalis	Cardinal Flower	2.00	0
Lycopus americanus	Waterhorehound	1.50	0
Lythrum alatum	Winged Loosestrife	2.00	0
Mimulus ringens	Monkey Flower	3.00	0
Pontederia cordata	Pickerelweed	2.00	0
Sagittaria latifolia	Common Arrowhead	13.00	0
Solidago patula	Swamp Goldenrod	2.00	0
Sparganium eurycarpum	Great Bur Reed	13.00	0
	Wildflower Subtotal	**62.50**	**0**
	SEED MIX TOTAL	**100.00**	**0**



SECTION - STORMWATER MANAGEMENT AREA LANDSCAPING

NO SCALE

THREE-YEAR MANAGEMENT PERIOD ACTIVITIES

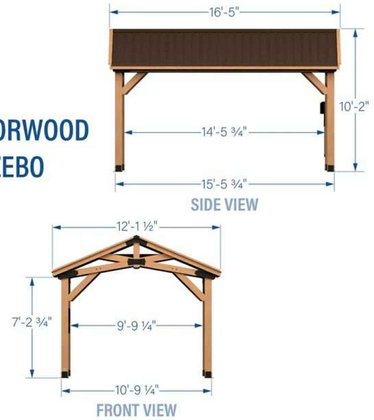
1. The work consists of the Contractor conducting routine ecological management activities during the three-year management and monitoring period in the naturalized planting areas as shown on the landscape plan to assist the Contractor in meeting required performance standards.
2. During the first two (2) growing seasons of the three-year period the Contractor shall high-mow the vegetation in the Prairie and/or Wet/Mesic Prairie areas several times during the growing season to ensure the vegetation does not exceed eighteen inches (18") in height. A rotary or flail type mower shall be used. During high-mowing, the vegetation shall be cut no lower than 6 to 9 inches so the native seeding are unharmed. Selective weed whipping can also be used if conditions are unfit (i.e., too wet) for a tractor, or if only small isolated areas of vegetation required cutting. In addition, cutting the inflorescence prior to seed set of many biennial species including teasel and sweet clover is an effective control method that can be utilized.
3. The Contractor shall conduct chemical and/or mechanical weed control activities in all of the naturalized seeded areas for a three-year period following planting/seeding. The Contractor shall conduct four annual weed control application periods (total of twelve (12) for the three-year period). The Contractor is responsible to achieve a 95% kill of reed canary grass, purple loosestrife, thistle and common reed and 80% kill of other problematic, nuisance species to successfully complete each of the application periods specified below.
   a. Application Period One (early spring): problematic species such as, but not limited to, reed canary grass, red/white cover, cattails.
   b. Application Period Two (late spring to mid-summer): problematic species such as, but not limited to, reed canary grass, while/yellow sweet cover, cattails, wild carrot, purple loosestrife and common reed.
   c. Application Period Three (mid to late summer): problematic species such as, but not limited to, reed canary grass, ragweed, cattails, purple loosestrife and common reed.
   d. Application Period Four (late summer to early fall): problematic species such as, but not limited to, reed canary grass, red/white cover, common reed.
4. Natural regeneration of cattails in the stormwater management facilities will likely occur following construction. As required by these planting specifications pre-planting weed control will be conducted if any problematic species are present. As for cattails, hand pulling cattails can be conducted when the cattails are small enough to ensure that the entire root is removed. Off-site disposal of cattails will be required. Larger cattails will require herbicide applications. Aggressive cattail control will be required after planting throughout the three-year management period to ensure plant establishment. After planting the hand-wick application method to control cattails shall be required.
5. If permitted, the Contractor shall conduct a prescribed burn in the prairie areas during the third growing season. The Contractor shall obtain all the required burn permits from the Illinois Environmental Protection Agency, City or Village, and local fire protect district and prepare all necessary documents required for the permit including a Burn Plan.
6. The Contractor shall irrigate all plant plugs as needed to achieve the survivorship requirements.
7. The Contractor shall remove and dispose of all planting enclosures during the second year of the management period.

PERFORMANCE CRITERIA

1. Within three (3) months of seed installation, at least 90% of the seeded area, as measured by aerial coverage, shall be vegetated. A minimum 90% vegetative coverage shall be maintained throughout and at the end of the three-year maintenance period for these areas. This standard does not apply to wetland plug areas (if planted).
2. At the end of the second growing season, a minimum of 75% vegetative coverage in the wetland plug area(s) shall be achieved and maintained throughout the end of the three-year maintenance period (if planted).
3. The stormwater management facilities shall not contain any rills greater than four inches (4") deep throughout and at the end of the three-year maintenance period.
4. At the end of the second and third growing seasons, no area greater than 1.0 square meters on slope areas shall be devoid of vegetation.
5. At the end of the second growing season, 30% seed mix presence for the prairie seed mix areas shall be achieved. At the end of the third growing season 50% seed mix presence for the prairie seed mixes shall be achieved.
6. At the end of the third growing season, the top three dominate species based on aerial coverage shall NOT be non-native species, cattail or reed grass
7. Relative coverage (determined by ocular estimation) of cattail shall be less than 10% throughout, and at the end of the three-year maintenance period.
8. Relative coverage (determined by ocular estimation) of common reed, reed canary grass, and loosestrife in aggregate shall be less than 5% throughout, and at the end of the three-year maintenance period.
9. Relative coverage (determined by ocular estimation) of thistle and teasel shall be less than 5% throughout, and at the end of the three-year maintenance period.
10. Plugs (if planted) must achieve 90% survivorship one (1) year from plant installation.

The Contractor shall water plant plugs (if planted) as needed in order to meet the performance criteria. The cost to irrigate is incidental to the contract and shall be included in the Contractor's bid price. The Contractor shall also perform vegetative management for three years following planting as specified under the section "Three-year Monitoring and Reporting Activities' to assist with meeting the Contractor Performance Criteria. If performance criteria are not achieved, Contractor is responsible to conduct additional activities, which may include supplemental seeding, supplemental planting and additional years of vegetation management to rectify areas at no additional cost to the Owner to achieve performance.

16X12 NORWOOD GAZEBO





FREE STANDING PERGOLA

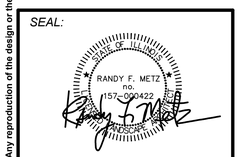
STAINED TO MATCH BUILDINGS

REVISIONS

3	Gazebo Dimensions	6-27-23
2	New Site Plan	5-30-23
1	New Site Plan/Village Review	5-18-23

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
BUFFALO GROVE, ILLINOIS

SEAL:



METZ & COMPANY
LANDSCAPE ARCHITECTURE/SITE PLANNING
826 East Maple Street
Lombard, Illinois 60148
PH: 630.561.3903
www.metz-company.com

TITLE
PRELIMINARY LANDSCAPE PLAN

PROJECT NO.: 23-227

DATE: 4-27-2023

SCALE: 1"=30'

SHEET
L-2.0

If this plan is not 24" x 36" in size, then it is a reproduction that may not be to scale
Any reproduction of the design or the concept embodied herein in any form, in whole or in part, without consent from Metz & Company is prohibited.
© Copyright 2023 all rights reserved. The design and any and all ideas contained herein are the sole property of Metz & Company.

PLANT MATERIAL

PART 1 - GENERAL

1.1 SCOPE OF WORK

The work includes furnishing of all materials, and the performance of all operation in connection with the planting of deciduous & evergreen trees, deciduous & evergreen shrubs, shrub roses, perennials, ornamental grasses, groundcover, bulbs (if any) and annual flowers (if any) in strict conformance with the project specifications and applicable drawings which are subject to the terms and conditions of the Contract.

1.2 GENERAL REQUIREMENTS

All plant material shall comply with the State of ILLINOIS and FEDERAL laws with respect to inspection for plant diseases and insect infestation. An inspection certificate required by law to this effect shall accompany each shipment. The Landscape Architect reserves the right to inspect the plant material at the place of growth but such inspection shall not preclude the right of rejection at the site.

1.3 APPLICABLE STANDARDS

A. *American National Standards for Tree Care Operations*, ANSI A300, American National Standards Institute, 11 West 42nd Street, New York, N.Y. 10036.
B. *American Standard for Nursery Stock*, ANSI Z60.1, American Nursery & Landscape Association, 1000 Vermont Avenue NW, Suite 300, Washington, D.C. 20005.
C. *Hortus Third*, The Staff of the L.J. Bailey Hortorium, 1976, MacMillan Publishing Co., New York.
D. All standards shall include the latest additions and amendments as of the dated of advertisement for bids.

PART 2 - MATERIALS

2.1 GENERAL
The Landscape Architect reserves the right to tag or inspect plants at the nursery but such inspection shall not preclude the right of rejection at the site. Contractor shall furnish and install all plants as shown on the drawing and in the quantities as actually designated on the drawings. The quantities shown on the plant list are included for convenience purposes only.

2.2 NOMENCLATURE
The names of the plants indicated on the drawings conform generally with those accepted in the nursery trade.

2.3 QUALITY AND SIZE
Plants shall have a habit of growth that is normal for the species and shall be sound, healthy, vigorous, and free from insect pests, their eggs or larvae, plant diseases, and injuries. All plants shall be nursery grown under climatic conditions similar to those which exist in the locality of the site for at least two (2) years and equal or exceed the measurements specified in the plant list. They shall be measured before pruning with branches in formal position. All necessary pruning shall be performed only at the time of planting. Trees will not be accepted which have their leaders cut or which have their leaders damaged so that cutting is necessary. Plants larger in size than specified may be used with the approval of the Landscape Architect but the use of larger plants will make no change in the contract price. Requirements for the measurement, branching, quality, balling, and burlapping of plants on the plant list shall follow the Code of Standards (Z60.1-most current edition) by the AMERICAN NURSERY & LANDSCAPE ASSOCIATION, formerly known as the AMERICAN ASSOCIATION OF NURSERYMEN, INC. All plant material with shriveled dry roots or which does not comply with the specifications will be rejected. All shrubs shall be at least twice transplanted and must have a fully developed fibrous root system typical of the stated species. All shrubs must be freshly dug immediately before shipping unless they are containerized. Pre-dug, healed-in plants may be considered only in special cases involving planting during the hot months between the spring and fall planting seasons. Use of such material will be allowed only upon the approval of the Landscape Architect and is subject to his inspection prior to said approval.

2.4 DELIVERIES
The Contractor shall take all precautions that are demanded by good trade practice to insure arrival of the plant material at the stated delivery point in good condition and without injury of any nature. Plants shall be covered properly to prevent drying, transit disease, or injury.

2.5 TEMPORARY STORAGE
Insofar as it is possible, plant material shall be planted on the day of delivery. In the event this is not possible, the Contractor shall protect the unplanted stock from sun and drying winds at all times. All balled and burlapped plants shall be shaded from the sun, have their ball set off the ground and healed in with sawdust, peat, soil or other moisture-holding material and shall be kept moist. Plants should not remain unplanted for longer than three (3) days if in leaf. On-site storage shall be only in area(s) designated by the Owner.

2.6 SUBSTITUTIONS
Substitutions may be permitted only upon submission of written proof that the specified plant is not obtainable locally. Such substitution may be made only upon authorization by the Landscape Architect.

2.7 SELECTION
All plants shall be obtained from nurseries licensed by the State of Illinois and approved by the Landscape Architect. The Landscape Architect reserves the right to accompany the Contractor to the nurseries for the purpose of selecting (tagging) material. Plant sources located outside the State of Illinois must be approved by the Landscape Architect.

2.8 TOPSOIL
Topsoil if needed shall be imported. All imported topsoil, used for any portion of the work, shall be fertile, friable, natural loam containing a liberal amount of humus. It shall be relatively free from weeds, large roots, plants, sticks, stones larger than one (1) inch, waste, debris or other extraneous matter. The installing Contractor shall be responsible for rock picking and/or debris removal as needed to meet this specification.

The soil, to be acceptable topsoil, shall meet the following criteria:
A. ORGANIC MATTER: Not less than 1.5 percent no more than 10.0 percent.
B. pH: No lower than 5.0 nor higher than 8.0.
C. TEXTURE: No more than 25 percent clay.
D. SOLUBLE SALT: No more than 1000 ppm
E. CHEMICAL ACTIVITY: The topsoil (on-site & imported) shall be free from any toxins or chemical residue which could result in any form of plant growth damage.

The Contractor shall provide a soil analysis report submittal containing test results and soil scientist recommendations based on a minimum of one (1) sample taken from each proposed imported topsoil stock pile. The testing shall cover macro nutrients and pH, soluble salts, organic content/mechanical analysis and Bio assay.

2.9 MULCH
Mulch shall consist of the following:

A. MUSHROOM COMPOST
Mushroom compost shall be composed of well-rotted cattle or stable manure with an admixture of 15-30% topsoil and shall have been used for the commercial growing of at least one (1) crop of mushrooms.
B. SHREDDED HARDWOOD BARK (general mulching)
Shredded hardwood bark shall consist of finely shredded hardwood bark, free of sticks and leaves.

2.10 FERTILIZER & NUTRIENTS

Fertilizer shall be commercial fertilizer which shall be a complete fertilizer with the following approximate analysis:

A. Shrubs
Woodace (14-3-3) slow-release briquettes or acceptable equivalent approved by Landscape Architect.
B. Roses
1. Woodace (14-3-3) slow-release briquettes
2. Superthrive liquid or acceptable equivalent approved by Landscape Architect.
C. Perennials, Grounddcover, Ornamental Grasses & Vines
Osmocote (18-6-12) 8-9 month controlled release, or acceptable equivalent approved by the Landscape Architect.
D. Annual Flowers
Osmocote (14-14-14) 3-4 month controlled release or acceptable equivalent approved by the Landscape Architect.
E. Bulbs
Holland Bulb Booster (9-9-6) or acceptable equivalent approved by the Landscape Architect.
F. Deciduous & Evergreen Trees
No fertilizer required

2.11 TREE WRAPPING MATERIAL

A. Wrap shall be - Breathable synthetic fabric tree wrap. White in color, delivered in 75 mm (3 in.) wide rolls. Specifically manufactured for tree wrapping. Tree wrap shall be "Breathable Fabric Tree Wrap" as manufactured by the Dewitt Company, Inc., Sikeston, MO, or approved equal. Submit manufacture literature for approval.
B. Tape for securing the wrap shall be bio-degradable tape suitable for nursery use and which is expected to degrade in sunlight in less than two (2) years after installation.

2.12 WATER

Potable water shall be supplied by the Owner at no cost to the Contractor by way of an irrigation system, quick coupler system, hose bibs, hydrant meter or a designated fill-up source on site.

PART 3 - EXECUTION

Planting operations shall be conducted under favorable weather conditions during the season stated in the Contract. Before excavations are made the surrounding turf (if existing) shall be covered in a manner that will satisfactorily protect all turf areas that are to be trucked or hauled over and upon which soil is to temporarily stocked. The Contractor shall be responsible for the restoration of all damaged existing turf. All restoration shall be sodded.

3.1 TIME SCHEDULE OF PLANTING OPERATION

Landscaping shall be performed during the season or seasons which are normal for such work as determined by weather conditions and by accepted practice. Planting may be performed under unseasonable conditions without additional compensation, but such work must have the prior approval of the Landscape Architect and/or Owner in writing as to the time of work and methods of operations. Approval to plant under such conditions shall in no way relieve the Contractor form the guarantee provisions of these specifications.

PLANTING SEASON	ACCEPTABLE TIME PERIOD
1. SPRING	a. From time soil is workable to June 15 with the following exception:
1) Bare root materials (if any) shall cease on May 31	
2. FALL	a. Sept. 1 to Nov. 15 with following exceptions:
1) Evergreen Shrub planting to cease Oct. 31	
2) Evergreen Tree planting to cease Oct. 15	
3) Perennial & Ornamental Grass planting to cease Oct. 15	

1. PACKING AND MARKETING

All seeds shall be delivered in suitable bags in accordance with standard commercial practice. Each bag shall be tagged or labeled as required by the law of the STATE OF ILLINOIS. The vendor's name shall show on or be attached to each bag together with a statement signed by the vendor showing: a) the kind of seed contained, b) the percentage of purity and germination, c) the percentage of hard seed, if any, d) a statement conforming to the laws of the STATE OF ILLINOIS hereinbefore mentioned showing percentage of weed seeds, if any. Seed which has become wet, moldy, or otherwise damaged will be rejected.

2.4 EROSION CONTROL BLANKET

1. **STRAW BLANKET (if specified)**
   a. **S-75 Straw Blanket (North American Green)**
   b. **AEC Premier Straw Blanket (American Excelsior Company)**
   c. **or equivalent**

2. **STRAW/COCONUT BLANKET (if specified)**
   a. **SC-150 Straw/Coconut Blanket (North American Green)**
   b. **AEC Premier Straw/Coconut Blanket (American Excelsior Company)**
   c. **or equivalent**

2.5 HYDROMULCH (if specified)
SoilCover Hydraulic Wood Mulch by Profile distributed by ERO-TEX (866)437-6839

2.6 SOD (if specified)
Sod shall comply with State and Federal laws with respect to inspection for plant diseases and insect infestation. It shall be fresh cut, live, nursery grown sod, not less than one and one half (1 1/2) inches thick having well-matted roots. The root zone shall be of good, fertile, natural mineral soil free from stones and debris. Peat sod will not be acceptable. The turf shall contain no bent or quack grass nor any other noxious weed growth. It shall be of firm tough texture having a compact growth of grass. The sod sections shall be standard in size (24 inches wide x 3 feet in length) and each section shall be strong enough to support its own weight and retain its size and shape when suspended vertically from a firm grasp on the upper ten (10%) percent of the section.

Before being cut and lifted, the sod shall have been mowed at least twice with a lawn mower and the final mowing not more than seven days before the sod is cut. Sod which is not placed within 48 hours of cutting shall not be used without the approval of the Owner and/or Landscape Architect.

The Owner and/or Landscape Architect, reserves the right to inspect the sod at the source before cutting and areas that fail to meet with his approval shall not be cut for the purpose of supplying material under the contract. The Owner and/or Landscape Architect shall be permitted to take such samples as he may select. All sod shall be fresh and green when placed. Any sod that is dried out, burned, inferior in quality to said samples, or in any way failing to meet the requirements of these specifications will be rejected and the Contractor shall immediately remove such rejected material from the premises of the project and supply suitable material in its place.

1. **BLUEGRASS SOD shall be a blend of at least three (3) cultivars of Kentucky bluegrass grown on a mineral base.**

2. **SALT SOD (if specified) shall be a blend of Kentucky Bluegrass, 'Fults' Alkalie Grass (Puccinellia Distans), Perennial Ryegrass and other types as approved by the Landscape Architect grown on a mineral base.**

2.7 WATER

The Owner shall provide at no cost, sufficient water for the Contractor to maintain plant materials and seeded and sodded areas in accordance with the requirements of the applicable technical specifications. Potable water shall be supplied by the Owner by way of a permanent underground irrigation system, quick coupler system, hose bibs, fire hydrants or a designated fill-up source for mobile tanks. When water is provided by way of fire hydrants, it shall be the Contractor's responsibility to be completely familiar with all local ordinances concerning the use of this water source. If a meter is required, it is the Contractor's responsibility to obtain, store and return the meter. All fees incurred by the Contractor in obtaining the meter and utilizing the water supply will be reimbursed to him by the Owner.

In the event that the on-site water supply is curtailed or terminated by the Owner or by ordinance during the period the Contract is in effect, or that there is no on-site sources of water, the Contractor shall supply water from off-site in sufficient quantities to complete the job. Compensation for this additional item will be in accordance with a solicited price quote. If authorization to supply off-site water is not given to the Contractor by the Owner, when the Owner is unable to supply the water in sufficient quantities, the Contractor shall not be left responsible for damage to new plantings (plant materials & sod) or failure of seed to germinate and grow caused a direct result of an inadequate water supply.

PART 3 - EXECUTION

3.1 **SEED - The accepted seasons for sowing seed in lawn areas shall be defined as follows:**

PLANTING SEASONS	SPRING	FALL
Turf grass	April 1 * to May 31	Aug. 15 to Sept. 30

*** or as soon as the soil is free of frost and in a workable condition.**

Seeding during other time periods shall require the approval of the Owner and/or Landscape Architect. All sowing of seed shall be completed after all trees and shrubs have been installed, if any.

3.2 **SOD - The accepted seasons for laying sod shall be as follows:**

1. **SPRING SODDING shall be performed from the time the soil becomes workable and unfrozen sod becomes available to June 15.**
2. **FALL SODDING shall be performed from August 15 to October 31.**

Sodding during the summer season, defined as June 16 to August 14, will be acceptable if the area is served by an operational irrigation system. Sodding after November 1 shall be considered unseasonable and will require the approval of the Landscape Architect or Owner.

3.3 **REQUIRED MAINTENANCE**

The Contractor shall be responsible for maintaining all newly seeded and sodded areas until such a time as these areas are granted acceptance by the Owner and/or Landscape Architect. Maintenance during this time period shall and consist of watering, mowing, fertilization and herbicide application, as well as any other horticultural practices necessary to establish an acceptable stand of grass.

A. **WATERING**

1. **The Contractor shall water all newly seeded** areas once immediately upon completion. Additional watering shall be performed as needed in the absence of adequate rainfall. All water should be applied as a spray or dispersion to prevent run-off or damage. The Contractor shall be responsible for watering until turf is established and accepted. If the Owner supplies an in-ground irrigation system, the Contractor shall be responsible for monitoring the effectiveness of the system and shall report any problems with the system to the Owner immediately, followed up in writing. If the Owner does not provide an irrigation system, then additional watering shall be performed in accordance with the Supplemental Bids where alternate watering prices shall be quoted. If this work item is not included as part of the original Contract, it must be authorized. Compensation shall be in accordance with the Supplemental Bid Prices. If the Owner fails to supply water or authorize supplemental watering the Contractor's warranty for providing an established stand of turf will be voided.

2. The Contractor shall water all newly installed **sod** immediately. The Contractor shall remain responsible for watering through three (3) applications. If the Owner supplies an in-ground irrigation system included in the scope of these improvements, the Contractor shall be responsible for monitoring the effectiveness of the system and shall report any problems with the system to the Owner immediately, followed up in writing. If the Owner does not provide an irrigation system, then additional watering shall be performed in accordance with the Supplemental Bids where alternate watering prices shall be quoted. If this work item is not included as part of the original Contract, it must be authorized. Compensation shall be in accordance with the Supplemental Bid Prices. If the Owner fails to supply water or authorize supplemental watering the Contractor's warranty for providing an established stand of turf will be voided. Watering after the required three (3) waterings shall be the responsibility of the Owner, or in accordance with authorized supplemental watering.

B. MOWING

1. The Contractor shall mow all **seeded** areas three (3) times. The three (3) mowings shall be performed once the turf has reached a height of three inches (3") and shall maintain the turf at 2-2½". At no time should more than 1/3 of the leaf blade be removed by any mowing.

2. The Contractor shall mow all **sodded** areas once. The one (1) mowing shall be performed once the turf has reached a height of three inches (3"). At no time should more than 1/3 of the leaf blade be removed by any mowing.

C. FERTILIZATION

1. **Seeded** areas after completion of the second required mowing, the Contractor shall apply an 18-5-9 commercial fertilizer at the rate of 15 pounds per 1,000 square feet (650 lbs/ac.) to all turf areas using a mechanical spreader and by making two (2) passes at right angles to each other.

2. **Sodded** area after completion of the required mowing, the Contractor shall apply an 18-5-9 commercial fertilizer at the rate of 15 pounds per 1,000 square feet (650 lbs/ac.) to all turf areas using a mechanical spreader and by making two passes at right angles to each other.

D. HERBICIDE

The Contractor shall be responsible for one (1) application of a weed control product no sooner than the second mowing with the areas seeded. The product shall reflect the specific weed problem which may exist.

3.4 ACCEPTANCE

Acceptance of seeded areas will be determined by the Owner and/or Landscape Architect.
Acceptance shall be granted upon conformance with the following:
1. Grass shall display a reasonably uniform distribution of grass plants.
2. Grass shall display vigorous growth and be green and healthy in appearance.
3. Grass shall have received the required mowings, fertilization and herbicide application.

The Contractor shall not be held liable for damage incurred to the seed areas caused by deicing compounds, toxic substances, fertilizers, pesticides and other materials not specified or not applied by him or under his supervision, nor those damages caused by vandalism or acts of nature.

3.5 GUARANTEE

The Contractor shall guarantee the provision of a green, healthy relatively weed free turf at the time of acceptance.

3.2 WATERING

All plants shall receive a thorough watering immediately after installation. During times of extreme heat, all evergreen and deciduous trees shall receive a minimum of 10 gallons of water per tree per watering up to two (2) additional waterings shall be performed as needed. The use of drip irrigation tree bags are encouraged (e.g., gatorbags). All additional waterings will be performed by the Owner or in accordance with a Change Order per the Supplemental Bid prices for additional watering.

3.3 MAINTENANCE
Maintenance shall be performed by the Contractor as follows:

A. TEMPORARY MAINTENANCE
The Contractor shall be responsible for the total maintenance of all plant material until such a date as all landscape operations have received Preliminary Acceptance. Temporary maintenance shall begin immediately after each plant is installed and shall include up to three (3) waterings, and all necessary cultivation, weeding, pruning, disease and insect pest control, protective spraying, resetting of plants to proper grades or upright position, restoration of damaged planting saucers, and any other procedure consistence with good horticultural practice necessary to insure normal, vigorous, and healthy growth of all work under this Contract. Upon the Preliminary Acceptance of all planted areas, the responsibility for plant maintenance rests solely with the Owner, with the following exceptions.

B. CONTINUED MAINTENANCE
For the duration of the guarantee period the Contractor shall be responsible for the resetting of settled plants, the straightening of plants which are not plumb and the tightening of tree guys (if utilized). All other maintenance is the responsibility of the Owner. However, it is the Contractor's responsibility to ccasionally inspect the quality of the Owner's maintenance.

3.4 ACCEPTANCE

A. PRELIMINARY PLANTING ACCEPTANCE
Preliminary planting acceptance shall be given for completed planting operations for the purpose of the Contractor becoming eligible for payment for this portion of the Contract work. In order to obtain Preliminary Acceptance, the Contractor shall notify the Owner and/or Owner's Representative by phone or in writing at the conclusion of all planting operations so that preliminary acceptability by way of a field inspection can be performed. In order for an area to be accepted on a preliminary basis, it shall conform to the following:
1. All plant material shall be in conformance with the Drawings with respect to quality, size, species and location, except those items accepted or revised in the field by the Landscape Architect.
2. All plant material shall be in a healthy condition, as defined under the guarantee requirements stated below in Section 3.14

B. FINAL PLANTING ACCEPTANCE
Final planting acceptance shall be granted after the completion of all replacement operations required fulfilling the guarantee stated below. On or about the expiration of the one-year (1 year) guarantee, a follow-up inspection will be made by the Owners and/or Owner's Representative to determine replacements required to be made by the Contractor in accordance with the provisions of these specifications. The inspector will document his/her findings in a field report. Upon completion of the replacement program, the Owner and/or Owner's Representative shall conduct an inspection to determine the acceptability of the required replacements. If all is found to be acceptable as defined by Item A above, the Contractor and the General Contractor shall be notified in writing of his final acceptance of work.

3.5 GUARANTEE
The Contractor shall guarantee for a period of one (1) year the replacement of any permanent plant which has died, or is in a dying condition, or which has failed to flourish in such a manner that its usefulness or appearance has been impaired. Any tree with a dead main leader or with a crown which is twenty-five percent (25%) or more dead shall be replaced.
These guarantees shall be in accordance with the following:

A. ONE YEAR PERIOD
The one (1) year period shall begin on the date of Preliminary Acceptance of all plant material.
B. REPLACEMENTS & DAMAGES
The decisions of the Owner and/or Owner's Representative for required replacements shall be conclusive and binding upon the Contractor. The Contractor shall also be responsible for repairing damage to persons and property also caused by defective workmanship and materials.
C. EXCLUSIONS
The Contractor shall not be liable for the replacement of plants which were damaged by animals, by deicing compounds, fertilizers, pesticides or other materials not specified by the Contract documents or not applied by him under his supervision, by relocating or removal by others, by Acts of God, by vandalism or by terrorism.
D. GUARANTEE PERIOD INSPECTION
During the guarantee period, the Contractor shall, from time to time, inspect the watering, cultivation, and other maintenance operations carried on by the Owner with respect to such work, and promptly report to the Owner any methods, practices or operations which he considers unsatisfactory, and not in accord with his interests or good horticultural practices. The failure of the Contractor to so inspect or report shall be construed as an acceptance by him of the Owner's maintenance operations, and he shall not thereafter claim or assert that any defects which may later develop are the result of such methods or practices or operations.

TURF GRASS

PART 1 - GENERAL

1.1 SCOPE OF WORK

The work includes finish grading, furnishing fertilizer, seed and/or sod as specified and performance of all operations in connection with seeding and/or sodding in strict accordance with the applicable Drawings and subject to the terms and conditions of the Contract.

1.2 EQUIPMENT

The Contractor shall provide and maintain equipment suitable for the execution and completion of the work specified in accordance with (IDOT) Standard Specifications. All equipment shall be operated by personnel trained in the operation of such equipment.

PART 2 - PRODUCTS

2.1 TOPSOIL

Topsoil for planting operations shall be obtained from an on-site stockpile generated from site stripping. In the event that none is available, needed topsoil shall be imported from an off-site source. All imported topsoil, used for any portion of the work, shall be fertile, friable, natural loam containing a liberal amount of humus. It shall be relatively free from weeds, large roots, plants, sticks, stones larger than one (1) inch, waste, debris or other extraneous matter. The installing Contractor shall be responsible for rock picking and/or debris removal as needed to meet this specification.

The soil, to be acceptable topsoil, shall meet the following criteria:

1. ORGANIC MATTER: Not less than 1.5 percent no more than 10.0 percent.
2. pH: No lower than 5.0 nor higher than 8.0.
3. TEXTURE: No more than 25 percent clay.
4. SOLUBLE SALT: No more than 1000 ppm.
5. CHEMICAL ACTIVITY: The topsoil (on-site & imported) shall be free from any toxins or chemical residue which could result in any form of plant growth damage.

The Contractor shall provide a soil analysis report submittal containing test results and soil scientist recommendations based on a minimum of one (1) sample taken from each proposed imported topsoil stock pile. The testing shall cover macro nutrients and pH, soluble salts, organic content/mechanical analysis and Bio assay.

2.2 COMMERCIAL FERTILIZER AND DELIVERY

Fertilizer shall be delivered to the site in unopened, original containers, each bearing name and address of the manufacturer, name brand, or trademark, and manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable to use, will not be accepted. Fertilizer shall not have been exposed to weather prior to delivery on the site and after delivery until used. It shall be completely protected at all times and shall not be stored in direct contact with the ground.

A. FERTILIZER STRENGTH
The fertilizer shall be a complete fertilizer containing a minimum basis percentage by weight of the following:
1. PRIOR TO SEEDING AND/OR SODDING 6-24-24
Nitrogen..... 6%
Phosphorous..... 24%
Potash..... 24%

2. AFTER SEEDING AND/OR SODDING 18-5-9
Nitrogen..... 18%
Phosphorous..... 5%
Potash..... 9%

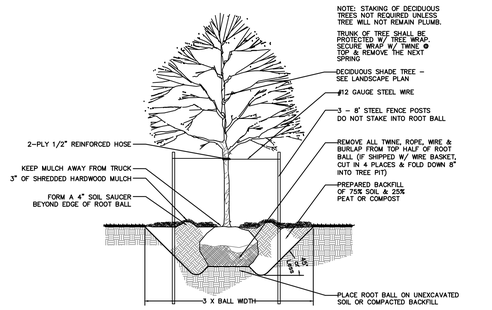
a) One-quarter of the nitrogen shall be in the form of nitrates, one-quarter in the form of ammonia salts, and one-half in the form of organic nitrogen.
b) Available phosphoric acid shall be derived from super-phosphate having a minimum guaranteed analysis of 20% of available phosphate.
c) The potash shall be in the form of sulphate of potash.

The balance of the fertilizer shall be made up of materials usually present in such a product. It shall be free from dust, sticks, sand, stone, or other debris.

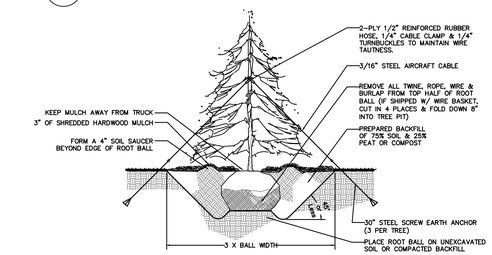
2.3 GRASS SEED (if specified)
Grass seed shall be reclaimed seed of the previous season's seed crops. All seed shall meet requirements established by the State and Federal Seed and Weed Controls Laws. The grass seed mixture shall be composed of the following grass seeds mixed in proportions by weight and shall meet or exceed the minimum percentages of purity and germination as indicated.

PROPORTION BY WEIGHT	TYPE OF GRASS
1. CONVENTIONAL TURF GRASS MIX (if specified)	
60%	KENTUCKY BLUEGRASS (blend of 3 cultivars)
30%	PERENNIAL RYEGRASS (blend of 2 cultivars)
10%	CREEPING RED FESCUE
(Apply at 7 lbs./1,000 S.F. for mechanical seeding)	
2. SALT TOLERANT MIX (if specified)	
40%	'FULTS' ALKALI GRASS (PUCCINELLIA DISTANS)
30%	CREEPING RED FESCUE
20%	KENTUCKY BLUEGRASS
10%	PERENNIAL RYEGRASS
(Apply at 5 lbs./1,000 S.F. for mechanical seeding)	

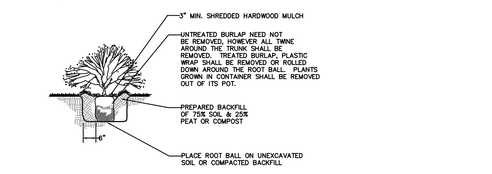
The percentage of hard seed included as a part of the germination percentage of any lot of seed, shall not exceed twenty. Kentucky bluegrass seed shall weigh a minimum of 28 pounds to the nearest measured bushel. Weed seed content shall not exceed 0.25%.



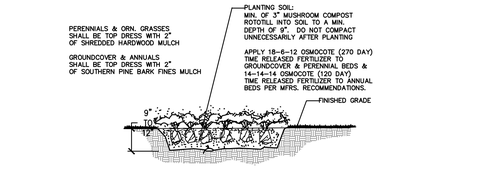
DECIDUOUS TREE n.t.s.



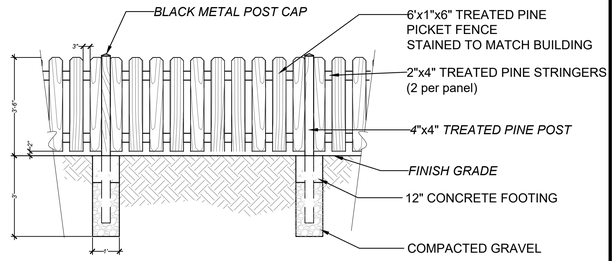
EVERGREEN TREE n.t.s.



SHRUBS n.t.s.



BED PLANTING DETAIL n.t.s.
(PERENNIALS, ORNAMENTAL GRASSES VINES, GROUNDCOVER & ANNUALS)



42" WOODEN DOG RUN FENCE (or equal) 3/8" = 1'-0"

REVISIONS		
3	Gazebo Dimensions	6-27-23
2	New Site Plan	5-30-23
1	New Site Plan/Village Review	5-18-23

PROPOSED MULTI-FAMILY DEVELOPMENT
22825 N. PRAIRIE ROAD
BUFFALO GROVE, ILLINOIS

If this plan is not 24" x 36" in size, then it is a reproduction that may not be to scale

Any reproduction of the design or the concept embodied herein in any form, in whole or in part, without consent from Metz & Company is prohibited.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

SEAL:
STATE OF ILLINOIS
RANDY F. METZ
no. 157-000422
LICENSED
LANDSCAPE
ARCHITECT

METZ & COMPANY
LANDSCAPE ARCHITECTURE/SITE PLANNING
826 East Maple Street
Lombard, Illinois 60148
PH: 630.561.3903
www.metz-company.com

TITLE
LANDSCAPE SPECIFICATIONS

PROJECT NO.: 23-227

DATE: 4-27-2023

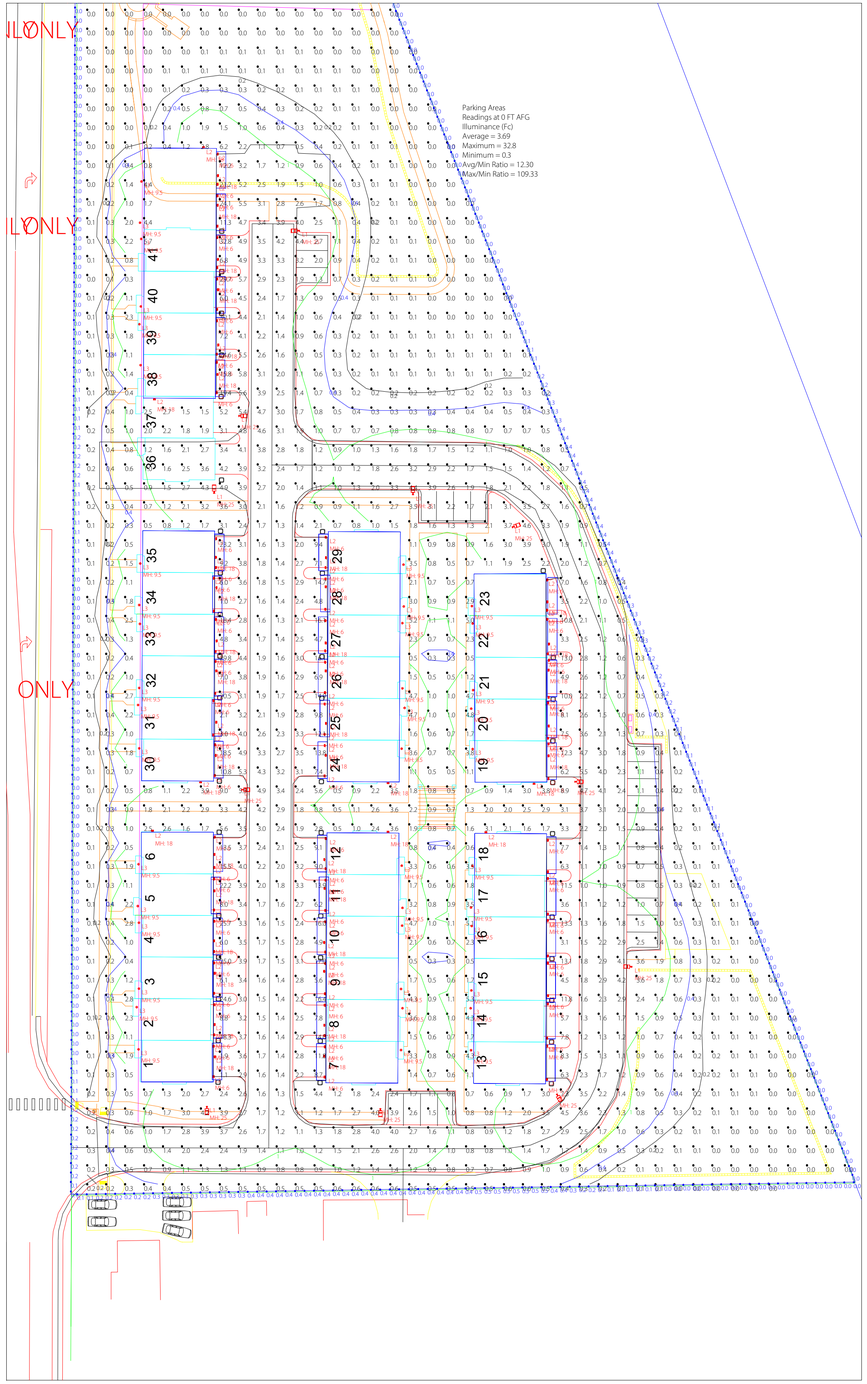
SCALE: N.T.S.

SHEET
L-3.0

© Copyright 2023 all rights reserved. The design and any and all ideas contained herein are the sole property of Metz & Company.

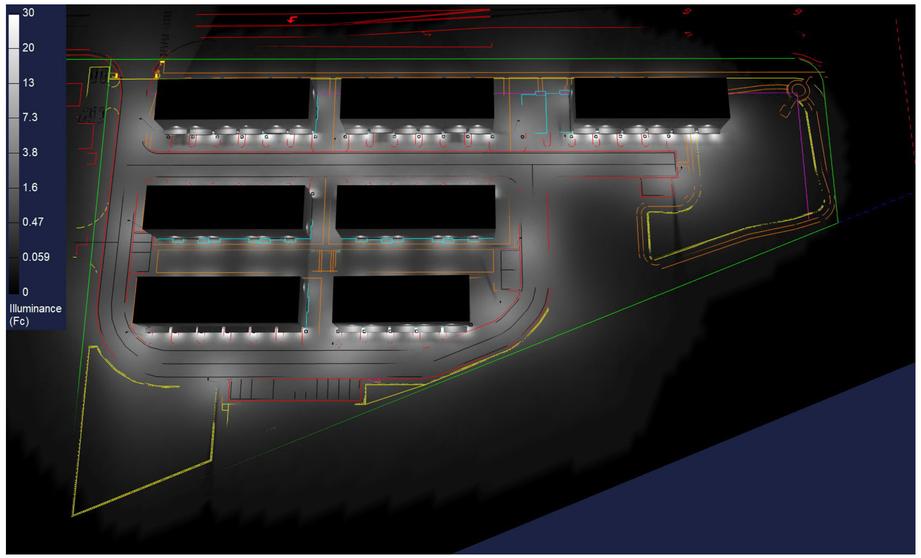
PLOT TO 22"X34" PAGE

Calculation Summary											
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**	**Description**	**PtSpcLr**	**PtSpcTb**	**Meter Type**
Full Site	Illuminance	Fc	1.84	32.8	0.0	N.A.	N.A.	Readings at 0 FT AFG	10	10	Horizontal
Property Line	Illuminance	Fc	0.10	0.5	0.0	N.A.	N.A.	Readings at 0 FT AFG	5	N.A.	Horizontal
Parking Areas	Illuminance	Fc	3.69	32.8	0.3	12.30	109.33	Readings at 0 FT AFG			



Scale: 1 inch= 40 Ft.

Luminaire Schedule			All quotes/orders generated from this layout must be forwarded to the Local Rep Agency						
Symbol	**Qty**	**Tag**	**Label**	**Lum. Lumens**	**LLF**	**Description**	**Lum. Watts**	**Total Watts**	**BUG Rating**
	11	L1	A17-3T70N	10122	1.000	A17 Type III 70W	70.05	770.55	B2-U0-G2
	125	L2	SLIM12N	1813	1.000	Slim wallpack 12W 4000K	14.1	1762.5	B1-U0-G0
	41	L3	RDLFA-6R12_ 595CCT120WB	1016	1.000	6in Wafer Downlight 12W 4000K	11.3	463.3	N.A.



NOTES:
* The light loss factor (LLF) is a product of many variables. RAB's standard is to use the initial 1.0 LLF in accordance with most municipal lighting ordinance light trespass requirements, unless otherwise noted.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* RAB disclaims all responsibility for the suitability of existing or proposed poles and bases to support proposed fixtures. This is the owner's, installer's and/or end-user's responsibility based on the weight and effective projected area ("EPA") of the proposed fixtures and the owner's site and soil conditions, wind zone, and many other factors. A professional engineer licensed to practice in the state the site is located should be engaged to assist in this determination.

* The landscape material shown hereon is conceptual and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the RAB Lighting Design. The owner/contractor/customer/end-user must provide accurate and complete construction drawings that reflect what will be the final construction RAB is not responsible for any inaccuracies caused by incomplete, inaccurate, or outdated information provided by the owner/contractor/customer/end-user.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending may apply. Please see www.rablighting.com/ip.

* The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

* RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

* RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package and should not be relied upon for any purpose.

* Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package, and should not be relied upon for any purpose.

* Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

Scale: as noted
Date:5/26/2023

PROJECT #209797
CASE #1109753

Filename: 22825 N Prairie Ave 11097538.AGI
Drawn By: Shaun Fillion, LC CLCP

Job Name:
22825 N. Prairie Ave.
Buffalo Grove, IL

Lighting Layout
Version B

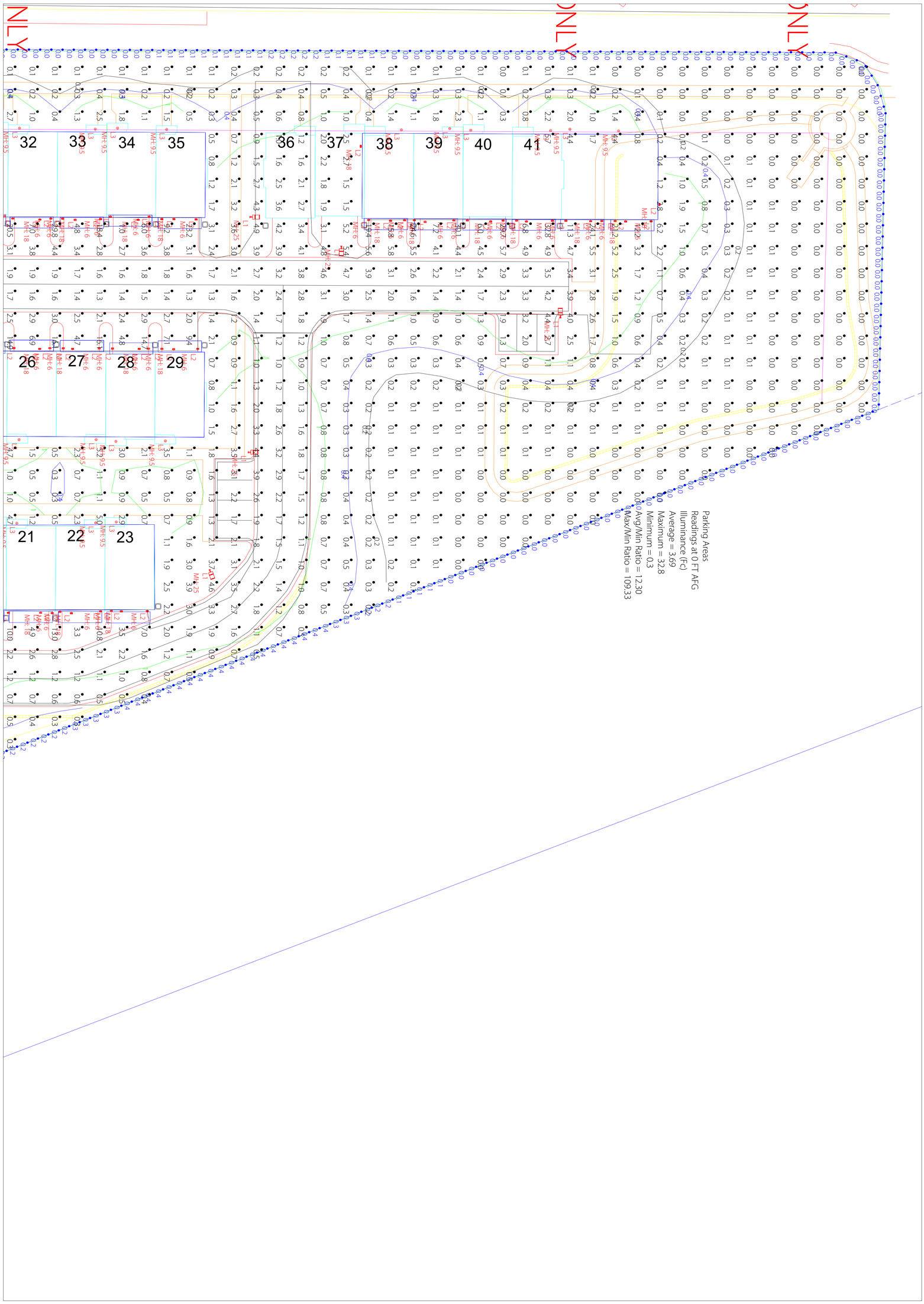
Prepared For:
Casey Electric
1001 Industrial Dr.
Bensenville, IL 60106

Filename: C:\Users\shaun.fillion\Desktop\229[illegible] N Prairie Ave 11097538.AGI

RAB
408 W 14th Street, New York, NY 10014
888 722-1000 • rablighting.com

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 - 22825 N. Prairie Rd)

Scale: 1 inch= 20 Ft.



RAB
408 W 14th Street, New York, NY 10014
888 722-1000 • rablighting.com

Prepared For:

Casey Electric
1001 Industrial Dr,
Bensenville, IL 60106

Job Name:
22825 N. Prairie Ave.
Buffalo Grove, IL

Lighting Layout
Version B

Scale: as noted	PROJECT #209797
Date:5/26/2023	CASE #1109753
Filename: 22825 N Prairie Ave 1109753B.AGI	
Drawn By: Shaun Fillion, LC CLCP	

Filename: C:\Users\shaun.fillion\Desktop\22825 N Prairie Ave 1109753B.AGI

The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others.
These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

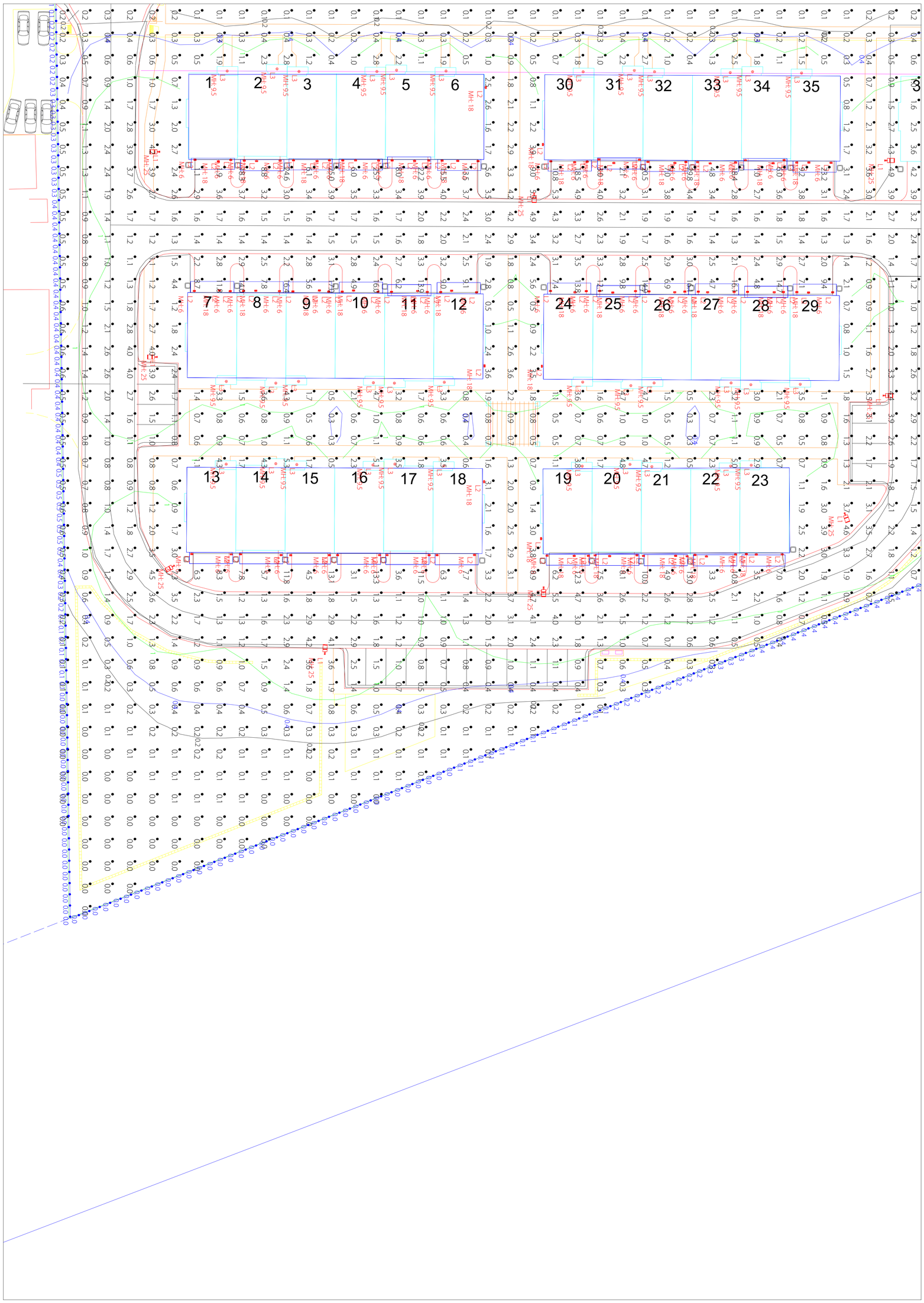
RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package and should not be relied upon for any purpose.

Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

PLOT TO 22"X34" PAGE

Scale: 1 inch= 20 Ft.



RAB
408 W 14th Street, New York, NY 10014
888 722-1000 • rablighting.com

Prepared For:

Casey Electric
1001 Industrial Dr,
Bensenville, IL 60106

Job Name:
22825 N. Prairie Ave.
Buffalo Grove, IL

Lighting Layout
Version B

Scale: as noted	PROJECT #209797
Date:5/26/2023	CASE #1109753
Filename: 22825 N Prairie Ave 1109753B.AGI	
Drawn By: Shaun Fillion, LC CLCP	

Filename: C:\Users\shaun fillion\Desktop\22825 N Prairie Ave 1109753B.AGI

The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others.
These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package and should not be relied upon for any purpose.

Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

PLOT TO 22"X34" PAGE

A17-3T70N



Color: Bronze

Weight: 10.8 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.70A
208V	0.40A
240V	0.35A
277V	0.30A
Input Watts	69.8W

LED Info

Watts	70W
Color Temp	4000K (Neutral)
Color Accuracy	72 CRI
L70 Lifespan	100,000 Hours
Lumens	10,148 lm
Efficacy	145.3 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

IP Rating:

Ingress protection rating of IP65 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PL0M2HOLUOND

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 0.70A, 208V: 0.40A, 240V: 0.35A, 277V: 0.30A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

3.26% at 120V, 13.34% at 277V

Power Factor:

99.5% at 120V, 91.6% at 277V

Surge Protection:

10kV

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Construction

IES Classification:

The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It is intended to be located near the side of the area, allowing the light to project outward and fill the area.

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Lens:

Polycarbonate lens

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

A17-3T70N

Technical Specifications (continued)

Construction

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Vibration Rating:

3G vibration rating per ANSI C136.31

EPA:

1 Fixture: 0.46
2 Fixtures at 90°: 0.60
2 Fixtures at 180°: 0.93
3 Fixtures at 90°: 0.93
4 Fixtures at 90°: 0.93

EPA with Slipfitter & Adjustable Arm Mounting Accessories (Sold Separately)

1 Fixture: 0.66
2 Fixtures at 90°: 0.80
2 Fixtures at 180°: 1.32
3 Fixtures at 90°: 1.32
4 Fixtures at 90°: 1.32

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Other

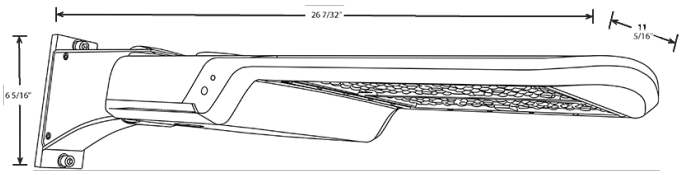
5 Yr Limited Warranty:

The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- 0-10V Dimming, standard
- 100,000-hour LED lifespan
- 5-Year, limited warranty

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

A17-3T70N

Ordering Matrix

Family		Distribution	Wattage/Lumens	Mounting	Color Temp	Driver	Options
A17	–	3T	70		N		
		3T = Type III **4T =** Type IV **5T =** Type V	**150 =** 150W/22,500LM **200 =** 200W/30,000LM **240 =** 240W/36,000LM **300 =** 300W/45,000LM **375 =** 375W/51,800LM **70 =** 70W/10,000LM **100 =** 100W/15,000LM	**Blank =** Universal Pole Mount **SF =** Slipfitter (Factory installed SF available in 150W)	**Blank =** 5000K Cool **N =** 4000K Neutral	**Blank =** 120-277V, 0-10V Dimming **/480 =** 480V, 0-10V Dimming [1]	**Blank =** No Option **/3PRS =** 3-pin Receptacle and Shorting Cap **/7PRS =** 7-pin Receptacle and Shorting Cap **/MVS =** Microwave Motion Sensor **/LC =** Lightcloud® Controller

[1] *480V driver available standard on 150W and 300W and by special order on 100, 240 and 375W. Not available on 70W or 200W models.*

Type II distribution available as special order

Wall mount and adjustable universal pole mount available as optional field-installed accessories

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

PS4-11-25D2



Square steel poles drilled for 2 Area Lights at 180°. Designed for ground mounting. Poles are stocked nationwide for quick shipment. Protective packaging ensures poles arrive at the job site good as new.

Color: Bronze

Weight: 167.6 lbs

Project:	**Type:**
Prepared By:	**Date:**

Technical Specifications

Compliance

CSA Listed:

Suitable for wet locations

Construction

Shaft:

46,000 p.s.i. minimum yield.

Hand Holes:

Reinforced with grounding lug and removable cover

Base Plates:

36,000 p.s.i. minimum yield.

Shipping Protection:

All poles are shipped in individual corrugated cartons to prevent finish damage

Color:

Bronze powder coating

Height:

25 ft.

Weight:

168 lbs

Gauge:

11

Wall Thickness:

1/8"

Shaft Size:

4"

Hand Hole Dimensions:

3" x 5"

Bolt Circle:

8 1/2"

Base Dimension:

8"

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

PS4-11-25D2

Technical Specifications (continued)

Construction

Anchor Bolt:

Galvanized anchor bolts and galvanized hardware and anchor bolt template. All bolts have a 3" hook.

Anchor Bolt Templates:

WARNING Template must be printed on 11" x 17" sheet for actual size. CHECK SCALE BEFORE USING. Templates shipped with anchor bolts and available online.

Pre-Shipped Anchor Bolts:

Bolts can be pre-shipped upon request for additional freight charge

Max EPA's/Max Weights:

70MPH 4.3 ft./275 lb.
80MPH 1.7 ft./270 lb

Other

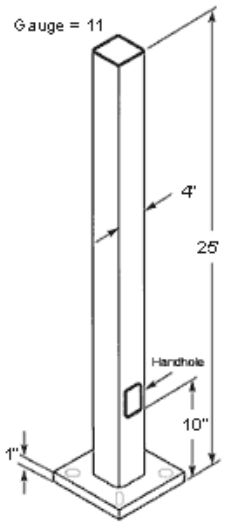
Terms of Sale:

Pole Terms of Sale is available online.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- Designed for ground mounting
- Heavy duty TGIC polyester coating
- Reinforced hand holes with grounding lug and removable cover for easy wiring access
- Pole caps, base covers & bolts are sold separately
- Custom manufactured for each application

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

SLIM12N



12, 18 and 26 Watt SLIM wall packs are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.2 lbs

Project:	**Type:**
Prepared By:	**Date:**

Driver Info

Type	Constant Current
120V	0.13A
208V	0.08A
240V	0.07A
277V	0.06A
Input Watts	14.9W

LED Info

Watts	12W
Color Temp	4000K (Neutral)
Color Accuracy	75 CRI
L70 Lifespan	100,000 Hours
Lumens	2,039 lm
Efficacy	136.8

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IP Rating:

Ingress protection rating of IP66 for dust and water

ADA Compliant:

SLIM™ is ADA Compliant

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PGJBD3AQ

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50-60Hz, 120V: 0.13A, 208V: 0.08A, 240V: 0.07A, 277V: 0.06A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

5.19% at 120V, 8.55% at 277V

Power Factor:

99.4% at 120V, 94% at 277V

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 70W Metal Halide

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Precision die-cast aluminum housing

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation

Recommended Mounting Height:

Up to 8 ft.

Lens:

Tempered glass lens

Reflector:

Specular thermoplastic

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

SLIM12N

Technical Specifications (continued)

Other

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

HID Replacement Range:

Replaces 70W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

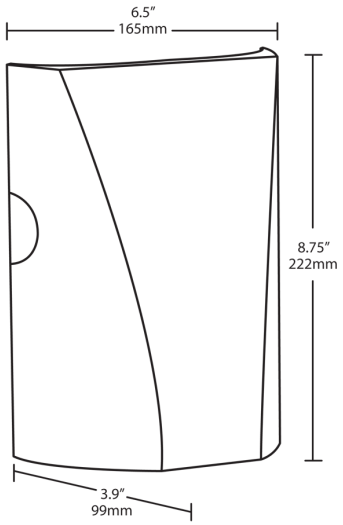
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Dimensions



Features

- Full cutoff, fully shielded LED wall pack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year, No-Compromise Warranty

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

SLIM12N

Ordering Matrix

Family	Wattage	Color Temp	Finish	Driver	Options
SLIM	12	N			
	12 = 12W **18 =** 18W **26 =** 26W	**Blank =** 5000K Cool **N =** 4000K Neutral **Y =** 3000K Warm	**Blank =** Bronze **W =** White	**Blank =** 120-277V, 0-10V Dimming **/D10 =** 120-277V, 0-10V Dimming	**Blank =** No Option **/PC =** 120V Button **/PC2 =** 277V Button **/LC =** Lightcloud® Controller

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

RDLFA-6R12.595CCT120WB



Color: White

Weight: 0.9 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.12A
208V	N/A
240V	N/A
277V	N/A
Input Watts	12.5W

LED Info

Watts	12W
Color Temp	2700K/3000K/3500K/4000K/5000K
Color Accuracy	90 CRI
L70 Lifespan	50,000 Hours
Lumens	1,000 lm
Efficacy	80

Technical Specifications

Performance

Description:

Deep regress remote driver downlight looks like a traditional recessed retrofit but without the need of a traditional downlight housing. With the flexibility to choose from 5 field selectable color temperatures 2700K, 3000K, 3500K, 4000K, 5000K and suitable for dry, damp, and wet locations, making them perfect for both indoor and outdoor use.

Product Type:

Recessed Downlights

Input Wattage:

12.5W

Lumens (Nominal):

1,000 Lm

Efficacy:

80 Lm/W

L70 Lifespan:

50,000-Hour LED lifespan based on IES LM-70 results

Compliance

UL Listed:

Suitable for wet locations

Energy Star Approved:

ENERGY STAR® Version 2.2 Certified

Energy Star ID:

2388931

Electrical

Dimming Driver:

TRIAC compatible dimmer with dimming as low as 10%.

THD:

≤20%

Power Factor:

≥0.9

Flicker:

<5%

Input Voltage:

120V

Operating Frequency:

60Hz

Construction

Material:

Metal

Trim Style:

Baffle

Shape:

Round

Mounting:

Recessed ceiling

LED Characteristics

R9 Value:

High color performance with R9 greater than or equal to 50

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

RDLFA-6R12.595CCT120WB

Operating Temperature:

-20°C (-4°F) to 40°C (104°F)

Size:

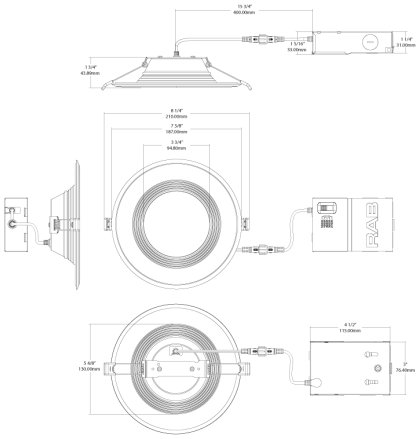
6"

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

RDLFA-6R12.595CCT120WB

Dimensions



Features

- 5 color temperatures in 1 SKU (2700K, 3000K, 3500K, 4000K, 5000K)
- Back-lit deep regress remote driver downlight
- No recessed housing or j-box required
- Dimmable down to 5% on compatible dimmers, see Dimmer Compatibility List
- IC and airtight rated
- Suitable for indoor and outdoor use in dry, damp, and wet environments

Ordering Matrix

Family	Size	Shape	Wattage	CRI/Color Temp	Voltage	Finish	Trim
RDLFA	6	R	12.5	95CCT	120	W	B
	4 = 4" **6** = 6"	**R** = Round	**8** = 8W **12.5** = 12.5W	**95CCT** = 90 CRI, Field Adjustable	**120** = 120V	**W** = White	**B** = Baffle

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

VILLAGE OF
BUFFALO GROVE

Regulations from the Zoning Code cannot be varied unless findings of fact are made that the following criteria are met. Please provide a response to each of the criteria below.

17.52.070 – CRITERIA FOR VARIATION

Section 17.28.505(E)4b to allow the distance between the south property line and the townhome buildings to be less than twice the building height when abutting a different kind of use (i.e., single-family next to multi-family);

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations of the zoning district in which it is located except in the case of residential zoning districts;

   Response: Due to the existing 0.63 acre wetland located on the northern third of the combined property, the proposed buildings must be situated closer to the southern lot line rather than spread equally throughout the property.

2. The plight of the owner is due to unique circumstances;

   Response: The existence of the wetland is a unique circumstance of this site and was instrumental in driving the design direction of the site plan and necessitated the 54.4' side setback rather than the required 70' side setback.

3. The proposed variation will not alter the essential character of the neighborhood.

   Response: The proposed 15.6' side setback variation will not alter the character of the neighborhood. The architectural style chosen suits the existing character and, with its gabled roofline, minimizes the building height at the southern end of each building.

Section 17.28.050(E)4e(i) to allow the spacing between front facing buildings to be less than 50 feet;

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations of the zoning district in which it is located except in the case of residential zoning districts;

   Response: The existing 0.63 acre wetland located on the northern third of the combined property and the angle of the Wisconsin Central Railroad running northwest along the east

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

side of the property, create design constraints. Partially remediating the wetland and preserving a portion of it requires a significant additional investment in site work, site stabilization, landscaping and fees. Without the proposed density, the project would not be financially viable.

2. The plight of the owner is due to unique circumstances;

Response: The existence of the wetland and railroad are unique circumstances that have long made this well-located property difficult to develop. The northern 3 acres of the combined property has been vacant for decades and on and off the market for approximately 20 years.

3. The proposed variation will not alter the essential character of the neighborhood.

Response: All "front facing" buildings on the property are located within the landscaped courtyards and will not be visible from the street or neighboring properties. Therefore, it will not alter the essential character of the neighborhood.

Section 17.28.050(C) to allow a rear yard setback of 34' 8" for Building 4, in lieu of the 35 foot setback required

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations of the zoning district in which it is located except in the case of residential zoning districts;
\

Response: The existing 0.63 acre wetland located on the northern third of the combined property and the angle of the Wisconsin Central Railroad running northwest along the east side of the property create design constraints and directly cause the need for this variation request. Partially remediating the wetland and preserving a portion of it requires a significant additional investment in site work, site stabilization, landscaping and fees. Without the proposed density, the project would not be financially viable.

2. The plight of the owner is due to unique circumstances;

Response: The existence of the wetland and railroad are unique circumstances that have long made this well-located property difficult to develop. The angle of the railroad specifically necessitated this variance.

3. The proposed variation will not alter the essential character of the neighborhood.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

VILLAGE OF
BUFFALO GROVE

Response: **The proposed variation is extremely small and will not be visible from the street. Therefore, it will not affect the essential character of the neighborhood in any way.**

Section 17.28.050(A) & (C) to allow accessory structures (gazebo and deck) to be closer to the front lot line than the principal buildings and beyond the mid-point of the principal structures when located in a side yard.

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations of the zoning district in which it is located except in the case of residential zoning districts;

   Response: **Due to the unique location as a gateway to a proposed mixed- use development near the Prairie View Station, it presents a unique opportunity to prominently identify the property with attractive accessory structures which will benefit the community at large as well as the residents of the proposed development. The proposed location of the gazebo, walkways and overlooks makes the development more desirable and therefore more financially viable.**

2. The plight of the owner is due to unique circumstances;

   Response: **The existence of the wetland and railroad are unique circumstances that have long made this well-located property difficult to develop. In order to provide the necessary surface detention and partial wetland remediation and retention, we were extremely limited in where we could locate the proposed gazebo and overlook.**

3. The proposed variation will not alter the essential character of the neighborhood.

   Response: The proposed gazebo and wetland overlook will enhance the neighborhood by upgrading a low-lying overgrown property to an attractive park-like amenity, keeping with the character of the neighborhood.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

PLANNED UNIT DEVELOPMENT STANDARDS

1. Have the minimum areas as set forth in Section 17.16.060.
Response: Yes – the minimum area for the proposed R9 zoning district is 2 acres. The subject property is 4.27 acres.

2. The uses permitted in such development are not of such a nature or so located as to exercise an undue detrimental influence or effect upon the surrounding neighborhood;
Response: The proposed use, attached single family residential, is consistent with the nature of the surrounding neighborhood, namely: townhomes to the east and west; commercial to the north; and single family to the south, and as such are very compatible with the surrounding neighborhood and therefore will not have a detrimental influence or effect.

3. The plan effectively treats the developmental possibilities of the subject property, making appropriate provisions for the preservation of streams, wooded areas, scenic views, floodplain areas, and similar physical features;
Response: The plan takes care to maximize the developmental possibilities of the existing features including partially remediating and landscaping the existing wetland, creating a park-like feature on the corner with a gazebo and wetlands overlook and landscaping the entire property consistent with an upscale townhome development.

4. All requirements pertaining to commercial, residential, institutional or other uses established in the planned unit development conform to the requirements for each individual classification as established elsewhere in this Title, except as may be specifically varied for the proper planning of the planned unit development;
Response: All requirements pertaining to a residential use conform to the requirements as established elsewhere in this title.

5. The Planning and Zoning Commission shall determine that the area and width of the lot shall be sufficient for the proposed use, and that the development of the property in the proposed manner creates no outlots which will be difficult to develop in an appropriate manner.
Response: No outlots will be created by this development.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

SPECIAL USE STANDARDS

1. The special use will serve the public convenience at the location of the subject property; or 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;
Response: The special use shall serve the public convenience by providing a sought after housing type by providing an attached single family rental option in an extremely convenient and attractive location. The proposed use, attached single family residential, is consistent with the nature of the surrounding neighborhood, namely: townhomes to the east and west; commercial to the north; and single family to the south, such that the establishment, maintenance and operation will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

2. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with said special use, the size of the subject property in relation to such special use, and the location of the site with respect to streets giving access to it shall be such that it will be in harmony with the appropriate, orderly development of the district in which it is located;
Response: With its multiple points of ingress and egress and carefully planned street presence, the proposed development shall be in harmony with the appropriate and orderly development of the district in which it will be located.

3. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning district, nor substantially diminish and impair other property valuations with the neighborhood;
Response: The special use will be consistent with other recent developments in the neighborhood. therefore it will not diminish or impair other property valuations.

4. The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder or discourage the development and use of adjacent land and buildings in accord with the zoning district within which they lie;
Response: The site plan of the special use is specifically designed for a potential future "Phase 2" of additional units to the south should those two properties ever become available. The special use will not otherwise impede, hinder or discourage future development.

5. Adequate utilities, access roads, drainage, and/or other necessary facilities have been or will be provided;
Response: Adequate access and utilities are available and/or will be provided.

6. Parking areas shall be of adequate size for the particular special use, which areas shall be properly located and suitably screened from adjoining residential uses, and the entrance and exit driveways to and from these parking areas shall be designed so as to prevent traffic hazards, eliminate nuisance and minimize traffic congestion in the public streets.
Response: 4.58 parking spaces are provided per unit. All 188 parking spaces are either indoor or provided within the interior driveways and are otherwise suitable screened from adjoining residential uses. The ingress and egress drives are designed to prevent traffic and minimize congestion.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

THE PERMAN GROUP

PUBLIC AFFAIRS STRATEGY
PUBLIC POLICY COMMUNICATIONS

May 29, 2023

Mr. Jeff Michael
Bloom Street Partners, LLC
1946 West Lawrence Avenue
Chicago, IL 60640

Dear Mr. Michael:

The Perman Group was asked by Bloom Street Partners (BSP) to evaluate the fiscal/economic impact of a proposed residential development called Prairie Point to be built at 22771-22825 Prairie Rd. in Buffalo Grove, IL. The proposed project consists of: 41 rental townhomes within Seven, 2 ½ - 3-story buildings (Six, 6-unit buildings and one, 5-unit building) on 4.25 acres in unincorporated Lake County. The property is located in the South Subarea featured in the Prairie View Station Area Plan, which was adopted by the Village of Buffalo Grove as part of its Comprehensive Plan in 2019.

Each unit would be between 1,800-2,000 square feet and would feature 3 bedrooms, a den, 2 ½ bathrooms, and a rear-loaded two-car garage. The townhomes would be luxury rental homes with rents at an estimated $4,000 per month, and would serve young families, empty-nesters looking to downsize, or anyone seeking a convenient location to live in proximity to the North Central Service Metra train line.

Our evaluation includes: the absorption rate and projected population, the tax revenues that will accrue to the Village of Buffalo Grove and the other local taxing bodies, the attendant costs to those taxing bodies, the net present value of net revenues to the taxing bodies over 14 years, and our conclusions of the fiscal impact from the proposed project that will benefit the Buffalo Grove community.

Besides our internal calculations using well-recognized formulas, we based our conclusions on data provided by Bloom Street Partners; formulas from both the Illinois School Consulting/Associated Municipal Consultants, Inc. (1996); and from Rutgers University, Center for Urban Policy Research, Residential Demographic Multipliers, Estimates for the Occupants of New Housing, June 2000, and other sources identified in the report.

The Village of Buffalo Grove, Stevenson High School District 125 and Lincolnshire-Prairie View District 103, and the other taxing bodies, such as the Vernon Area Public Library District, will see significant dollars resulting from the project when it is fully occupied. Before the project is complete, the Village of Buffalo Grove will benefit from substantial construction and permit fees.

Sincerely,

Jonathan Perman
Managing Director

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

1.0 Absorption Rates, Population and School Age Estimates (Table 1)

The absorption rate assumes the following schedule for the residential units. It is based on the developer's projections today for regulatory approval, construction, and a marketing campaign for the rental of the units.

2024	Construction
End of 2025	100% occupancy

The project expects to have a full population of 98. This number is reached by using a weighted average of household size based on the type of unit, according to formulas from Rutgers University, Center for Urban Policy Research, Residential Demographic Multipliers, Estimates for the Occupants of New Housing, June 2006. Their formulas are specifically for Illinois public school districts and unlike other studies, use explicit estimates for single-family attached 3-bedroom structures.

With regard to school age population, we used the same study with the following estimates:

3 BR attached townhomes generate: .10 public K-8 grade school students/unit
.06 public high school students/unit

For reference purposes of this report for Prairie Point, we calculated:

41 3 BR units for a total of: 4.1 public K-8 grade school students
2.46 public high school students

The Village of Buffalo Grove Code, by contrast, uses formulas that project the same number of high school students (2.5) but 12 elementary school students. Considering the proximity of the project to Stevenson High School, we have rounded up to 3 students.

We also looked at other examples of school population estimates for projects in or near Buffalo Grove. The Teska Associates, Inc. Fiscal Impact Analysis for Northbrook Pointe (2022), a 35-unit townhome project, now under construction uses an actual comparable, Northfield Mews, also of 35 units. This development yielded 7 elementary school students and 3 high school students.

A Goodman Williams study (2022) for Buffalo Grove Town Center used a comparable of Riverwalk Place in Buffalo Grove, built in 2006, which actually yielded only 2 school age (5-19) students in 90-unit apartment project for a ratio of 0.08 students per 2+ BR units. The same study projected Buffalo Grove Town Center would yield 11 students in a 283-unit project with 92 2-BR apartments, for a ratio of 0.13 school age children per 2 BR units. Finally, the same study showed, using the 2019 American Community Survey for Vernon Twp., that in multi-family communities with 20 or more units, the yield is only 6.2 school-age children per 100 units.

Given this data and comparables, we have elected to raise by 50% the Rutgers Univ. estimates for elementary school children from 4 to 6 students. Thus, the proposed Prairie Point development is expected to yield: **6 K-8 students**, and **3 high school students**.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

2.0 Taxable Revenue Projections (Table 2)

2.1 Property Taxes

Based on the last Lake County quadrennial reassessment (2019), at 22771-22825 Prairie Rd., the taxes paid on the property in 2023 (for the 2022 tax year) was $14,478.

Future quadrennial reassessment years occur in 2023, 2027, and every four years thereafter. Taxes based on the reassessment are due in the following years, respectively.

Property taxes are adjusted in the study in the year after any change in use or reassessment.

The study uses a 3% growth rate in assessment for a compounded 4-year increase between reassessments of 12.55%.

Since the property has never been developed and has largely been used for passive purposes, and since there are few attached townhomes for rent in Buffalo Grove, developing an estimate for the development's property taxes has been calculated using the following methods.

Estimated Gross Income Model
Rent = $4,000/mo. x 12 = $48,000 x 41 units = $1,968,000 x .95% = $1,869,600 @ 16% = **$299,136.**

Effective Tax Rate Model
The Civic Federation of Chicago just released its yearly report of effective tax rates in the Chicago metro area. An effective tax rate is the actual dollars paid by the taxpayer as a percentage of true market value. Buffalo Grove's effective tax rate for the 2019 tax year is 3.09%. Our small survey of comparable attached 3 BR townhomes in Buffalo Grove shows effective tax rates of around 2.8%. For purposes of this report, we have used a 3.0% effective tax rate.

The developer estimates the true market value of the property, when the 41 attached townhomes are completed to be $12,500,000. At a 3.0% effective tax rate, the property taxes would be **$375,000**.

Calculated Rate Model
Gross Income = $1,869,600 (see EGI Model above).
Operating Expenses at 35% = $654,360
Net Operating Income = $1,215,240/Cap. Rate of 5.25% = $23,147,429 = Estimated Stabilization Value (ESV).

$23,147,429 – 40% Assessor Discount ($9,258,971) = $13,888,458 = Assessor's FMV

$13,888,458 x State Equalizer (33%) = $4,629,023 x 1.1 (County Equalizer) = $5,091,925

$5,091,925 x 8.817% Buffalo Grove Aggregate Tax Rate = **$448,955**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Given the variance in the three estimates, they have been averaged together resulting in **$374,364 for property taxes**, when the development is fully occupied in 2025, nearly 26 times more than the property taxes paid in 2023.

In the 2022 tax year (paid in 2023), Lincolnshire-Prairie View School District #103 accounted for 35.9% of a property tax bill and Stevenson High School District #125 accounted for 34.6% of a tax bill. The Lincolnshire-Riverwoods Fire Protection District is 8.5% of the tax bill. The Vernon Area Library District is 3.2% of the tax bill. Other tax districts for Lake County and Vernon Township account for the remaining 18%. The report uses these same percentages of tax bills until the townhomes open in 2025.

Beginning in 2025, the following distribution is used for the developed property's tax bill, based on the 2022 tax bill for Buffalo Grove properties near the project's land. By then the Village of Buffalo Grove will have annexed the property:

Village of Buffalo Grove = 9.6%
Buffalo Grove Park District = 5.4%
School District #103 = 35.2%
School District #125 = 34%
Vernon Area Library = 3.4%
Twp. Of Vernon = 1%
All Lake County Taxing Districts = 11.3%

The additional property taxes generated by the project will increase the tax base for all of the taxing bodies cited above. Whether those taxing bodies choose to increase their levy to capture those incremental taxes or hold their levy constant (and reduce the amounts area residents have to pay) is a policy choice for each taxing body.

2.2 Sales Taxes from Residents Living in the Project (Table 2)

The median household income in the project is $137,143 when the building is opened in 2025. This is derived by using 35% of the unit rent, weighted by the number of units for each type of unit size (**see Table 3**). The growth in household income is estimated at 3% per year.

The study assumes the average household spends 20% of their annual income on convenience goods, of which 70% are purchased locally. The study also assumes the average household spends 10% of their annual income on comparison goods, of which 30% is purchased locally.

So, for example, in 2026, when the project is fully occupied, it is expected that the Village of Buffalo Grove will receive $466 per household x 41 households = **$19,691** (**see Table 4**).

The sales tax revenues identified here are only for direct spending by residents and do not include anticipated visitor spending or further economic benefits that often occur as new residents create demand for new businesses or expansion of existing businesses.

The study uses a 3% growth rate for each year.

Sales taxes include both the 1% municipal sales tax (returned from the state) and the 1% Home Rule sales tax.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

2.3 State Share Local Use Tax (Table 2)

The Village is expected to receive in 2022, $1,627,242 or $101.82 per household. The evaluation has kept the state income tax revenues level through the study period and bases it on the current Village of Buffalo Grove household population and the number of units occupied in Prairie Point.

The study assumes a one-year lag for receiving state local use taxes so that in 2026, one year after the development is fully occupied, the Village of Buffalo Grove will receive $4,174.62.

2.4 State Income Taxes (Table 2)

State income tax estimates are based on the total population absorption rates cited earlier. The Village of Buffalo Grove is budgeted to receive $5,300,000 in its share of state income taxes in 2022 (Village of Buffalo Grove Budget). The study assumes a one-year lag for receiving state income taxes.

The most recent U.S. Census household population estimate for Buffalo Grove is 15,982 (2017-21). That amounts to $332 per household x 41 units = **$13,612,** the income tax generated for the Village of Buffalo Grove, in the year (2026), one year after the building is fully occupied. The evaluation has kept the state income tax revenues level through the study period and bases it on the current Village of Buffalo Grove household population and the number of units occupied in Prairie Point.

2.5 Motor Fuel Tax (Table 2)

In 2022, the Village of Buffalo Grove is budgeted to receive $1,664,658 in motor fuel taxes from the State of Illinois, plus $544,255 from its local tax for a total of $2,208,913. This amounts to $138.21 per household.

Since Buffalo Grove will not capture additional motor fuel taxes from the project until after it is occupied, we do not show motor fuel tax revenue until 2026. So, for example, in 2027, when the project is fully occupied, it is anticipated the Village of Buffalo Grove will receive an estimated $138.21 x 41 household units = **$5,667**, annually.

The study assumes a one-year lag for receiving state motor fuel taxes. The evaluation has kept the state motor fuel tax revenues level through the study period because of the uncertainties in driving behavior in the future. Also, even though most of the households in Prairie Point will own cars, they still will also take taxis and ridesharing vehicles which will purchase motor fuel.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

2.6 Utility Taxes (Table 2)

In 2022, the Village of Buffalo Grove is budgeted to receive tax revenue from the combined accounts of Electric Use Tax and Natural Gas Utility Tax, totaling $2.7 million. In 2025, when the building is fully occupied, the Village of Buffalo Grove is expected to generate $2,700,000/15,982 households = $168.94 per household. So, multiplying $168.94 x 41 units = **$6,926.54**, annually.

The study assumes immediate collection of utility taxes. The evaluation has kept the utility tax revenues level through the study period because of the uncertainties in consumer behavior in the future with respect to electricity and natural gas.

2.7 Telecommunications Taxes (Table 2)

In 2022, the Village of Buffalo Grove is budgeted to receive $720,000 from the Telecommunications Tax. In 2025, when the building is fully occupied, Buffalo Grove is expected to generate $720,000/15,982 households = $45.05 per household. So, multiplying $45.05 x 41 units = **$1,847** annually.

The study assumes immediate collection of telecommunications taxes. The evaluation has kept the telecommunications tax revenues level through the study period because of the uncertainties in consumer behavior in the future with respect to telecommunications usage.

2.8 Buffalo Grove Library District Fees (Table 2)

The Village of Buffalo Grove, according to its municipal code, levies a fee of $93.85/person for library services. With 93 new residents in the development at $93.85 each, that will yield $8,728.05 annually to Indian Trails Public Library District.

The study assumes immediate collection of public library fees. The evaluation has kept these fee revenues level through the study period because of the uncertainties in how the fees will be assessed in the future.

2.9 Buffalo Grove School, Parks, and Library Donations (Table 2)

Based on the Village of Buffalo Grove's requirements for school and parks donations, the project will provide a Cash in Lieu of Land payment in the amounts as follows for Single Family Attached 3 BR units:

Elementary School District #103 (grades K-8): $965.03 x 41 units = $39,566
High School District #125: $179.57 x 41 units = $7,362
Parks B ($4,186) x 41 units = $171,626
Library: $224.49 x 41 units = $9,204

The study assumes these donations will be made in 2025.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

2.10 Construction and Other Permit Fees (Table 2)

Construction Fees, as well as fees for inspections, occupancy, electric permits, plumbing water/sewer, gas piping, mechanical permits, lift fees, signs and awnings fees, fire plan reviews, zoning and plan review fees, and other municipal fees associated with the construction that are charged to the developer by the Village of Buffalo Grove are estimated to be a total of at least **$250,000 over two years (2023-2024)**. At this stage of development process, this is an estimate based on the kinds of fees seen in similar projects of this size in Chicago's North Suburbs, and the estimate is intentionally low given the lack of information available now.

3.0 Public Expenses Projections

3.1 Village of Buffalo Grove Expenses (Table 5)

The cost to the Village of the additional 98 residents is calculated as follows. Included were the budget categories for: wages & benefits, operating expenses, capital, contractual services, and debt service, which together equal 73% of the yearly municipal budget in 2022.

Total 2022 budget = $128,396,637 – $34,667,092 = $93,729,545.

The costs are then adjusted downward to fairly distribute the costs of public services between residential and non-residential uses. The study estimates 44.9% can be attributed to servicing residential uses (CMAP Community Data Snapshot, Buffalo Grove, 2022). Therefore, the $93,729,545 in relevant municipal expenditures is expressed as the 44.9% attributed to residential land use. $93,729,545 x .449 = $42,084,566/42,784 population = $983.65 average cost per new resident.

The report also takes into account that Prairie Point is a Smart Growth development and therefore the incremental costs of providing services to such a project are less than in typical single-family neighborhoods where the relatively larger acreage results in a higher cost of service per capita. According to a 2013 Smart Growth America study, "Building Better Budgets: A National Examination of the Fiscal Benefits of Smart Growth Development", the cost of providing upfront infrastructure for smart growth developments is about 1/3 less than conventional suburban developments and the ongoing delivery of municipal services is 10% less.

Therefore, the study decreases the yearly municipal cost to servicing the 98 new residents by 20%.

$983.65 x 98 new residents = $96,398 minus 20% ($19,280) = $77,118 yearly municipal cost to the Village of Buffalo Grove.

A three percent growth rate in expenses is used per year.

So, for example, in 2025, when the project is fully occupied, the cost to the Village will be **$84,269**.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

4.0 School Impact Fiscal Analysis (Table 6)

The proposed project is in the Lincolnshire-Prairie View elementary School District #103 and Stevenson High School District #125, and the study assumes all school children generated from the property will attend those schools – although we do know some families may choose parochial or private schools.

The pro-rata share of property taxes collected for Prairie Point will go directly to these two school districts.

As noted earlier, once the project is completed in the 2025, we assume Lincolnshire-Prairie View School District #103 will be 35.2% of a property tax bill and Stevenson High School District #125 accounted for 34% of a tax bill. The report uses these same percentages of tax bills throughout the study period. We also assume an annual 3% increase in school operating costs per pupil.

Using the formulas cited earlier the proposed development is expected to yield **6 elementary school age children** and **3 high school students** (see Table 1).

Over the course of the study period, 2025-2035, the Lincolnshire-Prairie View District #103 will receive **$128,311 in net property tax revenue.**

Stevenson High School District #125, between 2025-2035, will receive **$629,219 in net property tax revenue.**

The operating expense per student in 2021 in District #103 was $18,029; and in District #125 it was $23,147, according to the Illinois School Report Card.

Therefore, in 2025, when the project is fully occupied, we estimate the cost of 6 elementary school students @ $20,293 each = $121,758. We estimate the cost of 2.5 high school students @ $26,052, each = $65,130.

Conclusions

The proposed Prairie Point project offers significant new positive fiscal impact to the Village of Buffalo Grove and its school districts. Consider first the current property yields only **$13,555** in property tax revenue. The new development, by contrast, offers **$374,000** in property tax revenue in 2025 (see Table 2). By 2029, property tax revenue will have grown to **more than $421,000 annually**. As with residential projects of this type, most of this new revenue will be in the form of new property taxes but there will be considerable other kinds of revenue too (see Table 2).

Analyzing the new revenue of each of the major taxing bodies, the study finds the Village of Buffalo Grove receiving an immediate infusion of new dollars from the construction building permit fees of more than **$250,000 over two years**. **Starting in 2026, the Village of Buffalo Grove is predicted to receive more than $97,000 of new revenue and that figure will ramp up to over $110,000 annually by 2033** (see Table 5).

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Whenever a new residential development is constructed, there are attendant costs to the major taxing bodies. For the Village of Buffalo Grove, those costs are for some nominal additional services necessary to accommodate increases in population resulting from the new development (see Table 5). Nonetheless, **the project is a net positive for the Village over the 14-year period with more than $316,000 in net revenue.**

Looking at the expected Net Revenue for the project (see Table 7); the first year (2023) brings $139,478, mainly from building permit and impact fees. By 2030, the annual Net Tax Revenue is $150,326, primarily from property taxes (see Table 7).

Even more striking is **the proposed project is estimated to generate almost $2.1 million of new Net Revenue in 13 years** to the Village of Buffalo Grove and the two school districts and other taxing bodies (see Table 7).

On a Net Present Value basis, the project's tax and fee revenue (2023-2035) is worth $1,431,592, using a discount rate of 6% (see Table 7).

From a benefit/cost perspective, the proposed project is a winner for both the local governmental taxing bodies and for the Buffalo Grove economy. With no real economic activity on the property, this project offers a substantial opportunity to create jobs, local income, and tax revenue.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 1
Absorption Rates, Population, and School Age

Type of Unit	Available Units	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
3 BR Townhome	41	41	41	41	41	41	41	41	41	41	41	41
Total	**41**	**41**	**41**	**41**	**41**	**41**	**41**	**41**	**41**	**41**	**41**	**41**

Type of Unit	Population											
3 BR Townhome		98	98	98	98	98	98	98	98	98	98	98
Total		**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**

Elementary School Age		6	6	6	6	6	6	6	6	6	6	6
High School Age		3	3	3	3	3	3	3	3	3	3	3
Total School Age		**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 2

Estimated Project Tax Revenue

Type of Tax	2022	2023	2024	2025	2026	2027	2028
Residential Property Tax	0	0	0	374,364	385,595	397,163	409,078
Land Property Tax	13,555	14,478	14,912				
Total Property Tax	**13,555**	**14,478**	**14,912**	**374,364**	**385,595**	**397,163**	**409,078**
Sales Tax from Residents Living in the Project	0	0	0	19,118	19,691	20,282	20,890
State Share Local Use Tax					4,175	4,175	4,175
State Income Tax	0	0	0	0	13,612	13,612	13,612
Motor Fuel Tax	0	0	0	0	5,667	5,667	5,667
Utility Tax	0	0	0	6,927	6,927	6,927	6,927
Telecommuncations Tax	0	0	0	1,847	1,847	1,847	1,847
Library Fees				8,728	8,728	8,728	8,728
Construction Permit Fees, Inspections		125,000	125,000				
Parks & Library Donations		0	0	180,830	0	0	0
Total Tax Revenue to all taxing bodies	**$ 13,555**	**$ 139,478**	**$ 139,912**	**$ 591,814**	**$ 446,242**	**$ 458,401**	**$ 470,924**
Village of Buffalo Grove Property Tax Share	**$ -**	**$ -**	**$ -**	**$ 35,939**	**$ 37,017**	**$ 38,128**	**$ 39,271**
Buffalo Grove Park District Prop. Tax Share	**$ -**	**$ -**	**$ -**	**$ 20,216**	**$ 20,822**	**$ 21,447**	**$ 22,090**
Vernon Area Library District Prop. Tax Share	**$ 434**	**$ 463**	**$ 477**	**$ 12,728**	**$ 13,110**	**$ 13,504**	**$ 13,909**
District #103 Property Tax Share	**$ 4,866**	**$ 5,198**	**$ 5,353**	**$ 171,342**	**$ 135,729**	**$ 139,801**	**$ 143,995**
District #125 Property Tax Share	**$ 4,690**	**$ 5,009**	**$ 5,160**	**$ 134,646**	**$ 131,102**	**$ 135,035**	**$ 139,086**
Prop. Tax to Lake County & other districts	**3,565**	**3,808**	**3,922**	**46,421**	**47,814**	**49,248**	**50,726**

Type of Tax	2029	2030	2031	2032	2033	2034	2035
Residential Property Tax	421,350	433,991	447,010	460,421	474,233	488,460	503,114
Land Property Tax	0	0	0	0	0	0	0
Total Property Tax	**421,350**	**433,991**	**447,010**	**460,421**	**474,233**	**488,460**	**503,114**
Sales Tax from Residents Living in the Project	21,517	22,163	22,828	23,512	24,218	24,944	25,693
State Share Local Use Tax	4,175	4,175	4,175	4,175	4,175	4,175	4,175
State Income Tax	13,612	13,612	13,612	13,612	13,612	13,612	13,612
Motor Fuel Tax	5,667	5,667	5,667	5,667	5,667	5,667	5,667
Utility Tax	6,927	6,927	6,927	6,927	6,927	6,927	6,927
Telecommunications Tax	1,847	1,847	1,847	1,847	1,847	1,847	1,847
Library Fees	8,728	8,728	8,728	8,728	8,728	8,728	8,728
Construction Permit Fees, Inspections, etc..	0	0	0	0	0	0	0
Total Tax Revenue to all taxing bodies	**$ 483,823**	**$ 497,110**	**$ 510,794**	**$ 524,889**	**$ 539,407**	**$ 554,360**	**$ 569,763**
Village of Buffalo Grove Property Tax Share	**$ 40,450**	**$ 41,663**	**$ 42,913**	**$ 44,200**	**$ 45,526**	**$ 46,892**	**$ 48,299**
Buffalo Grove Park District Prop. Tax Share	**$ 22,753**	**$ 23,435**	**$ 24,139**	**$ 24,863**	**$ 25,609**	**$ 26,377**	**$ 27,168**
Vernon Area Library District Prop. Tax Share	**$ 14,326**	**$ 14,756**	**$ 15,198**	**$ 15,654**	**$ 16,124**	**$ 16,608**	**$ 17,106**
District #103 Property Tax Share	**$ 148,315**	**$ 152,765**	**$ 157,348**	**$ 162,068**	**$ 166,930**	**$ 171,938**	**$ 177,096**
District #125 Property Tax Share	**$ 143,259**	**$ 147,557**	**$ 151,983**	**$ 156,543**	**$ 161,239**	**$ 166,076**	**$ 171,059**
Prop. Tax to Lake County & other districts	**52,247**	**53,815**	**55,429**	**57,092**	**58,805**	**60,569**	**62,386**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 3
Estimated Household Income

Type of Unit	# of Units	Monthly Rent	Est. Household Income	Total Income
3BR	41	$ 4,000	$ 137,143	$ 5,622,863
Total	**41**			**$ 5,622,863**
Weighted Avg. Household Income				**$ 137,143**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 4: Estimated Per Household Spending & Sales Tax Revenue

	Type of Spending	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Household Income	137,143	141,257	145,495	149,860	154,356	158,986	163,756	168,669	173,729	178,941	184,309
20%	*Convenience Goods*	27,429	28,251	29,099	29,972	30,871	31,797	32,751	33,734	34,746	35,788	36,862
10%	*Comparison Goods*	13,714	14,126	14,550	14,986	15,436	15,899	16,376	16,867	17,373	17,894	18,431
70%	*Local Spent Convenience Goods*	19,200	19,776	20,369	20,980	21,610	22,258	22,926	23,614	24,322	25,052	25,803
30%	*Local Spent Comparison Goods*	4,114	4,238	4,365	4,496	4,631	4,770	4,913	5,060	5,212	5,368	5,529
	Taxable Share Convenience Goods	384	396	407	420	432	445	459	472	486	501	516
	Taxable Share Comparison Goods	82	85	87	90	93	95	98	101	104	107	111
	Total Sales Tax Rev. per Household	**466**	**480**	**495**	**510**	**525**	**541**	**557**	**573**	**591**	**608**	**627**
	Total Sales Tax Generated by Project	**19,118**	**19,691**	**20,282**	**20,890**	**21,517**	**22,163**	**22,828**	**23,512**	**24,218**	**24,944**	**25,693**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 5
Estimated Village of Buffalo Grove Cost and Net Revenue

Year	2022	2023	2024	2025	2026	2027	2028
Village of Buffalo Grove Total Revenue	-	125,000	125,000	72,559	97,664	99,366	101,117
New Residents Added	0	0	0	98	98	98	98
Additional Municipal Cost				84,269	86,797	89,401	92,083
Village of Buffalo Grove Net Revenue	**13,555**	**125,000**	**125,000**	**-11,710**	**10,867**	**9,965**	**9,034**

	2029	2030	2031	2032	2033	2034	2035
Village of Buffalo Grove Total Revenue	**102,923**	**104,782**	**106,697**	**108,668**	**110,700**	**112,792**	**114,948**
New Residents Added	98	98	98	98	98	98	98
Additional Municipal Cost	94,845	97,690	100,621	103,640	106,749	109,951	113,250
Village of Buffalo Grove Net Revenue	**8,078**	**7,092**	**6,076**	**5,028**	**3,951**	**2,841**	**1,698**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

School District Net Revenue
Table 6

District #103	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Property Tax Revenue	374,364	385,595	397,163	409,078	421,350	433,991	447,010	460,421	474,233	488,460	503,114
School Share @35.2%	131,776	135,729	139,801	143,995	148,315	152,765	157,348	162,068	166,930	171,938	177,096
Additional per Student Cost	20,293	20,902	21,529	22,175	22,840	23,525	24,231	24,958	25,707	26,478	27,272
Less 6 Students Cost	121,758	125,411	129,173	133,048	137,040	141,151	145,385	149,747	154,239	158,867	163,633
School Donation	39,566										
Net Revenue	**49,584**	**10,319**	**10,628**	**10,947**	**11,275**	**11,614**	**11,962**	**12,321**	**12,691**	**13,071**	**13,464**

District #125											
Property Tax Revenue	374,364	385,595	397,163	409,078	421,350	433,991	447,010	460,421	474,233	488,460	503,114
School Share @ 34%	127,284	131,102	135,035	139,087	143,259	147,557	151,983	156,543	161,239	166,076	171,059
Additional per Student Cost	26,052	26,834	27,639	28,468	29,322	30,201	31,107	32,041	33,002	33,992	35,012
Less 3 Students Cost	78,156	80,501	82,916	85,403	87,965	90,604	93,322	96,122	99,006	101,976	105,035
School Donation	7,362										
Net Revenue	**56,490**	**50,602**	**52,120**	**53,683**	**55,294**	**56,953**	**58,661**	**60,421**	**62,234**	**64,101**	**66,024**

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 7
Estimated Project Tax Revenue

Year	2023	2024	2025	2026	2027	2028	2029	2030
Total Tax & Fee Revenue	**139,478**	**139,912**	**591,814**	**446,242**	**458,401**	**470,924**	**483,823**	**497,110**
Village of Buffalo Grove Costs	-	-	99,963	102,962	105,268	108,621	111,679	115,029
District #103 Costs	0	0	121,758	125,411	129,173	133,048	137,040	141,151
District #125 Costs	0	0	78,156	80,501	82,916	85,403	87,965	90,604
Total Public Costs	-	-	299,877	308,874	317,357	327,072	336,684	346,784
Net Revenue	**139,478**	**139,912**	**291,937**	**137,368**	**141,044**	**143,852**	**147,139**	**150,326**
Cumulative Net Revenue	**139,478**	**279,390**	**571,327**	**708,695**	**849,739**	**993,591**	**1,140,730**	**1,291,056**
Net Present Value of Net Revenue	**1,431,592**							

Year	2031	2032	2033	2034	2035
Total Tax & Fee Revenue	**510,794**	**524,889**	**539,407**	**554,360**	**569,763**
Village of Buffalo Grove Costs	118,694	122,254	125,922	129,700	133,591
District #103 Costs	145,557	149,747	154,239	158,867	163,633
District #125 Costs	93,322	96,122	99,006	101,976	105,035
Total Public Costs	357,573	368,123	379,167	390,543	402,259
Net Revenue	**153,221**	**156,766**	**160,240**	**163,817**	**167,504**
Cumulative Net Revenue	**1,444,277**	**1,601,043**	**1,761,283**	**1,925,101**	**2,092,604**

Traffic Impact Study

Prairie Point
Residential Development
Half Day Road and Prairie Road
Buffalo Grove, Illinois

Prepared for:

Bloom Street Partners

April 28, 2023
Updated May 30, 2023

Prepared by:

Lynn M. Means, P.E., PTOE, RSP1
Senior Transportation Engineer



CONSULTING ENGINEERS

BLA, Inc.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Table of Contents

Description	Page
Executive Summary	1
Introduction	2
Existing Conditions	4
Future Conditions	9
Traffic Analysis	14
Parking Analysis	17
Conclusions and Recommendations	18

Appendix

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Executive Summary

BLA, Inc. has conducted a Traffic Impact Study for the proposed Prairie Point residential development located at the southeast corner of Half Day Road (IL Route 22) and Prairie Road / Main Street in Buffalo Grove, Illinois. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic operations and the impact of the planned development. Conclusions and recommendations are presented below:

- The existing, approximately 4.3-acre site contains undeveloped land and a single-family residence. Access to the site is provided via one driveway on Prairie Road.
- The project will include developing the site to provide 41 (3-story, 3-bedroom) townhomes contained within seven (7) buildings. The development will be served by 187 parking spaces: 82 garage spaces, two (2) per unit; 82 driveway spaces, 2 per unit; and 23 surface parking lot spaces. Access to the site is proposed via one full access driveway on Prairie Road, opposite Willow Parkway. No new site access is proposed to Half Day Road.
- The existing driveway serving the single-family residence at 22745 Prairie Road (to the south of the site) will be closed and a new driveway provided within the site.
- Existing traffic conditions within the study area were established by performing weekday morning and evening traffic counts in April 2023.
- Crash data was reviewed for the last five calendar years (2017-2021) from the LCDOT Transportation Data Management System.
- Future (non-site) traffic volume conditions were developed for the anticipated opening year of the development plus five years, year 2030, including a compounded annual growth rate of 1.0 percent along Half Day Road, Willow Parkway and Main Street and a 3 percent non-compounded annual growth rate along Prairie Road.
- Trip generation for the proposed development was quantified for the weekday morning, evening and daily basis using the Institute of Transportation Engineers (ITE) trip generation rates contained in the 11th Edition of the Manual *Trip Generation*.
- Analyses have been conducted for all study intersections under existing and future (2030 design year) traffic conditions to determine the impact from the planned development.
- Our determination is the proposed development traffic can be accommodated on the adjacent streets and with the proposed site access and recommended transportation improvements:
    - The site access driveway should provide one inbound lane and one outbound lane, operating under Stop sign control.
    - The painted median on Prairie Road should be restriped, along with widening of Prairie Road as needed, to provide a southbound left-turn lane at the site full access, opposite Willow Parkway.
    - Provide a right-turn lane on northbound Prairie Road at the proposed site access, opposite Willow Parkway.
- The proposed off-street parking supply will be adequate to accommodate the projected parking demand for the proposed development.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Introduction

BLA, Inc. has conducted a Traffic Impact Study for the proposed Prairie Point residential development located in Buffalo Grove, Illinois. The approximately 4.3-acre site is located at the southeast corner of Half Day Road (IL Route 22) and Prairie Road / Main Street and currently contains a single-family home and undeveloped land. Access to the residence is provided via one driveway on Prairie Road. The site location is illustrated on ***Exhibit 1***.

As proposed, the development includes the construction of 41 (3-story, 3-bedroom) townhomes contained within seven (7) buildings. The development will be served by 187 parking spaces: 82 garage spaces, two (2) per unit; 82 driveway spaces, 2 per unit; and 23 surface parking lot spaces. Access to the site is proposed via a full access on Prairie Road.

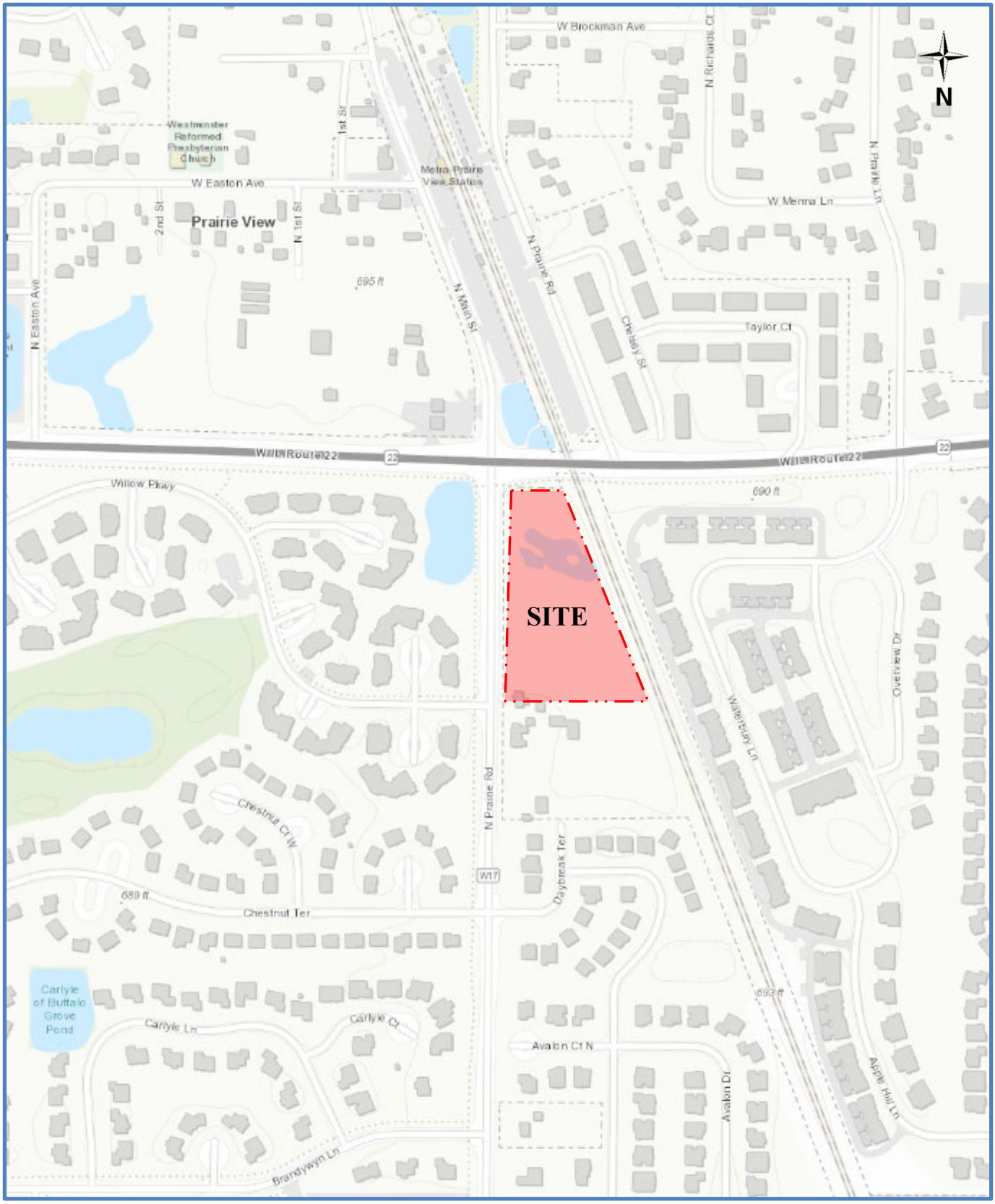
Also as part of the development, the existing driveway serving the single-family residence at 22745 Prairie Road (to the south of the site) will be closed and a new driveway provided within the site.

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Exhibit 1: Site Location Map



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

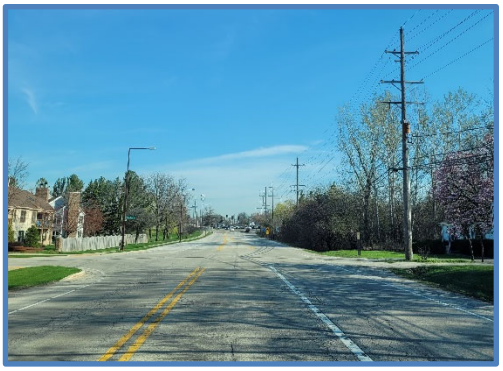
Existing Conditions

Area Land Use

The site is located at the southeast corner of Half Day Road and Prairie Road / Main Street in Buffalo Grove and currently contains a single-family home and undeveloped land. The site is bound by Half Day Road to the north, Prairie Road to the west, single family residential to the south and the Canadian National Railway to the east.

Street/Roadway Network

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



Looking north on Prairie Rd., south of Willow Pkwy

Prairie Road / Main Street

Prairie Road (Lake County Route W17) is a north-south minor arterial roadway, providing a three-lane cross section (one travel lane in each direction and a center lane for left-turns at intersection) in the site vicinity. It is under the jurisdiction of the Lake County Division of Transportation (LCDOT) and maintained by the Village of Buffalo Grove, with a posted speed limit of 40 miles per hour (mph).

At its unsignalized "T" intersection with Willow Parkway, Prairie Road provides a left-turn lane and through lane in the northbound direction and a through lane and right-turn lane in the southbound direction, operating under free-flow conditions. At its signalized intersection with Half Day Road, Prairie Road provides a left-turn lane, through lane and a right-turn lane in the northbound direction.

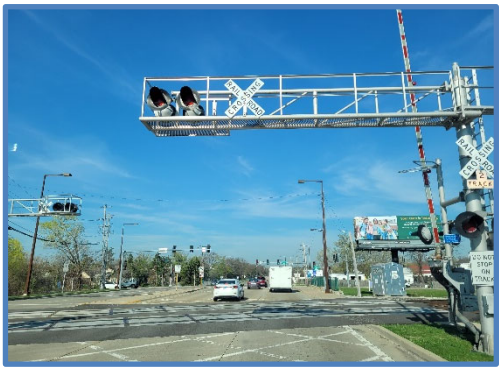


Looking east on Willow Pkwy., west of Prairie Rd.

Main Street is aligned opposite Prairie Road, extending northerly from Half Day Road. It is a local, Village of Buffalo Grove, two-lane roadway (one travel lane in each direction) with a posted speed limit of 30 mph. Main Street provides a left-turn lane and a shared through/right-turn lane in the southbound direction at its signalized intersection with Half Day Road.

Willow Parkway

Willow Parkway is an east-west local, Village of Buffalo Grove, roadway, extending westerly from Prairie Road, with a posted speed limit of 25 mph. At its unsignalized "T" intersection with Prairie Road, Willow Parkways provides a single approach lane with shared turning movements, operating under Stop sign control. *A driveway serving the single-family residence located on the site, as well as a driveway serving the single-family residence to the south of the site (22745 Prairie Road) are aligned opposite Willow Parkway.*

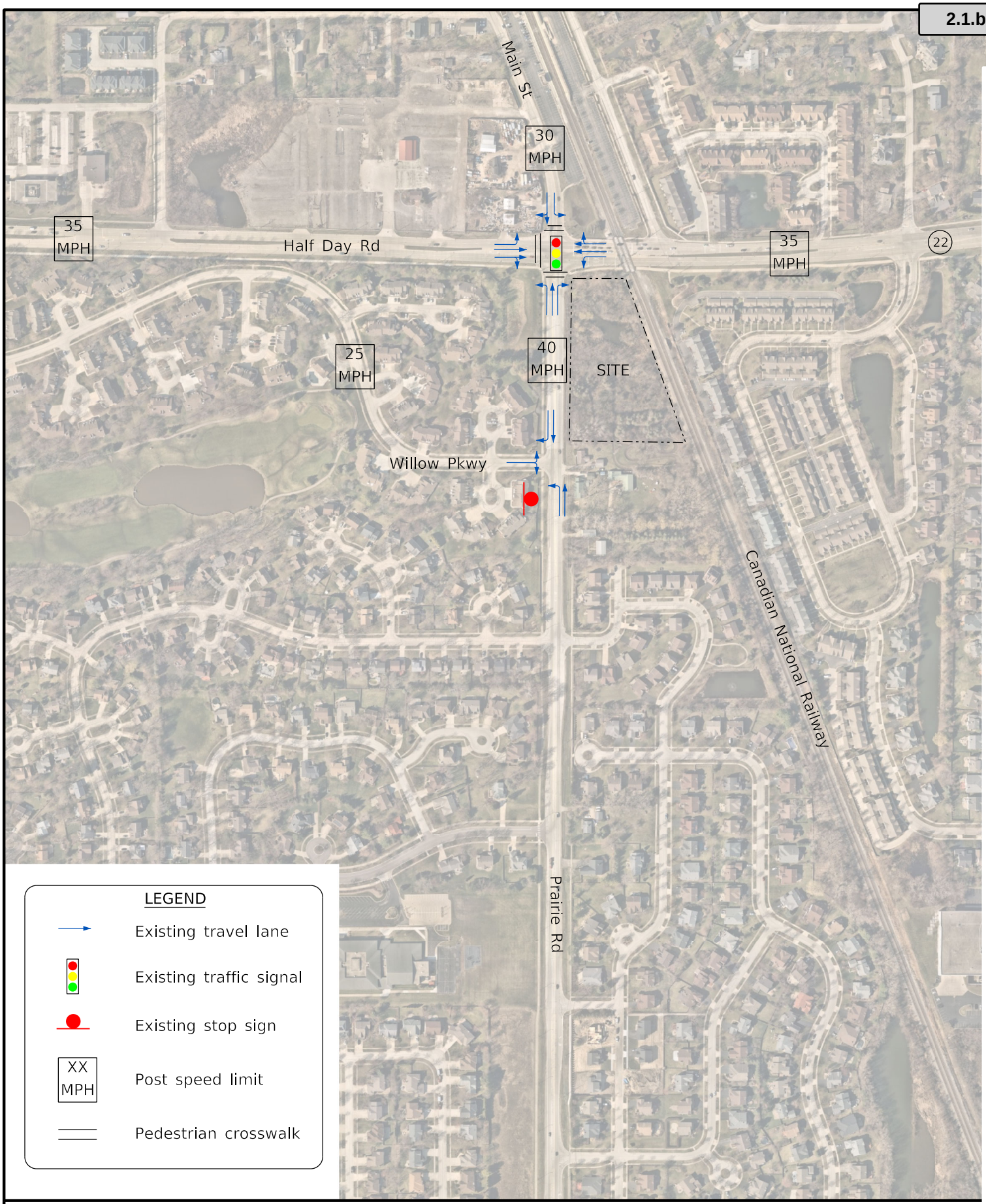


Looking west on IL 22, east of Prairie Rd./Main St.

Half Day Road

Half Day Road (IL Route 22) is an east-west principal arterial roadway providing a five-lane cross section (two travel lanes in each direction and center lane/median that provides left-turns at intersections). At its signalized intersection with Prairie Road / Main Street, Half Day Road provides a left-turn lane, through lane and shared through/right-turn lane in both the eastbound and westbound directions. Half Day Road is under the jurisdiction of the Illinois Department of Transportation (IDOT) with a posted speed limit of 35 mph. It is designated as a Strategic Regional Arterial (SRA) route. The SRA designation controls roadway and signal installation to facilitate efficient and safe transportation.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



BLA, Inc.
ITASCA, ILLINOIS

N

SCALE: NTS

Exhibit 2
Existing Operations

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Pedestrian / Bicycle Facilities

Sidewalks are generally provided on the south side of Half Day Road and the north side, east of Main Street; on the east side of Main Street, between Half Day Road and the Prairie View Metra Station parking lot; on the west side of Prairie Road and the east side, south of site; and along both sides of Willow Parkway. Pedestrian traffic signals and crosswalks are provided on the north, west and south legs of the Half Day Road and Prairie Road / Main Street intersection.

Public Transportation

The site is also well served by public transportation. Metra provides weekday commuter rail service along the North Central Service (NCS) Line that begins in Antioch and ends at Union Station in Chicago. There is no weekend service on the NCS Line. The Prairie View Station is located on Main Street, approximately 0.3-miles north of the proposed site.

Existing Traffic

Traffic turning movement counts were conducted on Tuesday, April 11, 2023, during the weekday morning (7:00 to 9:00 AM) and weekday evening (4:00 to 6:00 PM) peak periods at the following intersections:

- Half Day Road at Prairie Road / Main Street
- Prairie Road at Willow Parkway

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

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

Table 1: Summary of IDOT AADT Volumes

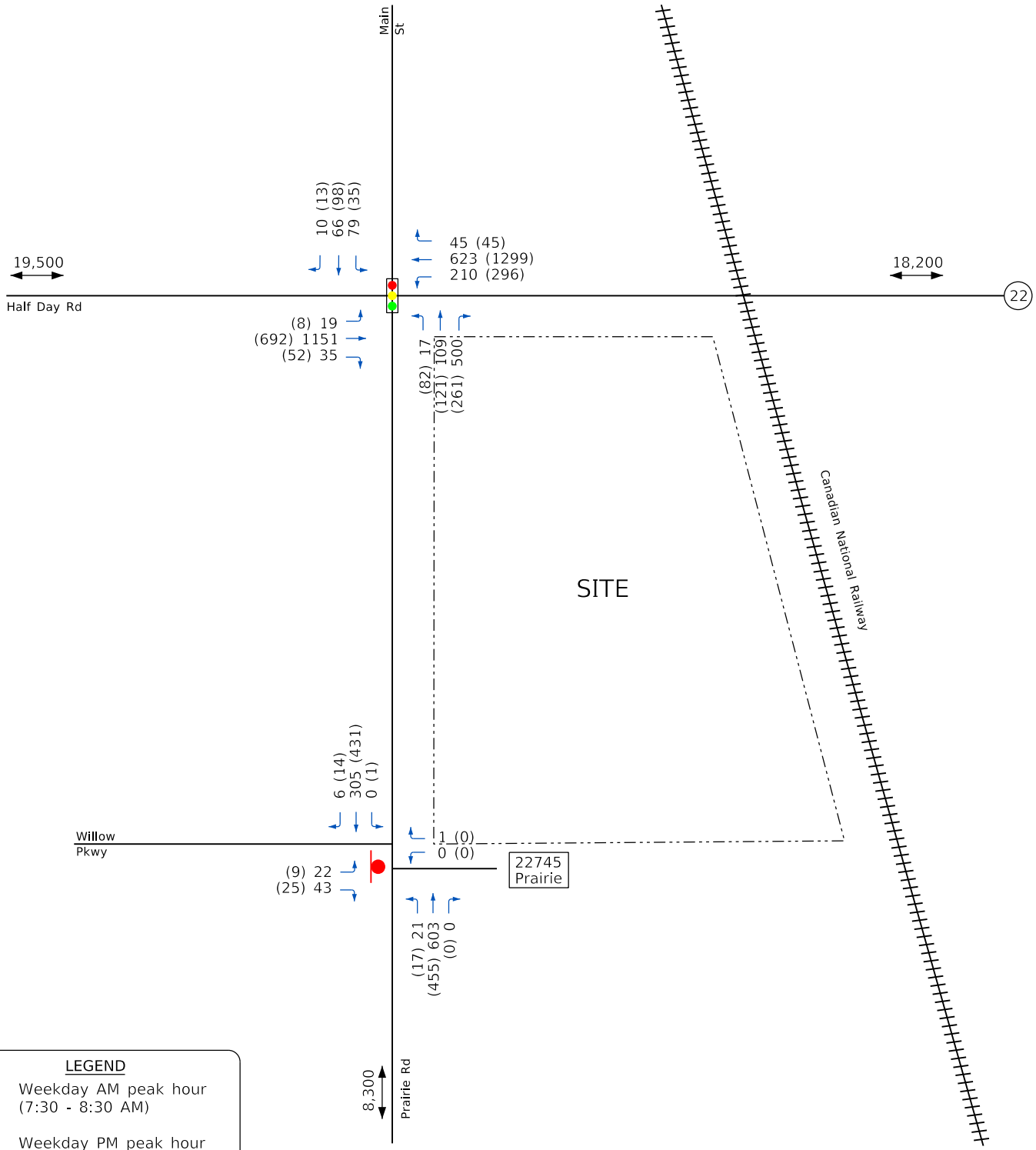
Location	IDOT AADT (Year)
Prairie Road	
Between Half Day Road (IL 22) and Aptakistic Road	7,450 (2019)
Half Day Road (IL 22)	
Between Buffalo Grove Road and Main Street/Prairie Road	19,100 (2021)
Between Main Street/Prairie Road and Milwaukee Ave (IL 21)	17,800 (2021)

The existing peak hour and IDOT AADT volumes (adjusted to existing, year 2023 conditions) are illustrated on ***Exhibit 3***.

Also included on *Exhibit 3* is the traffic entering and exiting the single-family residence located on the site, as well as the residence located to the south of the site at 22745 Prairie Road. Note, no traffic was observed to enter or exit the existing single-family residence located on the site, and was, therefore, not included to provide a conservative analysis scenario (future site traffic would not discount for existing traffic on site). There was one vehicle observed exiting the 22745 Prairie Road residence during the weekday morning peak hour; however, there was no traffic observed entering or exiting this residence during the weekday evening peak hour. Accordingly, to provide a conservative analysis scenario, one vehicle was assumed entering the 22745 Prairie Road residence during the weekday evening peak hour. *One vehicle exiting during the morning peak hour and one vehicle entering during the evening peak hour is consistent with the Institute of Transportation Engineers (ITE) trip generation for one single family home.*

Summaries of the intersection turning movement count data are contained in ***Appendix A***.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



BLA, Inc.
ITASCA, ILLINOIS

N

SCALE: NTS

Exhibit 3
Existing Traffic

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Crash Summary

To evaluate and address potential safety issues within the study area, crash data was obtained from the LCDOT Transportation Data Management System for the last five calendar years available, 2017 through 2021. A summary of the crash data is provided in ***Table 2***.

Table 2: Crash Summary (2017-21)

Location / Year	No. of Crashes	Severity [A]					Crash Type [C]						Percent During Wet/Icy Conditions
		PD	PI [B]			F	CM	RE	SS	FO	HO	Ped	
			A	B	C								
Intersections (Crashes within 250' of Intersection)													
Half Day Road (IL Route 22) at Prairie Road / Main Street													
2017	5	3	--	1	1	--	3	2	--	--	--	--	20%
2018	7	5	--	1	1	--	--	5	1	1	--	--	14%
2019	6	6	--	--	--	--	2	2	1	1	--	--	67%
2020	1	1	--	--	--	--	--	--	--	1	--	--	0%
2021	3	3	--	--	--	--	--	2	1	--	--	--	67%
Total	*22*	*18*	*0*	*2*	*2*	*0*	*5*	*11*	*3*	*3*	*0*	*0*	*36%*
Prairie Road at Willow Parkway													
2017	1	--	--	--	1	--	--	1	--	--	--	--	0%
2018	--	--	--	--	--	--	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	--	--	--	--	--	--	--
2021	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0%*
Total (2017-21)	**23**	**18**	**0**	**2**	**3**	**0**	**5**	**12**	**3**	**3**	**0**	**0**	**35%**

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

As shown in Table 2, the signalized intersection of Half Day Road at Prairie Road / Main Street experienced a total of 22 crashes over the 5-year study period, approximately 4 crashes per year. Approximately 82 percent (18 of 22) of the crashes involved property damage only, and 50 percent (11 of 22) were rear-end type collisions.

The unsignalized intersection of Prairie Road at Willow Parkway experienced one crash over the 5-year study period. It involved a Type-C injury (possible injury) and was a rear-end type collision.

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Future Conditions

Traffic Growth

Construction and occupancy of the proposed residential development is anticipated to occur by the end of the year, 2025. Future traffic volumes were developed for the year 2030, anticipated build-out year of the development plus five years. Traffic growth in the area is a function of expected land development in the region. Based on a review of historical traffic volumes and the Chicago Metropolitan Agency for Planning (CMAP) 2050 projections (see ***Appendix B***), traffic volumes along Half Day Road are assumed to experience an annual, compounded growth rate ranging between 0.80 and 0.81 percent, while Prairie Road's annual, compounded growth rate was 0.75 percent. However, to provide a conservative analysis scenario, a 1.0 percent per year compounded growth rate was applied along Half Day Road, Willow Parkway and Main Street and a 3 percent, non-compounded growth rate was applied along Prairie Road, consistent with LCDOT guidelines.

2030 No-Build (Non-Site) Conditions

The 2030 No-Build traffic volumes were accordingly developed by applying a 1.0 percent compounded, annual growth rate (Half Day Road, Willow Parkway and Main Street) and 3 percent non-compounded annual growth rate (Prairie Road) to the existing traffic (*Exhibit 3*). The 2030 No-Build traffic volume networks are graphically depicted on ***Exhibit 4***.

Planned Roadway Improvement Projects

The SRA Report dated April 1993 for IL Route 22 identified improvements at the Half Day Road intersection with Prairie Road and Main Street, including dual left-turn lanes on eastbound IL Route 22, an exclusive right-turn lane on both eastbound and westbound IL Route 22, as well as additional lanes on southbound Main Street and northbound Prairie Road, which required the acquisition of additional right-of-way. However, these improvements are not included in the current Multi-Modal Transportation Plan (FY 2023-2028). Thus, there is currently no construction completion date scheduled. Accordingly, for the purpose of this study, these improvements were not considered in the analyses. Excerpts from the SRA Report are provided in ***Appendix C***.

Proposed Development Plan

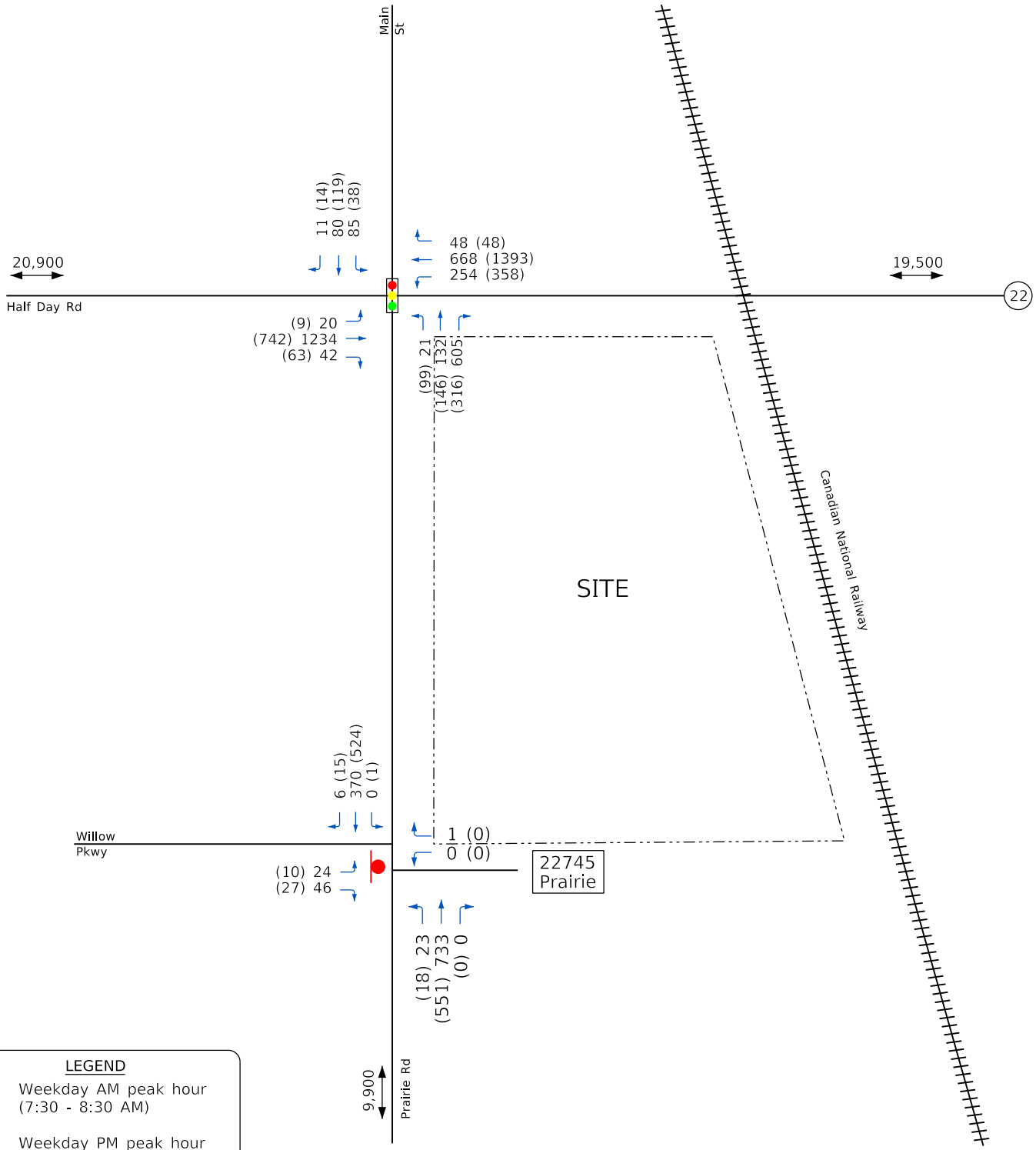
The Site Plan prepared by Pearson, Brown & Associates, Inc. is provided in ***Appendix D***. As proposed, the development includes the construction of 41 (3-story, 3-bedroom) townhomes contained within seven (7) buildings. The development will be served by 187 parking spaces: 82 garage spaces, two (2) per unit; 82 driveway spaces, 2 per unit; and 23 surface parking lot spaces. Access to the site will be provided via a full access on Prairie Road. It also includes a dog run, as well open space, sidewalks and multi-use paths. In addition, as part of the development, the existing driveway serving the single-family residence at 22745 Prairie Road (to the south of the site) will be closed and a new driveway provided within the site.

Trip Generation

The amount of traffic generated by a development depends on the type and density of the land use. Trip generation estimates for the development were calculated based on information published in the Institute of Transportation Engineers (ITE) Manual *Trip Generation*, 11th Edition (see ***Appendix E***). The ITE manual is a compilation of national traffic data surveys used to estimate traffic volumes for various land uses.

The ITE data does not represent locations with measurable transit, walking and other non-auto trips. *The Prairie View Metra Station is located approximately 0.3-miles north of the site*. Based on the US Census Bureau, 2017-2021 America Community Survey Data, Mode of Transportation (Journey to Work) for Census Tract 8645.20, approximately ***72 percent use auto*** (personal vehicles and/or taxi/rideshare carpool) to commute to/from work (see ***Appendix F***). However, to provide a conservative scenario, test the maximum site impacts, the ITE trip generation estimates were <u>not</u> discounted for residents that carpool and/or use alternative modes to travel to/from work (bike, walk and/or transit).

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



BLA, Inc.
ITASCA, ILLINOIS

N

SCALE: NTS

Exhibit 4
2030 No Build

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Table 3 provides a summary of the total trips to be generated by the proposed development, including residents, visitors, deliveries, etc.

Table 3: Estimated Trip Generation

Land Use / Size	ITE LUC	Weekday								
		AM Peak Hour			PM Peak Hour			Daily		
		In	Out	Total	In	Out	Total	In	Out	Total
Townhomes / 41 Units	220	9	27	36	24	14	38	169	169	338

Directional Distribution

The anticipated trip distribution of new site traffic is summarized in ***Table 4***. This was based on current travel patterns, the operational characteristics of the street system and site access.

Table 4: Trip Distribution

Route & Direction	Percent Route (To/From)
Prairie Road	
South of Willow Parkway	40%
Half Day Road	
West of Prairie Road / Main Street	15%
East of Prairie Road / Main Street	40%
Main Street	
North of Half Day Road	5%
Willow Parkway	
West of Prairie Road	--
Total	**100%**

--Less than 5%

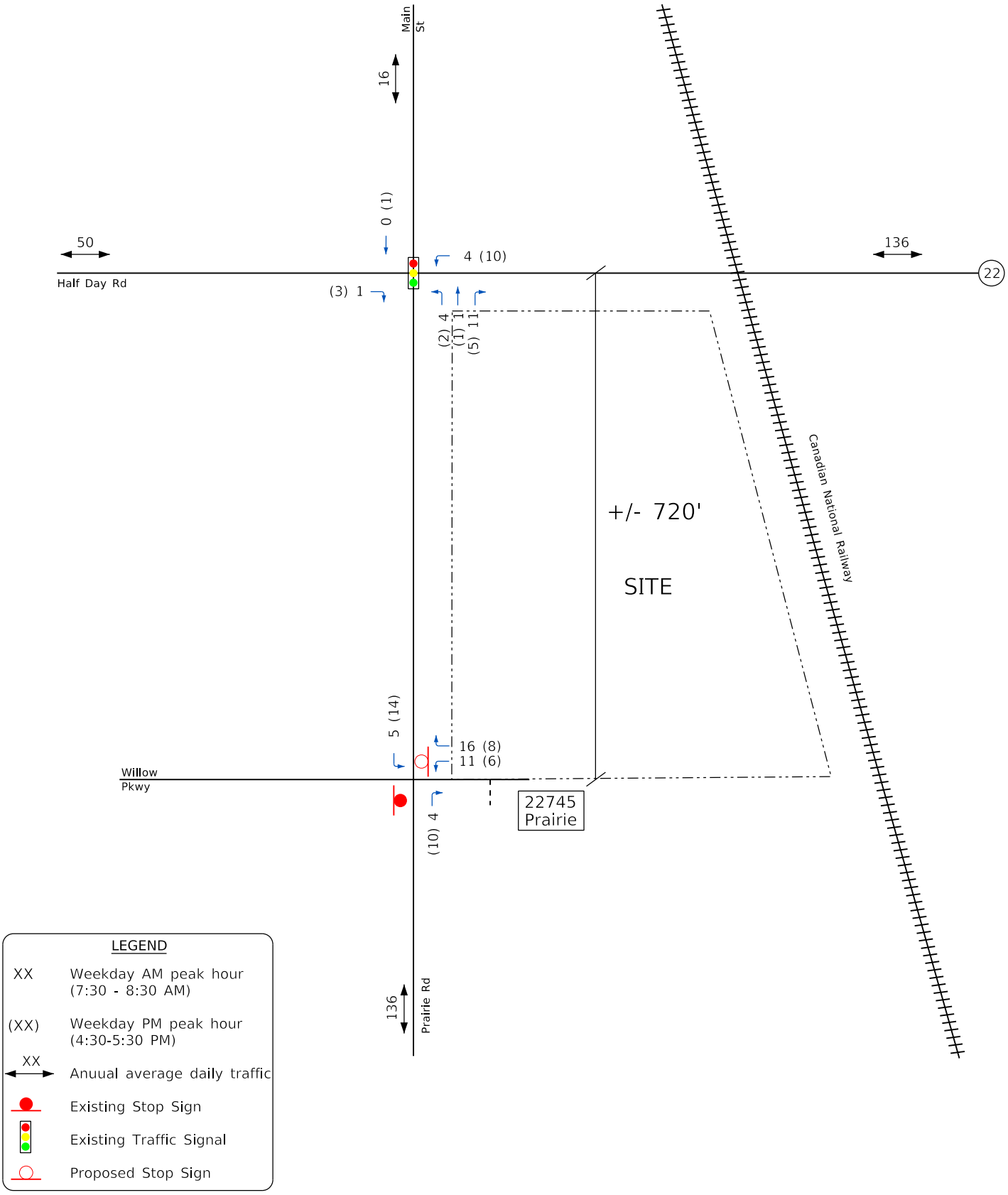
Site Traffic Assignment

Based on the direction of travel, the site-generated trips were assigned to the roadway network using the site estimated trips listed in *Table 3* and the anticipated directional distribution outlined in *Table 4*. The site vehicular traffic assignment is illustrated on ***Exhibit 5***.

2030 Total Traffic Conditions

The site-generated traffic volumes (*Exhibit 5*) were then added to the 2030 No-Build traffic volumes (*Exhibit 4*) to develop the 2030 Total traffic volumes. *This includes the traffic from the closure of the existing 22745 Prairie Road driveway and a new driveway located on site.* The Total traffic volumes for the year 2030 are shown on ***Exhibit 6***.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



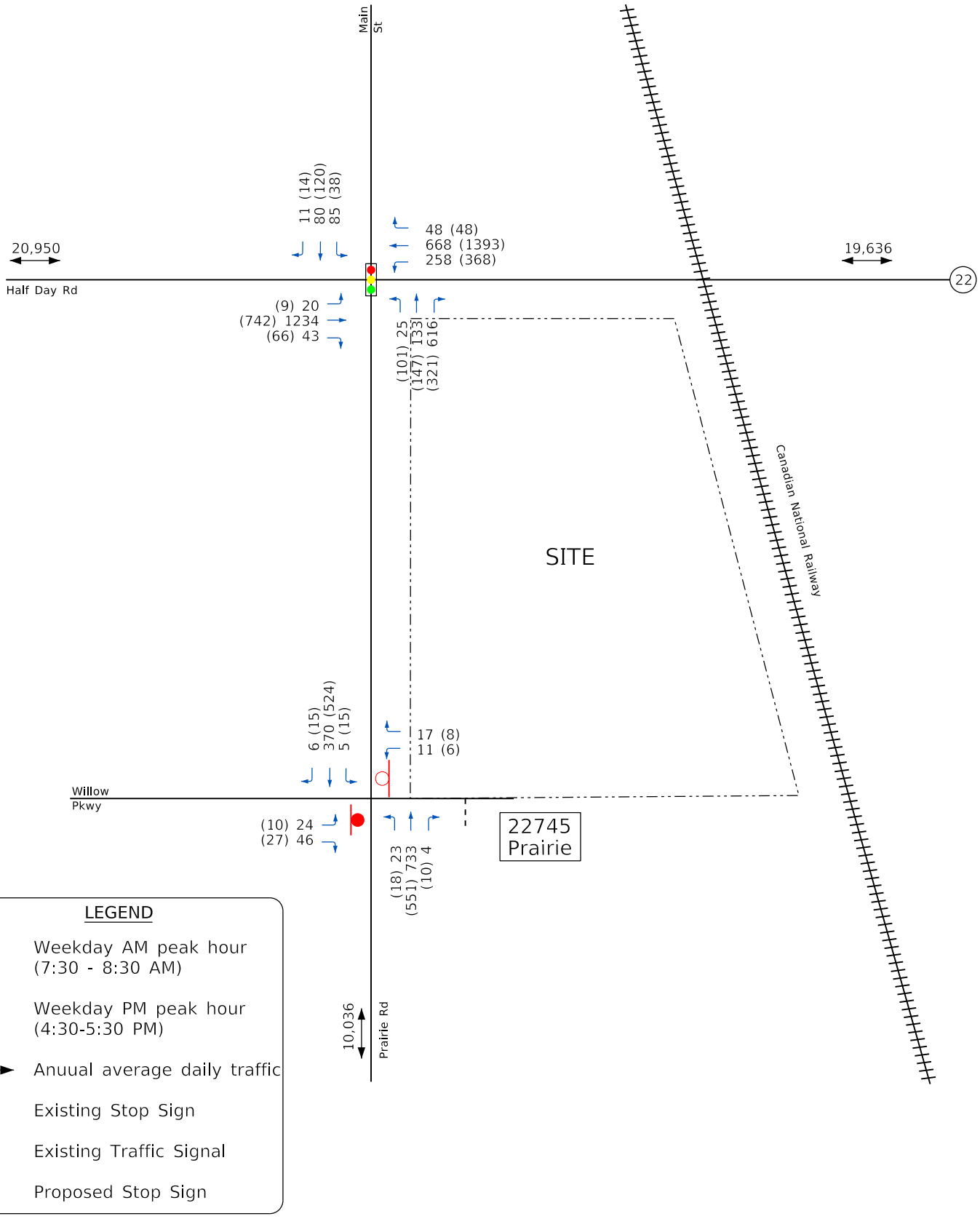
BLA, Inc.
ITASCA, ILLINOIS

N

SCALE: NTS

Exhibit 5
Site Traffic

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



BLA, Inc.
ITASCA, ILLINOIS

N

SCALE: NTS

Exhibit 6
2030 Total Traffic

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Traffic Analysis

Auxiliary Lane Analysis

The LCDOT *Highway Access and Use Ordinance* was used to determine the need for a right-turn lane on northbound Prairie Road at the site access under future traffic conditions. *Note: A center, painted median is currently present on southbound Prairie Road at the site access and is anticipated to be restriped to provide a left-turn lane.*

Section 5.3.2 Auxiliary Lane Requirements indicates that a right-turn lane is considered when the criteria illustrated in Table 5.3 is satisfied for a two-lane roadway. Based on the approach and right-turn volumes on Prairie Road, a right-turn lane is *not* warranted on northbound Prairie Road at the proposed site access under future traffic conditions. *However, consideration should be given to installing a right-turn lane at the proposed site access due to driver expectations and continuity along the corridor.*

A summary of the application of the right- and left-turn lane warrants is provided in ***Appendix G***.

Capacity and Queue Analysis

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

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service is provided in ***Table 5.***

Table 5: Level of Service (LOS) Summary

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

Capacity and queue analyses were conducted at all study intersections under Existing, 2030 No-Build and 2030 Total traffic volume conditions through application of the procedures described above. The impact of site-generated traffic can be measured by comparing 2030 No-Build conditions to 2030 Total conditions. The results of the intersection analyses are discussed below and are summarized in ***Table 6***. All analysis worksheets are provided in ***Appendix H***.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Table 6: Level-of-Service and Queue Analysis Summary

Intersection/Peak Hour/Movement	Existing			2030 No-Build			2030 Total		
	Delay[1]	LOS[2]	Queue[3]	Delay	LOS	Queue	Delay	LOS	Queue
Half Day Road at Prairie Road and Main Street									
Weekday AM									
Half Day Rd EB left-turns	58.2	E	41	58.4	E	42	58.4	E	42
Half Day Rd EB through/right-turns	55.5	E	647	73.3	E	731	73.5	E	732
Half Day Rd WB left-turns	>80.0	F	355	>80.0	F	441	>80.0	F	450
Half Day Rd WB through/right-turns	22.7	C	267	23.3	C	290	23.3	C	290
Prairie Rd NB left-turns	22.2	C	24	22.4	C	28	22.5	C	31
Prairie Rd NB throughs	34.8	C	123	36.3	D	146	36.4	D	147
Prairie Rd NB right-turns	19.8	B	340	29.3	C	524	30.3	C	565
Main St SB left-turns	23.3	C	74	23.5	C	78	23.5	C	78
Main St SB through/right-turns	27.6	C	84	29.6	C	98	29.8	C	98
Overall Intersection	**45.6**	**D**	--	**61.3**	**E**	--	**62.4**	**E**	--
Weekday PM									
Half Day Rd EB left-turns	58.5	E	24	58.6	E	25	58.6	E	25
Half Day Rd EB through/right-turns	32.4	C	325	33.6	C	357	33.6	C	358
Half Day Rd WB left-turns	>80.0	F	473	>80.0	F	595	>80.0	F	615
Half Day Rd WB through/right-turns	23.6	C	603	25.4	C	680	25.4	C	680
Prairie Rd NB left-turns	29.3	C	86	30.0	C	102	30.1	C	103
Prairie Rd NB throughs	39.1	D	143	41.4	D	172	41.4	D	173
Prairie Rd NB right-turns	3.6	A	50	7.0	A	100	7.3	A	104
Main St SB left-turns	28.0	C	45	28.1	C	47	28.1	C	47
Main St SB through/right-turns	40.6	D	132	42.5	D	156	42.6	D	157
Overall Intersection	**36.9**	**D**	--	**48.3**	**D**	--	**50.3**	**D**	--
Prairie Road at Willow Parkway / 22745 Prairie Road & Site Access									
Weekday AM									
Willow Pkwy EB approach	17.0	C	18	22.5	C	28	24.0	C	30
Site Access WB approach	12.8	B	--	14.5	B	--	25.7	D	12
Prairie Rd NB left-turns	8.1	A	3	8.3	A	3	8.3	A	3
Prairie Rd SB left-turns	0.0	A	--	--	--	--	9.5	A	--
Weekday PM									
Willow Pkwy EB approach	14.9	B	8	17.8	C	10	18.6	C	10
Site Access WB approach	0.0	A	--	0.0	A	--	20.8	C	5
Prairie Rd NB left-turns	8.4	A	3	8.7	A	3	8.7	A	3
Prairie Rd SB left-turns	8.3	A	--	8.6	A	--	8.7	A	--

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Half Day Road at Prairie Road / Main Street

Under existing conditions, the signalized intersection of Half Day Road at Prairie Road / Main Street operates at overall LOS "D" during the weekday morning and evening peak hours. There are several movements that operate with capacity constraints at LOS "E/F" during both peak periods. Under future (No-Build and Total) traffic conditions, this intersection is anticipated to operate at overall LOS "E" during the weekday morning peak hour and LOS "D" during the weekday evening peak hour. As previously identified in the SRA Report and the capacity analyses contained herein, improvements are necessary at this intersection to accommodate existing traffic conditions. The proposed site traffic has minimal impact on the intersection operations.

Prairie Road at Willow Parkway / Site Access

All movements at the Willow Parkway and site acessintersection with Prairie Road are anticipated to operate at acceptable levels of service (at LOS "D" or better) during both peak hours studied under both existing and future traffic conditions. The 95th-percentile queue lengths for exiting movements onto Prairie Road, as well as left-turn entering movements are not expected to exceed one vehicle, which will not impact operations on- or off-site.

Future conditions assumed the site access driveway would provide one inbound lane and one outbound lane, operating under Stop sign control. It also assumed that the center median on Prairie Road would be restriped (with widening, as necessary) to provide a southbound left-turn lane, along with the installation of right-turn lane on northbound Prairie Road. Future conditions also included the closure of the existing single-family residence driveway south of the site (22745 Prairie Road) and a new driveway provided within the site; this eliminates conflicts between vehilcles entering and exiting the 22745 residence and vehicles entering the site from the south within the new right-turn lane.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Parking Analysis

Parking Demand Requirements

Based on the parking requirements outlined in the Village of Buffalo Grove Code of Ordinance (Section 17.36.040) 82 parking spaces are required for the site. The Village's parking requirements are summarized in ***Table 7***.

Table 7: Village Parking Requirements

Use	Size	Parking Requirement	Parking Spaces	
			Required	Provided [A]
Townhomes	41 Units	2.0 spaces per dwelling unit	82	**187**

[A] 82 garage spaces (2 each per unit), 82 driveway spaces (2 each per unit) and 13 surface parking lot spaces.

Parking Demand Projections

To project the peak parking demand, BLA referenced the following sources:

- ITE Parking Generation 5th Edition and
- Urban Land Institute (ULI) Shared Parking, 3rd Edition.

ITE Parking Generation

The ITE Parking Generation publication provides a compilation of parking demand surveys from across the country for a wide variety of land uses. ITE LUC 221, Multifamily Housing (Mid-Rise), was referenced for the proposed development (see ***Appendix I***). Using the ITE data, ***Table 8*** presents a summary of the projected peak parking demand for the proposed development on a weekday and weekend. Again, to provide a conservative scenario, test the maximum site impacts, the ITE parking generation estimates were *not* discounted for proximity of the proposed development to transit (located less than 0.5 miles from commuter rail).

Table 8: Projected Peak Parking Demand: ITE – Parking Generation

Land Use	ITE LUC	Size	Average Peak Parking Demand				85th Percentile Parking Demand			
			Weekday		Weekend		Weekday		Weekend	
			Rate/Unit	Spaces	Rate/Unit	Spaces	Rate/Unit	Spaces	Rate/Unit	Spaces
Townhomes	221	41 Units	1.31	54	1.22	50	1.47	**60**	1.33	55

ULI Shared Parking

The ULI Shared Parking publication also contains rates for various uses by weekday and weekend. BLA referenced the peak parking demand rates for residential use (see ***Appendix J***) for the proposed development (see ***Table 9)***.

Table 9: Projected Peak Parking Demand: ULI – Parking Generation

Land Use	Size	Peak Parking Demand					
		Weekday			Weekend		
		Visitor (Rate/Unit)	Resident (Rate/Unit)	Spaces	Visitor (Rate/Unit)	Resident (Rate/Unit)	Spaces
Townhomes/3 bedrooms	41 Units	0.10	2.5	107	0.15	2.5	109

Accordingly, the proposed parking supply of 187 spaces (82 garage spaces, 82 driveway spaces and 23 surface parking lot spaces) will be adequate to accommodate the project parking demand for the proposed development.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Conclusions and Recommendations

A Traffic Impact Study was performed for the proposed Prairie Point residential development located at the southeast corner of Half Day Road (IL Route 22) and Prairie Road / Main Street in Buffalo Grove, Illinois. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic operations and the planned development. Conclusions and recommendations of this effort are presented below:

Conclusions:

1. The existing, approximately 4.3-acre site contains undeveloped land and a single-family residence. Access to the site is provided via one driveway on Prairie Road.
2. The project will include developing the site to provide 41 (3-story, 3-bedroom) townhomes contained within seven (7) buildings. The development will be served by 187 parking spaces: 82 garage spaces, two (2) per unit; 82 driveway spaces, 2 per unit; and 23 surface parking lot spaces. Access to the site is proposed via one full access driveway on Prairie Road, opposite Willow Parkway. No new site access is proposed to Half Day Road.
3. The existing driveway serving the single-family residence at 22745 Prairie Road (to the south of the site) will be closed and a new driveway provided within the site.
4. The site traffic impacts on the existing street system will be minimal. No improvements to the adjacent existing study area intersections are required to accommodate the development traffic.

Recommendations:

1. The site access driveway should provide one inbound lane and one outbound lane, operating under Stop sign control.
2. The painted median on Prairie Road should be restriped, along with widening of Prairie Road as needed, to provide a southbound left-turn lane at the site full access, opposite Willow Parkway.
3. Provide a right-turn lane on northbound Prairie Road at the proposed site full access, opposite Willow Parkway.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendices

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendix A

Traffic Count Summaries

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

1 - Half Day Rd at Prairie Rd / Main St - Re... - TMC

Tue Apr 11, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1057919, Location: 42.195763, -87.955338

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

Leg	Main						Prairie						IL 22						IL 22						
Direction	Southbound						Northbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-11 7:00AM	9	19	4	0	**32**	0	3	20	54	0	**77**	0	12	248	1	0	**261**	2	18	80	12	0	**110**	1	**480**
7:15AM	19	18	4	0	**41**	0	5	18	98	0	**121**	0	6	301	2	0	**309**	2	18	127	9	0	**154**	0	**625**
7:30AM	9	22	5	0	**36**	0	4	15	123	0	**142**	0	4	253	4	0	**261**	0	49	146	5	0	**200**	0	**639**
7:45AM	19	13	3	0	**35**	0	4	38	109	0	**151**	0	5	305	10	0	**320**	1	53	162	16	0	**231**	0	**737**
Hourly Total	56	72	16	0	**144**	0	16	91	384	0	**491**	0	27	1107	17	0	**1151**	5	138	515	42	0	**695**	1	**2481**
8:00AM	29	19	2	0	**50**	0	4	27	142	0	**173**	0	3	311	8	0	**322**	0	50	135	5	0	**190**	0	**735**
8:15AM	22	12	0	0	**34**	0	5	28	120	0	**153**	0	7	282	13	0	**302**	0	58	180	19	0	**257**	0	**746**
8:30AM	8	20	5	0	**33**	0	6	19	56	0	**81**	0	2	254	6	0	**262**	0	44	159	12	0	**215**	0	**591**
8:45AM	14	19	2	0	**35**	0	12	15	44	0	**71**	0	1	260	8	0	**269**	0	22	136	10	0	**168**	0	**543**
Hourly Total	73	70	9	0	**152**	0	27	89	362	0	**478**	0	13	1107	35	0	**1155**	0	174	610	46	0	**830**	0	**2615**
4:00PM	9	22	6	0	**37**	0	11	26	40	0	**77**	1	1	153	6	0	**160**	2	58	280	8	0	**346**	0	**620**
4:15PM	3	20	0	0	**23**	0	13	16	59	0	**88**	0	0	144	12	0	**156**	2	63	240	7	0	**310**	0	**577**
4:30PM	12	26	5	0	**43**	0	16	33	81	0	**130**	1	1	160	12	1	**174**	7	60	333	10	0	**403**	1	**750**
4:45PM	5	25	2	0	**32**	0	26	28	68	0	**122**	0	2	167	11	0	**180**	3	84	333	7	0	**424**	1	**758**
Hourly Total	29	93	13	0	**135**	0	66	103	248	0	**417**	2	4	624	41	1	**670**	14	265	1186	32	0	**1483**	2	**2705**
5:00PM	13	22	4	0	**39**	0	21	32	52	0	**105**	0	1	190	16	0	**207**	0	77	326	13	0	**416**	0	**767**
5:15PM	5	23	2	0	**30**	0	19	28	60	0	**107**	0	4	175	12	0	**191**	0	68	307	15	1	**391**	0	**719**
5:30PM	12	28	12	2	**54**	0	21	30	67	0	**118**	0	1	166	16	0	**183**	2	64	302	18	0	**384**	0	**739**
5:45PM	10	19	5	0	**34**	0	13	36	68	0	**117**	0	1	139	7	0	**147**	7	61	241	15	0	**317**	0	**615**
Hourly Total	40	92	23	2	**157**	0	74	126	247	0	**447**	0	7	670	51	0	**728**	9	270	1176	61	1	**1508**	0	**2840**
Total	198	327	61	2	**588**	0	183	409	1241	0	**1833**	2	51	3508	144	1	**3704**	28	847	3487	181	1	**4516**	3	**10641**
% Approach	33.7%	55.6%	10.4%	0.3%	**-**	-	10.0%	22.3%	67.7%	0%	**-**	-	1.4%	94.7%	3.9%	0%	**-**	-	18.8%	77.2%	4.0%	0%	**-**	-	
% Total	1.9%	3.1%	0.6%	0%	**5.5%**	-	1.7%	3.8%	11.7%	0%	**17.2%**	-	0.5%	33.0%	1.4%	0%	**34.8%**	-	8.0%	32.8%	1.7%	0%	**42.4%**	-	
Lights	194	318	57	2	**571**	-	175	405	1219	0	**1799**	-	48	3423	141	1	**3613**	-	834	3409	177	1	**4421**	-	10404
% Lights	98.0%	97.2%	93.4%	100%	**97.1%**	-	95.6%	99.0%	98.2%	0%	**98.1%**	-	94.1%	97.6%	97.9%	100%	**97.5%**	-	98.5%	97.8%	97.8%	100%	**97.9%**	-	97.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	4	0	**4**	-	1	33	0	0	**34**	-	3	24	1	0	**28**	-	66
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.3%	0%	**0.2%**	-	2.0%	0.9%	0%	0%	**0.9%**	-	0.4%	0.7%	0.6%	0%	**0.6%**	-	0.6%
Buses and Single-Unit Trucks	4	9	4	0	**17**	-	8	4	18	0	**30**	-	2	52	3	0	**57**	-	10	54	3	0	**67**	-	171
% Buses and Single-Unit Trucks	2.0%	2.8%	6.6%	0%	**2.9%**	-	4.4%	1.0%	1.5%	0%	**1.6%**	-	3.9%	1.5%	2.1%	0%	**1.5%**	-	1.2%	1.5%	1.7%	0%	**1.5%**	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	26	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	92.9%	-	-	-	-	-	66.7%	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	7.1%	-	-	-	-	-	33.3%	

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

1 - Half Day Rd at Prairie Rd / Main St - Re... - TMC

Tue Apr 11, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1057919, Location: 42.195763, -87.955338

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

Leg	Main						Prairie						IL 22						IL 22						
Direction	Southbound						Northbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-11 7:30AM	9	22	5	0	**36**	0	4	15	123	0	**142**	0	4	253	4	0	**261**	0	49	146	5	0	**200**	0	**639**
7:45AM	19	13	3	0	**35**	0	4	38	109	0	**151**	0	5	305	10	0	**320**	1	53	162	16	0	**231**	0	**737**
8:00AM	29	19	2	0	**50**	0	4	27	142	0	**173**	0	3	311	8	0	**322**	0	50	135	5	0	**190**	0	**735**
8:15AM	22	12	0	0	**34**	0	5	28	120	0	**153**	0	7	282	13	0	**302**	0	58	180	19	0	**257**	0	**746**
Total	79	66	10	0	**155**	0	17	108	494	0	**619**	0	19	1151	35	0	**1205**	1	210	623	45	0	**878**	0	**2857**
% Approach	51.0%	42.6%	6.5%	0%	**-**	-	2.7%	17.4%	79.8%	0%	**-**	-	1.6%	95.5%	2.9%	0%	**-**	-	23.9%	71.0%	5.1%	0%	**-**	-	
% Total	2.8%	2.3%	0.4%	0%	**5.4%**	-	0.6%	3.8%	17.3%	0%	**21.7%**	-	0.7%	40.3%	1.2%	0%	**42.2%**	-	7.4%	21.8%	1.6%	0%	**30.7%**	-	
PHF	0.681	0.750	0.500	-	**0.775**	-	0.850	0.711	0.870	-	**0.895**	-	0.679	0.925	0.673	-	**0.936**	-	0.905	0.865	0.592	-	**0.854**	-	0.957
Lights	78	61	8	0	**147**	-	13	106	483	0	**602**	-	17	1129	34	0	**1180**	-	206	599	44	0	**849**	-	2778
% Lights	98.7%	92.4%	80.0%	0%	**94.8%**	-	76.5%	98.1%	97.8%	0%	**97.3%**	-	89.5%	98.1%	97.1%	0%	**97.9%**	-	98.1%	96.1%	97.8%	0%	**96.7%**	-	97.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	7	0	0	**8**	-	1	5	0	0	**6**	-	14
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	5.3%	0.6%	0%	0%	**0.7%**	-	0.5%	0.8%	0%	0%	**0.7%**	-	0.5%
Buses and Single-Unit Trucks	1	5	2	0	**8**	-	4	2	11	0	**17**	-	1	15	1	0	**17**	-	3	19	1	0	**23**	-	65
% Buses and Single-Unit Trucks	1.3%	7.6%	20.0%	0%	**5.2%**	-	23.5%	1.9%	2.2%	0%	**2.7%**	-	5.3%	1.3%	2.9%	0%	**1.4%**	-	1.4%	3.0%	2.2%	0%	**2.6%**	-	2.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

1 - Half Day Rd at Prairie Rd / Main St - Re... - TMC

Tue Apr 11, 2023
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1057919, Location: 42.195763, -87.955338

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

Leg	Main						Prairie						IL 22						IL 22						
Direction	Southbound						Northbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-11 4:30PM	12	26	5	0	**43**	0	16	33	81	0	**130**	1	1	160	12	1	**174**	7	60	333	10	0	**403**	1	**750**
4:45PM	5	25	2	0	**32**	0	26	28	68	0	**122**	0	2	167	11	0	**180**	3	84	333	7	0	**424**	1	**758**
5:00PM	13	22	4	0	**39**	0	21	32	52	0	**105**	0	1	190	16	0	**207**	0	77	326	13	0	**416**	0	**767**
5:15PM	5	23	2	0	**30**	0	19	28	60	0	**107**	0	4	175	12	0	**191**	0	68	307	15	1	**391**	0	**719**
Total	35	96	13	0	**144**	0	82	121	261	0	**464**	1	8	692	51	1	**752**	10	289	1299	45	1	**1634**	2	**2994**
% Approach	24.3%	66.7%	9.0%	0%	**-**	-	17.7%	26.1%	56.3%	0%	**-**	-	1.1%	92.0%	6.8%	0.1%	**-**	-	17.7%	79.5%	2.8%	0.1%	**-**	-	
% Total	1.2%	3.2%	0.4%	0%	**4.8%**	-	2.7%	4.0%	8.7%	0%	**15.5%**	-	0.3%	23.1%	1.7%	0%	**25.1%**	-	9.7%	43.4%	1.5%	0%	**54.6%**	-	
PHF	0.673	0.923	0.650	-	**0.837**	-	0.788	0.917	0.806	-	**0.892**	-	0.500	0.911	0.797	0.250	**0.908**	-	0.860	0.975	0.750	0.250	**0.963**	-	0.976
Lights	35	96	13	0	**144**	-	82	120	258	0	**460**	-	8	679	49	1	**737**	-	286	1288	45	1	**1620**	-	2961
% Lights	100%	100%	100%	0%	**100%**	-	100%	99.2%	98.9%	0%	**99.1%**	-	100%	98.1%	96.1%	100%	**98.0%**	-	99.0%	99.2%	100%	100%	**99.1%**	-	98.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	2	0	**2**	-	0	8	0	0	**8**	-	0	5	0	0	**5**	-	15
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.8%	0%	**0.4%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.5%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	5	2	0	**7**	-	3	6	0	0	**9**	-	18
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.8%	0.4%	0%	**0.4%**	-	0%	0.7%	3.9%	0%	**0.9%**	-	1.0%	0.5%	0%	0%	**0.6%**	-	0.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	80.0%	-	-	-	-	-	100%	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	20.0%	-	-	-	-	-	0%	

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Prairie Rd at Willow Pkwy - TMC

Tue Apr 11, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 1054038, Location: 42.193827, -87.95536

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

Leg / Direction	Willow Pkwy Eastbound					Prairie Rd Northbound					Prairie Rd Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-11 7:00AM	5	3	0	**8**	1	0	71	0	**71**	0	41	1	0	**42**	0	**121**
7:15AM	2	5	0	**7**	1	1	118	0	**119**	0	35	2	0	**37**	0	**163**
7:30AM	7	12	0	**19**	1	3	136	0	**139**	0	71	1	1	**73**	0	**231**
7:45AM	5	11	0	**16**	0	9	145	0	**154**	0	74	1	0	**75**	0	**245**
Hourly Total	19	31	0	**50**	3	13	470	0	**483**	0	221	5	1	**227**	0	**760**
8:00AM	5	12	0	**17**	1	8	175	0	**183**	0	76	1	0	**77**	0	**277**
8:15AM	5	8	0	**13**	1	1	147	0	**148**	0	81	3	0	**84**	0	**245**
8:30AM	7	11	0	**18**	0	1	71	0	**72**	0	65	1	0	**66**	0	**156**
8:45AM	5	6	0	**11**	0	2	66	0	**68**	0	46	2	0	**48**	0	**127**
Hourly Total	22	37	0	**59**	2	12	459	0	**471**	0	268	7	0	**275**	0	**805**
4:00PM	1	6	0	**7**	3	8	76	0	**84**	0	81	1	0	**82**	0	**173**
4:15PM	1	6	0	**7**	4	8	82	0	**90**	0	98	4	0	**102**	0	**199**
4:30PM	1	10	0	**11**	5	2	126	0	**128**	0	100	3	0	**103**	0	**242**
4:45PM	3	1	0	**4**	7	4	119	0	**123**	0	110	3	0	**113**	0	**240**
Hourly Total	6	23	0	**29**	19	22	403	0	**425**	0	389	11	0	**400**	0	**854**
5:00PM	3	5	0	**8**	2	8	105	0	**113**	0	112	5	0	**117**	0	**238**
5:15PM	2	9	0	**11**	5	3	100	0	**103**	0	109	3	0	**112**	0	**226**
5:30PM	4	4	0	**8**	5	5	110	0	**115**	0	107	5	0	**112**	0	**235**
5:45PM	4	7	0	**11**	5	9	109	0	**118**	0	84	4	0	**88**	0	**217**
Hourly Total	13	25	0	**38**	17	25	424	0	**449**	0	412	17	0	**429**	0	**916**
Total	60	116	0	**176**	41	72	1756	0	**1828**	0	1290	40	1	**1331**	0	**3335**
% Approach	34.1%	65.9%	0%	**-**	-	3.9%	96.1%	0%	**-**	-	96.9%	3.0%	0.1%	**-**	-	-
% Total	1.8%	3.5%	0%	**5.3%**	-	2.2%	52.7%	0%	**54.8%**	-	38.7%	1.2%	0%	**39.9%**	-	-
Lights	59	109	0	**168**	-	71	1718	0	**1789**	-	1264	40	1	**1305**	-	3262
% Lights	98.3%	94.0%	0%	**95.5%**	-	98.6%	97.8%	0%	**97.9%**	-	98.0%	100%	100%	**98.0%**	-	97.8%
Articulated Trucks	0	0	0	**0**	-	0	3	0	**3**	-	2	0	0	**2**	-	5
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.2%	0%	**0.2%**	-	0.2%	0%	0%	**0.2%**	-	0.1%
Buses and Single-Unit Trucks	1	7	0	**8**	-	1	35	0	**36**	-	24	0	0	**24**	-	68
% Buses and Single-Unit Trucks	1.7%	6.0%	0%	**4.5%**	-	1.4%	2.0%	0%	**2.0%**	-	1.9%	0%	0%	**1.8%**	-	2.0%
Pedestrians	-	-	-	-	41	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Prairie Rd at Willow Pkwy - TMC

Tue Apr 11, 2023
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 1054038, Location: 42.193827, -87.95536

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

Leg / Direction	Willow Pkwy Eastbound					Prairie Rd Northbound					Prairie Rd Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-04-11 7:30AM	7	12	0	**19**	1	3	136	0	**139**	0	71	1	1	**73**	0	**231**
7:45AM	5	11	0	**16**	0	9	145	0	**154**	0	74	1	0	**75**	0	**245**
8:00AM	5	12	0	**17**	1	8	175	0	**183**	0	76	1	0	**77**	0	**277**
8:15AM	5	8	0	**13**	1	1	147	0	**148**	0	81	3	0	**84**	0	**245**
Total	22	43	0	**65**	3	21	603	0	**624**	0	302	6	1	**309**	0	**998**
% Approach	33.8%	66.2%	0%	**-**	-	3.4%	96.6%	0%	**-**	-	97.7%	1.9%	0.3%	**-**	-	-
% Total	2.2%	4.3%	0%	**6.5%**	-	2.1%	60.4%	0%	**62.5%**	-	30.3%	0.6%	0.1%	**31.0%**	-	-
PHF	0.786	0.896	-	**0.855**	-	0.583	0.861	-	**0.852**	-	0.932	0.500	0.250	**0.920**	-	0.901
Lights	21	41	0	**62**	-	20	583	0	**603**	-	294	6	1	**301**	-	966
% Lights	95.5%	95.3%	0%	**95.4%**	-	95.2%	96.7%	0%	**96.6%**	-	97.4%	100%	100%	**97.4%**	-	96.8%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	1	2	0	**3**	-	1	20	0	**21**	-	8	0	0	**8**	-	32
% Buses and Single-Unit Trucks	4.5%	4.7%	0%	**4.6%**	-	4.8%	3.3%	0%	**3.4%**	-	2.6%	0%	0%	**2.6%**	-	3.2%
Pedestrians	-	-	-	-	3	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Prairie Rd at Willow Pkwy - TMC

Tue Apr 11, 2023
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 1054038, Location: 42.193827, -87.95536

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

Leg Direction	Willow Pkwy Eastbound					Prairie Rd Northbound					Prairie Rd Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-04-11 4:30PM	1	10	0	**11**	5	2	126	0	**128**	0	100	3	0	**103**	0	**242**
4:45PM	3	1	0	**4**	7	4	119	0	**123**	0	110	3	0	**113**	0	**240**
5:00PM	3	5	0	**8**	2	8	105	0	**113**	0	112	5	0	**117**	0	**238**
5:15PM	2	9	0	**11**	5	3	100	0	**103**	0	109	3	0	**112**	0	**226**
Total	9	25	0	**34**	19	17	450	0	**467**	0	431	14	0	**445**	0	**946**
% Approach	26.5%	73.5%	0%	**-**	-	3.6%	96.4%	0%	**-**	-	96.9%	3.1%	0%	**-**	-	-
% Total	1.0%	2.6%	0%	**3.6%**	-	1.8%	47.6%	0%	**49.4%**	-	45.6%	1.5%	0%	**47.0%**	-	-
PHF	0.750	0.625	-	**0.773**	-	0.531	0.893	-	**0.912**	-	0.962	0.700	-	**0.951**	-	0.977
Lights	9	23	0	**32**	-	17	447	0	**464**	-	426	14	0	**440**	-	936
% Lights	100%	92.0%	0%	**94.1%**	-	100%	99.3%	0%	**99.4%**	-	98.8%	100%	0%	**98.9%**	-	98.9%
Articulated Trucks	0	0	0	**0**	-	0	1	0	**1**	-	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.2%	0%	**0.2%**	-	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	2	0	**2**	-	0	2	0	**2**	-	4	0	0	**4**	-	8
% Buses and Single-Unit Trucks	0%	8.0%	0%	**5.9%**	-	0%	0.4%	0%	**0.4%**	-	0.9%	0%	0%	**0.9%**	-	0.8%
Pedestrians	-	-	-	-	19	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

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

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendix B

CMAP Traffic Volume Projections

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

April 6, 2023

Lynn M. Means, P.E., PTOE, RSP1
Senior Transportation Engineer
BLA, Inc.
333 Pierce Road
Suite 200
Itasca, IL 60143

Subject: ***IL 22 (Half Day Road) @ Prairie Road***
IDOT

Dear Ms. Means:

In response to a request made on your behalf and dated April 4, 2023, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
IL 22 Half Day Rd from Buffalo Grove Rd to Prairie Rd	19,100	24,100
IL 22 Half Day Rd from Prairie Rd to Milwaukee Ave	17,800	22,400
Prairie Ave from IL 22 Half Day Rd to Aptakisic Rd	7,450	9,400

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

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

Sincerely,

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

cc: Rios (IDOT)
2023_TrafficForecasts\BuffaloGrove\la-12-23\la-12-23.docx

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendix C

SRA Excerpts

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Strategic Regional Arterial

Illinois 22
from U.S. 14 to U.S. 41



Operation GreenLight

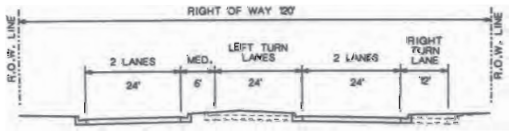
Illinois Department of Transportation
April 1993

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

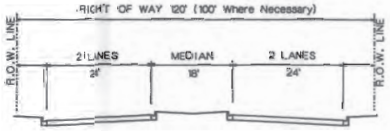


LEGEND

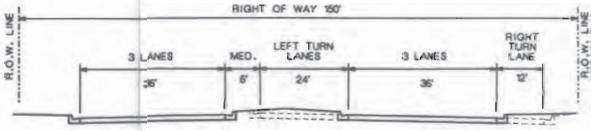
- EXISTING SIGNAL
- POTENTIAL SIGNAL
- SIGNAL TO BE REMOVED
- PROPOSED LANE ARRANGEMENT
- < 2 NUMBER OF LANES
- FUTURE RIGHT OF WAY LINE
- BUS STOP
- METRA PROPOSED TRAIN STATION



ROADWAY SECTION A–A
MAIN ST/PRAIRIE RD WEST INTERSECTION APPROACH



ROADWAY SECTION B–B
WILLOW PARKWAY TO OLD HALF DAY RD (EAST)



ROADWAY SECTION C–C
ILL 21/US 45 INTERSECTION APPROACHES

ILL 22 – PROPOSED PLAN

Prepared by CH2M HILL in association with
METRO Transportation Group and EJM Engineering

ILLINOIS DEPARTMENT OF TRANSPORTATION

SRA Strategic Regional Arterial Planning Study

EXHIBIT C-8

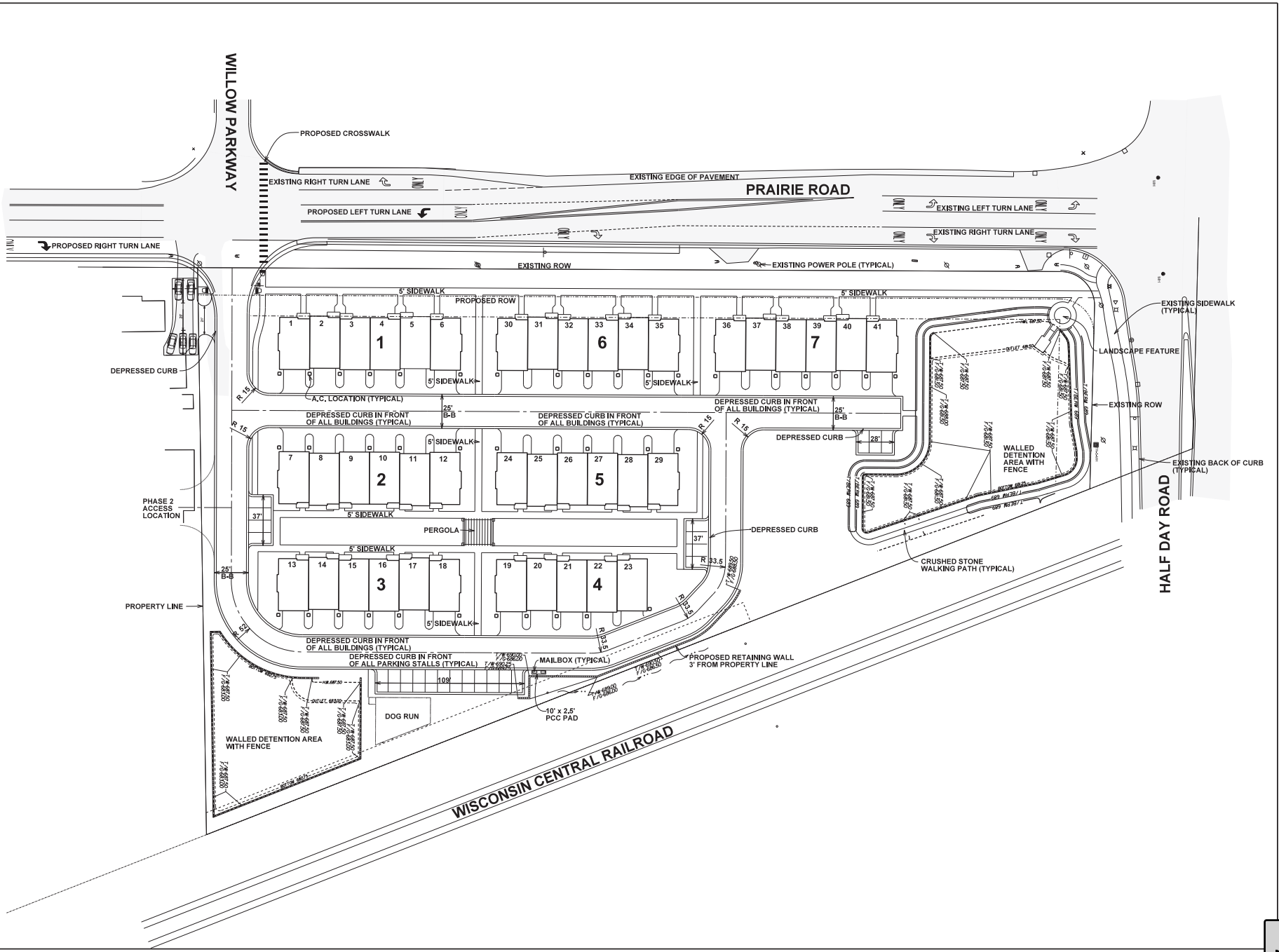
Scale: 0 200 400 feet

BLA, Inc.

Appendix D

Site Plan

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)



NORTH

SCALE: 1" = 30'

PEARSON, BROWN & ASSOCIATES, INC.
BUFFALO GROVE, ILLINOIS
CONSULTING ENGINEERS
1650 W. WINCHESTER ROAD • SUITE 205
LIBERTYVILLE, IL. 60048
PHONE: (847) 367-4787
FAX: (847) 367-4707
E-MAIL ADDRESS: pba@pearsonbrown.com

©COPYRIGHT 2023 PEARSON, BROWN & ASSOCIATES, INC. ALL RIGHTS RESERVED

22825 N. PRAIRIE ROAD

DESIGNED BY: D.S.H.
DRAWN BY: A.J.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 04/28/23

REVISIONS

DATE	BY	DESCRIPTION
05/30/23	JFC	REVISED PER VILLAGE REVIEW COMMENTS

GEOMETRICS PLAN

SHEET NUMBER 3 OF 6 SHEETS

JOB No. 23102

2.1.b

BLA, Inc.

Appendix E

ITE Trip Generation Excerpts

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

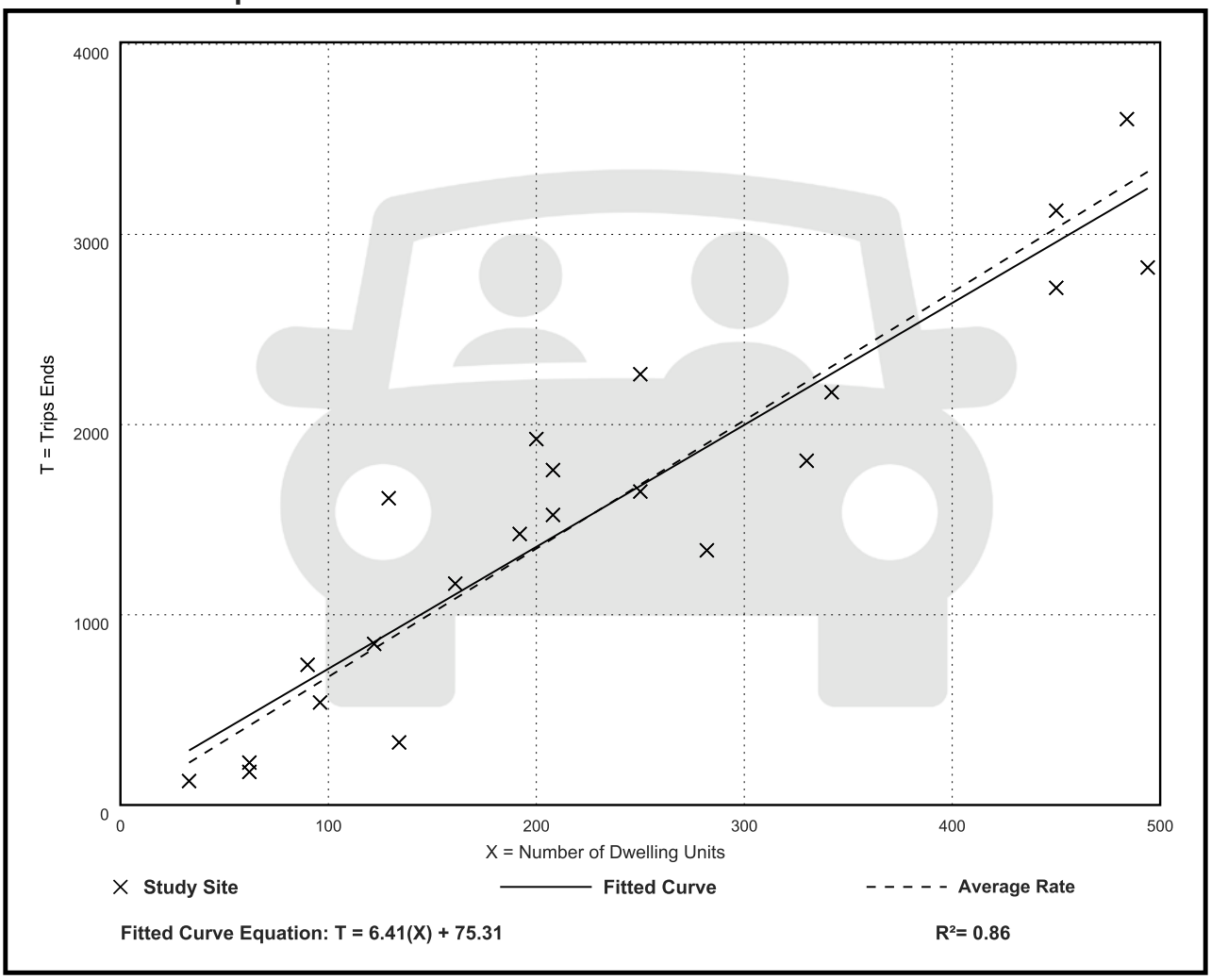
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

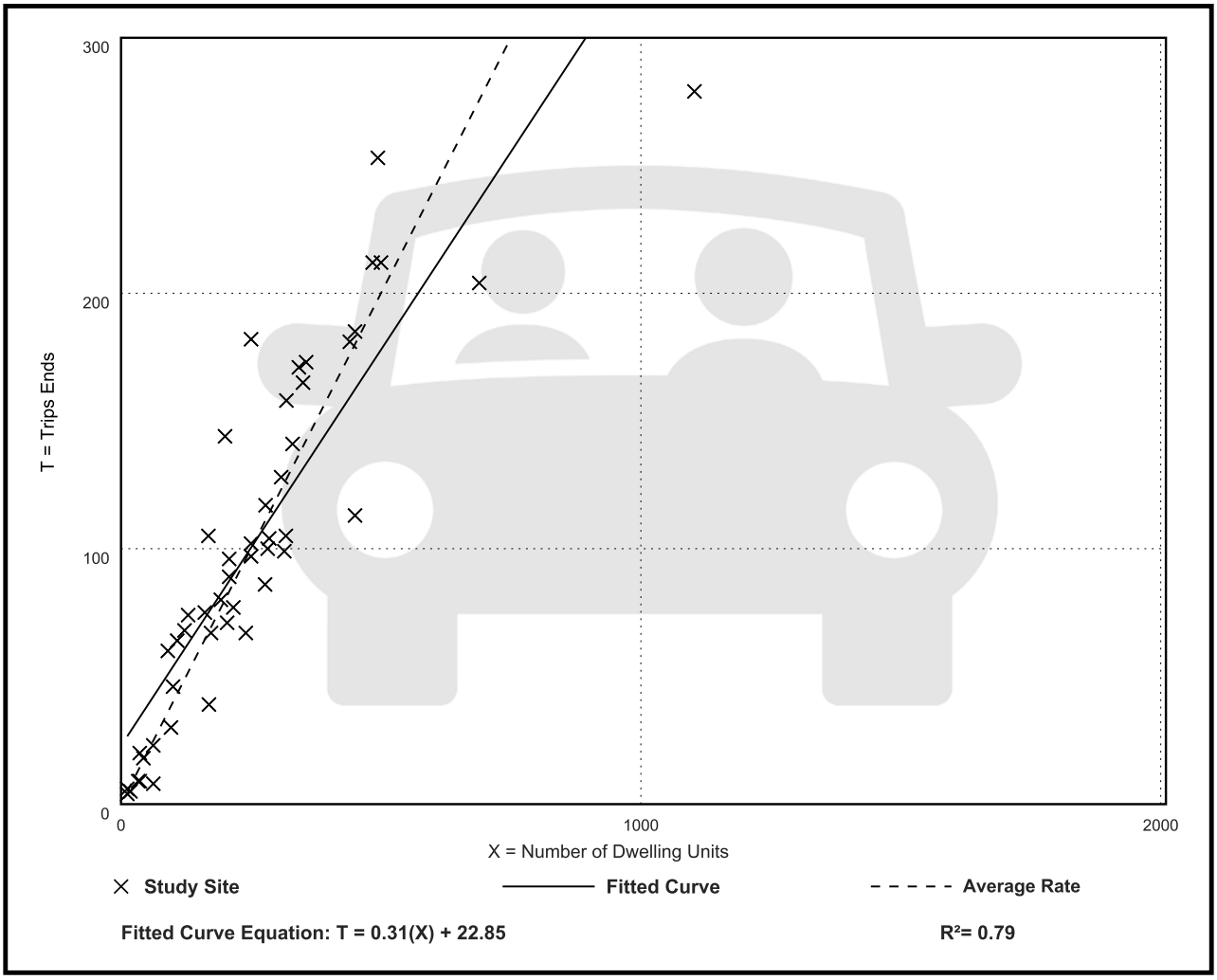
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

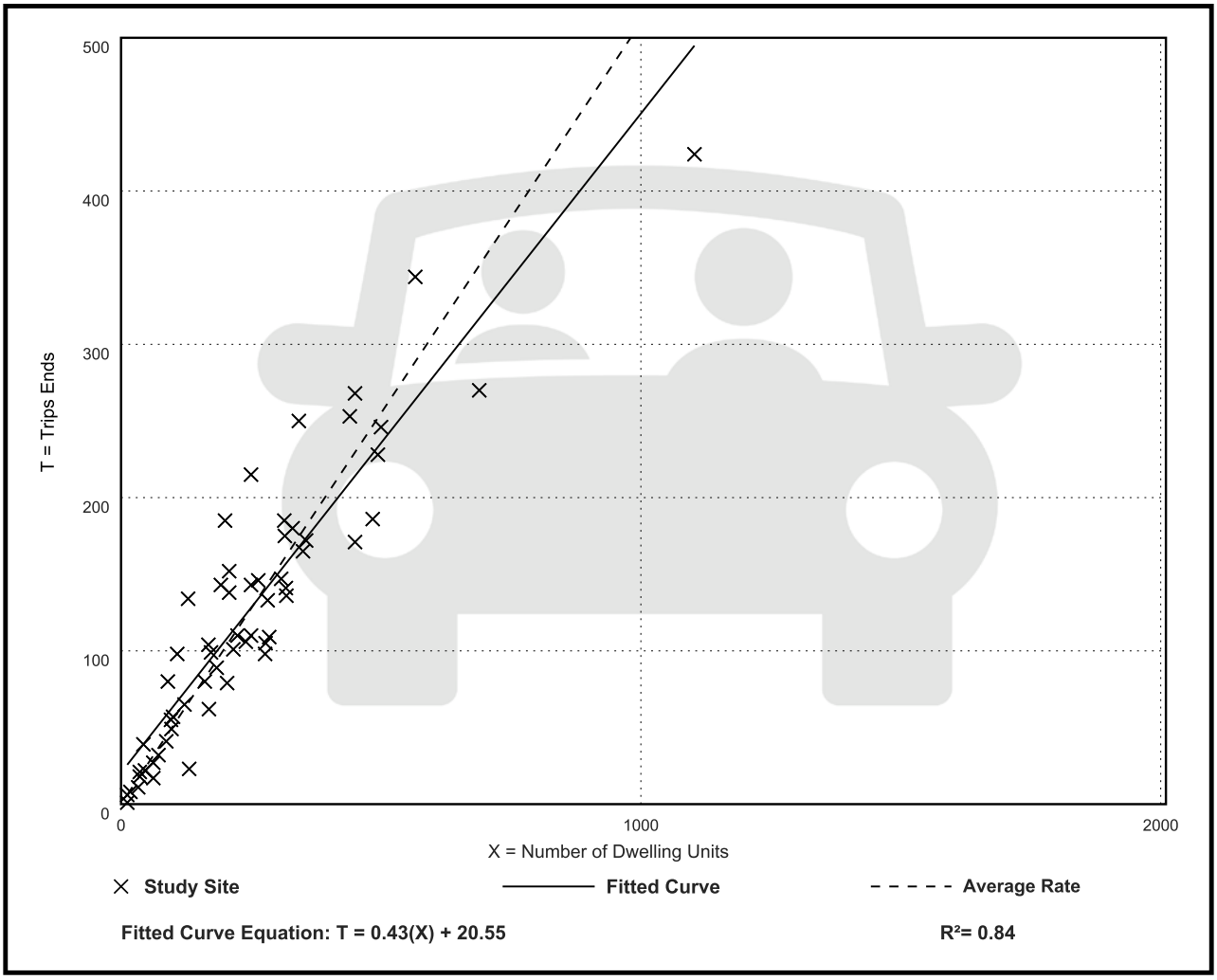
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

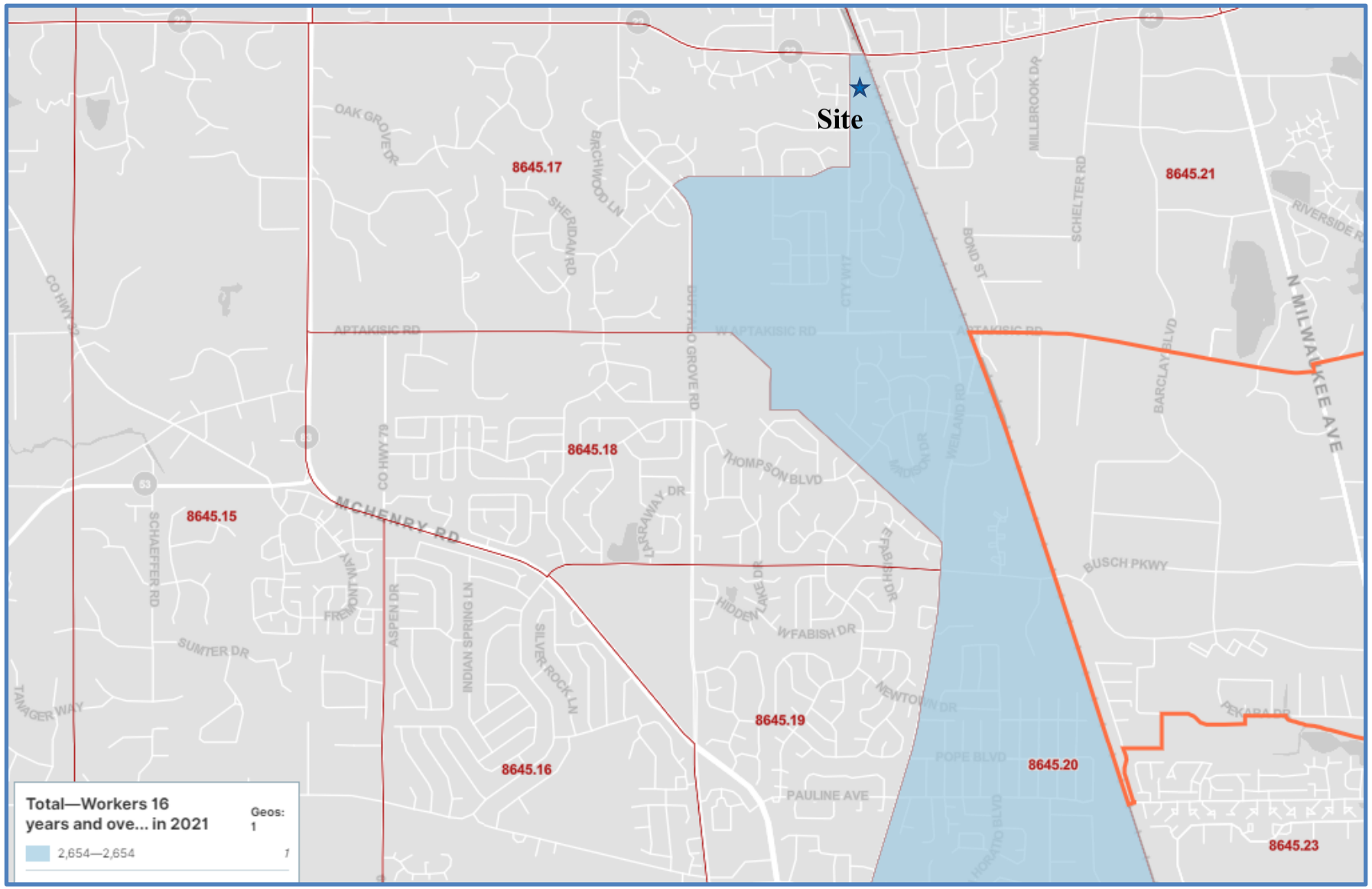
BLA, Inc.

Appendix F

US Census Data

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

US Census Tract Map



MEANS OF TRANSPORTATION TO WORK

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

Census Tract 8645.20, Lake County, Illinois

Label	Estimate	Margin of Error
Total:	2,654	±263
Car, truck, or van:	1,915	±221
Drove alone	1,838	±218
Carpooled:	77	±43
In 2-person carpool	68	±41
In 3-person carpool	9	±14
In 4-person carpool	0	±12
In 5- or 6-person carpool	0	±12
In 7-or-more-person carpool	0	±12
Public transportation (excluding taxicab):	160	±73
Bus	0	±12
Subway or elevated rail	14	±17
Long-distance train or commuter rail	146	±71
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±12
Ferryboat	0	±12
Taxicab	0	±12
Motorcycle	0	±12
Bicycle	0	±12
Walked	17	±24
Other means	22	±31
Worked from home	540	±187

Table Notes

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

MEANS OF TRANSPORTATION TO WORK

Survey/Program: American Community Survey

Universe: Workers 16 years and over

Year: 2021

Estimates: 5-Year

Table ID: B08301

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

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

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

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

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

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

Several means of transportation to work categories were updated in 2019. For more information, see: Change to Means of Transportation.

The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

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

Explanation of Symbols:

-

The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N

The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)

The estimate or margin of error is not applicable or not available.

median-

The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+

The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**

The margin of error could not be computed because there were an insufficient number of sample observations.

***

The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****

A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

BLA, Inc.

Appendix G

Auxiliary Lane Warrant Analysis

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Prairie Road (Northbound) at Site Access

Table 5.3 Right-Turn Lane Guidelines for Two-Lane Highways

Approach Lane Volume (vph)	Minimum Right-turn Volume Warranting Exclusive Lane (vph) By Posted Speed Limit				
	35 mph	40 mph	45 mph	50 mph	55 mph
200	--	--	75	35	20
300	--	120	40	25	15
400	200	50	30	20	10
500	50	25	20	15	10
600	25	15	15	10	10
800	15	10	10	10	10
1200	10	10	10	10	10

Alternative / Timeframe	Speed Limit	Advancing Volume	No. Right-Turns	Satisfied?
2030 Total Traffic				
AM Peak	40	760	4	No
PM Peak		579	10	No

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

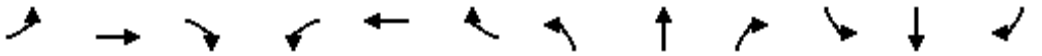
Appendix H

Capacity Analysis Worksheets

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

Existing Conditions
Weekday AM



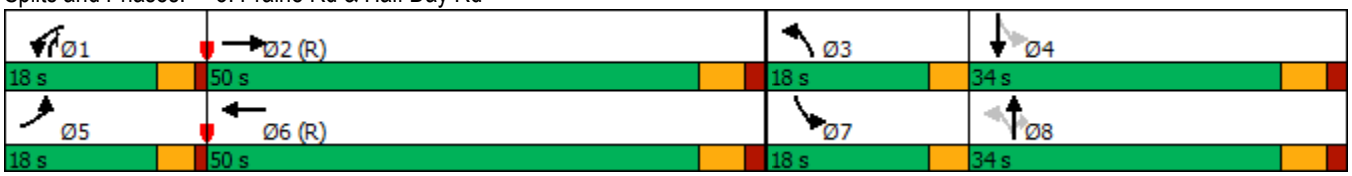
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1151	35	210	623	45	17	109	500	79	66	10
Future Volume (vph)	19	1151	35	210	623	45	17	109	500	79	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1641	3524	0	1770	3441	0	1456	1863	1583	1787	1693	0
Flt Permitted	0.950			0.950			0.705			0.624		
Satd. Flow (perm)	1641	3524	0	1770	3441	0	1079	1863	1583	1174	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				196		6	
Link Speed (mph)		35			35			40			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			12.9			14.0	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	2%	3%	2%	4%	2%	24%	2%	2%	1%	8%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1249	0	221	703	0	18	115	526	83	80	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	18.0	50.0		18.0	50.0		18.0	34.0	18.0	18.0	34.0	
Total Split (%)	15.0%	41.7%		15.0%	41.7%		15.0%	28.3%	15.0%	15.0%	28.3%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	7.0	44.0		13.5	56.8		43.3	35.5	55.0	48.4	41.6	
Actuated g/C Ratio	0.06	0.37		0.11	0.47		0.36	0.30	0.46	0.40	0.35	
v/c Ratio	0.21	0.97		1.11	0.43		0.04	0.21	0.63	0.16	0.14	
Control Delay	58.2	55.5		145.3	22.7		22.2	34.8	19.8	23.3	27.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.2	55.5		145.3	22.7		22.2	34.8	19.8	23.3	27.6	
LOS	E	E		F	C		C	C	B	C	C	
Approach Delay		55.5			52.1			22.5			25.4	
Approach LOS		E			D			C			C	
Queue Length 50th (ft)	15	494		~196	166		8	68	197	40	37	
Queue Length 95th (ft)	41	#647		#355	267		24	123	340	74	84	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	184	1294		199	1633		479	550	831	548	591	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.97		1.11	0.43		0.04	0.21	0.63	0.15	0.14	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 53 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 45.6		Intersection LOS: D	
Intersection Capacity Utilization 92.5%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	0	43	0	0	1	21	603	0	0	305	6
Future Vol, veh/h	22	0	43	0	0	1	21	603	0	0	305	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	2	5	0	0	0	5	3	0	0	3	0
Mvmt Flow	24	0	48	0	0	1	23	670	0	0	339	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1059	1058	342	1083	1065	670	349	0	0	670	0	0
Stage 1	342	342	-	716	716	-	-	-	-	-	-	-
Stage 2	717	716	-	367	349	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.52	6.25	7.1	6.5	6.2	4.15	-	-	4.1	-	-
Critical Hdwy Stg 1	6.14	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.018	3.345	3.5	4	3.3	2.245	-	-	2.2	-	-
Pot Cap-1 Maneuver	200	225	694	197	224	460	1193	-	-	930	-	-
Stage 1	669	638	-	424	437	-	-	-	-	-	-	-
Stage 2	418	434	-	657	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	196	220	692	181	219	460	1190	-	-	930	-	-
Mov Cap-2 Maneuver	196	220	-	181	219	-	-	-	-	-	-	-
Stage 1	654	636	-	416	429	-	-	-	-	-	-	-
Stage 2	409	426	-	612	635	-	-	-	-	-	-	-

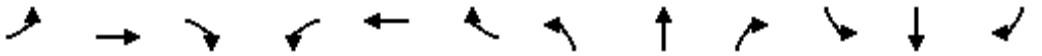
Approach	EB	WB	NB	SB
HCM Control Delay, s	17	12.8	0.3	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1190	-	-	373	460	930	-	-
HCM Lane V/C Ratio	0.02	-	-	0.194	0.002	-	-	-
HCM Control Delay (s)	8.1	-	-	17	12.8	0	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

Existing Conditions
Weekday PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	692	52	296	1299	45	82	121	261	35	98	13
Future Volume (vph)	8	692	52	296	1299	45	82	121	261	35	98	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1805	3490	0	1787	3558	0	1805	1881	1599	1805	1861	0
Flt Permitted	0.950			0.950			0.597			0.676		
Satd. Flow (perm)	1805	3490	0	1786	3558	0	1125	1881	1577	1283	1861	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			4				275		5	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			17.2			14.0	
Confl. Peds. (#/hr)			1	1			10		2	2		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	4%	1%	1%	0%	0%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	783	0	312	1414	0	86	127	275	37	117	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	14.0	54.0		24.0	64.0		14.0	26.0	24.0	21.0	33.0	
Total Split (%)	11.2%	43.2%		19.2%	51.2%		11.2%	20.8%	19.2%	16.8%	26.4%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	6.2	48.0		19.5	69.6		42.6	34.0	55.0	38.2	28.4	
Actuated g/C Ratio	0.05	0.38		0.16	0.56		0.34	0.27	0.44	0.31	0.23	
v/c Ratio	0.09	0.58		1.12	0.71		0.20	0.25	0.32	0.09	0.27	
Control Delay	58.5	32.4		138.7	23.6		29.3	39.1	3.6	28.0	40.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.5	32.4		138.7	23.6		29.3	39.1	3.6	28.0	40.6	
LOS	E	C		F	C		C	D	A	C	D	
Approach Delay		32.7			44.4			17.3			37.6	
Approach LOS		C			D			B			D	
Queue Length 50th (ft)	6	259		~290	402		47	84	0	20	75	
Queue Length 95th (ft)	24	325		#473	603		86	143	50	45	132	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	137	1344		278	1984		442	511	851	519	427	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.06	0.58		1.12	0.71		0.19	0.25	0.32	0.07	0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 9 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 36.9		Intersection LOS: D	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑			↱	↱
Traffic Vol, veh/h	9	0	25	0	0	0	17	455	0	1	431	14
Future Vol, veh/h	9	0	25	0	0	0	17	455	0	1	431	14
Conflicting Peds, #/hr	0	0	0	0	0	0	19	0	0	0	0	19
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	8	0	0	0	0	1	0	0	1	0
Mvmt Flow	9	0	26	0	0	0	18	479	0	1	454	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	990	990	473	992	1005	479	488	0	0	479	0	0
Stage 1	475	475	-	515	515	-	-	-	-	-	-	-
Stage 2	515	515	-	477	490	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.28	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.372	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	227	246	579	227	243	591	1086	-	-	1094	-	-
Stage 1	574	557	-	546	538	-	-	-	-	-	-	-
Stage 2	546	535	-	573	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	220	237	569	214	234	591	1066	-	-	1094	-	-
Mov Cap-2 Maneuver	220	237	-	214	234	-	-	-	-	-	-	-
Stage 1	554	546	-	537	529	-	-	-	-	-	-	-
Stage 2	537	526	-	546	542	-	-	-	-	-	-	-

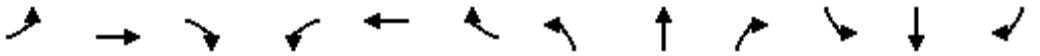
Approach	EB	WB	NB	SB
HCM Control Delay, s	14.9	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1066	-	-	401	-	1094	-	-
HCM Lane V/C Ratio	0.017	-	-	0.089	-	0.001	-	-
HCM Control Delay (s)	8.4	-	-	14.9	0	8.3	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

20230 NoBuild
Weekday AM



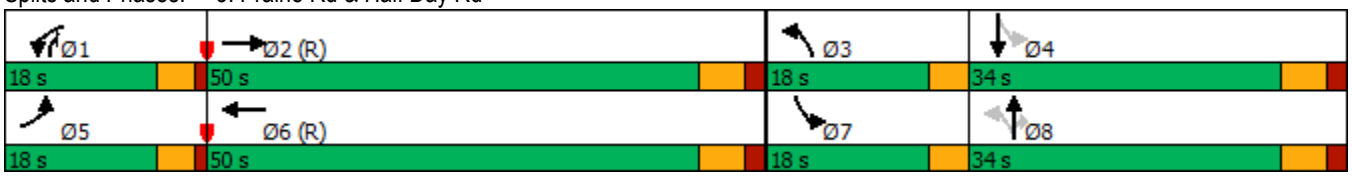
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1234	42	254	668	48	21	132	605	85	80	11
Future Volume (vph)	20	1234	42	254	668	48	21	132	605	85	80	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1641	3520	0	1770	3441	0	1456	1863	1583	1787	1699	0
Flt Permitted	0.950			0.950			0.695			0.587		
Satd. Flow (perm)	1641	3520	0	1770	3441	0	1064	1863	1583	1104	1699	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				186		6	
Link Speed (mph)		35			35			40			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			12.9			14.0	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	2%	3%	2%	4%	2%	24%	2%	2%	1%	8%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1343	0	267	754	0	22	139	637	89	96	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	18.0	50.0		18.0	50.0		18.0	34.0	18.0	18.0	34.0	
Total Split (%)	15.0%	41.7%		15.0%	41.7%		15.0%	28.3%	15.0%	15.0%	28.3%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	7.1	44.0		13.5	56.8		42.4	33.3	52.8	48.3	39.5	
Actuated g/C Ratio	0.06	0.37		0.11	0.47		0.35	0.28	0.44	0.40	0.33	
v/c Ratio	0.22	1.04		1.34	0.46		0.06	0.27	0.80	0.18	0.17	
Control Delay	58.4	73.3		224.5	23.3		22.4	36.3	29.3	23.5	29.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.4	73.3		224.5	23.3		22.4	36.3	29.3	23.5	29.6	
LOS	E	E		F	C		C	D	C	C	C	
Approach Delay		73.1			75.9			30.3			26.7	
Approach LOS		E			E			C			C	
Queue Length 50th (ft)	16	~591		~270	181		10	84	308	43	52	
Queue Length 95th (ft)	42	#731		#441	290		28	146	#524	78	98	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	184	1292		199	1632		475	516	800	528	563	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	1.04		1.34	0.46		0.05	0.27	0.80	0.17	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 53 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 61.3		Intersection LOS: E	
Intersection Capacity Utilization 104.1%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↱			↱	↱
Traffic Vol, veh/h	24	0	46	0	0	1	23	733	0	0	370	6
Future Vol, veh/h	24	0	46	0	0	1	23	733	0	0	370	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	2	5	0	0	0	5	3	0	0	3	0
Mvmt Flow	27	0	51	0	0	1	26	814	0	0	411	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1281	1280	414	1306	1287	814	421	0	0	814	0	0
Stage 1	414	414	-	866	866	-	-	-	-	-	-	-
Stage 2	867	866	-	440	421	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.52	6.25	7.1	6.5	6.2	4.15	-	-	4.1	-	-
Critical Hdwy Stg 1	6.14	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.018	3.345	3.5	4	3.3	2.245	-	-	2.2	-	-
Pot Cap-1 Maneuver	141	166	632	138	166	381	1122	-	-	822	-	-
Stage 1	612	593	-	351	373	-	-	-	-	-	-	-
Stage 2	345	370	-	600	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	138	162	630	125	162	381	1119	-	-	822	-	-
Mov Cap-2 Maneuver	138	162	-	125	162	-	-	-	-	-	-	-
Stage 1	596	591	-	343	364	-	-	-	-	-	-	-
Stage 2	336	361	-	551	590	-	-	-	-	-	-	-

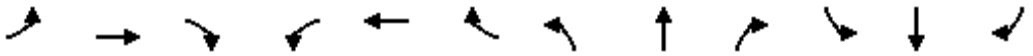
Approach	EB	WB	NB	SB
HCM Control Delay, s	22.5	14.5	0.3	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1119	-	-	283	381	822	-	-
HCM Lane V/C Ratio	0.023	-	-	0.275	0.003	-	-	-
HCM Control Delay (s)	8.3	-	-	22.5	14.5	0	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

2030 NoBuild
Weekday PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	742	63	358	1393	48	99	146	316	38	119	14
Future Volume (vph)	9	742	63	358	1393	48	99	146	316	38	119	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1805	3485	0	1787	3558	0	1805	1881	1599	1805	1865	0
Flt Permitted	0.950			0.950			0.556			0.659		
Satd. Flow (perm)	1805	3485	0	1786	3558	0	1048	1881	1577	1250	1865	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			4				262		4	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			17.2			14.0	
Confl. Peds. (#/hr)			1	1			10		2	2		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	4%	1%	1%	0%	0%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	847	0	377	1517	0	104	154	333	40	140	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	14.0	54.0		24.0	64.0		14.0	26.0	24.0	21.0	33.0	
Total Split (%)	11.2%	43.2%		19.2%	51.2%		11.2%	20.8%	19.2%	16.8%	26.4%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	6.2	48.0		19.5	69.6		42.5	31.9	52.9	37.9	28.0	
Actuated g/C Ratio	0.05	0.38		0.16	0.56		0.34	0.26	0.42	0.30	0.22	
v/c Ratio	0.10	0.63		1.36	0.77		0.25	0.32	0.41	0.10	0.33	
Control Delay	58.6	33.6		222.2	25.4		30.0	41.4	7.0	28.1	42.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.6	33.6		222.2	25.4		30.0	41.4	7.0	28.1	42.5	
LOS	E	C		F	C		C	D	A	C	D	
Approach Delay		33.8			64.6			20.0			39.3	
Approach LOS		C			E			C			D	
Queue Length 50th (ft)	7	287		~400	453		58	103	33	21	94	
Queue Length 95th (ft)	25	357		#595	680		102	172	100	47	156	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	137	1343		278	1983		421	480	822	512	421	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.07	0.63		1.36	0.77		0.25	0.32	0.41	0.08	0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 9 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.36			
Intersection Signal Delay: 48.3		Intersection LOS: D	
Intersection Capacity Utilization 103.2%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	27	0	0	0	18	551	0	1	524	15
Future Vol, veh/h	10	0	27	0	0	0	18	551	0	1	524	15
Conflicting Peds, #/hr	0	0	0	0	0	0	19	0	0	0	0	19
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	8	0	0	0	0	1	0	0	1	0
Mvmt Flow	11	0	28	0	0	0	19	580	0	1	552	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1191	1191	571	1194	1207	580	587	0	0	580	0	0
Stage 1	573	573	-	618	618	-	-	-	-	-	-	-
Stage 2	618	618	-	576	589	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.28	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.372	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	166	187	509	165	185	518	998	-	-	1004	-	-
Stage 1	508	504	-	480	484	-	-	-	-	-	-	-
Stage 2	480	481	-	506	499	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	161	180	500	153	178	518	980	-	-	1004	-	-
Mov Cap-2 Maneuver	161	180	-	153	178	-	-	-	-	-	-	-
Stage 1	489	494	-	471	475	-	-	-	-	-	-	-
Stage 2	471	472	-	477	490	-	-	-	-	-	-	-

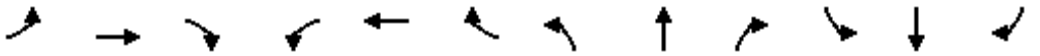
Approach	EB	WB	NB	SB
HCM Control Delay, s	17.8	0	0.3	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	319	-	1004	-	-
HCM Lane V/C Ratio	0.019	-	-	0.122	-	0.001	-	-
HCM Control Delay (s)	8.7	-	-	17.8	0	8.6	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

2030 Total
Weekday AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1234	43	258	668	48	25	133	616	85	80	11
Future Volume (vph)	20	1234	43	258	668	48	25	133	616	85	80	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1641	3520	0	1770	3441	0	1456	1863	1583	1787	1699	0
Flt Permitted	0.950			0.950			0.695			0.586		
Satd. Flow (perm)	1641	3520	0	1770	3441	0	1064	1863	1583	1102	1699	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				186		6	
Link Speed (mph)		35			35			40			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			12.9			14.0	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	2%	3%	2%	4%	2%	24%	2%	2%	1%	8%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1344	0	272	754	0	26	140	648	89	96	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	18.0	50.0		18.0	50.0		18.0	34.0	18.0	18.0	34.0	
Total Split (%)	15.0%	41.7%		15.0%	41.7%		15.0%	28.3%	15.0%	15.0%	28.3%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	7.1	44.0		13.5	56.8		42.6	33.3	52.8	48.2	39.3	
Actuated g/C Ratio	0.06	0.37		0.11	0.47		0.36	0.28	0.44	0.40	0.33	
v/c Ratio	0.22	1.04		1.37	0.46		0.07	0.27	0.81	0.18	0.17	
Control Delay	58.4	73.5		234.1	23.3		22.5	36.4	30.3	23.5	29.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.4	73.5		234.1	23.3		22.5	36.4	30.3	23.5	29.8	
LOS	E	E		F	C		C	D	C	C	C	
Approach Delay		73.3			79.2			31.1			26.8	
Approach LOS		E			E			C			C	
Queue Length 50th (ft)	16	~591		~278	181		12	85	320	43	52	
Queue Length 95th (ft)	42	#732		#450	290		31	147	#565	78	98	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

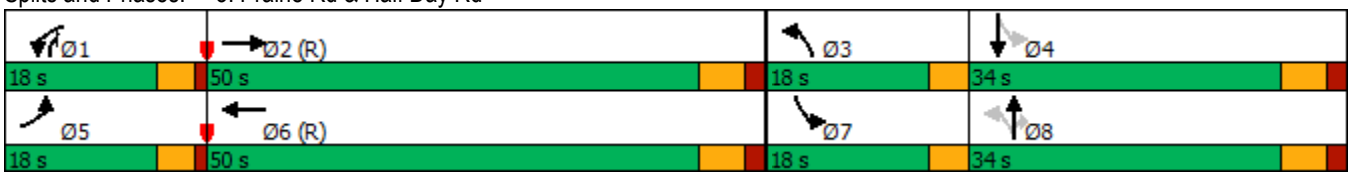
Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

2030 Total
Weekday AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	184	1292		199	1632		475	516	800	528	560	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	1.04		1.37	0.46		0.05	0.27	0.81	0.17	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 53 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.37			
Intersection Signal Delay: 62.4		Intersection LOS: E	
Intersection Capacity Utilization 104.4%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	46	11	0	17	23	733	4	5	370	6
Future Vol, veh/h	24	0	46	11	0	17	23	733	4	5	370	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	125	115	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	2	5	2	2	2	5	3	2	2	3	0
Mvmt Flow	27	0	51	12	0	19	26	814	4	6	411	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1304	1296	414	1318	1299	814	421	0	0	818	0	0
Stage 1	426	426	-	866	866	-	-	-	-	-	-	-
Stage 2	878	870	-	452	433	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.52	6.25	7.12	6.52	6.22	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	6.14	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.018	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	136	162	632	134	161	378	1122	-	-	810	-	-
Stage 1	602	586	-	348	370	-	-	-	-	-	-	-
Stage 2	340	369	-	587	582	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	126	157	630	120	156	378	1119	-	-	810	-	-
Mov Cap-2 Maneuver	126	157	-	120	156	-	-	-	-	-	-	-
Stage 1	586	580	-	340	361	-	-	-	-	-	-	-
Stage 2	316	361	-	535	576	-	-	-	-	-	-	-

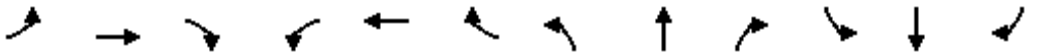
Approach	EB	WB	NB	SB
HCM Control Delay, s	24	25.7	0.3	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1119	-	-	266	205	810	-	-
HCM Lane V/C Ratio	0.023	-	-	0.292	0.152	0.007	-	-
HCM Control Delay (s)	8.3	-	-	24	25.7	9.5	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.5	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lanes, Volumes, Timings
3: Prairie Rd & Half Day Rd

2030 Total
Weekday PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	742	66	368	1393	48	101	147	321	38	120	14
Future Volume (vph)	9	742	66	368	1393	48	101	147	321	38	120	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	350		0	160		405	105		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	150			180			125			225		
Satd. Flow (prot)	1805	3485	0	1787	3558	0	1805	1881	1599	1805	1865	0
Flt Permitted	0.950			0.950			0.554			0.659		
Satd. Flow (perm)	1805	3485	0	1786	3558	0	1045	1881	1577	1250	1865	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			4				262		4	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		734			923			756			618	
Travel Time (s)		14.3			18.0			17.2			14.0	
Confl. Peds. (#/hr)			1	1			10		2	2		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	4%	1%	1%	0%	0%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	850	0	387	1517	0	106	155	338	40	141	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0	3.0	3.0	8.0	
Minimum Split (s)	7.5	38.0		7.5	36.0		6.5	14.0	7.5	6.5	47.0	
Total Split (s)	14.0	54.0		24.0	64.0		14.0	26.0	24.0	21.0	33.0	
Total Split (%)	11.2%	43.2%		19.2%	51.2%		11.2%	20.8%	19.2%	16.8%	26.4%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		0.0	2.0	1.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		3.5	6.0	4.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Act Effct Green (s)	6.2	48.0		19.5	69.6		42.5	31.9	52.9	37.8	28.0	
Actuated g/C Ratio	0.05	0.38		0.16	0.56		0.34	0.26	0.42	0.30	0.22	
v/c Ratio	0.10	0.63		1.39	0.77		0.26	0.32	0.41	0.10	0.34	
Control Delay	58.6	33.6		236.4	25.4		30.1	41.4	7.3	28.1	42.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	58.6	33.6		236.4	25.4		30.1	41.4	7.3	28.1	42.6	
LOS	E	C		F	C		C	D	A	C	D	
Approach Delay		33.8			68.3			20.2			39.4	
Approach LOS		C			E			C			D	
Queue Length 50th (ft)	7	288		~416	453		59	104	35	21	95	
Queue Length 95th (ft)	25	358		#615	680		103	173	104	47	157	
Internal Link Dist (ft)		654			843			676			538	
Turn Bay Length (ft)	170			350			160		405	105		

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	137	1343		278	1983		420	480	822	512	419	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.07	0.63		1.39	0.77		0.25	0.32	0.41	0.08	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 9 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 50.3		Intersection LOS: D	
Intersection Capacity Utilization 103.9%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Prairie Rd & Half Day Rd



Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	10	0	27	6	0	8	18	551	10	15	524	15
Future Vol, veh/h	10	0	27	6	0	8	18	551	10	15	524	15
Conflicting Peds, #/hr	0	0	0	0	0	0	19	0	0	0	0	19
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	125	115	-	115
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	8	2	2	2	0	1	2	2	1	0
Mvmt Flow	11	0	28	6	0	8	19	580	11	16	552	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1231	1232	571	1224	1237	580	587	0	0	591	0	0
Stage 1	603	603	-	618	618	-	-	-	-	-	-	-
Stage 2	628	629	-	606	619	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.28	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.372	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	156	177	509	156	176	514	998	-	-	985	-	-
Stage 1	489	488	-	477	481	-	-	-	-	-	-	-
Stage 2	474	475	-	484	480	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	147	168	500	143	167	514	980	-	-	985	-	-
Mov Cap-2 Maneuver	147	168	-	143	167	-	-	-	-	-	-	-
Stage 1	471	471	-	468	472	-	-	-	-	-	-	-
Stage 2	457	466	-	449	464	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	20.8	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	303	243	985	-	-
HCM Lane V/C Ratio	0.019	-	-	0.129	0.061	0.016	-	-
HCM Control Delay (s)	8.7	-	-	18.6	20.8	8.7	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0	-	-

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendix I

ITE Parking Generation Excerpts

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Land Use: 221 Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with between three and 10 levels (floors) of residence. Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), and affordable housing (Land Use 223) are related land uses.

Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (one general urban/suburban study site), a Saturday (two general urban/suburban study sites), and a Sunday (one dense multi-use urban study site).

	Percent of Peak Parking Demand		
Hour Beginning	Weekday	Saturday	Sunday
12:00–4:00 a.m.	100	100	100
5:00 a.m.	94	99	–
6:00 a.m.	83	97	–
7:00 a.m.	71	95	–
8:00 a.m.	61	88	–
9:00 a.m.	55	83	–
10:00 a.m.	54	75	–
11:00 a.m.	53	71	–
12:00 p.m.	50	68	–
1:00 p.m.	49	66	33
2:00 p.m.	49	70	40
3:00 p.m.	50	69	27
4:00 p.m.	58	72	13
5:00 p.m.	64	74	33
6:00 p.m.	67	74	60
7:00 p.m.	70	73	67
8:00 p.m.	76	75	47
9:00 p.m.	83	78	53
10:00 p.m.	90	82	73
11:00 p.m.	93	88	93

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Additional Data

In prior editions of *Parking Generation*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of parking demand data found no clear differences in parking demand between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

The average parking supply ratios for the study sites with parking supply information are shown in the table below.

		Parking Supply Ratio	
Setting	**Proximity to Rail Transit**	**Per Dwelling Unit**	**Per Bedroom**
Center City Core	Within ½ mile of rail transit	1.1 (15 sites)	1.0 (12 sites)
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2 (39 sites)	0.9 (34 sites)
	Not within ½ mile of rail transit	1.2 (65 sites)	0.8 (56 sites)
General Urban/ Suburban	Within ½ mile of rail transit	1.5 (25 sites)	0.8 (12 sites)
	Not within ½ mile of rail transit	1.7 (62 sites)	1.0 (39 sites)

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, District of Columbia, Maryland, Massachusetts, New Jersey, New York, Oregon, Virginia, Washington, and Wisconsin.

It is expected that the number of bedrooms and number of residents are likely correlated to the parking demand generated by a residential site. Parking studies of multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex). Future parking studies should also indicate the number of levels contained in the residential building.

Source Numbers

21, 209, 247, 255, 277, 401, 402, 419, 505, 512, 522, 533, 535, 536, 537, 538, 545, 546, 547, 575, 576, 577, 579, 580, 581, 583, 584, 585, 587

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

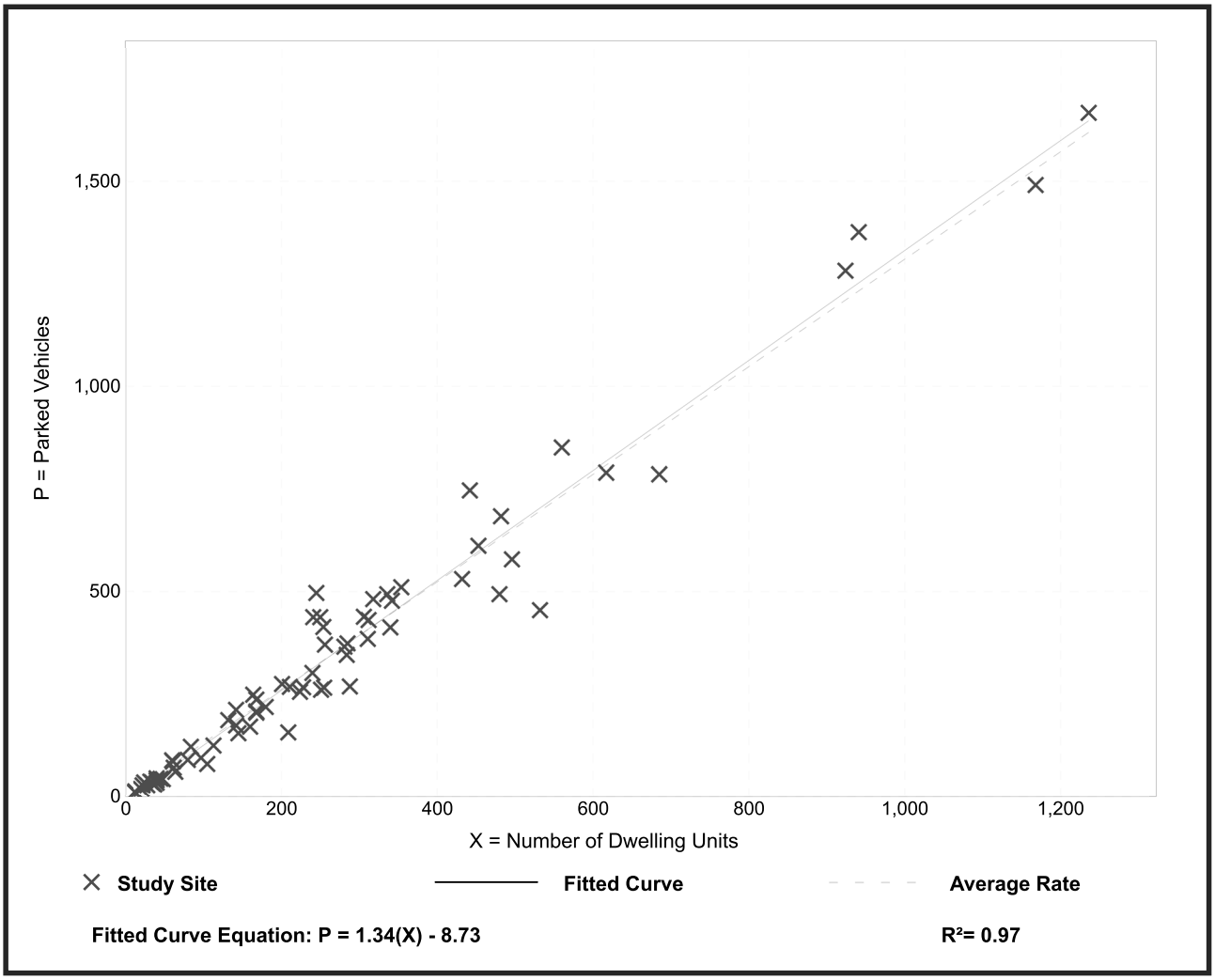
Multifamily Housing (Mid-Rise)
(221)

Peak Period Parking Demand vs: **Dwelling Units**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban (no nearby rail transit)**
Peak Period of Parking Demand: **10:00 p.m. - 5:00 a.m.**
Number of Studies: 73
Avg. Num. of Dwelling Units: 261

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.31	0.75 - 2.03	1.13 / 1.47	1.26 - 1.36	0.22 (17%)

Data Plot and Equation



Parking Generation Manual, 5th Edition ● Institute of Transportation Engineers

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

Multifamily Housing (Mid-Rise)
(221)

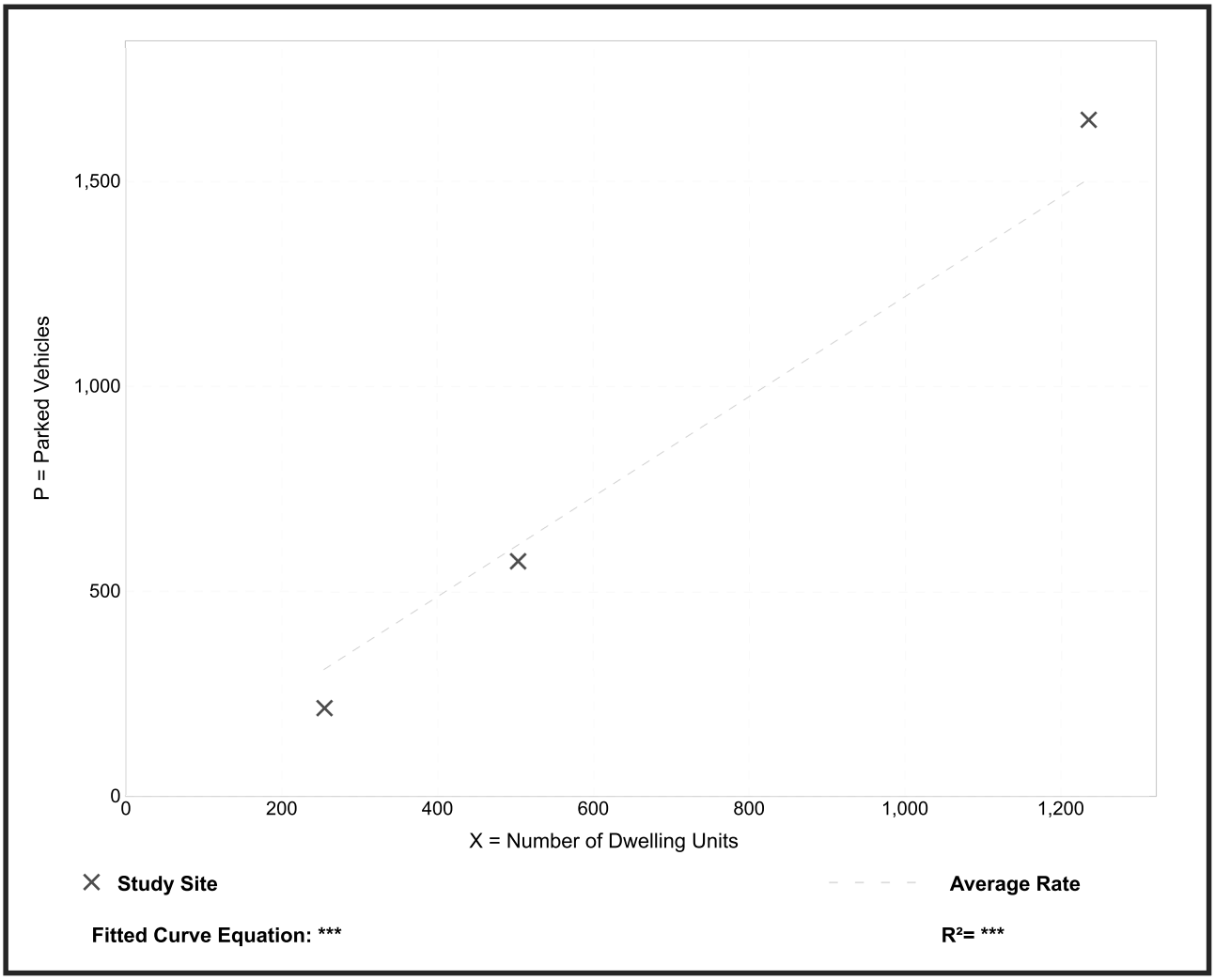
Peak Period Parking Demand vs: **Dwelling Units**
On a: **Saturday**
Setting/Location: **General Urban/Suburban (no nearby rail transit)**
Peak Period of Parking Demand: **11:00 p.m. - 7:00 a.m.**
Number of Studies: 3
Avg. Num. of Dwelling Units: 665

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.22	0.84 - 1.33	0.94 / 1.33	***	0.20 (16%)

Data Plot and Equation

Caution – Small Sample Size



Parking Generation Manual, 5th Edition ● Institute of Transportation Engineers

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

BLA, Inc.

Appendix J

ULI Shared Parking Excerpts

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

FIGURE 2-2 (continued)

	Weekday (parking spaces/unit land use)		Weekend (parking spaces/unit land use)		Peak ratio	Units	Source
Land use	**Visitors**	**Employees**	**Visitors**	**Employees**			
Hotel–business	1.00	0.15	1.00	0.15	1.15	key	2,3
Hotel–leisure	1.00	0.15	1.00	0.15	1.15	key	2,3
Restaurant/lounge	6.67	1.20	7.67	1.33	9.00	ksf GLA	2,3
Meeting/banquet (0–20 sq ft/key)	scaled from 0 to 30	scaled from 0 to 2.0	scaled from 0 to 20	scaled from 0 to 2.0	scaled from 0 to 32	ksf GLA	2,3
Meeting/banquet (20–50 sq ft/key)	scaled from 30 to 20	scaled from 2 to 1.5	scaled from 20 to 10	scaled from 2 to 1.5	scaled from 32 to 21.5	ksf GLA	2,3
Meeting/banquet (50–100 sq ft/key)	scaled from 20 to 10	scaled from 1.5 to 1.0	scaled from 10 to 5.5	scaled from 1.5 to 1.0	scaled from 21.5 to 11.1	ksf GLA	2,3
Convention (100–200 sq ft/key)	scaled from 10 to 5.5	scaled from 1 to 0.5	5.50	scaled from 1 to 0.5	scaled from 11.1 to 6	ksf GLA	2,3
Convention (>200 sq ft/key)	use convention center but adjust for captive on site						2,3
Residential							
Studio efficiency	0.10	0.85	0.15	0.85	1.00	unit	2,3
1 bedroom	0.10	0.90	0.15	0.90	1.05	unit	2,3
2 bedrooms	0.10	1.65	0.15	1.65	1.80	unit	2,3
3+ bedrooms	0.10	2.50	0.15	2.50	2.65	unit	2,3
Senior housing	0.55	0.30	0.42	0.30	0.85	unit	2,3
Office <25,000 sq ft	0.30	3.50	0.03	0.35	3.80	ksf GFA	3
Office 25,000–100,000 sq ft	sliding scale between <25,000 and 100,000				scaled from 3.8 to 3.4	ksf GFA	3
Office = 100,000 sq ft	0.25	3.15	0.03	0.32	3.40	ksf GFA	3
Office 100,000–500,000 sq ft	sliding scale between 100,000 and 200,000				scaled from 3.4 to 2.8	ksf GFA	3
Office >500,000 sq ft	0.20	2.60	0.02	0.26	2.80	ksf GFA	3
Open plan/ high-density office	0.25	5.75	0.03	0.58	6.00	ksf GFA	2
Medical/dental office	3.00	1.60	0.00	0.00	4.60	ksf GFA	2,3
Bank (drive-in branch)	3.50	2.50	3.00	1.75	6.00	ksft GFA	2,3
Arena	0.27	0.03	0.30	0.03	0.33	seat	2
Pro football stadium	0.30	0.01	0.30	0.01	0.31	seat	2
Pro baseball stadium	0.31	0.01	0.34	0.01	0.35	seat	2

Sources:

1. *Parking Requirements for Shopping Centers*, 2nd ed. (Washington, DC: ULI, 1999).
2. Developed by Team Members from a combination of sources.
3. *Parking Generation*, 5th ed. (Washington, DC: Institute of Transportation Engineers, 2019).

Note: New land uses and changes to second edition titles shown in **bold.** Changes or new ratios are highlighted in blue.

Attachment: Final Plan Set (Prairie Point Townhome Development - 22771 -22825 N. Prairie Rd)

CONSULTING ENGINEERS

BLA, Inc.

Office Locations

Corporate Office
333 Pierce Road
Suite 200
Itasca, IL 60143
630-438-6400
Fax 630-438-6444

Indianapolis Office
8720 Castle Creek Parkway
Suite 329
Indianapolis, IN 46250
317-842-4500
Fax 317-842-4506

Action Item : Consideration of a Petition to the Village of Buffalo Grove for Approval of an Amendment to Ordinance No. 2021-067, an Amendment to the Planned Unit Development and the Preliminary Plan, with Approval of a Self-Storage Use, to Allow the Construction of a 112,268 Square Foot Self-Storage Facility on the Property at 105 Lexington Drive.

Recommendation of Action

Staff recommends approval, subject to the conditions in the staff report.

Buffalo Grove Self-Storage, is the contract purchaser of the property located at 105 Lexington Drive and is requesting approval of an amendment to the Planned Unit Development and Preliminary Plan for the site to allow the construction of a 4-story, 112,268 square foot, climate controlled, self-storage facility.

The Planning & Zoning Commission (PZC) shall open the public hearing and take public testimony concerning the requests and make a recommendation to the Village Board regarding the project.

ATTACHMENTS:

- Staff Report - 105 Lexington Dr (PDF)
- Plan Set (PDF)

Trustee Liaison
Stein

Staff Contact
Kelly Purvis, Community Development

Wednesday, July 19, 2023	

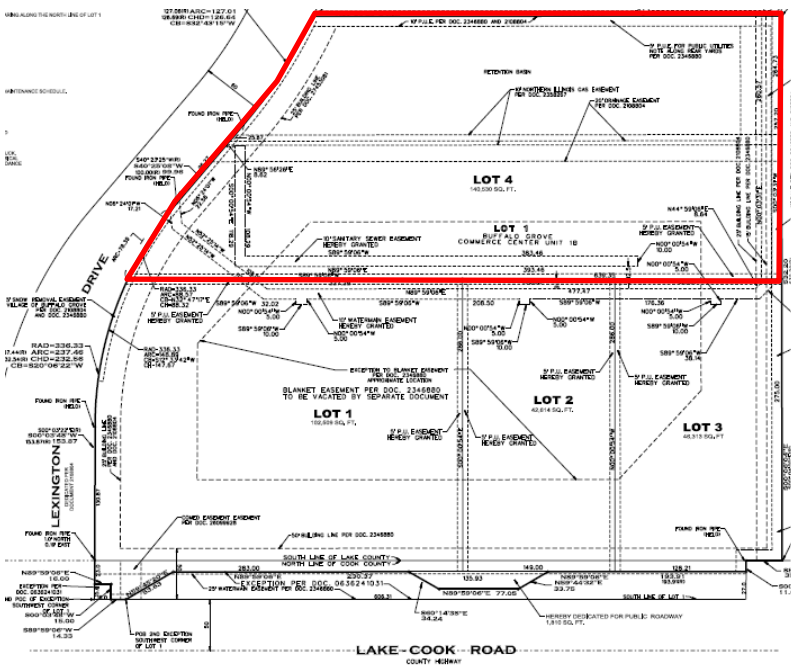
VILLAGE OF BUFFALO GROVE
PLANNING & ZONING COMMISSION
STAFF REPORT

MEETING DATE:	July 19, 2023
SUBJECT PROPERTY LOCATION:	105 Lexington Drive
PETITIONER:	Jim Lapetina, Buffalo Grove Self-Storage
PREPARED BY:	Kelly Purvis, Deputy Community Development Director
REQUEST:	The petitioner is seeking approval of an amendment to Ordinance No. 2021-067, an amendment to the Planned Unit Development and the Preliminary Plan, with approval of a self-storage use, to allow the construction of a 112,268 square foot self-storage facility on the subject property.
EXSITING LAND USE AND ZONING:	The property is currently an unimproved, vacant lot and is zoned B-3, Planned Business Center District.
COMPREHENSIVE PLAN:	The Village of Buffalo Grove Comprehensive Plan calls for this property to be an industrial use.

Attachment: Staff Report - 105 Lexington Dr (Self-Storage Development - 105 Lexington Drive)

BACKGROUND

Jim Lapetina, of Buffalo Grove Self-Storage, is the contract purchaser of the property located at 105 Lexington Drive and is requesting approval of an amendment to the Planned Unit Development and Preliminary Plan for the site to allow the construction of a 4-story, 112,268 square foot, climate controlled, self-storage facility. In 2021, the Village Board approved Ordinance No. 2021-067 for the development of the Ricky Rockets site with a new gas station, convenience store and car wash. As part of the Ricky Rockets project, the property was rezoned as a B-3 Commercial PUD and subdivided into four lots; Lots 1 and 2 were used for the Ricky Rockets development, and Lots 3 and 4 were anticipated to be developed in the future. The proposed storage facility would occupy Lot 4 of the Bluestone Resubdivision. Nearly half of the 3.22-acre site is providing stormwater detention for the 4-lot subdivision and is not buildable, making it a challenging site to develop. Prior to the site being developed by Ricky Rockets, it was previously improved with a 100,000 square foot office building that was occupied by BMO Harris.



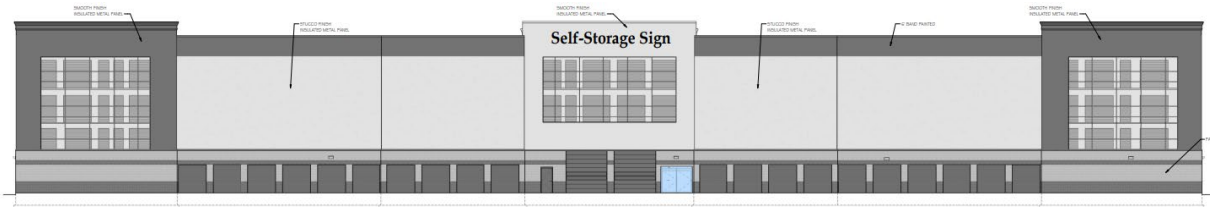
Bluestone Resubdivision – Final Plat

At the April 17, 2023 Village Board meeting, the developer presented an overview of the concept plan. The Trustees were supportive of the development and referred it to the PZC for public hearing. The following report provides a summary of the project and the petitioner's requests.

PLANNING & ZONING ANALYSIS

Business Operations:

The facility will offer 773 storage units of varying sizes for a net rentable square footage of approximately 82,265 square feet. The facility will typically have 1-2 employees on-site at a time. The office is located at the west end of the building facing Lexington Drive and is approximately 385 square feet. There will be a small retail area in the office where customers can purchase general moving supplies (boxes, tape, etc.). The petitioner has indicated, on a busy day, the facility will have 6-10 customer visits. The facility will maintain normal business hours, typically 8:00 AM to 8:00PM; hours may be adjusted slightly based on local customer needs. Doors will be kept locked, and access provided to tenants with a key code. After-hours visits to the interior of the building are restricted unless prior arrangements are made in case of emergency. The facility will have security cameras inside and outside. All refuse containers will be located within the building.



South Building Elevation

Use:

The self-storage use is an appropriate transition from the commercial/retail/service uses on Lake Cook Road and the industrial/office use to the north, east and west of the site. The site's geometry, and the location of the property (lacking frontage) also make the site suitable for a self-storage facility. Self-storage is not listed as a permitted or special use in the B-3 zoning district, however the use can be considered as part of the amendment to the PUD.

Setbacks and bulk requirements:

The proposed building is 49 feet at its highest point and setback from the property line over 140 feet, which complies with the setback and height requirements for the B3 zoning District. No zoning variations are proposed for the development.

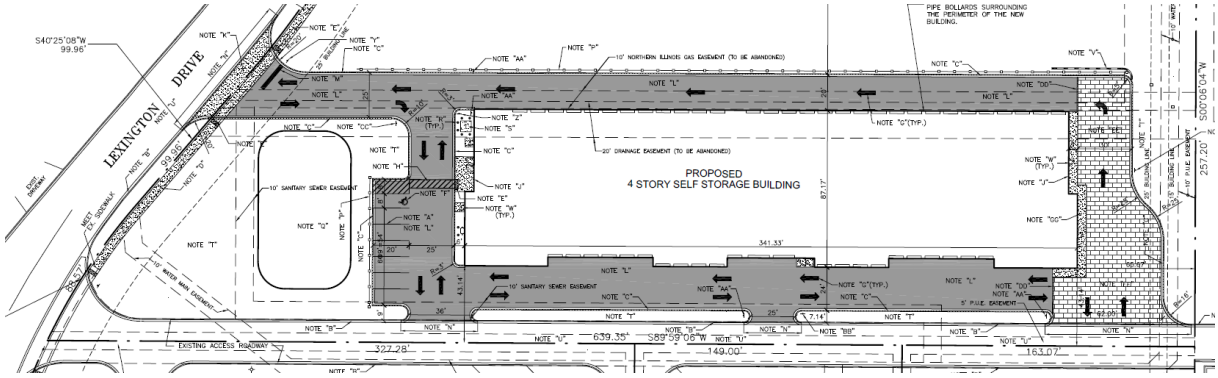
Signage:

The petitioner is proposing two wall signs for the development; one on the west side of the building (facing Lexington Drive) and the other on the south side (facing the private roadway behind Ricky Rockets). Both wall signs will be internally illuminated channel letter signs and are compliant with the code limitations for height and sign area.



West Elevation Signage Plan

Attachment: Staff Report - 105 Lexington Dr (Self-Storage Development - 105 Lexington Drive)



Engineering Site Plan

Traffic & Vehicular Accessibility:
There are four proposed access drives to the site; one full access drive is proposed on Lexington Drive and the other three full access drives are proposed along the private roadway to the south of the site. Traffic will be limited to one-way circulation in the east and north part of the site. The anticipated trip generation for this use is minimal.

Parking:
The Zoning Code does not have specific parking requirements for storage facilities. Based upon 1-2 employees being on the site at a time, and the limited number of anticipated visits to the site (6-10 on the busiest days), staff feels that the 7 parking stalls proposed will be adequate to serve the facility and is comparable to other similar storage facilities.

Landscaping:
The petitioner has submitted a landscape plan that includes shade and ornamental trees as well as evergreen and deciduous shrubs, ornamental grasses, and perennials. Foundation landscaping is proposed on the west side of the building, near the front entrance. Along the south part of the site, landscaping islands will add some greenery between the private road and the storage facility's drive aisle.

Lighting:
The proposed lighting complies with the Village illumination standards of no more than .5 footcandles at the property lines. LED wallpack light fixtures are proposed for the exterior of the building.

Building Elevations:
A combination of painted CMU and insulated metal panels (in smooth and stucco finishes) are proposed for the building. Building articulation, faux windows, and the change in materials break up the building elevations, as does the varying roof line and cornices.



Color Rendering – Northeast View

Stormwater & Engineering:
The site's stormwater detention was coordinated as part of the Ricky Rockets PUD in 2021/2022. Additional stormwater

Attachment: Staff Report - 105 Lexington Dr (Self-Storage Development - 105 Lexington Drive)

management will be provided with this development on the west part of the site, as required by the Lake County Watershed Development Ordinance and Village Ordinances. Village Engineering staff have reviewed the preliminary submittal and are working with the development engineer to make minor changes to the submitted materials. The Village's Engineers have indicated that the minimal concerns related to stormwater and utilities can be addressed during the final engineering process.

DEPARTMENTAL REVIEWS

Village Department	Comments
Engineering	The Village Engineer has reviewed the preliminary engineering plans and does not have any concerns.
Forestry	The Village Forester has reviewed the landscape plan and does not have any concerns.
Fire	The Fire Department has reviewed the plans and the truck turn exhibit and does not have any concerns.

SURROUNDING PROPERTY OWNERS

Pursuant to Village Code, the surrounding property owners within 250 feet were notified by mail, notice was published in the Daily Herald, and a public hearing sign was posted on the subject property. All notifications were completed within the prescribed timeframe as required. As of the date of this Staff Report, the Village has not received any comments or questions related to the project.

STANDARDS

The Planning & Zoning Commission is authorized to make a recommendation to the Village Board on requested Planned Unit Developments/Amendments based upon the following criteria:

1. That the PUD has the minimum areas as set forth in Section 17.16.060.
2. The uses permitted in such development are not of such a nature or so located as to exercise an undue detrimental influence or effect upon the surrounding neighborhood;
3. The plan effectively treats the developmental possibilities of the subject property, making appropriate provisions for the preservation of streams, wooded areas, scenic views, floodplain areas, and similar physical features;
4. All requirements pertaining to commercial, residential, institutional or other uses established in the planned unit development conform to the requirements for each individual classification as established elsewhere in this Title, except as may be specifically varied for the proper planning of the planned unit development;
5. The Planning and Zoning Commission shall determine that the area and width of the lot shall be sufficient for the proposed use, and that the development of the property in the proposed manner creates no outlots which will be difficult to develop in an appropriate manner.

Planned Unit Developments are also Special Uses, and therefore must meet the Special Use criteria as follows:

1. The special use will serve the public convenience at the location of the subject property; or 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;
2. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with said special use, the size of the subject property in relation to such special use, and the location of the site with respect to streets giving access to it shall be such that it will be in harmony with the appropriate, orderly development of the district in which it is located;
3. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning

Attachment: Staff Report - 105 Lexington Dr (Self-Storage Development - 105 Lexington Drive)

district, nor substantially diminish and impair other property valuations with the neighborhood;

4. The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder or discourage the development and use of adjacent land and buildings in accord with the zoning district within which they lie;
5. Adequate utilities, access roads, drainage, and/or other necessary facilities have been or will be provided;
6. Parking areas shall be of adequate size for the particular special use, which areas shall be properly located and suitably screened from adjoining residential uses, and the entrance and exit driveways to and from these parking areas shall be designed so as to prevent traffic hazards, eliminate nuisance and minimize traffic congestion in the public streets.

The petitioner has provided written responses to both sets of standards, which are included in the attached packet.

STAFF RECOMMENDATION

Staff recommends **approval** of the amendment to Ordinance No. 2021-067, an amendment to the underlying Planned Unit Development, Preliminary Plan, and approval of a self-storage facility use, subject to the conditions in the Suggested PZC Motion.

ACTION REQUESTED

The Planning & Zoning Commission (PZC) shall open the public hearing and take public testimony concerning the requests for approval of the amendment to Ordinance No. 2021-067, an amendment to the underlying Planned Unit Development, the Preliminary Plan, and approval of a self-storage use to accommodate the construction of a new climate controlled self-storage facility at 105 Lexington Drive. The PZC shall make a recommendation to the Village Board concerning the requests.

Suggested PZC Motion

The PZC recommends approval of the amendment to Ordinance No. 2021-067, an amendment to the underlying Planned Unit Development, the Preliminary Plan, and approval of a self-storage use*, all to accommodate the construction of a new self-storage facility at 105 Lexington Drive, subject to the following conditions:*

1. *The proposed development shall be developed in substantial conformance with the plans attached as part of the petition.*

2. *The Final Engineering plans shall be submitted in a manner acceptable to the Village.*

3. *Any directional or incidental signage added to the sign package shall be reviewed administratively by staff.*

4. *The landscaping on the site shall be maintained in compliance with the approved landscape plan in perpetuity.*

ATTACHMENTS

- Narrative Description
- Architectural Plan Set (Site Plan, Elevations, Floor Plan, 3D images)
- Color Renderings
- Preliminary Civil Engineering Plans
- Landscape Plan
- Signage Plan
- Photometric Plan
- Light Fixture Cut Sheets
- Response to PUD Standards
- Response to Special Use Standards

Attachment: Staff Report - 105 Lexington Dr (Self-Storage Development - 105 Lexington Drive)

architects' studio

June 22, 2023

Nicole Woods, AICP
Kelly Purvis, AICP
Village of Buffalo Grove
50 Raupp Boulevard
Buffalo Grove, IL 60089

RE: Project Description Narrative Statement
Climate Controlled Self-Storage Facility
105 Lexington Drive
Buffalo Grove, IL 60089

Project Narrative,

This project consists of developing the currently vacant site located at 105 Lexington Drive (currently zoned B-3, Planned Business Center District) to include a four-story 112,268 SF Climate Controlled Self-Storage Facility and will require an amendment to the underlying PUD and Preliminary Plan Review. The site is 3.22 acres (140,530 SF) in size and is currently vacant with a storm water detention facility situated on more than half of the northern portion of the site. The buildable area of the site is an unusually long (east-west) and narrow (north-south) portion of the southern half of the site. The northern portion of the site was used to create storm water detention for the entire four lot re-subdivision project which includes Ricky Rockets, a car wash and a third development lot along Lake Cook Road. The configuration of the buildable area forces a long and narrow building as indicated by the preliminary plans submitted. To break this up the proposed building has been articulated with sections of the southern elevation bumping out to the south, east and west to give the appearance of a series of smaller elevations. Additionally, the top of the exterior walls at the southeast and southwest corners have been articulated with a cornice. The site will be landscaped per Village Ordinance. This development will provide a quiet buffer between the lighter use commercial to the north and residential area to the northwest from the much busier commercial uses to the south (Gas Station, Car Wash and potential truck tire store).

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

An Illinois Licensed Professional Design Firm #184.002314

257 n. west avenue, suite 100 elmhurst, illinois 60126 phone 630.617.5990 fax 630.617.5992 www.architectsstudiollc.com

Some facts about Climate Controlled Self-Storage Facilities:

- This type of self-storage facility (climate controlled with interior load-in/load-out) are extremely desirable to the market for both local residential and local commercial storage.
- It is a benign use that, unlike other commercial uses, does not create noise, smells or vibration. Other "Of Right" commercial users can have 20-30 employees (20-30 employee vehicles daily) numerous customer visits and numerous large truck deliveries.
- This facility will typically have 1 – 2 employees onsite at a time.
- On a busy day, this facility will have 6-8-10 customer trips.
- The facility is a very secure, quiet, and well-lit neighbor.
- This facility maintains normal business hours, typically 8AM to 8PM. Hours may be adjusted slightly based on local customer needs. Doors are locked and access is gained by tenants with a key code. After hours visits to the interior of the building are restricted unless prior arrangements are made in case of an emergency.
- This facility will have security cameras both inside and outside the building.
- This facility will have one two-yard dumpster located inside the drive-in loading area for management use. Tenants are responsible for removing their own garbage.

We look forward to meeting at the Preliminary Review to discuss this project. Should you have any questions prior to the meeting do not hesitate to reach out!

Sincerely,

Architects' Studio, LLC

Jeffrey Budgell

Jeffrey Budgell, Architect
FALA, NCARB, LEED-AP

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

SELF STORAGE FACILITY

105 LEXINGTON DR.
BUFFALO GROVE, IL 60090
New Climate Controled Self-Storage Facility

LOCATION MAP



PRELIM - DRAWING INDEX

A0	COVER SHEET
A-0.1	PRELIMINARY ARCHITECTURAL SITE PLAN
A-0.1B	PREMILINARY VEHICLE CIRCULATION PLAN 4 RTU LINE OF SIGHT
A-1.0	PRELIMINARY GROUND FLOOR - UNIT MIX
A-1.1	PRELIMINARY SECOND LEVEL - UNIT MIX
A-1.2	PRELIMINARY THIRD LEVEL - UNIT MIX
A-1.3	PRELIMINARY FOURTH LEVEL - UNIT MIX
A-2.0	PRELIMINARY ELEVATIONS - GREY SCHEME
A-2.3	PERSPECTIVES

PROJECT DATA

SCOPE OF WORK:
PROJECT CONSISTS OF BUILDING AND CREATING NEW 113,856 S.F. FOUR STORY CLIMATE CONTROLLED SELF-STORAGE BUILDING. THE PROJECT IS LOCATED AT 105 LEXINGTON DR. BUFFALO GROVE, IL.

USE GROUP:
MODERATE HAZARD STORAGE, GROUP S-1
THE BUILDING WILL BE FULLY SPRINKLERED

CONSTRUCTION TYPE:
CONSTRUCTION TYPE IIB

ALLOWABLE NUMBER OF STORIES ABOVE GRADE (TABLE 503, PAGE 107):
ALLOWABLE = 3 STORIES
PROPOSED = 4 STORIES
BUILDING FOOTPRINT
FIRST FLOOR = 28,464 SF

PRELIMINARY

NOT FOR CONSTRUCTION

architects' studio
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
T: 630-617-5999
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs indicated in these drawing and specifications are original and unpublished property of Architects' Studio, LLC. These designs and specifications shall not be reproduced in any form without the written consent of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV #	DATE	REVISION/ ISSUE
		FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
1 N. WACKER DRIVE
CHICAGO, IL 60625

DRAWING TITLE:
COVER SHEET

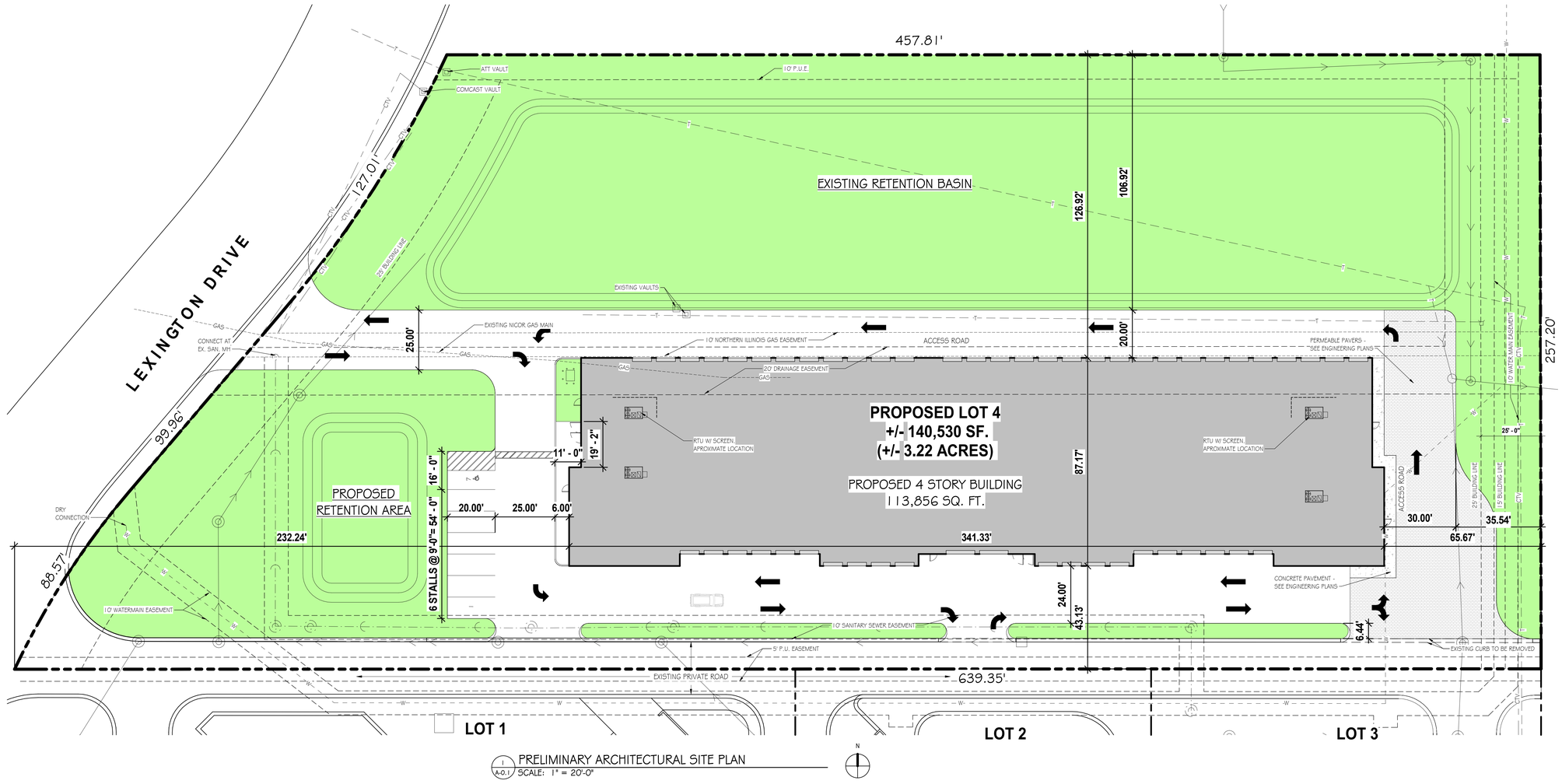
CHECKED BY: JB
DRAWN BY: FZMC
SCALE: AS NOTED

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A0
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

UTILITY LEGEND	
	SANITARY SEWER LINE
	STORM LINE
	WATER LINE
	GAS LINE
	CABLE LINE
	TELEPHONE LINE
	MANHOLE



PRELIMINARY ARCHITECTURAL SITE PLAN
A-0.1 SCALE: 1" = 20'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

architects' studio
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
T: 630-617-5999
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs enclosed in these drawing and specifications are original and unpublished work of Architects' Studio, LLC. These designs and specifications shall not be reproduced in any form or by any means without the express written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV #	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
2611 W. LAWRENCE
CHICAGO, IL 60625

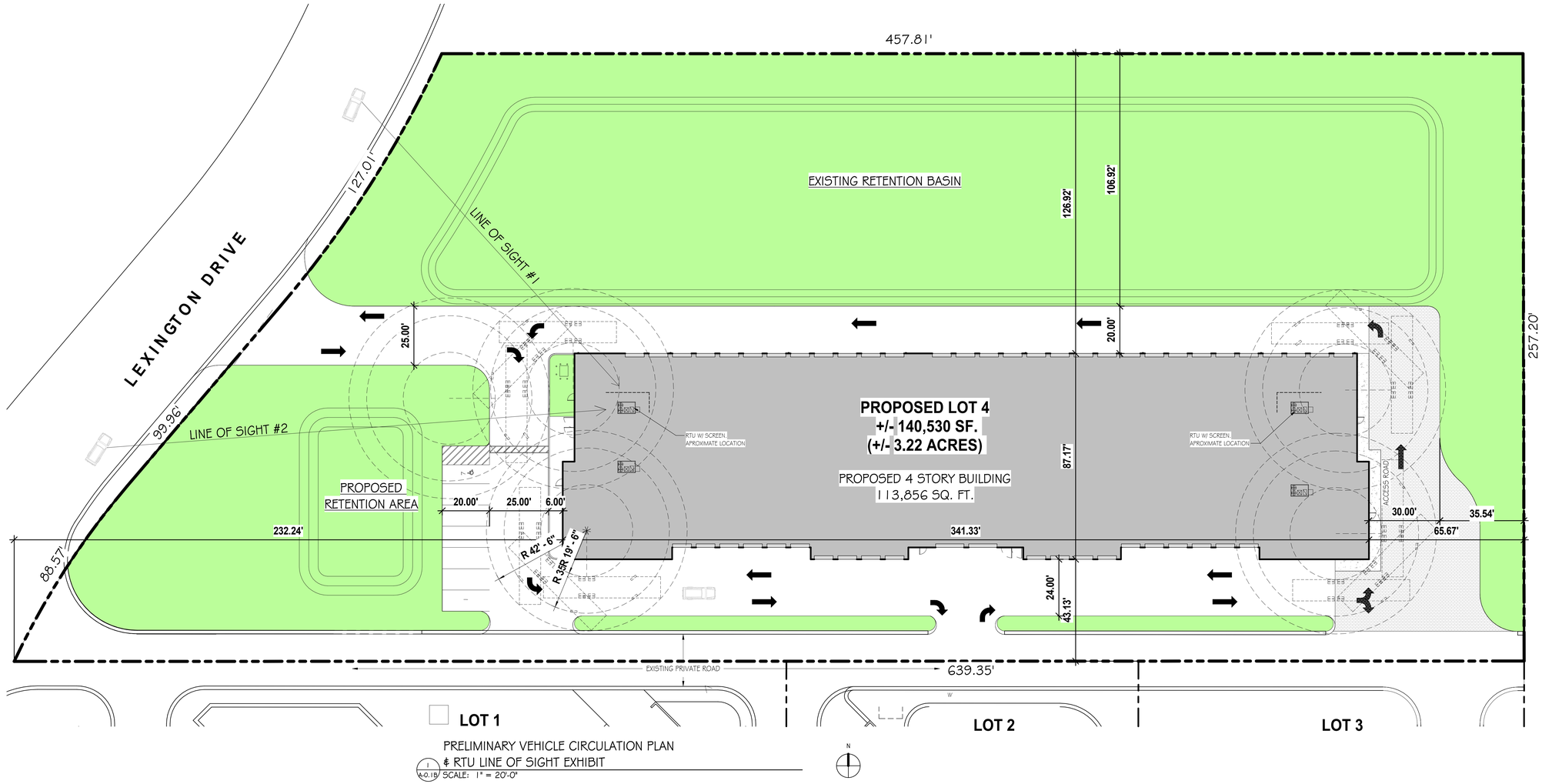
DRAWING TITLE:
PRELIMINARY ARCHITECTURAL SITE PLAN

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-0.1
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



PRELIMINARY VEHICLE CIRCULATION PLAN
& RTU LINE OF SIGHT EXHIBIT
1 / A-0.1B SCALE: 1" = 20'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

architects' studio
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
T: 630-617-5999
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs and ideas incl in these drawings and specifications are copyrighted and are the exclusive property of Architects' Studio, LLC.
These drawings and specifications shall not be reproduced in any form or by any means and are not to be used for any purpose without the expressed written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS' STUDIO, LLC

REV'S	DATE	SUBMISSION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
2611 W. LAKE ST.
CHICAGO, IL 60612

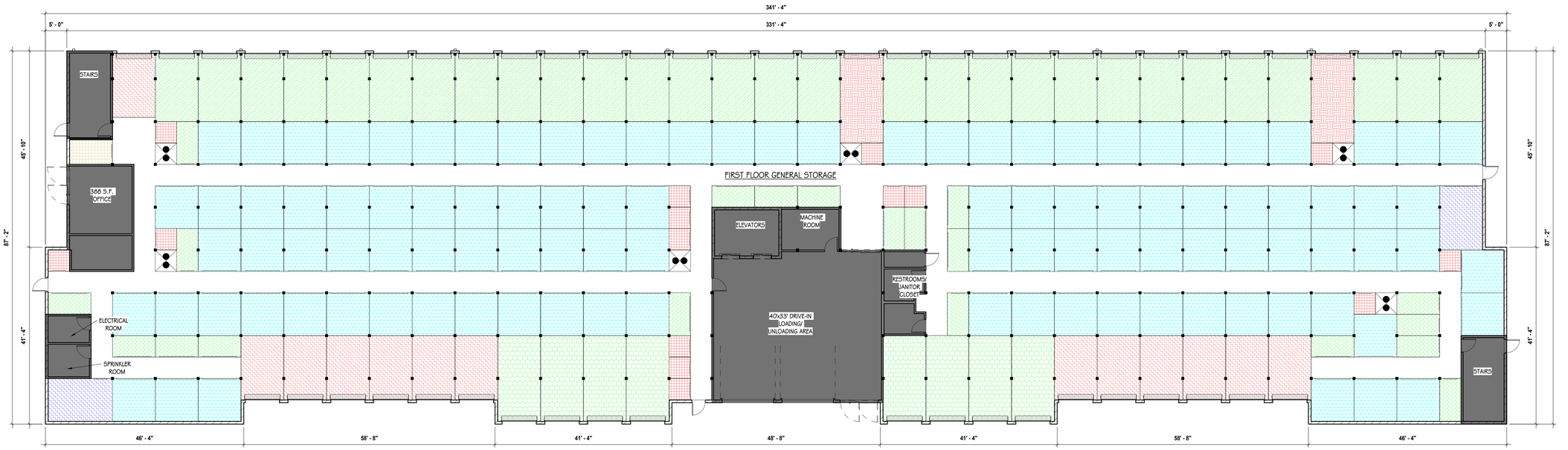
DRAWING TITLE:
PREMILINARY VEHICLE CIRCULATION PLAN & RTU LINE OF SIGHT

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-0.1B
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



PRELIMINARY GROUND LEVEL FLOOR PLAN - UNIT MIX
1 / A-1.0 SCALE: 3/32" = 1'-0"

N

JOB SITE BUFFALO GROVE SELF STORAGE

UNIT MIX SCHEDULE

CLIMATE CONTROLLED BUILDING	GROSS S.F.	5x5	5x6	5x8'-8"	5x10	5x11	6x10	10x10	10x11	10x15	10x15E	10x16	10x16E	10X20	10x20E	10x21	# OF UNITS	MICS. AREAS - SQUARE FOOTAGE
FIRST FLOOR	28,464	15	0	0	20	0	1	104	0	2	13	0	29	0	8	2	194.00	FRONT OFFICE/TOILETS - 578 S.F.
SECOND FLOOR	28,464	10	0	3	9	0	1	85	31	45	0	1	0	3	0	0	188.00	
THIRD FLOOR	28,464	7	1	3	9	2	4	95	26	43	0	1	0	3	0	0	194.00	
FOURTH FLOOR	28,464	11	1	3	13	2	4	90	26	43	0	1	0	3	0	0	197.00	
# OF UNITS		43	2	9	51	4	10	374	83	133	13	3	29	9	8	2	773.00	TOTAL # OF UNITS
S.F. PER UNIT		25.00	30.00	43.33	50.00	55.00	60.00	100.00	110.00	150.00	150.00	160.00	160.00	200.00	200.00	210.00		
TOTAL S.F.		1,075.00	60.00	389.97	2,550.00	220.00	600.00	37,400.00	9,130.00	19,950.00	1,950.00	480.00	4,640.00	1,800.00	1,600.00	420.00	82,264.97	NET RENTABLE (S.F.)
% UNITS (#)		5.56%	0.26%	1.16%	6.60%	0.52%	1.29%	48.38%	10.74%	17.21%	1.68%	0.39%	3.75%	1.16%	1.03%	0.26%	100.00%	
% UNITS (S.F.)		1.31%	0.07%	0.47%	3.10%	0.27%	0.73%	45.46%	11.10%	24.25%	2.37%	0.58%	5.64%	2.19%	1.94%	0.51%		
TOTAL BUILDING	113,856																	
																	106.42	**AVERAGE UNIT (S.F.)**
																	72%	**EFFICIENCY**

E= EXTERIOR UNIT

PRELIMINARY
NOT FOR CONSTRUCTION

architects' studio
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
T. 630-617-5990
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs enclosed in these drawing and specifications are original and unpublished property of Architects' Studio, LLC. These designs and specifications shall not be reproduced in any form without the written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS' STUDIO, LLC

DRAWN #	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
2 N. RIVERSIDE PLAZA
CHICAGO, IL 60625

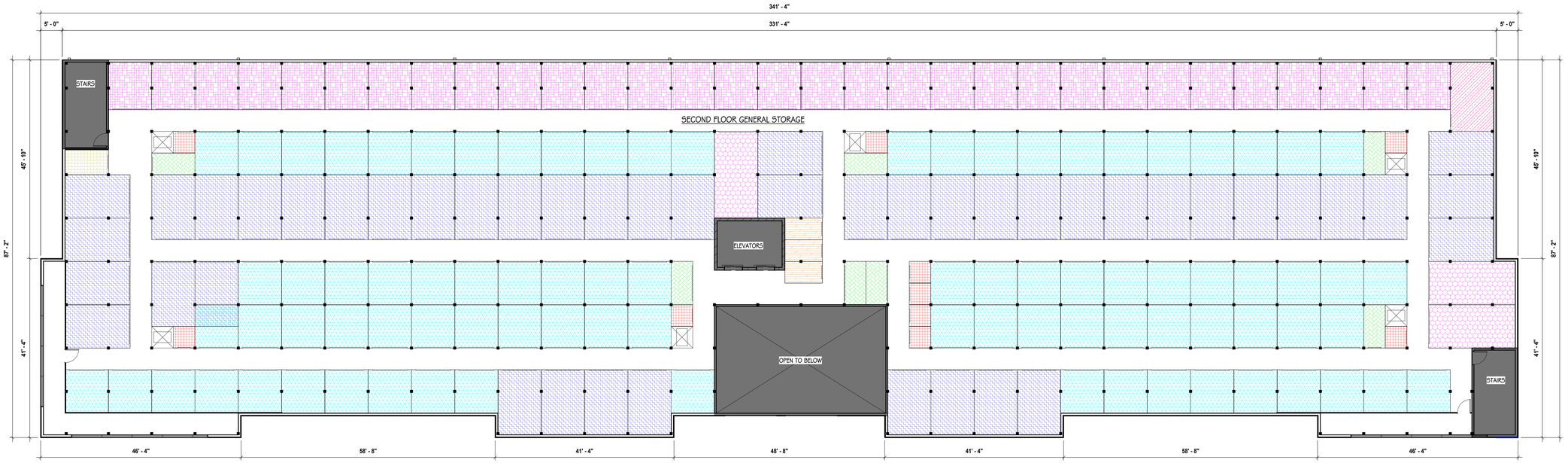
DRAWING TITLE:
PRELIMINARY GROUND FLOOR - UNIT MIX

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-1.0
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



1 / A-1.1 PRELIMINARY SECOND LEVEL FLOOR PLAN - UNIT MIX
SCALE: 3/32" = 1'-0"

N

JOB SITE BUFFALO GROVE SELF STORAGE

UNIT MIX SCHEDULE

CLIMATE CONTROLLED BUILDING	GROSS S.F.	5x5	5x6	5x8'-8"	5x10	5x11	6x10	10x10	10x11	10x15	10x15E	10x16	10x16E	10X20	10x20E	10x21	# OF UNITS	MICS. AREAS - SQUARE FOOTAGE
FIRST FLOOR	28,464	15	0	0	20	0	1	104	0	2	13	0	29	0	8	2	194.00	FRONT OFFICE/TOILETS - 578 S.F.
SECOND FLOOR	28,464	10	0	3	9	0	1	85	31	45	0	1	0	3	0	0	188.00	
THIRD FLOOR	28,464	7	1	3	9	2	4	95	26	43	0	1	0	3	0	0	194.00	
FOURTH FLOOR	28,464	11	1	3	13	2	4	90	26	43	0	1	0	3	0	0	197.00	
# OF UNITS		43	2	9	51	4	10	374	83	133	13	3	29	9	8	2	773.00	TOTAL # OF UNITS
S.F. PER UNIT		25.00	30.00	43.33	50.00	55.00	60.00	100.00	110.00	150.00	150.00	160.00	160.00	200.00	200.00	210.00		
TOTAL S.F.		1,075.00	60.00	389.97	2,550.00	220.00	600.00	37,400.00	9,130.00	19,950.00	1,950.00	480.00	4,640.00	1,800.00	1,600.00	420.00	82,264.97	NET RENTABLE (S.F.)
% UNITS (#)		5.56%	0.26%	1.16%	6.60%	0.52%	1.29%	48.38%	10.74%	17.21%	1.68%	0.39%	3.75%	1.16%	1.03%	0.26%	100.00%	
% UNITS (S.F.)		1.31%	0.07%	0.47%	3.10%	0.27%	0.73%	45.46%	11.10%	24.25%	2.37%	0.58%	5.64%	2.19%	1.94%	0.51%		
TOTAL BUILDING	113,856																	
																	106.42	**AVERAGE UNIT (S.F.)**
																	72%	**EFFICIENCY**

E= EXTERIOR UNIT

PRELIMINARY

NOT FOR CONSTRUCTION

architects' studio
T. 630-617-5990
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-005314

The designs indicated in these drawing and specifications are original property of Architects' Studio, LLC. These designs and specifications shall not be reproduced in any manner without the written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

DRAWN	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126

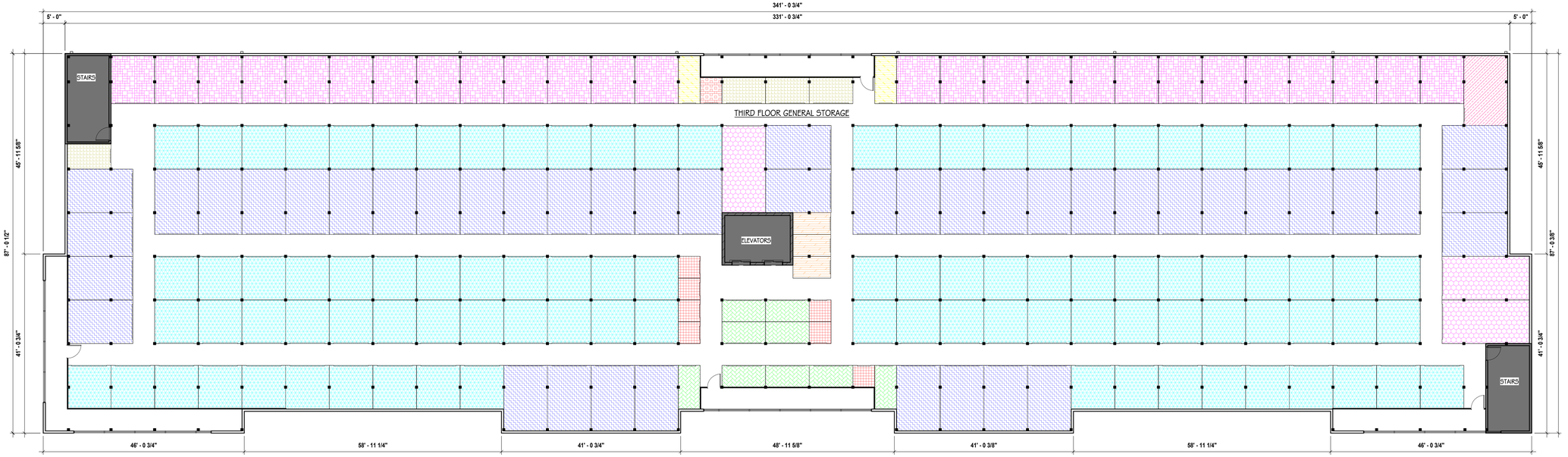
DRAWING TITLE:
PRELIMINARY SECOND LEVEL - UNIT MIX

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-1.1
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



1 / A-1.2 PRELIMINARY THIRD LEVEL FLOOR PLAN - UNIT MIX
SCALE: 3/32" = 1'-0"

N

JOB SITE BUFFALO GROVE SELF STORAGE

UNIT MIX SCHEDULE

CLIMATE CONTROLLED BUILDING	GROSS S.F.	5x5	5x6	5x8'-8"	5x10	5x11	6x10	10x10	10x11	10x15	10x15E	10x16	10x16E	10X20	10x20E	10x21	# OF UNITS	MICS. AREAS - SQUARE FOOTAGE
FIRST FLOOR	28,464	15	0	0	20	0	1	104	0	2	13	0	29	0	8	2	194.00	FRONT OFFICE/TOILETS - 578 S.F.
SECOND FLOOR	28,464	10	0	3	9	0	1	85	31	45	0	1	0	3	0	0	188.00	
THIRD FLOOR	28,464	7	1	3	9	2	4	95	26	43	0	1	0	3	0	0	194.00	
FOURTH FLOOR	28,464	11	1	3	13	2	4	90	26	43	0	1	0	3	0	0	197.00	
# OF UNITS		43	2	9	51	4	10	374	83	133	13	3	29	9	8	2	773.00	TOTAL # OF UNITS
S.F. PER UNIT		25.00	30.00	43.33	50.00	55.00	60.00	100.00	110.00	150.00	150.00	160.00	160.00	200.00	200.00	210.00		
TOTAL S.F.		1,075.00	60.00	389.97	2,550.00	220.00	600.00	37,400.00	9,130.00	19,950.00	1,950.00	480.00	4,640.00	1,800.00	1,600.00	420.00	82,264.97	NET RENTABLE (S.F.)
% UNITS (#)		5.56%	0.26%	1.16%	6.60%	0.52%	1.29%	48.38%	10.74%	17.21%	1.68%	0.39%	3.75%	1.16%	1.03%	0.26%	100.00%	
% UNITS (S.F.)		1.31%	0.07%	0.47%	3.10%	0.27%	0.73%	45.46%	11.10%	24.25%	2.37%	0.58%	5.64%	2.19%	1.94%	0.51%		
TOTAL BUILDING	113,856																	
																	106.42	**AVERAGE UNIT (S.F.)**
																	72%	**EFFICIENCY**

E= EXTERIOR UNIT

PRELIMINARY

NOT FOR CONSTRUCTION

architects' studio
T. 630-617-5990
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs indicated in these drawing and specifications are original property of Architects' Studio, LLC. Drawings and specifications shall not be reproduced in any manner without written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV #	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
2 N. RIVERSIDE PLZ
CHICAGO, IL 60521

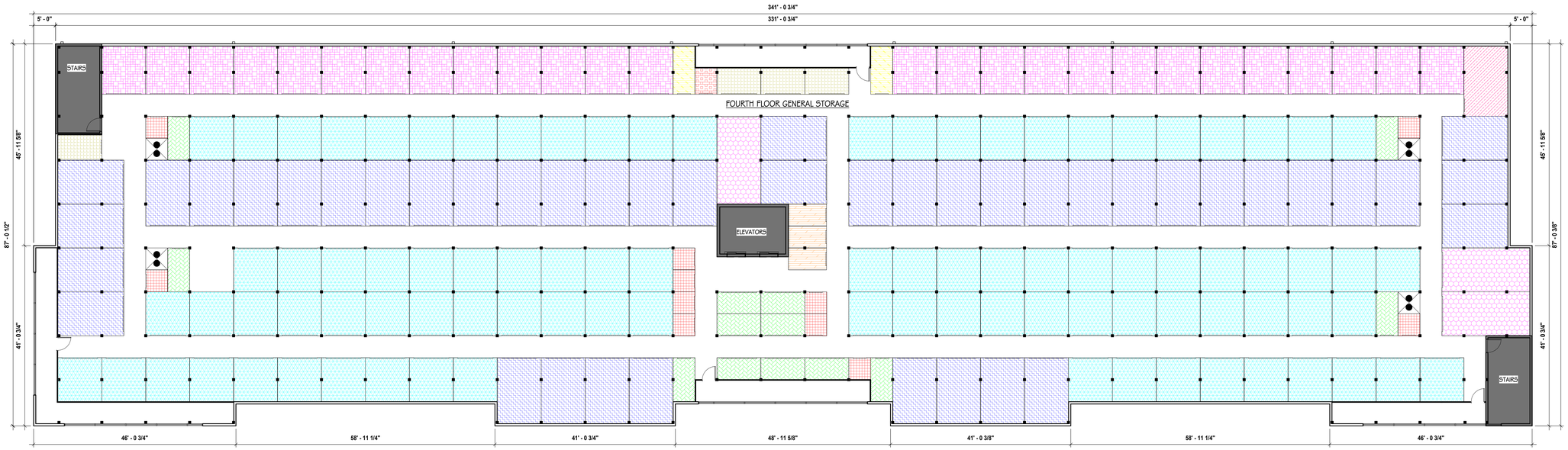
DRAWING TITLE:
PRELIMINARY THIRD LEVEL - UNIT MIX

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-1.2
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



1 / A-1.3 PRELIMINARY FOURTH LEVEL FLOOR PLAN - UNIT MIX
SCALE: 3/32" = 1'-0"

N

JOB SITE BUFFALO GROVE SELF STORAGE

UNIT MIX SCHEDULE

CLIMATE CONTROLLED BUILDING	GROSS S.F.	5x5	5x6	5x8'-8"	5x10	5x11	6x10	10x10	10x11	10x15	10x15E	10x16	10x16E	10X20	10x20E	10x21	# OF UNITS	MICS. AREAS - SQUARE FOOTAGE
FIRST FLOOR	28,464	15	0	0	20	0	1	104	0	2	13	0	29	0	8	2	194.00	FRONT OFFICE/TOILETS - 578 S.F.
SECOND FLOOR	28,464	10	0	3	9	0	1	85	31	45	0	1	0	3	0	0	188.00	
THIRD FLOOR	28,464	7	1	3	9	2	4	95	26	43	0	1	0	3	0	0	194.00	
FOURTH FLOOR	28,464	11	1	3	13	2	4	90	26	43	0	1	0	3	0	0	197.00	
# OF UNITS		43	2	9	51	4	10	374	83	133	13	3	29	9	8	2	773.00	TOTAL # OF UNITS
S.F. PER UNIT		25.00	30.00	43.33	50.00	55.00	60.00	100.00	110.00	150.00	150.00	160.00	160.00	200.00	200.00	210.00		
TOTAL S.F.		1,075.00	60.00	389.97	2,550.00	220.00	600.00	37,400.00	9,130.00	19,950.00	1,950.00	480.00	4,640.00	1,800.00	1,600.00	420.00	82,264.97	NET RENTABLE (S.F.)
% UNITS (#)		5.56%	0.26%	1.16%	6.60%	0.52%	1.29%	48.38%	10.74%	17.21%	1.68%	0.39%	3.75%	1.16%	1.03%	0.26%	100.00%	
% UNITS (S.F.)		1.31%	0.07%	0.47%	3.10%	0.27%	0.73%	45.46%	11.10%	24.25%	2.37%	0.58%	5.64%	2.19%	1.94%	0.51%		
TOTAL BUILDING	113,856																	
																	106.42	**AVERAGE UNIT (S.F.)**
																	72%	**EFFICIENCY**

E= EXTERIOR UNIT

PRELIMINARY

NOT FOR CONSTRUCTION

architects' studio
T. 630-617-5990
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs indicated in these drawing and specifications are original property of Architects' Studio, LLC. Drawings and specifications shall not be reproduced in any manner or used without the express written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV'S #	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
1 N. LASALLE STREET
CHICAGO, IL 60625

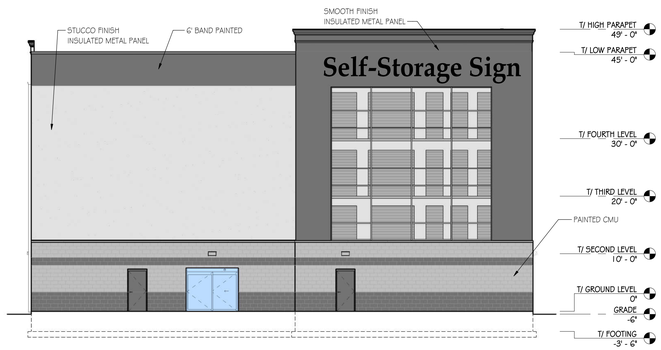
DRAWING TITLE:
PRELIMINARY FOURTH LEVEL - UNIT MIX

CHECKED BY: JB
DRAWN BY: FZMC
SCALE: AS NOTED

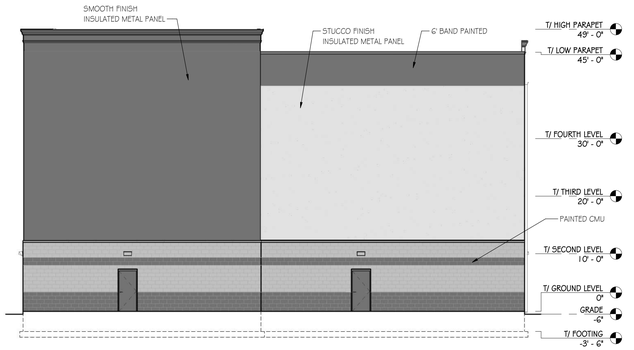
DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-1.3
OF

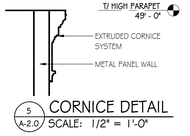
Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



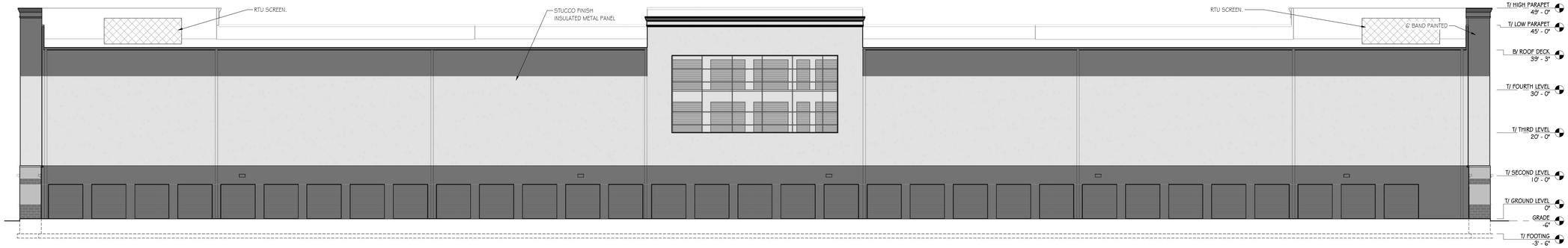
1 A-2.0 PRELIMINARY WEST ELEVATION
SCALE: 3/32" = 1'-0"



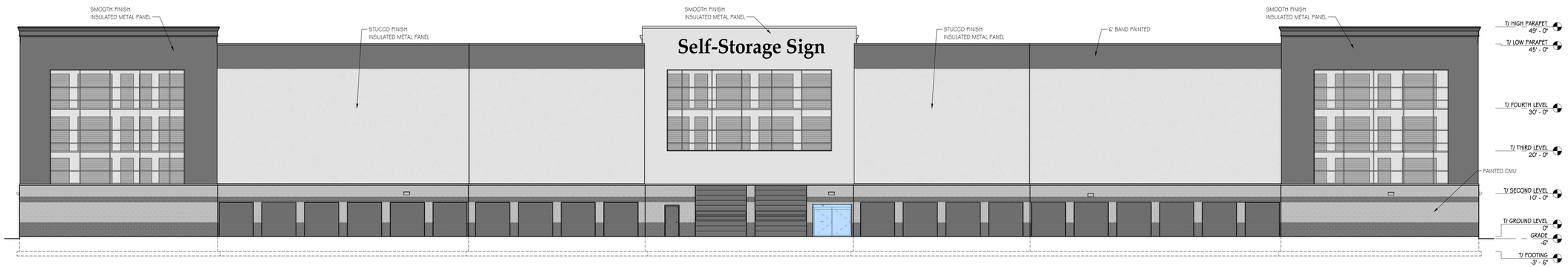
2 A-2.0 PRELIMINARY EAST ELEVATION
SCALE: 3/32" = 1'-0"



5 A-2.0 CORNICE DETAIL
SCALE: 1/2" = 1'-0"



3 A-2.0 PRELIMINARY NORTH ELEVATION (REAR)
SCALE: 3/32" = 1'-0"



4 A-2.0 PRELIMINARY SOUTH ELEVATION (FRONT)
SCALE: 3/32" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

architects' studio
T: 630-617-5999
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The designs indicated in these drawings and specifications are original and unpublished property of Architects' Studio, LLC. Such designs and specifications shall not be reproduced in any form without the written permission of Architects' Studio, LLC.
COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV'S	DATE	REVISION/ ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
1 N. LASALLE
CHICAGO, IL 60625

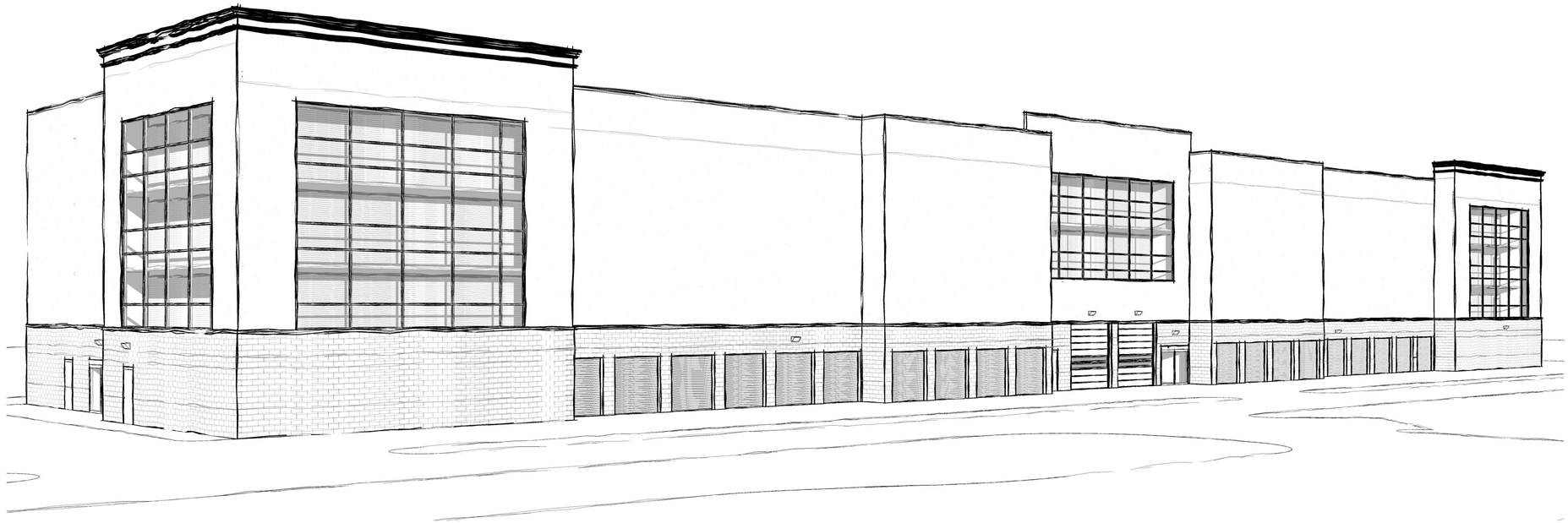
DRAWING TITLE:
PRELIMINARY ELEVATIONS - GREY SCHEME

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

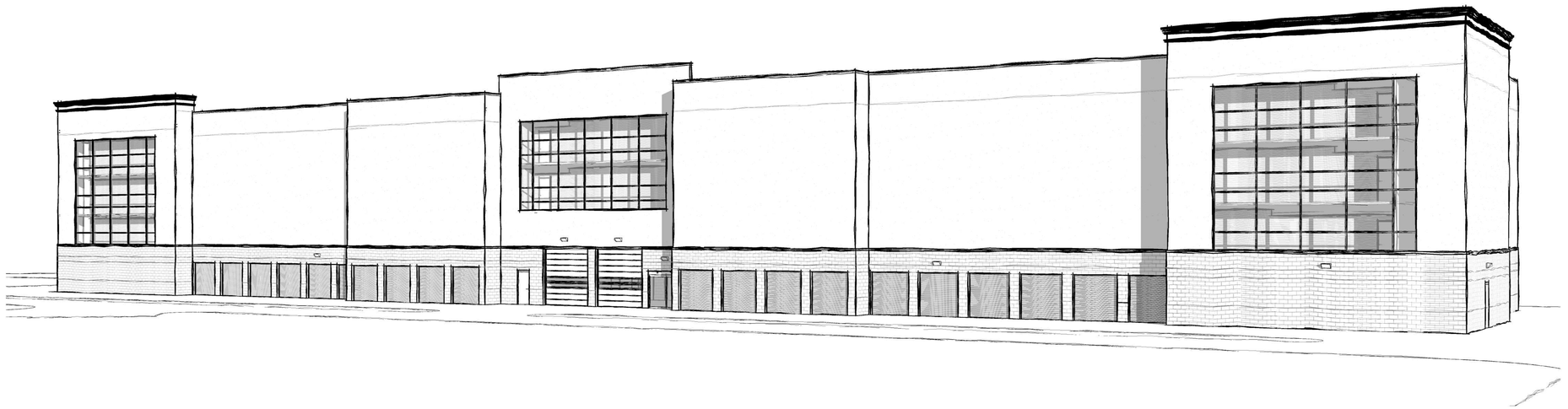
DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-2.0
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



SOUTHWEST VIEW



SOUTHEAST VIEW

PRELIMINARY

NOT FOR CONSTRUCTION

architects' studio
257 WEST AVENUE SUITE 100
ELMHURST, IL 60126
T: 630-617-5990
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM #184-002314

The design enclosed in these drawing and specifications are original and unpublished work of Architects' Studio, LLC. These designs and specifications shall not be reproduced in any form without the written permission of Architects' Studio, LLC.

COPYRIGHT © 2023
ARCHITECTS STUDIO, LLC

REV #	DATE	REVISION / ISSUE

FOR REVIEW

SELF STORAGE FACILITY
105 LEXINGTON DR
BUFFALO GROVE, IL 60090

CLIENT:
BUFFALO GROVE STORAGE, LLC
1 E. WACKER DR. #3127
CHICAGO, IL 60521

DRAWING TITLE:
PERSPECTIVES

SCALE: AS NOTED
DRAWN BY: FZMC
CHECKED BY: JB

DATE: 06/30/23
ISSUED FOR:
REVIEW

DRAWING #:
A-2.3
OF

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



FRONT VIEW

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



SOUTHWEST VIEW

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



SOUTHEAST VIEW

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

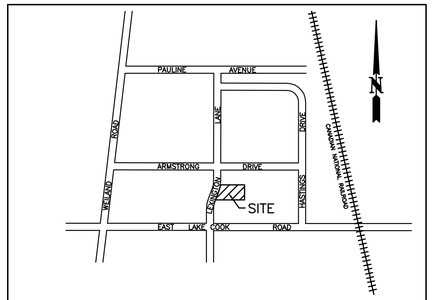


DRIVE-IN VIEW

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

SELF STORAGE FACILITY

PRELIMINARY ENGINEERING
105 LEXINGTON DRIVE
BUFFALO GROVE, ILLINOIS



SITE LOCATION MAP
N.T.S.

EXISTING	LEGEND	PROPOSED
+ 819.24	WALK GRADE	W=631.75
+ 819.04	CURB GRADE	C=630.62
+ 818.48	GUTTER GRADE	G=630.39
+ 817.56	PAVEMENT GRADE	P=631.25
+ 815.60	GRADE	632.51
639	CONTOUR	639
	CONCRETE CURB	
	CONC. CURB TO BE REMOVED	
	SPECIAL CONCRETE CURB	
	SANITARY SEWER	
	STORM SEWER	
W 12"	WATERMAIN	W 2"
-XX-XX-XX-XX-	ORNAMENTAL FENCE	
-X-X-X-X-X-	CHAIN LINK FENCE	
-o-o-o-o-	WOOD FENCE	
-o-o-o-o-	GUARD RAIL	
	DITCH FLOWLINE	
	MANHOLE	
	CATCH BASIN	
	INLET BASIN	
	VALVE VAULT	
	VALVE BOX	
	LIGHT POLE	
	WOOD POLE	
	FIRE HYDRANT	
	DIRECTION OF DRAINAGE	
	CONCRETE WALK/PAVEMENT	
	SILT FENCE	S
	TREE	
	PROPERTY LINE	
E	UNDERGROUND ELECTRIC	
G	GAS MAIN	
T	UNDERGROUND TELEPHONE	
FO	UNDERGROUND FIBER OPTIC	
	OVERLAND FLOW ROUTE	

GENERAL DEVELOPMENT NOTES

1. All work shall be performed in a manner so as not to unreasonably impair or interfere with the use, occupancy or enjoyment of, or with any business conducted on, any adjacent property.
2. At all times during the performance of any Work all areas other than the construction site proper and the staging area shall be kept free from any loose dirt, debris, equipment or construction materials relating to the work.
3. Upon completion of the Work, Constructing Party shall promptly restore the area to as good or better condition than existed before the use of the area commenced. Restoration shall include, without limitation, clearing the areas of all loose dirt, debris, equipment and construction materials, the repair or replacement of paving, striping and landscaping, and the repair or replacement of any and all damaged areas or improvements.

SPECIAL NOTE:
THE CONTRACTOR SHALL AT ALL TIMES CONDUCT HIS WORK IN A MANNER AS TO MINIMIZE HAZARDS TO VEHICULAR AND PEDESTRIAN TRAFFIC. TRAFFIC CONTROLS AND WORK SITE PROTECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF CHAPTER 6 (TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS) OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. ALL SIGNS, BARRICADES, FLAGGERS, ETC. REQUIRED FOR TRAFFIC CONTROL SHALL BE FURNISHED BY THE CONTRACTOR. ANY WORK IN THE LEXINGTON DRIVE RIGHT OF WAY SHALL COMPLY WITH ALL IDOT AND VILLAGE OF BUFFALO GROVE STANDARDS AND REQUIREMENTS.

SPECIAL NOTE TO CONTRACTOR
THE CONTRACTOR IS ADVISED THAT EXISTING STORM WATER MANAGEMENT FACILITIES SERVING THE PROPOSED CONSTRUCTION AREA ARE CURRENTLY IN PLACE AND IN SERVICE. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL FACILITIES AS REQUIRED SUCH THAT NO SILTATION FROM THE CONSTRUCTION PROJECT IS TRIBUTARY TO THESE EXISTING FACILITIES.

GENERAL NOTES AND SPECIFICATIONS

1. All roadway and pavement construction shall comply with the requirements of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction", latest edition, except as may be modified by the project plans and specifications.
2. All underground construction shall comply with the requirements of the "Standard Specifications for Water and Sewer Main Construction in Illinois", Illinois Municipal League, latest edition, except as may be modified by project plans and specifications.
3. Water mains shall be protected in accordance with the requirements of the Illinois EPA. Where a sewer crosses below a water main, a minimum vertical separation of 18" shall be provided between the top of the sewer pipe and the bottom of the water main pipe. Where this 18" vertical separation is not provided or when the water main crosses below the sewer, the sewer shall be constructed to water main standards for a minimum of 10 feet on each side of the water main unless otherwise noted on the drawings. If the water main crosses beneath the sewer, 18" vertical separation shall be provided in all cases. Minimum water main cover is 5'-6". Minimum horizontal separation of 10' between sewer and water main is required.
4. All sewer and water main trenches under or within two feet of existing or proposed curbs, sidewalks, or pavement shall be backfilled with compacted porous granular backfill (IDOT gradation CA-6).
5. Commonwealth Edison, A.T.& T., Nicor Gas and other utility company facilities are not necessarily shown on the drawings and must be located in the field prior to construction. Call J.U.L.I.E. (1-800-892-0123) at least 48 hours prior to the start of construction.
6. Any pavement or other improvements disturbed by contractor's operations shall be replaced in kind at no additional cost.
7. Valve vault, catch basin, and manhole covers and rings shall be set in workmanlike manner in mastic bed.
8. All elevations shown are NAVD 88 datum.
9. The Village of Buffalo Grove Building, Engineering, and Public Works Departments shall be notified at least two working days prior to start of construction.
10. All structures shall be clean at time of final acceptance by the Village at no additional cost.
11. All work to meet all State and Local codes and requirements.
12. Water and sewer locations are shown on the drawing from the best available information and must be located in the field by the contractor prior to construction. Any discrepancy that the contractor may find with the plan shall be immediately reported to the engineer and the Village for resolution prior to proceeding with construction.
13. Valve vault lids shall be stamped "Water", storm manhole covers shall be stamped "Storm", and sanitary manhole covers shall be stamped "Sanitary".
14. Sanitary sewer pipe shall be PVC SDR 26 pipe meeting the requirements of ASTM D-3034 with flexible elastomeric joints per ASTM D-3212, unless otherwise noted on the drawings.
15. D.I. sewer pipe to be cement-lined ductile iron pipe, Class 55 conforming to ANSI specification A21.51 with push-on rubber gasket joints ANSI A21.11. All D.I. sewer pipe shall be polyethylene wrapped, 8 mil thick per ANSI 221.5-1972 and AWWA C-105-72.
16. Stone bedding 1/4" to 1" in size, with a minimum depth of 6" below the pipe and 12" above the pipe shall be provided for all sanitary sewer construction (IDOT gradation CA-11 or CA-13).
17. All floor drains shall be connected to the sanitary sewer system. All down spouts and footing drains shall discharge into the storm sewer system.
18. "Band Seal" or similar flexible type couplings shall be used in the connection of sewer pipe of dissimilar materials.
19. Concrete thrust blocks to prevent movement of water main under pressure shall be placed at all tees, valves, and bends of 11 1/4° and greater.
20. PVC Storm sewer pipe shall be PVC SDR 26 pipe meeting the requirements of ASTM D 3034 with flexible elastomeric joints per ASTM D 3212, except as noted.
21. Water service line (2" and smaller) shall be copper water tube, type K, soft temper for underground service conforming to ASTM B-88 and B251 and also conforming to all Village of Buffalo Grove requirements. Water mains and service lines larger than 2" shall be cement-lined ductile iron, Class 52, conforming to AWWA standard C-151, C-111 and C-104 with push-on rubber gasket joints. All fittings to be cement lined. Sterilization and pressure testing in accordance with the local governing authority's requirements is included. All ductile iron watermain shall be polyethylene wrapped, 8 mil thick per ANSI 221.5-1972 and AWWA C-105-72.
22. The contractor(s) shall indemnify the owner, the Northwestern Engineering Consultants P.C., and the municipality, their agents, etc. from all liability involved with the construction, installation and testing of the work on this project. The Contractor(s) is (are) solely responsible for jobsite safety. The design engineer shall not be responsible for the means, methods, procedures, techniques, or sequences of construction not specified herein, nor for the safety on the job site, nor shall the design engineer be responsible for the contractor's failure to carry out the work in accordance with the contract documents.
23. All concrete used shall be I.D.O.T. Class SI, except for concrete pavement which shall be I.D.O.T. Class PV.
24. All work shall comply with the IEPA "Standard Specifications for Soil Erosion and Sediment Control" current edition. The contractor shall take whatever steps are necessary to control erosion on the site. Erosion control features shall be constructed concurrently with other work on the site. The contractor shall take sufficient precaution to prevent pollution of streams, lakes and reservoirs with fuels, oils, bitumens, calcium chloride or other harmful material. He shall conduct and schedule his operations so as to avoid or minimize siltation of streams, lakes and reservoirs. Hauling will not be allowed when the work site is too wet to maintain acceptable conditions on adjacent streets. Adjacent streets and driveways shall be manually or mechanically swept periodically as may be required to maintain clean conditions.
25. When connecting to an existing sewer main by means other than an existing wye, tee, or an existing manhole, one of the following methods shall be used:
    A. Circular saw-cut of sewer main by proper tools ("Sewer-Tap" machine or similar) and proper installation of hub-wye saddle or hub-tee saddle.
    B. Remove an entire section of pipe (breaking only the top of one bell) and replace with a wye or tee branch section.
    C. With pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting, using "Band-Seal" or similar couplings to hold it firmly in place.
26. All existing field drainage tile encountered or damaged during construction are to be restored to their original condition, properly rerouted and/or connected to the storm sewer system. The contractor shall keep a record of all locations of field drainage tile encountered, and shall notify the Village Engineer whenever encountering a drainage tile.
27. The contractor is responsible for maintaining a clean construction area and shall remove debris resulting from his operations. Open trenches or other construction hazards shall be protected with barricades at the end of each day's operations.
28. The contractor shall be responsible for compliance with all of the requirements of the Occupational Safety and Health Act including those requirements for open cut trenches and sheeting and bracing required. At no time will the engineer or any of his employees be held liable, either directly or as third party participants to any litigation concerned with the construction project.
29. The contractor and its employees are responsible to comply with all the requirements of the IDOT "Confined Space Entry Policy" as published by IDOT current edition, insofar as it relates to entry into manholes, sewers, pipes, lift stations, vaults, wet wells, tanks, and other confined spaces that may be involved with this project.
30. All existing buildings, foundations, utilities, landscaping, fences, and other improvements on adjacent properties shall be protected at all times during construction. The contractor is responsible to provide and install materials, equipment, and/or manpower necessary to accomplish this.
31. In order to prevent damage due to settlement, structural support shall be provided for the upper pipe at all water main/sewer crossings in accordance with the standard drawings 19,20,21,22, and/or 23 (whichever is applicable to the particular situation) as shown in the "Standard Specifications for Water and Sewer Main Construction in Illinois", 2014 edition.
32. Any new sanitary sewer shall be tested in accordance with the specifications in the "Standard Specifications for Water and Sewer Main Construction in Illinois", and all Village of Buffalo Grove requirements.
33. All construction and traffic control within the highway rights-of-way shall comply with all I.D.O.T. and Village requirements. Pavement, curb, concrete walk or any other improvements disturbed by contractor's operation's shall be replaced in kind. Cost of traffic control and replacement of disturbed items shall be considered incidental to the contract.
34. Subgrade preparation for all pavements and other improvements shown on the drawings shall include topsoil stripping and removal of any underlying unstable/deleterious material. Fill placement under all paved areas shall be compacted to 95% Modified Proctor density and shall comply with all the recommendations of the soils engineer.
35. All excess excavated material shall become the property of the contractor and shall be removed from the site and legally disposed of by him. The contractor shall comply with all the current requirements of the State of Illinois EPA Clean Construction and Demolition Debris (CCDD) requirements.
36. Reinforced concrete storm sewer pipe shall be ASTM C-76 with rubber gasket joints (ASTM C443), except as noted.
37. Any damage to perimeter street curbs and/or pavement caused by the contractor's activity shall be repaired by the contractor.
38. All sanitary manholes, (and storm manholes in combined sewer areas), shall have a minimum inside diameter of 48 inches, and shall be cast in place or precast reinforced concrete. Flexible connectors conforming to ASTM C-923 are required at all manhole pipe connections.
39. Drainage from upstream properties shall not be blocked at any time in any manner by any of the proposed construction work shown on these drawings.
40. The contractor is advised that the site contains trees, scrub trees, and brush. The contractor shall make his own investigation and shall include the cost of tree and brush removal as required for this construction project in his total price bid. Any trees whose trunk is located on both sides of any property line shall remain and be protected, unless written permission is obtained from the adjoining property owner to remove said trees. Contractor shall verify the exact scope of landscape material removal/preservation with the landscape drawings.
41. All work shall conform to NRCS Standards as described in the current edition of the Illinois Urban Manual.
42. All streetlighting material and construction shall comply with the State of Illinois "Standard Specifications for Road and Bridge Construction" current edition, "American Standard Practice for Roadway Lighting" current edition, the National Electric Code, current edition, and the current Village of Buffalo Grove standards.
43. All sanitary manholes shall be tested for leakage in accordance with ASTM C-969 or vacuum tested in accordance with ASTM C-1244.

OPERATES 24 HOURS 365 DAYS
CALL J.U.L.I.E. 1-800-892-0123
WITH THE FOLLOWING:
COUNTY ____ LAKE
CITY-TOWNSHIP ____ BUFFALO GROVE
SEC. & 1/4 SEC. NO. SW 1/4 34-43-11
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN. & HOLIDAYS

INDEX OF DRAWINGS

C-1 TITLE SHEET
C-2 SITE PLAN
C-3 GRADING AND DRAINAGE PLAN
C-4 UTILITY PLAN
C-5 STORM WATER POLLUTION PREVENTION PLAN
C-6 DETAILS
C-7 VILLAGE OF BUFFALO GROVE DETAILS
C-8 IDOT HIGHWAY STANDARDS

BENCHMARKS
BENCHMARK NO.1=665.08 (NAVD88 DATUM)=CUT CROSS IN EAST TOP OF CURB OF LEXINGTON DRIVE APPROXIMATELY 24 FEET SOUTHWESTERLY OF THE NORTHWEST CORNER OF THE SELF STORAGE PARCEL.

BENCHMARK NO.2=663.69 (NAVD88 DATUM)=CUT CROSS IN TOP OF SIDEWALK APPROXIMATELY 95 FEET SOUTH OF THE SOUTHEAST CORNER OF THE SELF STORAGE PARCEL.

DEVELOPER
MR. JIM LAPETINA
BERMAN LAPETINA ENTERPRISES
2121 W. WALTON STREET
CHICAGO, IL 60622
847-417-4550

ARCHITECT
MR. JEFF BUDGELL
ARCHITECTS' STUDIO
257 N. WEST AVENUE
ELMHURST, IL 60126
630-617-5990

NOTE: INFORMATION SHOWN ON THESE PRELIMINARY ENGINEERING PLANS IS BASED ON CIVIL ENGINEERING DRAWINGS FOR RICKY ROCKETS PREPARED BY MANHARD CONSULTING DATED REVISED 07-26-21.

REVISIONS

NO.	DATE	DESCRIPTION
1	4-26-23	REVISED PER SITE PLAN CHANGES

DANIEL M. HAVLIK, JR.
0062-039375
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS
Daniel M. Havlik
4-26-23
LIC. EXP. 11-30-23

PREPARED BY
NORTHWESTERN ENGINEERING CONSULTANTS, P.C.
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-002695
LICENSE EXPIRES APRIL 30, 2025
675 N. NORTH COURT
PALATINE, ILLINOIS 60067
(847) 520-8410
APRIL 6, 2023

23-10

THE RECEIVER OF ELECTRONIC DATA TRANSMISSION BY USE, ENDORSE, UNDERSTANDS AND AGREES AS FOLLOWS:
FOR COPIES OF ALL OF THE CIVIL ENGINEERING DRAWINGS FOR THIS PROJECT MAY BE TRANSMITTED TO THE CLIENT AS ELECTRONIC CADD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OR COMPLETENESS OF THE CADD FILES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE CLIENT AGREES THAT IN CONSIDERATION FOR THE CADD FILES, THE CLIENT WILL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY LOSS OR LIABILITY ARISING FROM ALTERATIONS OF THE CADD FILES BY PERSONS OTHER THAN THE ENGINEER OR FROM REUSE OF THE CADD FILES WITHOUT THE ENGINEER'S PRIOR WRITTEN CONSENT. THE CLIENT AGREES THAT ANY REVISIONS OR ADDITIONS TO THE CADD FILES MADE BY THE CLIENT OR ANY PERSON OR ENTITY ACTING ON BEHALF OF THE CLIENT SHALL BE CLEARLY IDENTIFIED AS SUCH. THE CLIENT AGREES THAT THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY REVISIONS OR ADDITIONS TO THE CADD FILES MADE BY ANYONE OTHER THAN THE ENGINEER OR THE ENGINEER'S AGENTS. THE CLIENT AGREES THAT ALL REVISIONS OR ADDITIONS MADE BY THE ENGINEER TO THE CADD FILES SHALL BECOME THE PROPERTY OF THE ENGINEER. THE CLIENT AGREES THAT THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR USABILITY OF THE CADD FILES DUE TO DATA CORRUPTION, MISUSE, MODIFICATION, OR TRANSFER TO OTHER HARDWARE. THE CLIENT AGREES THAT THE USE OF THE CADD FILES IS NOT GUARANTEED ACCURATE AND SHALL NOT BE MODIFIED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER BY ACCEPTANCE OF THIS CADD DATA AGREES TO INDEMNIFY AND HOLD HARMLESS NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FROM ANY AND ALL CLAIMS, LIABILITIES, EXPENSES AND ATTORNEY'S FEES ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM NOR INITIATE ANY ACTION IN LAW OR EQUITY AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY DAMAGES RESULTING FROM THE USE OF THE CADD FILES. THE RECEIVER AGREES TO WAIVE ANY AND ALL CLAIMS AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. AND AGREES TO HOLD NORTHWESTERN ENGINEERING CONSULTANTS, P.C. HARMLESS FOR ANY LOSS, DAMAGE OR EXPENSE INCURRED BY THE RECEIVER RESULTING FROM ERRORS AND OMISSIONS IN THE CADD FILES. THE RECEIVER AGREES TO NOT ASSERT ANY CLAIMS OR INITIATE LITIGATION AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. ALLEGING THAT NORTHWESTERN ENGINEERING CONSULTANTS, P.C. IS LIABLE FOR INFRINGEMENT OF COPYRIGHTS AND/OR PATENTS ARISING FROM THE USE OF THE CADD FILES. THE RECEIVER AGREES TO PAY NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY EXPENSES OR LIABILITY RESULTING FROM ANY INFRINGEMENT OF COPYRIGHTS AND/OR PATENTS

NOTE "A":
PROPOSED PAVEMENT STRIPING (TYP.)

NOTE "B":
EXISTING CONCRETE CURB AND GUTTER TO REMAIN.

NOTE "C":
PROP. CONCRETE CURB AND GUTTER. SEE DETAIL, SHEET C-6.

NOTE "D":
PROPOSED 5' WIDE CONCRETE PUBLIC SIDEWALK.

NOTE "E":
CONSTRUCT NEW HANDICAP RAMP IN ACCORDANCE WITH VILLAGE, STATE AND ADA REQUIREMENTS (TYPICAL). RAMP SHALL HAVE 24" WIDE RED TRUNCATED DOME DETECTABLE WARNING SURFACE. SEE DETAIL.

NOTE "F":
PROPOSED HANDICAPPED PARKING STALL WITH PAINTED SYMBOL AND POLE SIGN.

NOTE "G":
PROPOSED PAINTED TRAFFIC ARROW (TYP.)

NOTE "H":
PROPOSED PAVEMENT STRIPING, 4" WIDE LINES @45°, 3' O.C.

NOTE "J":
WHERE CONCRETE WALK, CURB OR PAVEMENT IS ADJACENT TO FOUNDATION WALL, INSTALL COMPRESSIBLE FILLER (3/4" MAXIMUM) BETWEEN PAVEMENT AND FOUNDATION WALL. CUT BACK AND PROVIDE SEALANT AT BUILDING WALL. (TYP).

NOTE "K":
NEW DRIVEWAY PAVEMENT (INCLUDING SIDEWALK PORTION) IN ROADWAY RIGHT OF WAY SHALL CONSIST OF 8" P.C. CONCRETE UNREINFORCED ON 6" CA-6 CRUSHED STONE BASE ON COMPACTED SUBGRADE.

NOTE "L":
PROPOSED ASPHALT PAVEMENT (SHADED). SEE PARKING LOT PAVEMENT DETAIL, SHEET C-6.

NOTE "M":
PROPOSED 24" WIDE WHITE PAINTED STOP BAR.

NOTE "N":
SAW CUT AND REMOVE EXISTING CONCRETE CURB AND GUTTER ACROSS NEW DRIVEWAY AS INDICATED. REPLACE WITH NEW DEPRESSED CONCRETE CURB AND GUTTER ACROSS THE PROPOSED DRIVEWAY, MATCHING EXISTING CURB AND GUTTER. NEW FLOW LINE SHALL MATCH EXISTING FLOW LINE.

NOTE "P":
INSTALL A 3' HIGH, 2-RAIL SPLIT RAIL WOOD FENCE ALONG THE SIDE OF THE STORM WATER MANAGEMENT BASIN AS INDICATED. SEE SHEET C-3.

NOTE "Q":
PROPOSED STORM WATER MANAGEMENT BASIN. SEE SHEET C-3.

NOTE "R":
PROPOSED PIPE BOLLARD (TYP.). SEE DETAIL, SHEET C-6.

NOTE "S":
PROPOSED CONCRETE PAD FOR ELECTRICAL TRANSFORMER. SEE ELECTRICAL DRAWINGS.

NOTE "T":
PROPOSED LANDSCAPED AREA. SEE LANDSCAPING DRAWINGS.

NOTE "U":
EXISTING ASPHALT PAVEMENT TO REMAIN.

NOTE "V":
PROPOSED 50 LF DECORATIVE BLOCK RETAINING WALL. SEE SHEET C-3.

NOTE "W":
PROPOSED CONCRETE STOOP AT DOOR. SEE ARCHITECTURAL DRAWINGS.

NOTE "Y":
PROPOSED 30"x30" R1-1 STOP SIGN MOUNTED ON METAL POST.

NOTE "Z":
PROPOSED 30"x30" R3-1 NO RIGHT TURN SIGN MOUNTED ON METAL POST.

NOTE "AA":
PROPOSED 30"x30" R5-1 DO NOT ENTER SIGN MOUNTED ON METAL POST.

NOTE "BB":
PROPOSED 30"x30" L3-1 NO LEFT TURN SIGN MOUNTED ON METAL POST.

NOTE "CC":
PROPOSED 30"x36" R3-5 RIGHT TURN ONLY SIGN MOUNTED ON METAL POST.

NOTE "DD":
PROPOSED FLUSH CONCRETE CURB TO SEPARATE PERMEABLE PAVERS FROM STANDARD ASPHALT PAVEMENT. SEE DETAIL, SHEET C-6.

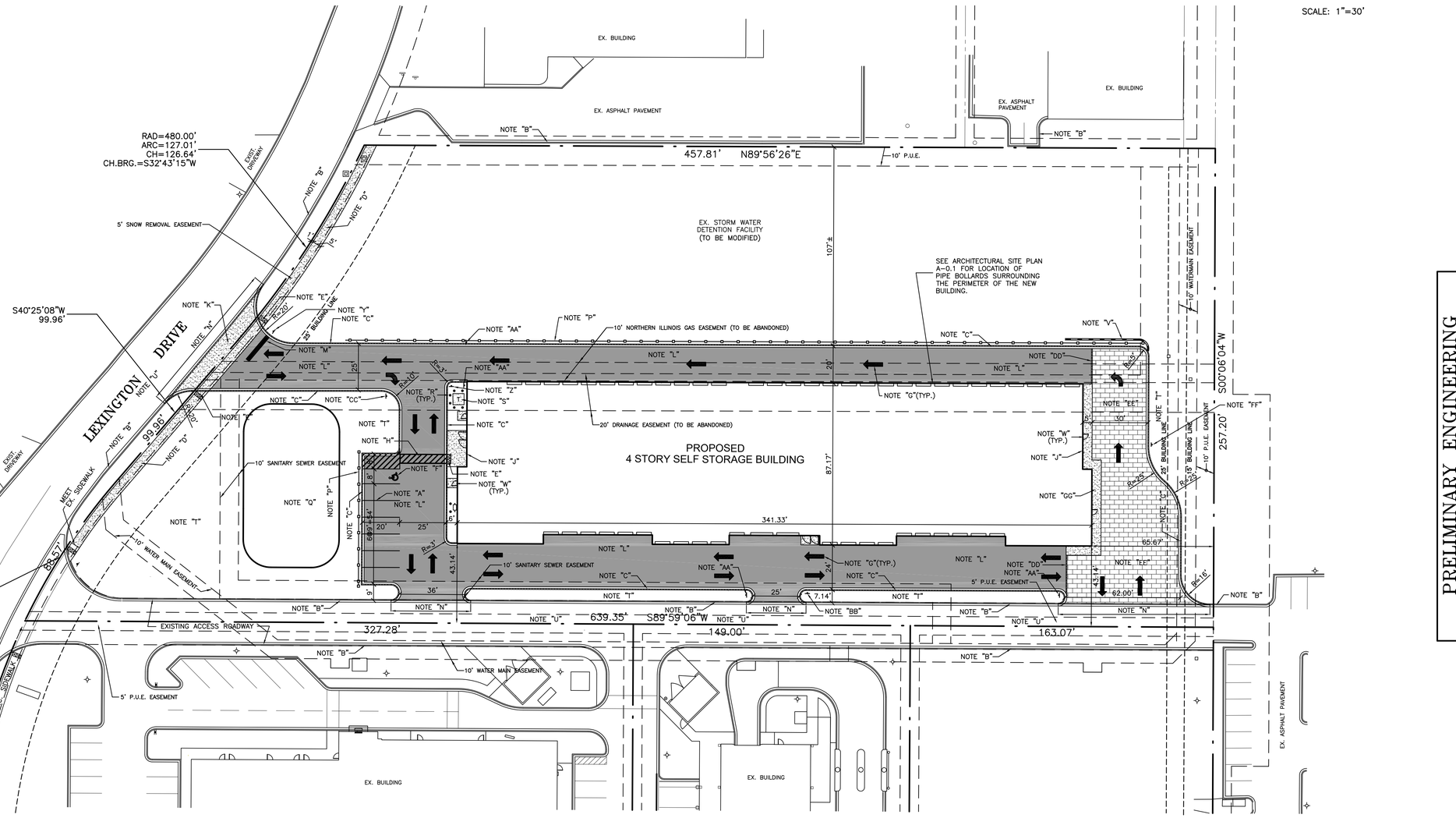
NOTE "EE":
PROPOSED AREA OF PERMEABLE PAVERS-SEE DETAIL, SHEET C-6. CONTRACTOR SHALL USE PERMEABLE PAVER UNITS WHICH ARE DESIGNED TO SUPPORT FIRE TRUCK AND GARBAGE TRUCK APPARATUS. PERMEABLE PAVERS SHALL BE UNILOCK ECO-OPTILOC (GRAY), OR EQUAL PERMEABLE PAVERS, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

NOTE "FF":
PROPOSED 12" X 18" "PERMEABLE PAVEMENT AREA" SIGN, MOUNTED ON METAL POST. SEE DETAIL, SHEET C-6.

NOTE "GG":
CONCRETE PAVEMENT FOR AREA ADJACENT TO BUILDING SHALL BE MINIMUM OF 3,500 P.S.I. AIR ENTRAINED CONCRETE, 8" THICK, 6 BAG MIX WITH 6"x6"-W4xW4 W.W.F. ON 6" COMPACTED CA-6 CRUSHED STONE BASE ON COMPACTED SUBGRADE (TYP.). SURFACE TO RECEIVE BROOM FINISH AND ONE SEAL COAT.

OPERATES 24 HOURS 365 DAYS
CALL JULIE 1-800-892-0123
WITH THE FOLLOWING:
COUNTY LAKE
CITY-TOWNSHIP BUFFALO GROVE
SEC. & 1/4 SEC. NO.# SW1/4 34-43-11
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN. & HOLIDAYS

SPECIAL NOTE:
Existing grades and improvements are shown from the best information available and must be verified in the field by the contractor prior to the start of construction. Any discrepancy with the plan shall be immediately reported to the engineer.



PARKING PROVIDED	
6	STANDARD STALLS (9')
1	HANDICAP STALLS (16')
7	STALLS PROVIDED

PAVEMENT MARKING (STRIPING) FOR PARKING LOTS

A. After paving operations are completed, or when directed by the General Contractor, marking as designated on the drawings may proceed. Marking shall consist of 4" wide lines configured as indicated on drawings, white color. Traffic paint shall be manufactured by Sherwin Williams, or approved equal. Apply in strict conformance with manufacturer's instructions.

B. Paint striping work shall include painting of international handicap symbol at designated parking for handicapped, as indicated on drawings.

C. Protect area against traffic for at least 48 hours after application of striping.

NOTE:
ALL TRAFFIC SIGNS ARE TO BE INSTALLED AT 7' MEASURED FROM THE GROUND ELEVATION TO THE BOTTOM OF THE SIGN.

NOTE:
SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS, PARKING LOT LIGHTING, SIGNAGE, FENCING AND LANDSCAPING.

NOTE:
ALL DIMENSIONS ARE TO THE FACE OF SIDEWALK OR FACE OF CURB UNLESS OTHERWISE NOTED.

NORTHWESTERN ENGINEERING CONSULTANTS, P.C.
CIVIL ENGINEERS SITE PLANNERS LAND SURVEYORS
675 N. NORTH COURT PALATINE, ILLINOIS 60067 (847) 520-8410
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-002695 EXP. 4-30-25

PRELIMINARY ENGINEERING

SITE PLAN
SELF STORAGE FACILITY
105 LEXINGTON DRIVE
BUFFALO GROVE, ILLINOIS

NO.	DATE	DESCRIPTION
3	6-29-23	REVISED PER VILLAGE REVIEW
2	6-23-23	REVISED PER VILLAGE REVIEW
1	4-26-23	REVISED FOR SITE PLAN CHANGES

DRAWN BY: KRL
CHECKED BY: DMH
DATE: 4-6-23
SCALE: 1"=30'

DRAWING NO. C-2

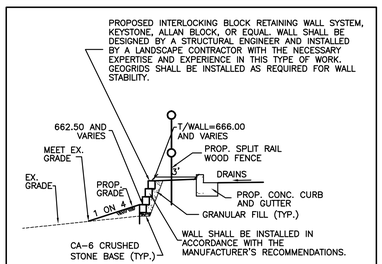
JOB NO. 23-10

THE RECEIVER OF ELECTRONIC DATA TRANSMISSION BY USE THEREOF UNDERSTANDS AND AGREES AS FOLLOWS:
1. THE ELECTRONIC DRAWING DATA FILES ("ELECTRONIC DATA FILES") ARE PROVIDED AS ELECTRONIC CADD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE SUITABILITY OF THE ELECTRONIC DRAWING DATA FILES FOR ANY PURPOSE. DIMENSIONS OF ALL IMPROVEMENTS SHOWN ON THE HARD COPY DRAWINGS TRANSMITTED TO THE CLIENT SHALL GOVERN OVER THE LOCATION OF THE ELECTRONIC DATA FILES. THE ELECTRONIC DATA FILES ARE PROVIDED AS AN ACCOMMODATION TO THE CLIENT AND ITS CONSULTANTS AND CONTRACTORS. THE ELECTRONIC DATA FILES DELIVERED ARE THE PRINTED HARD COPY CONSTRUCTION DOCUMENTS. THE RECEIVER SHALL COMPARE THE DATA WITH AVAILABLE HARD COPIES. IN THE EVENT OF CONFLICT BETWEEN THE HARD COPY CONSTRUCTION DOCUMENTS AND THE ELECTRONIC DATA FILES, THE HARD COPY CONSTRUCTION DOCUMENTS SHALL GOVERN. THE ELECTRONIC DATA FILES ARE NOT GUARANTEED ACCURATE AND SHALL NOT BE USED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER OF ELECTRONIC DATA FILES AGREES TO INDEMNIFY AND HOLD HARMLESS NORTHWESTERN ENGINEERING CONSULTANTS, P.C. AND ITS OFFICERS, EMPLOYEES AND AGENTS FROM ANY AND ALL CLAIMS, LIABILITIES, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEYS' FEES, ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM FOR WITHDRAWAL OF ITS ACCEPTANCE OF THE ELECTRONIC DATA FILES AND SHALL HOLD HARMLESS NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FROM ANY AND ALL CLAIMS WITH RESPECT TO ANY DEFECT ERROR OR OMISSION IN THE DATA. NORTHWESTERN ENGINEERING CONSULTANTS, P.C. ALONE RETAINS ALL OWNERSHIP, COPYRIGHT AND OTHER INTELLECTUAL PROPERTY INTERESTS IN THIS DATA.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

BENCHMARKS
BENCHMARK NO.1=665.08 (NAVD88 DATUM)=CUT CROSS IN EAST TOP OF CURB OF LEXINGTON DRIVE APPROXIMATELY 24 FEET SOUTHWESTERLY OF THE NORTHWEST CORNER OF THE SELF STORAGE PARCEL.

BENCHMARK NO.2=663.69 (NAVD88 DATUM)=CUT CROSS IN TOP OF SIDEWALK APPROXIMATELY 95 FEET SOUTH OF THE SOUTHEAST CORNER OF THE SELF STORAGE PARCEL.

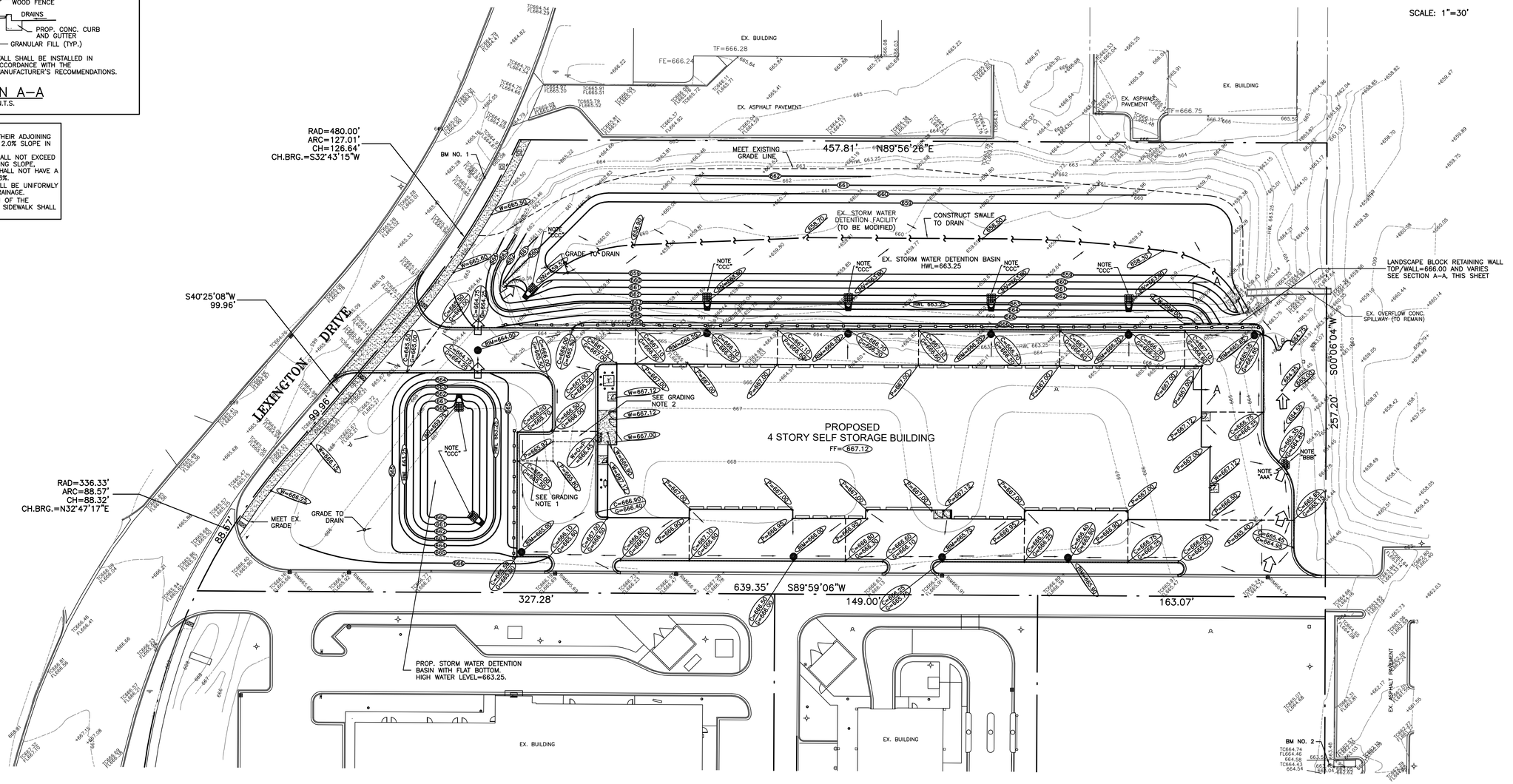


SECTION A-A
N.T.S.

GRADING NOTES
1. ACCESSIBLE PARKING SPACES AND THEIR ADJOINING ACCESS AISLES SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION.
2. ACCESSIBLE PEDESTRIAN ROUTES SHALL NOT EXCEED 2.0% CROSS SLOPE OR 5.0% RUNNING SLOPE, EXCEPT FOR CURB RAMPS WHICH SHALL NOT HAVE A RUNNING SLOPE GREATER THAN 8.33%.
3. ALL GRASS/LANDSCAPED AREAS SHALL BE UNIFORMLY GRADED TO DRAIN WITH POSITIVE DRAINAGE.
4. THE CROSS SLOPE OF THE PORTION OF THE DRIVEWAY IN LINE WITH THE PUBLIC SIDEWALK SHALL NOT EXCEED 2.0%.

OPERATES 24 HOURS 365 DAYS
CALL JULIE 1-800-892-0123
WITH THE FOLLOWING:
COUNTY ____ LAKE
CITY-TOWNSHIP ____ BUFFALO GROVE
SEC. & 1/4 SEC. NO.# SW1/4 34-43-11
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN. & HOLIDAYS

SPECIAL NOTE:
Existing grades and improvements are shown from the best information available and must be verified in the field by the contractor prior to the start of construction. Any discrepancy with the plan shall be immediately reported to the engineer.



NOTE "AAA"
INSTALL 3' OF DEPRESSED CURB TO ALLOW FOR DRAINAGE THROUGH THE CURB.

NOTE "BBB"
INSTALL 25 S.F. OF 6"-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) AT GAP IN CURB.

NOTE "CCC"
INSTALL 25 S.F. OF 6"-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) IN BASIN AT END OF STORM SEWER PIPE.

THE RECEIVER AS ELECTRONIC AKA TRANSMISSION BY USE, EXHIBIT, HANDSHAKE, AND LABELS AS FOLLOWS:
PORTIONS OF ALL OF THE CIVIL ENGINEERING DRAWINGS FOR THIS PROJECT MAY BE TRANSMITTED TO THE CLIENT AS ELECTRONIC CAD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE INFORMATION CONTAINED IN THE CAD FILES. THE CLIENT AGREES THAT THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS, LIABILITIES, OR LOSS OR DAMAGES ARISING FROM THE USE OF THE CAD FILES. THE CLIENT AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS, DAMAGES, LITIGATION EXPENSES, OR ATTORNEY'S FEES ARISING OUT OF THE CLIENT'S USE OF THE CAD FILES. THE CAD FILES SHALL NOT BE USED BY THE CLIENT FOR ANY PURPOSE OTHER THAN THOSE STATED ABOVE. THE CAD FILES SHALL NOT BE TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER BY ACCEPTANCE OF THIS CAD DATA AGREES TO HOLD HARMLESS THE ENGINEER FOR ANY AND ALL LIABILITY ARISING FROM THE USE OF THIS DATA. THE RECEIVER ACKNOWLEDGES THAT THE CAD FILES ARE INSTRUMENTS OF SERVICE PREPARED BY THE ENGINEER FOR USE ON THIS PROJECT ONLY AND ARE NOT SUITABLE FOR USE ON ANY OTHER PROJECT OR EXTENSIONS TO THIS PROJECT. ANY REUSE OF THE CAD FILES WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE CLIENT'S SOLE RISK AND WITHOUT LIABILITY TO THE ENGINEER. THE CLIENT SHALL REMOVE ALL OF THE ENGINEER'S CONFIDENTIAL AND PROPRIETARY MARKINGS FROM ANY DOCUMENTS AND ELECTRONIC FILES. THE SIGNED OR SEALED HARD-COPY CONSTRUCTION DOCUMENTS SHALL GOVERN. THE ENGINEER DOES NOT WARRANT THE ACCURACY OR LONG TERM STABILITY OF THE CAD FILES DUE TO DATA CONVERSION, HARDWARE, OR SOFTWARE INCOMPATIBILITY. THE CLIENT AGREES THAT THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CHANGES MADE TO THE CAD FILES AFTER THEY HAVE BEEN TRANSFERRED TO THE CLIENT. THE CAD FILES ARE NOT GUARANTEED ACCURATE AND SHALL NOT BE MODIFIED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER BY ACCEPTANCE OF THIS CAD DATA AGREES TO HOLD HARMLESS THE ENGINEER FOR ANY AND ALL LIABILITY ARISING FROM THE USE OF THIS DATA. THE RECEIVER SHALL MAKE NO CLAIM NOR INITIATE ANY ACTION IN LAW OR EQUITY AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. ALONE, RELEASE ALL WARRANTY, EXPRESS AND IMPLIED, AND ATTORNEY'S FEES ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM NOR INITIATE ANY ACTION IN LAW OR EQUITY AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. ALONE, RELEASE ALL WARRANTY, EXPRESS OR

BENCHMARKS
BENCHMARK NO.1=665.08 (NAVD88 DATUM)=CUT CROSS IN EAST TOP OF CURB OF LEXINGTON DRIVE APPROXIMATELY 24 FEET SOUTHWESTERLY OF THE NORTHWEST CORNER OF THE SELF STORAGE PARCEL.

BENCHMARK NO.2=663.69 (NAVD88 DATUM)=CUT CROSS IN TOP OF SIDEWALK APPROXIMATELY 95 FEET SOUTH OF THE SOUTHEAST CORNER OF THE SELF STORAGE PARCEL.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH BUILDING UTILITY SERVICE LINE FROM THE PLUMBING AND/OR MECHANICAL DRAWINGS AND SHALL COORDINATE UTILITY SERVICE LINE LOCATION WITH SAME.
2. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES (SEWER, WATER, ELECTRIC, GAS, TELEPHONE, ETC.)
3. ANY EXISTING SEWER, WATER OR OTHER UTILITY LINES OR STRUCTURES (MANHOLES, ETC.) UNDER OR WITHIN 5' OF THE PROPOSED BUILDING OR TRASH ENCLOSURE SHALL BE REMOVED. PLUG ENDS OF REMAINING UTILITY LINES. BACKFILL TRENCHES WITH SELECTED GRANULAR BACKFILL COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY IN 8" LIFTS.

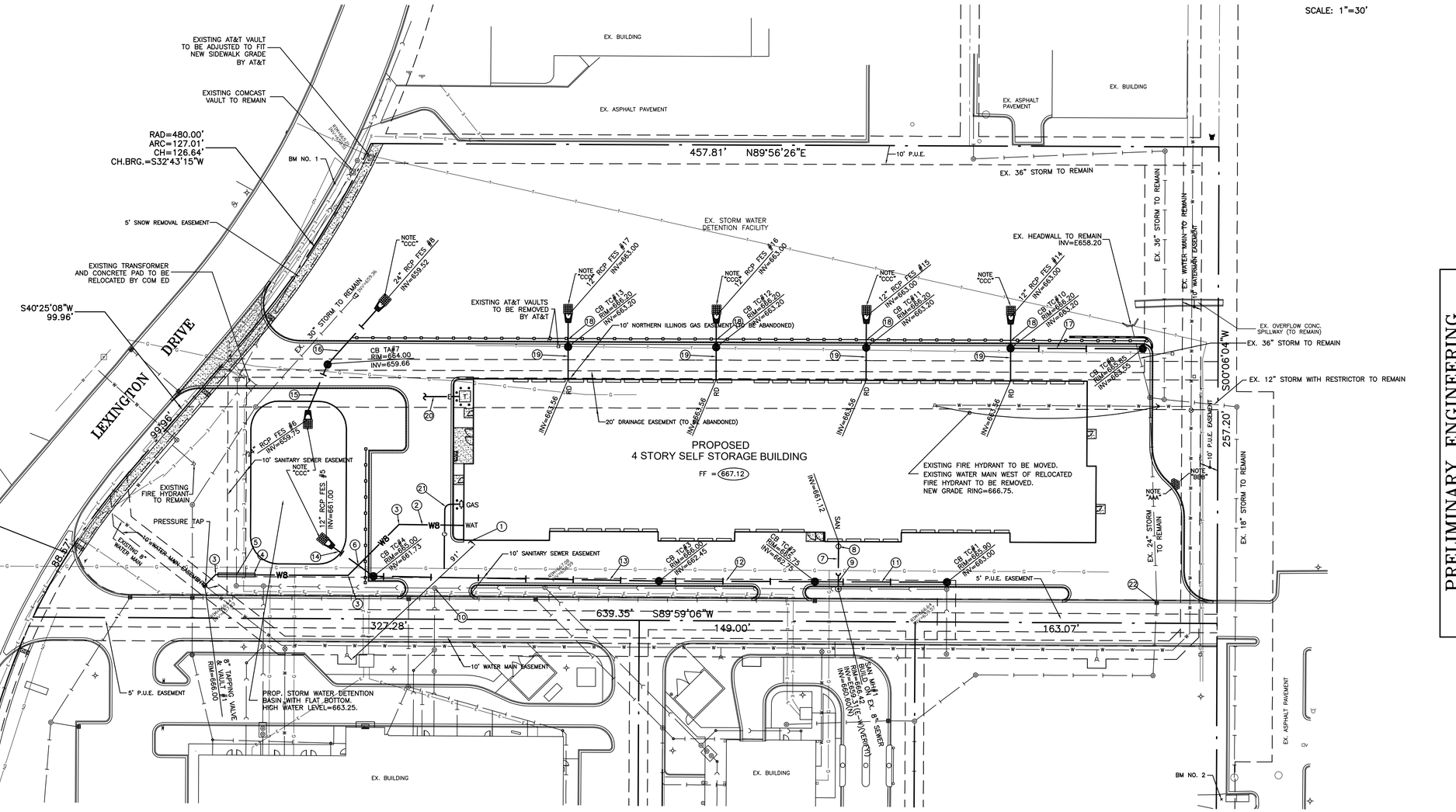
OPERATES 24 HOURS 365 DAYS
CALL JULIE 1-800-892-0123
WITH THE FOLLOWING:
COUNTY LAKE
CITY-TOWNSHIP BUFFALO GROVE
SEC. & 1/4 SEC. NO.# SW1/4 34-43-11
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN. & HOLIDAYS

SPECIAL NOTE:

Existing grades and improvements are shown from the best information available and must be verified in the field by the contractor prior to the start of construction. Any discrepancy with the plan shall be immediately reported to the engineer.

SPECIAL NOTE

The locations of existing underground utilities, such as water mains, sewers, gas lines, electric lines, telephone lines, etc., as shown on the plans have been determined from the best available information and is given for the convenience of the contractor. However, the engineer and owner do not assume responsibility for the accuracy of the locations shown. It shall be the contractor's responsibility to contact all utility companies and their facilities shall be located prior to any work.



NOTE "AAA"
INSTALL 3" OF DEPRESSED CURB TO ALLOW FOR DRAINAGE THROUGH THE CURB.

NOTE "BBB"
INSTALL 25 S.F. OF 6'-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) AT GAP IN CURB.

NOTE "CCC"
INSTALL 25 S.F. OF 6'-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) IN BASIN AT END OF STORM SEWER PIPE.

UTILITY NOTES

1. PROPOSED FIRE DEPARTMENT CONNECTION.
2. 155 LF 8" DUCTILE IRON WATER MAIN CLASS 52.
3. 8" DUCTILE IRON CLASS 52 45° BEND.
4. INSTALL 20 LF STEEL CASING PIPE ON NEW 8" WATER MAIN CASING PIPE SHALL BE CENTERED ON THE SANITARY SEWER CROSSING.
5. 8" SAN. INV=E657.80(VERFIY). TOP 8"WM=656.20.
6. 12" STORM INV=661.47. TOP 8" WM=659.50.
7. 26 LF 6" PVC SDR 26 SAN. SEWER S=2.00%
8. EXTERIOR CLEAN OUT-SEE DETAIL, SHEET C-6.
9. 10" STORM INV=662.79. TOP 6" SAN=661.22.
10. EXISTING MANHOLE TO BE ADJUSTED. RIM=E667.02. ADJUST TO 665.73± TO FIT NEW PAVEMENT GRADE.
11. 72 LF 10" PVC SDR 26 STORM SEWER S=0.35%
12. 84 LF 12" RCP C76 CL IV STORM SEWER S=0.35%
13. 154 LF 12" RCP C76 CL IV STORM SEWER S=0.47%
14. 28 LF 12" RCP C76 CL IV STORM SEWER S=2.61%
15. 28 LF 24" RCP C76 CL IV STORM SEWER S=0.33%
16. 42 LF 24" RCP C76 CL IV STORM SEWER S=0.33%
17. 70 LF 10" PVC SDR 26 STORM SEWER S=0.50%
18. 15 LF 12" RCP C76 CL IV STORM SEWER S=1.33%
19. 18 LF 10" PVC SDR 26 STORM SEWER S=2.00% CONNECTED TO ROOF DRAIN.
20. ELECTRIC SERVICE SIZED AND ROUTED BY COM ED.
21. GAS SERVICE SIZED AND ROUTED BY NICOR.
22. REMOVE EXISTING CURB BOX. REPLACE WITH FLAT GRATE, NEENAH R-2502 W/TYPE "D" GRATE, OR EQUAL. RIM=667.74.

THE RECEIVER OF ELECTRONIC DATA TRANSMISSIONS BY USE, INTENT, UNDERSTANDING AND AGREES AS FOLLOWS:
FOR ONE OF ALL OF THE FINAL ENGINEERING DRAWING FOR THIS PROJECT MAY BE TRANSMITTED TO THE CLIENT AS ELECTRONIC CADD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE ELECTRONIC CADD FILES, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE CLIENT ACCEPTS ALL RISK ASSOCIATED WITH THE USE OF THE ELECTRONIC CADD FILES. THE CLIENT AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIM OR LIABILITY ARISING OUT OF OR RESULTING FROM THE USE OF THE ELECTRONIC CADD FILES BY THE CLIENT OR ANYONE UNDER THE CLIENT'S DIRECTION OR CONTROL. THE CLIENT AGREES TO ASSUME FULL RESPONSIBILITY FOR ANY MODIFICATIONS OR ALTERATIONS TO THE ELECTRONIC CADD FILES MADE

BENCHMARKS
BENCHMARK NO.1=665.08 (NAVD88 DATUM)=CUT CROSS IN EAST TOP OF CURB OF LEXINGTON DRIVE APPROXIMATELY 24 FEET SOUTHWESTERLY OF THE NORTHWEST CORNER OF THE SELF STORAGE PARCEL.

BENCHMARK NO.2=663.69 (NAVD88 DATUM)=CUT CROSS IN TOP OF SIDEWALK APPROXIMATELY 95 FEET SOUTH OF THE SOUTHEAST CORNER OF THE SELF STORAGE PARCEL.

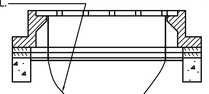
TYPICAL SOIL PROTECTION CHART

Stabilization Type:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Permanent Seeding			A-	-	-	-	-	-	XXX	XXX	X-	-
Dormant Seeding	B-	-	-	-	-	-	-	-	-	-	-	-
Temporary Seeding			C-	-	-	-	-	-	XXX	XXX	X-	-
Sodding			E-XXX	-	-	-	-	-	-	-	-	-
Mulching	F-	-	-	-	-	-	-	-	-	-	-	-

A= Kentucky Bluegrass @ 90 lbs/ac. Mixed with Perennial Ryegrass @ 30 lbs/ac.
B= Kentucky Bluegrass @ 135 lbs/ac. Mixed with Perennial Ryegrass @ 45 lbs/ac.
C= Spring Oats @ 100lbs/ac.
D= Wheat or Cereal Rye @150 lbs/ac.
E= Sod
F= Straw Mulch @ 2 tons/ac.
XXX= Irrigation needed

Irrigation should be provided as necessary to throughly establish growth.

DURING CONSTRUCTION, ALL INLETS AND CATCH BASINS SHALL BE EQUIPPED WITH A CATCH BASIN FILTRATION SYSTEM, CATCH ALL MANUFACTURED BY MARATHON MATERIALS, INC (1-800-983-9493), FLOGARD + PLUS MANUFACTURED BY HANCOR (1-888-367-7473) OR EQUAL.



DETAIL SHOWING PLACEMENT OF CATCH BASIN FILTRATION SYSTEM UNDER CATCHBASIN AND INLET RIMS DURING CONSTRUCTION
N.T.S.

SEE SWPP NOTE 12 ON THIS SHEET.

OPERATES 24 HOURS 365 DAYS
CALL JULIE 1-800-892-0123
WITH THE FOLLOWING:
COUNTY LAKE
CITY-TOWNSHIP BUFFALO GROVE
SEC. & 1/4 SEC. NO.# SW1/4 34-43-11
48 HOURS BEFORE YOU DIG
EXCLUDING SAT., SUN. & HOLIDAYS

SPECIAL NOTE:
Existing grades and improvements are shown from the best information available and must be verified in the field by the contractor prior to the start of construction. Any discrepancy with the plan shall be immediately reported to the engineer.

INSPECTIONS AND MAINTENANCE
ALL EROSION CONTROL DEVICES AND MEASURES SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED UNTIL THE SITE OR SECTIONS OF THE SITE ARE STABILIZED. ALL EROSION CONTROL DEVICES AND MEASURES SHALL BE INSPECTED BY A REPRESENTATIVE OF THE GENERAL CONTRACTOR ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT EXCEEDING 0.5" RAIN. WRITTEN INSPECTION REPORTS SHALL BE MAINTAINED ON SITE AND SHALL BE PRODUCED UPON REQUEST OF ANY LOCAL, STATE OR FEDERAL OFFICIAL. THE FOLLOWING SHALL BE THE MINIMUM MAINTENANCE REQUIREMENTS:

1. ANY INLET OR PIPE PROTECTION OR PERIMETER EROSION BARRIER THAT SHOWS SIGNS OF DETERIORATION OR UNDERMINING SHALL BE REPLACED OR REPAIRED AS REQUIRED.

2. CATCH BASINS SHALL BE INSPECTED AND CLEANED PERIODICALLY.

3. ANY SEEDED AREAS THAT SHOW SIGNS OF GULLIES OR EROSION SHALL BE REGRADED, RESEEDED, WATERED AND FERTILIZED AS REQUIRED TO MAINTAIN A COVER THAT IS ADEQUATE TO PREVENT EROSION.

4. SEDIMENT SHALL BE REMOVED FROM PERIMETER EROSION BARRIER WHEN SILT REACHES ONE HALF THE HEIGHT OF THE FENCE.

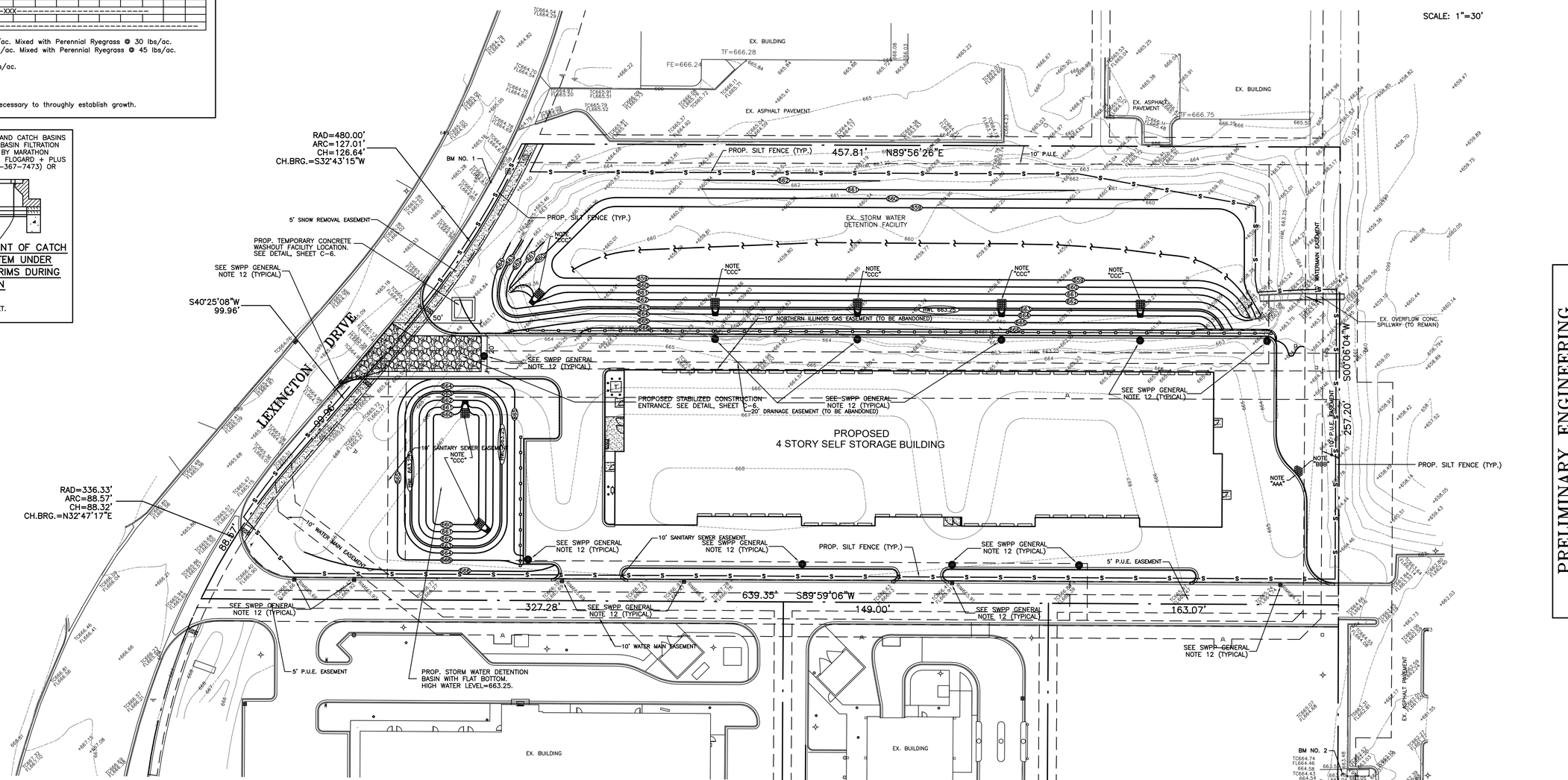
5. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO THE RIGHT OF WAY OR PUBLIC PARKING LOTS. TOP DRESSING SHALL BE INSTALLED AS REQUIRED ON THE CONSTRUCTION ENTRANCE AT NO ADDITIONAL COST TO THE OWNER.

6. ANY MUD OR DEBRIS TRACKED ONTO A PUBLIC ROAD OR PARKING LOT SHALL BE REMOVED BY THE CONTRACTOR TO THE SATISFACTION OF THE JURISDICTIONAL BODY CONTROLLING THE ROAD OR PARKING LOT. THIS WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

NOTE "AAA"
INSTALL 3' OF DEPRESSED CURB TO ALLOW FOR DRAINAGE THROUGH THE CURB.

NOTE "BBB"
INSTALL 25 S.F. OF 6"-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) AT GAP IN CURB.

NOTE "CCC"
INSTALL 25 S.F. OF 6"-8" DIAMETER COBBLESTONE RIP RAP, 16" THICK, (NO CRUSHED CONCRETE OR LIMESTONE) IN BASIN AT END OF STORM SEWER PIPE.



STORM WATER POLLUTION PREVENTION PLAN GENERAL NOTES

This Storm Water Pollution Prevention Plan has been prepared in compliance with the requirements of the State of Illinois. The work to be done is stripping, stockpiling and grading of the project site shown in detail on the contract drawings. The following notes and requirements shall apply to work performed on this project:

1. Soil Erosion and sediment control features shall be constructed prior to the commencement of upland disturbance.
2. Hauling will not be allowed when the work site is too wet to maintain acceptable conditions on adjacent streets.
3. Adjacent streets will be manually or mechanically swept periodically as may be required, minimum at end of each working day. Village streets are to be kept free from mud and debris.
4. Each catch basin will be installed with a sump as indicated on the drawings. The rims will be set at final grade. A temporary 1 foot deep sump shall be excavated in a 10 foot diameter area around the structure to act as a silt trap. Both sumps will be inspected after each rain and cleaned as required.
5. Soil stockpile areas shall be designated and surrounded by a geotextile fabric silt fence to intercept sediment-laden runoff from the stockpile. The fence shall be continuously maintained and sediment shall be removed to restore planned capacity as required.
6. If the stockpiles will not be used for construction activity for a period of more than 14 days, they shall be protected with temporary vegetative cover.
7. No material from construction site shall be discharged to the storm sewer.
8. The contractor shall take whatever other steps are deemed necessary to prevent erosion from taking place during the course of the construction project.
9. The contractor shall comply with all requirements of this plan and shall include the cost of such compliance in the total price bid for his contract.
10. All temporary and permanent erosion control measures must be maintained and repaired as needed. Erosion control features shall be inspected every 7 days or after 1/2" of rainfall. The general contractor will be responsible for inspection and repair during construction. The owner will be responsible if erosion control is required after the contractor has completed the project.
11. All work shall conform to NRCS Standards as described in the current edition of the Illinois Urban Manual.
12. Install filter fabric erosion control filtration system in the new and existing impacted storm structures to prevent eroded material from entering the storm sewer system during the construction project.
13. Watering shall be used as required to control dust on the project. A water truck shall be kept on the site at all times during mass earthwork construction, if required by the Village.
14. The name, address and telephone number of the individual in responsible charge of erosion control measures during the construction project shall be given to the Village Public Works Department prior to the start of construction.
15. Disturbed areas shall be protected with seeding according to the "Typical Soil Protection Chart" on this sheet.
16. All erosion control measures and inspections shall be documented on site in the site superintendent's log book.
17. A copy of the approved Storm Water Pollution Prevention Plan shall be maintained on the site at all times.
18. All wash water (concrete trucks, vehicle cleaning, equipment cleaning, etc.) shall be detained and properly treated or disposed of.
19. Rubbish, trash, garbage, litter, or other such materials shall be deposited into sealed containers. Materials shall be prevented from leaving the premises through the action of wind or stormwater discharge into drainage ditches or waters of the State.
20. All Contractors and Subcontractors involved with storm water pollution prevention shall obtain a copy of the storm water pollution prevention plan and the State of Illinois National Pollution Discharge Elimination General Permit (NPDES Permit) and become familiar with their contents.
21. The Contractor shall implement best management practices as required by the SWPPP. Additional best management practices shall be implemented as dictated by conditions at no additional cost to the owner through out all phases of construction.
22. Best management practices (BMP'S) and controls shall conform to federal, state, or local requirements or manual of practice. As applicable Contractor shall implement additional controls as directed by permitting agency or owner.
23. All temporary erosion and sediment control items are to be removed within thirty (30) days of the site's final stabilization by the contractor.
24. All construction activities within the boundaries of the project as well as all construction activities involved in making any connections to utilities outside the boundaries of the project shall comply with the requirements of this plan. This Storm Water Pollution Prevention Plan shall cover all such activities.
25. Refer to the Landscape Plan for locations and specifications of sodding, seeding and other permanent ground cover.

CONSTRUCTION SEQUENCE
1. INSTALL SILT FENCE AT LOCATIONS AS INDICATED ON THE PLANS.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND EXISTING INLET PROTECTION AS NOTED.
3. PERFORM SITE DEMOLITION AS NOTED ON DEMOLITION PLAN (IF APPLICABLE).
4. CUT AND FILL SITE TO PLAN SUB-GRADE.
5. BEGIN BUILDING CONSTRUCTION.
6. CONSTRUCT UNDERGROUND IMPROVEMENTS, I.E. GAS MAIN, WATERMAIN AND AND STORM SEWER**, ETC.
7. CONSTRUCT PAVEMENT IMPROVEMENTS PER PLAN.
8. COMPLETE CONSTRUCTION OF SITE WITH PERMANENT STABILIZATION.
9. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
** INSTALL INLET PROTECTION FOR DRAINAGE STRUCTURES WHEN CONSTRUCTED.

INCIDENCE OF NON-COMPLIANCE REPORTING REQUIREMENTS
INCIDENCE OF NON-COMPLIANCE (ION) SHALL BE REPORTED TO THE IEPA ON THE ION FORMS AVAILABLE ON THE IEPA WEB SITE, WWW.EPA.STATE.IL.US AND MAILED TO:
ILLINOIS EPA
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
P.O. BOX 19276
SPRINGFIELD, IL 62794-9276

NOTE:
ALL SLOPED AREAS SHALL BE PROTECTED WITH EROSION CONTROL BLANKETS.

NOTE:
ALL DISTURBED AREAS NOT COVERED WITH A HARD SURFACE SHALL RECEIVE AT LEAST 4" OF TOPSOIL AND SEED AND BLANKET OR SOD.

NOTE
A SIGNED COPY OF THE SWPPP AND NOI MUST BE SENT TO THE IEPA AT LEAST 30 DAYS PRIOR TO THE START OF CONSTRUCTION. A SIGNED COPY MUST ALSO BE KEPT ON-SITE DURING CONSTRUCTION AND A SIGNED COPY MUST BE PROVIDED TO THE VILLAGE OF BUFFALO GROVE FOR THEIR FILES.

Contractor Certification Statement: "I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) General Permit No. ILR-10 that authorizes the storm water discharges associated with activity from the construction site identified as part of this certification."

Contractor

Owner Certification Statement: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Owner

CIVIL ENGINEERS SITE PLANNERS LAND SURVEYORS
NORTHWESTERN ENGINEERING CONSULTANTS, P.C.
675 N. NORTH COURT PALATINE, ILLINOIS 60067 (847) 520-8410
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-002695 EXP. 4-30-25

PRELIMINARY ENGINEERING

STORM WATER POLLUTION PREVENTION PLAN
SELF STORAGE FACILITY
105 LEXINGTON DRIVE
BUFFALO GROVE, ILLINOIS

NO.	DATE	DESCRIPTION
1	4-26-23	REVISED FOR SITE PLAN CHANGES

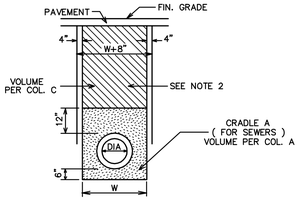
DRAWN BY: KRL
CHECKED BY: DMH
DATE: 4-6-23
SCALE: 1"=30'

DRAWING NO. C-5

JOB NO. 23-10

THE RECEIPT OF ELECTRONIC MEDIA (INFORMATION) BY HERE RECEIVER UNDERSTANDS AND AGREES AS FOLLOWS:
PURSUANT TO ALL OF THE FOLLOWING ENGINEERING DRAWINGS FOR THIS PROJECT MAY BE TRANSMITTED TO THE RECEIVER AS ELECTRONIC CADD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE INFORMATION CONTAINED ON THE CADD FILES. THE CADD FILES SHALL NOT BE USED BY THE RECEIVER FOR ANY PURPOSE OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED AND TRANSFERRED. ANY REUSE OF THE CADD FILES FOR EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT SHALL BE AT THE RECEIVER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE ENGINEER. THE RECEIVER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM FOR WITHHOLD ANY ACTION IN LAW OR EQUITY AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. WHICH MAY ATTEMPT TO HOLD PARTIES OTHER THAN THE RECEIVER RESPONSIBLE FOR ANY MODIFICATIONS MADE TO THIS DATA. ANY PARTY MODIFYING OR REUSING THESE ELECTRONIC CADD FILES FOR ANY PURPOSE OTHER THAN THOSE STATED WITHIN THESE NOTES AGREES, BY SUCH MODIFICATION OR REUSE, TO HOLD NORTHWESTERN ENGINEERING CONSULTANTS, P.C. AND ITS OFFICERS AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY, INCLUDING BUT NOT LIMITED TO, PERSONAL INJURY AND PROPERTY DAMAGE ARISING OUT OF OR RESULTING THEREFROM. NORTHWESTERN ENGINEERING CONSULTANTS, P.C. ALSO RESERVES ITS RIGHTS WITH RESPECT TO ANY REUSE OF THESE ELECTRONIC CADD FILES, INCLUDING WITHOUT LIMITATION ALL COPYRIGHTS AND OTHER INTELLECTUAL PROPERTY INTERESTS IN THESE DATA.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



TRENCH DETAIL AND BACKFILL QUANTITIES

N.T.S.

COND. DIA.	MAX TRENCH WIDTH AT TOP OF COND. (W+8")	PAYMENT QUANTITY/FT. OF COND. COL. A CRADLE C.Y./FT.	COL. C GRANULAR BACKFILL C.Y./FT. OF DEPTH	COL. D GRANULAR BACKFILL TOVER PIPE C.Y./FT.
6"	3'-2"	0.24	0.117	
8"	3'-2"	0.26	0.117	
10"	3'-2"	0.28	0.117	
12"	3'-4"	0.30	0.12	
15"	3'-6"	0.33	0.13	
18"	3'-10"	0.37	0.14	
21"	4'-4"	0.46	0.16	
24"	4'-8"	0.51	0.17	
27"	4'-11"	0.55	0.18	
30"	5'-3"	0.62	0.19	
36"	6'-4"	0.82	0.23	

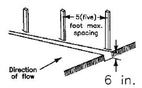
NOTES:

1.) ALL SEWER AND WATER CONSTRUCTION REQUIRES STONE BEDDING, 1/4" TO 1" IN SIZE. THIS BEDDING SHALL BE INSTALLED ACCORDING TO THE CRADLE DIMENSIONS SHOWN ABOVE.

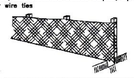
2.) SELECTED GRANULAR BACKFILL SHALL BE USED WHENEVER A TRENCH CROSSES ANOTHER UTILITY, OR UNDER, OR WITHIN 3' OF EXISTING OR PROPOSED PAVEMENT. MATERIAL FOR THE S.G.B. SHALL BE GRAVEL, SAND OR CRUSHED STONE, GRADATION CA-6 AS SPECIFIED IN STATE OF ILLINOIS "STANDARD SPECIFICATIONS".

3.) S.G.B. SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION.

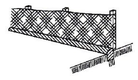
1. Set posts and excavate or slit-trench a 6-inch deep trench upslope along the line of the post



2. Attach the geotextile filter fabric to each post with a minimum of 3 (three) fasteners per post and extend to the bottom of the trench. Acceptable fasteners include staples, zip ties, or wire ties

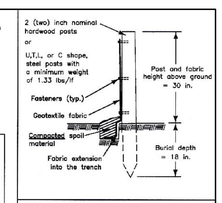


3. Backfill and compact the excavated spoil materials



Geotextile Requirement	Test Method	MARV
Grab strength - Machine direction - X-machine direction	ASTM D 4632	550 N 450 N
Permittivity	ASTM D 4491	0.05 sec-1
Apparent opening size*	ASTM D 4751	0.60 mm
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours

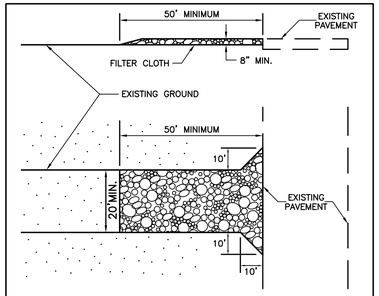
Note: Value for apparent opening size represents maximum average roll value.



LAKE COUNTY
STORMWATER MANAGEMENT COMMISSION

SILT FENCE DETAIL

DATE: 4/21/08 BY: KAW
REVISED: DY:



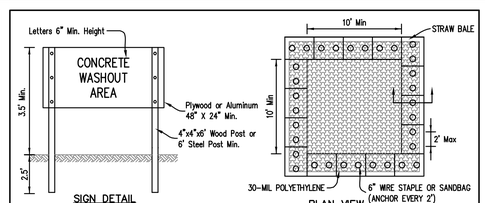
CONSTRUCTION ENTRANCE SPECIFICATIONS

1. STONE SIZE – USE CA-1 STONE.
2. THICKNESS – NOT LESS THAN EIGHT (8) INCHES.
3. FILTER CLOTH – SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAYS MUST BE REMOVED IMMEDIATELY.
5. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

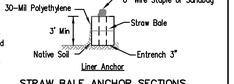
(TEMPORARY)

N.T.S.



NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
3. Each straw bale is to be staked in place using (2) 2"x2"x4' wooden stakes.



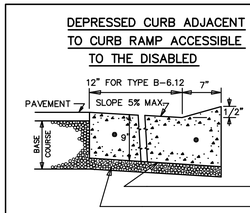
STRAW BALE ANCHOR SECTIONS

No.	Description	Date

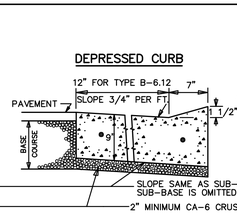
TEMPORARY CONCRETE WASHOUT FACILITY – STRAW BALE

Designed: ____ Date: ____
Drawn B. JOHNSON: 6/08
Checked: ____
Approved: ____

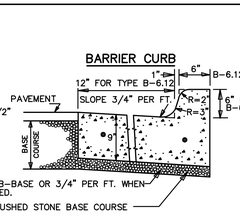
DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



DEPRESSED CURB



BARRIER CURB



SLOPE SAME AS SUB-BASE OR 3/4" PER FT. WHEN SUB-BASE IS OMITTED.

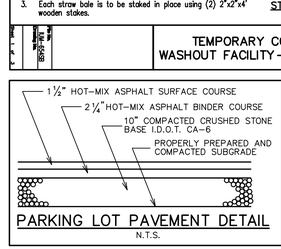
2" MINIMUM CA-6 CRUSHED STONE BASE COURSE

COMBINATION CONCRETE CURB & GUTTER

NOTES FOR CURB:

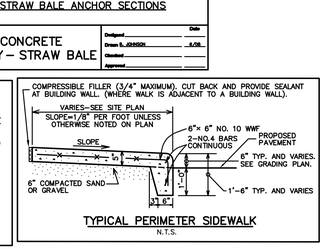
1. PROVIDE 2-#4 BARS (10' LONG) CENTERED OVER EACH UTILITY TRENCH CROSSING.
2. EXP. JTS. AT ENDS OF RETURNS AND 60' INTERVALS, WITH 2-1" DOWELS.
3. CONTRACTION JTS. AT 20' INTERVALS.
4. 1" EXP. JTS. AROUND STRUCTURES IN CURB.
5. COST OF JTS. AND BARS TO BE INCLUDED IN PRICE BID FOR CURB.

NOTE:
THE GUTTER FLAG SHALL SLOPE AWAY FROM THE CURB IN THOSE AREAS WHERE THE GRADING PLAN SHOWS DRAINAGE AWAY FROM THE CURB.



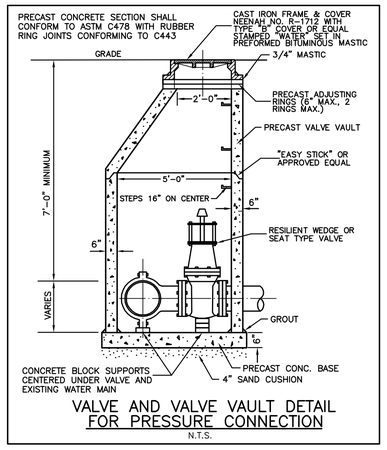
PARKING LOT PAVEMENT DETAIL

N.T.S.



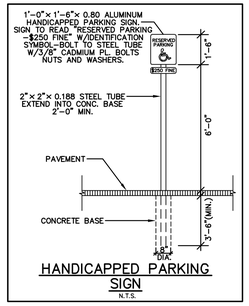
TYPICAL PERIMETER SIDEWALK

N.T.S.



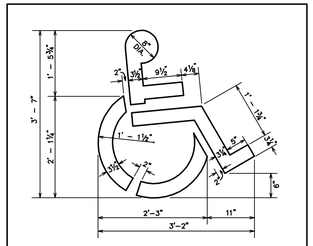
VALVE AND VALVE VAULT DETAIL FOR PRESSURE CONNECTION

N.T.S.



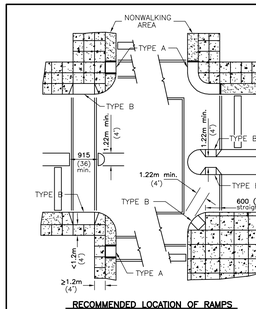
HANDICAPPED PARKING SIGN

N.T.S.

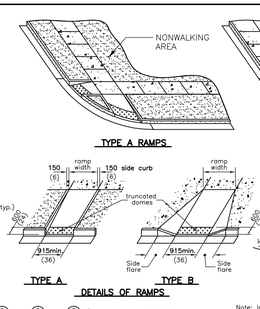


HANDICAP SYMBOL DETAIL

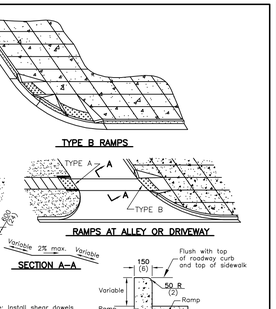
N.T.S.



RECOMMENDED LOCATION OF RAMPS



DETAILS OF RAMPS



Note: Install shear dowels 2'-0" o.c. and keyways to prevent heaving of ramps w/adjacent sidewalk or concrete surface.

SIDEWALK RAMPS ACCESSIBLE TO THE DISABLED

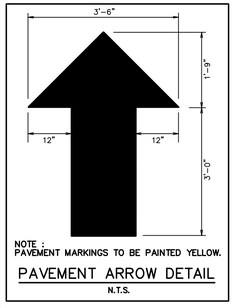
GENERAL NOTES

All ramps shall have 24" deep x 48" wide cast in place truncated dome detectable warning system by ADA Solutions, Inc., part #2448DPAVZ, or equal, in brick red color, install panels in accordance with all manufacturer's recommendations.

The maximum slope of the side flare for Type B ramps shall be 1:10; however, if the width of the landing area between the top of the ramp and an obstruction is less than 1.2 m (4'-0") then the maximum slope shall be 1:12.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

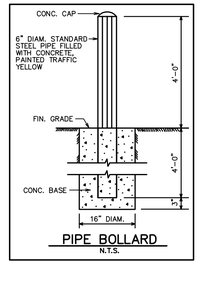
All dimensions are in millimeters (inches) unless otherwise shown.



NOTE :
PAVEMENT MARKINGS TO BE PAINTED YELLOW.

PAVEMENT ARROW DETAIL

N.T.S.



PIPE BOLLARD

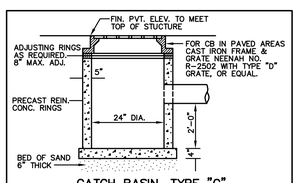
N.T.S.

NOTES :

1. A MAX. OF 6" ADJUSTMENT IS ALLOWED USING A MAX. OF 2 RINGS.
2. BASE SLAB SHALL BE MONOLITHICALLY PRECAST WITH MANHOLE.
3. BEDDING MATERIAL SHALL BE SAND.
4. PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT WATER TIGHT PIPE TO MANHOLE SLEEVES OR SEALS.
5. DIAMETER:
   A.) 4'-0" FOR DOWNSTREAM SEWER SIZES 18" AND LESS.
   B.) 5'-0" FOR DOWNSTREAM SEWER SIZES 21"-42".
6. THE WATERTIGHT RESILIENT CONNECTOR (ASTM C923) SHALL BE PROVIDED FOR CORED OPENINGS BETWEEN MANHOLE AND SEWER PIPES.

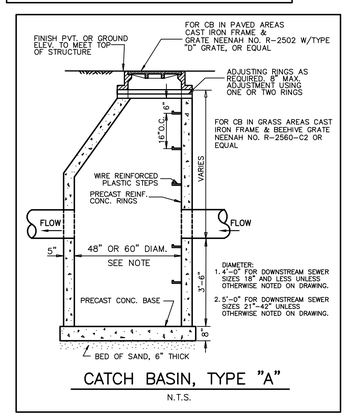
SANITARY MANHOLE

N.T.S.



CATCH BASIN, TYPE "C"

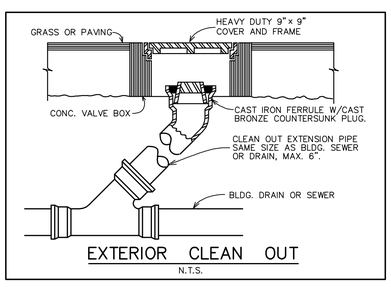
N.T.S.



DIAMETER:
1. 4'-0" FOR DOWNSTREAM SEWER SIZES 18" AND LESS UNLESS OTHERWISE NOTED ON DRAWING.
2. 5'-0" FOR DOWNSTREAM SEWER SIZES 21"-42" UNLESS OTHERWISE NOTED ON DRAWING.

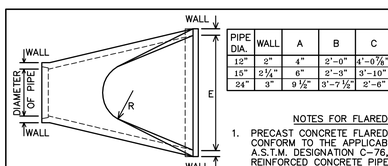
CATCH BASIN, TYPE "A"

N.T.S.



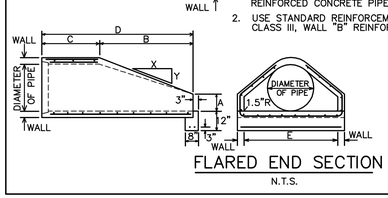
EXTERIOR CLEAN OUT

N.T.S.



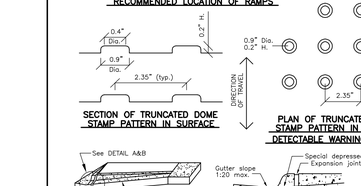
NOTES FOR FLARED END SECTION

1. PRECAST CONCRETE FLARED END SECTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF A.S.T.M. DESIGNATION C-76, CLASS III, WALL "B" REINFORCED CONCRETE PIPE.
2. USE STANDARD REINFORCEMENT FOR CIRCULAR, CLASS III, WALL "B" REINFORCED CONCRETE PIPE.



FLARED END SECTION

N.T.S.



NOTES:

1. THRUST BLOCKS SHALL BE AT ALL TEES AND BENDS OF 11 1/4° AND GREATER.
2. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
3. CONCRETE SHALL BE 3000 PSI (MIN.)

THRUST BLOCKS

N.T.S.

TYPICAL SECTION

THE RECEIVER OF ELECTRONIC DATA ("RECEIVER") BY USE, RECEIPT OR UNDERTAKING ANY ACTIVITY TO TRANSFER ELECTRONIC CAD FILES, THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OR LONG TERM STABILITY OF THE CAD FILES DUE TO DATA CONVERSION, HARDWARE OR SOFTWARE INCOMPATIBILITY OR ANY OTHER CAUSE. THE RECEIVER AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF OR IN CONNECTION WITH THE RECEIPT OR USE OF THE CAD FILES. IN ADDITION, THE RECEIVER AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF OR IN CONNECTION WITH DEFECTS IN THE CAD FILES DUE TO DATA CONVERSION, HARDWARE OR SOFTWARE INCOMPATIBILITY OR ANY OTHER CAUSE DISCOVERED AFTER ACCEPTANCE OF THE CAD FILES. THE RECEIVER AGREES THAT IT SHALL NOT RELY ON THE CAD FILES AS BEING ACCURATE AND SHALL NOT BE MODIFIED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER BY ACCEPTANCE OF THE CAD FILES AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM (OR FILE ANY LAWSUIT) AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY ERRORS OR OMISSIONS IN THE CAD FILES. THE RECEIVER AGREES THAT ALL CAUSES OF ACTION ARISING UNDER THIS AGREEMENT SHALL BE BROUGHT IN A COURT OF COMPETENT JURISDICTION IN LAKE COUNTY, ILLINOIS. THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF ILLINOIS. THE RECEIVER AGREES THAT IN THE EVENT THAT ANY PROVISION OF THIS AGREEMENT IS HELD TO BE INVALID BY ANY COURT OF COMPETENT JURISDICTION, THE INVALIDITY OF SUCH PROVISION SHALL NOT INVALIDATE THE REMAINING PROVISIONS OF THIS AGREEMENT. THE RECEIVER AGREES THAT NORTHWESTERN ENGINEERING CONSULTANTS, P.C. SHALL BE ENTITLED TO AN AWARD OF ATTORNEYS' FEES ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM (OR FILE ANY LAWSUIT) AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY ERRORS OR OMISSIONS IN THE CAD FILES. THE RECEIVER AGREES THAT ALL CAUSES OF ACTION ARISING UNDER THIS AGREEMENT SHALL BE BROUGHT IN A COURT OF COMPETENT JURISDICTION IN LAKE COUNTY, ILLINOIS. THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF ILLINOIS. THE RECEIVER AGREES THAT IN THE EVENT THAT ANY PROVISION OF THIS AGREEMENT IS HELD TO BE INVALID BY ANY COURT OF COMPETENT JURISDICTION, THE INVALIDITY OF SUCH PROVISION SHALL NOT INVALIDATE THE REMAINING PROVISIONS OF THIS AGREEMENT. THE RECEIVER AGREES THAT NORTHWESTERN ENGINEERING CONSULTANTS, P.C. SHALL BE ENTITLED TO AN AWARD OF ATTORNEYS' FEES ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM NOR INITIATE ANY ACTION IN LAW OR EQUITY AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY ERRORS OR OMISSIONS IN THE CAD FILES. THE RECEIVER AGREES TO INDEMNIFY NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF OR IN CONNECTION WITH THE RECEIPT OR USE OF THE CAD FILES. IN ADDITION, THE RECEIVER AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF OR IN CONNECTION WITH DEFECTS IN THE CAD FILES DUE TO DATA CONVERSION, HARDWARE OR SOFTWARE INCOMPATIBILITY OR ANY OTHER CAUSE DISCOVERED AFTER ACCEPTANCE OF THE CAD FILES. THE RECEIVER AGREES THAT IT SHALL NOT RELY ON THE CAD FILES AS BEING ACCURATE AND SHALL NOT BE MODIFIED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER BY ACCEPTANCE OF THE CAD FILES AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM (OR FILE ANY LAWSUIT)

EXHIBIT NO.109
MATERIALS LIST

Date of revision: 1/1/16

Water Distribution Material Specifications:

Water main pipe.	Ductile Iron Pipe. Pipe class thickness—AWWA C150, minimum thickness, Class 52. Pipe—AWWA C151. Pipe lining—AWWA C104. Fittings—AWWA C153. Joints—mechanical and push-on, AWWA C111. Wrap—4 mil. X-Lam conforming to AWWA C105,A21.5 and AWWA C600. No 90 degree bends allowed. All stainless steel trim.
Valves.	American Flow Control, Series 2500 resilient wedge gate valve, All sizes two inch to fourteen inch, counter clockwise to open, AWWA C500., AWWA C504. Clow AWWA C-504 Butterfly Valve for sixteen inch and above. Joint end—mechanical, AWWA C111. All stainless steel trim.
Valve Vault.	All structures shall be monolithically precast with designed openings or mechanically cored in the field and shall have rubber boots conforming to ASTM C-923. Dog house vaults are excluded from these requirements when permitted by Village Engineer. Size: For six and eight inch diameter valves, valve vaults shall have a forty-eight inch inside diameter; for pressure connections and valves ten inches and larger in diameter, valve vaults shall have a sixty inch inside diameter. All valve vault cones must be eccentric centers with valve properly aligned.
Castings.	Neenah No. R-1772, embossed per Exhibit No. 401.
Fire Hydrant.	Waterous Pacer Model WB67-250, AWWA C502, painted fire engine red above ground, with resilient wedge auxiliary gate valve. Nozzles, two at two and one half inch, one at four and one half inch, with threads conforming to National Standard Specifications. Frangible section (breakaway type) with the break line flange located one inch above finished grade. Joint end, six inch, mechanical or push-on. All stainless steel trim. Auxiliary hoses and hydrants shall be a direct flange-to-flange connection.
Fire hydrant extension	Fire hydrant extensions and parts to be manufactured by Waterous only. All stainless steel trim.
Hydrant Valve Box \ Valve boxes	Hydrant Valve Box Tyler 664-S. Lid embossed "WATER." Rubber valve box stabilizer required.
Service Pipe.	Copper tube, two inches and smaller, ASTM B88, Type K (1" minimum). Ductile iron, larger than two inches. Conform to Water main section above. Service upgrade for existing water main requires a stainless steel tap repair clamp. Ford model FS1-CC, minimum length 15" long.
Corporation Stop.	Mueller H15000, 1" minimum, AWWA C800. 1" Direct tap or 1 1/4" and larger shall use Ford FC202 stainless steel band, epoxy coated saddle.
Curb Stop.	Copper service, Mueller H-15154. Ductile iron service, Resilient wedge counter clockwise to open, AWWA C500. Joint end—mechanical, AWWA C111.
Curb box	Copper service, Mueller H-10302. Ductile iron service, conform to Hydrant Valve Box section above. Ductile iron service, 6" and larger, conform to Valve Vault section above.
Copper to Copper Fittings	Mueller Company Model #H-15400. An all flared coupling is required, no sweat joint or compression allowed.
Pressure Connections	Ford FTSS style tapping sleeve. American Flow Control Series 2500 tapping valve four inch minimum. All stainless steel trim.

Sanitary Sewer Material Specifications:

Sewer and Service Connection Pipe	Reinforced concrete pipe—circular reinforcement, minimum Class 3, ASTM C76, with epoxy lining. PVC solid wall (SDR-26H) pipe—ASTM D-3034 for six to fifteen inches in diameter.
Sewer and Service Connection Pipe Joints.	Reinforced concrete pipe—ASTM C443. PVC solid wall (SDR-26H) pipe—ASTM D-3212 for six to eighteen inches in diameter.
Sewer and Service Connection Pipe Fittings	PVC solid wall (SDR-26H) pipe—ASTM D3034 for six to fifteen inches in diameter.
Casing Pipes.	Steel pipe—ASTM A120, three-eighths inch minimum thickness.
Manholes	Size. For sewer eighteen inch diameter or less, manhole shall have a forty-eight inch inside diameter. For sewer twenty-one inch to thirty-six inch diameter, manhole shall have a sixty inch inside diameter. For sewer greater than thirty-six inch diameter, manhole shall have an offset riser pipe of forty-eight inch inside diameter. All structures shall be monolithically precast including bases and invert flow lines.
Castings.	Neenah No. R-1772, with self-sealing lid and recessed pick hole, embossed per Exhibit No. 301.

Storm Sewer System Material Specifications:

Structures.	All structures shall be precast with designed openings or mechanically cored in the field.
Castings.	Closed Lid, Type 1—Neenah No. R-1772, embossed per Exhibit No. 201., Open Lid, Type 1— Neenah No. R-1772, Standard B4.12 or any other barrier curb, Type 11— Neenah No. R-3170 (open curb box) Box height must be 6" minimum with 5° tapers to match curb height., Depressed barrier curb, Type 10— Neenah No. R-3205, Yard inlet, Type 8— Neenah No. R-2579
Sewer Pipe Joints.	Reinforced concrete pipe—ASTM C443 or C361. PVC solid wall (SDR-26H) pipe—ASTM.D-3212 for six to eighteen inches in diameter.
Sump pump service connection pipe/sub surface drain pipe.	4" PVC solid wall sewer pipe SDR-35. Blind connections must be cored in storm sewer and pipe connection shall be made with a rubber boot and stainless steel band. Sump pump per Exhibit No. 202 and underdrain per Exhibit No. 203.

Material Specifications For All Utilities:

Bedding	CA-11, Class B or better. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 90% modified proctor density as required by ASTM.D.1557 or AASHTO T-180. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Trench Backfill	CA-11, Class B or better. This item shall meet the requirements of Class B CA-11, per the IDOT Standard Specifications for Road and Bridge Construction. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 90% modified proctor density as required by ASTM D1557 or AASHTO T-180. Jetting of trenches is not permitted. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Adjustments	No more than two precast concrete adjusting rings with six inch maximum height adjustment shall be allowed, minimum one 2" ring installed on new structures. Only one HDPE ring with a max of 2" may be used within the precast tolerances. Only precast concrete or HDPE adjustment rings permitted. ½" x 3.5" mastic to be used between all frames, rings and structures. Mortar around rings, but none between.

Miscellaneous Material Specifications:

Detectable Warnings	Quick connect plates or bolted plates by Neenah Enterprises, Inc. Color shall be brick red.
Concrete	In accordance with IDOT Standard Specifications for Road and Bridge Construction
Asphalt	In accordance with IDOT Standard Specifications for Road and Bridge Construction and Chapter 16.50.070 of the Village of Buffalo Grove Municipal Code

* The Village Engineer shall have the authority to approve the use of alternative materials than those specifically required by Exhibit 109 in the manner provided for in this Title. The Village Engineer may approve alternative materials that are not specifically required by this title when:

1. The materials or their components required by this title are no longer manufactured and available for purchase; and

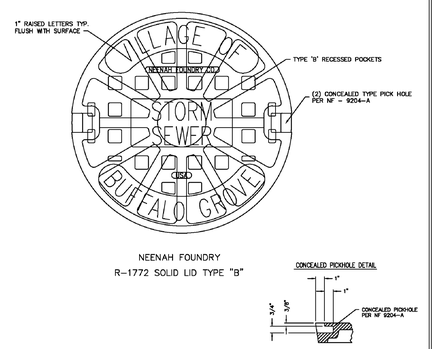
2. The alternative materials are generally consistent with requirements of this title, including but not limited to those standards relating to production, composition, safety and aesthetics.

Testing Specifications:

(In addition to the requirements of IDOT's Standard Specifications for Road and Bridge Construction or the Standard Specifications for Water and Sewer Construction in Illinois)

Storm Sewer	Cleaning and televising, with reporting, as directed by the Village Engineer
Sanitary Sewer	Cleaning and televising, with reporting, as directed by the Village Engineer

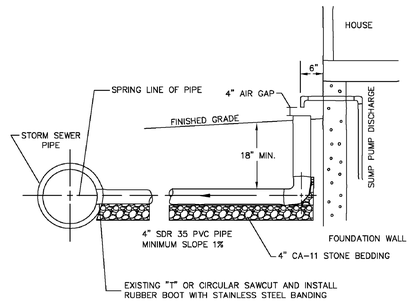
EXHIBIT NO. 201



STORM SEWER MANHOLE LID DETAIL

Prepared by the Village Engineering Division

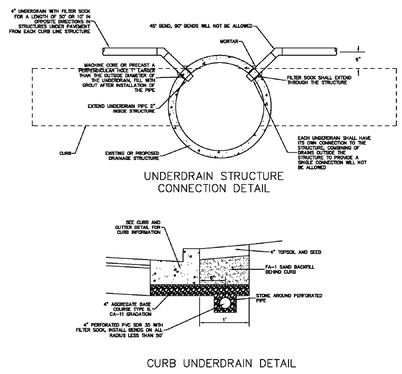
EXHIBIT NO. 202



SUMP PUMP CONNECTION DETAIL

Prepared by the Village Engineering Division

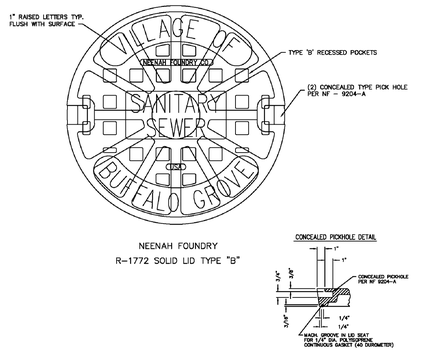
EXHIBIT NO. 203



SUBSURFACE DRAINAGE DETAIL

Prepared by the Village Engineering Division

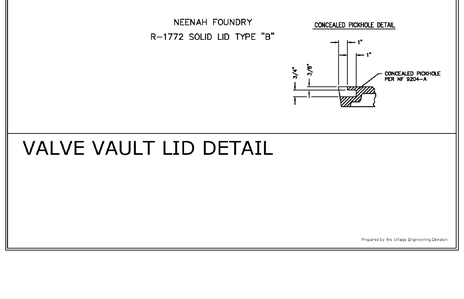
EXHIBIT NO. 301



SANITARY SEWER MANHOLE LID DETAIL

Prepared by the Village Engineering Division

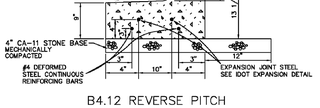
EXHIBIT NO. 401



VALVE VAULT LID DETAIL

Prepared by the Village Engineering Division

EXHIBIT NO. 501



B4.12



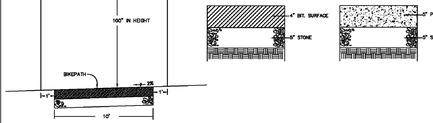
B4.12 REVERSE PITCH

B4.12 CURB AND GUTTER DETAIL

NOTE:
1. SET EXPANSION JOINTS AT ALL PC'S, PT'S, EVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 45' MAX. INTERVALS
2. CONTRACTION JOINTS SHALL BE TOOLED AT 10' INTERVALS AND SAW CUT WITHIN 24 HOURS.
3. JOINTS SHALL BE CLEANED AND SEALED ACCORDING TO ARTICLE 420.12.
4. CURING COMPOUND REQUIRED.
5. IDOT APPROVED CURBS ALSO PERMITTED.

Prepared by the Village Engineering Division

EXHIBIT NO. 502

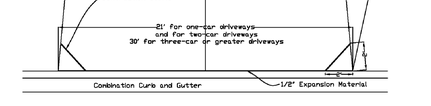


BIKEPATH & SIDEWALK DETAIL

NOTE:
1. AT ALL TRENCH CROSSINGS, 3 – 10' X 3/4" REINFORCING BARS SHALL BE PLACED EQUALLY SPACED AND CENTERED OVER THE TRENCH.
2. CONCRETE THICKNESS SHALL BE 6" AT ALL DRIVEWAYS AND TRENCH CROSSINGS.
3. SET 3/4" EXPANSION JOINTS AT 50' MAX. SPACING INTERVALS.
4. SIDEWALK WIDTH AS SHOWN ON PLANS.
5. CURB RAMPS SHALL COMPLY WITH LATEST ACCESSIBILITY STANDARDS.

Prepared by the Village Engineering Division

EXHIBIT NO. 503



DRIVEWAY APRON DETAIL

NOTE:
1. Contraction joint depth shall be 1–1/4" minimum.
2. Contraction joint shall divide the apron into slabs approximately square with no side longer than 15'.
3. Minimum apron width is 10' at the sidewalk.

Prepared by the Village Engineering Division

CIVIL ENGINEERS SITE PLANNERS LAND SURVEYORS
NORTHWESTERN ENGINEERING CONSULTANTS, P.C.
675 N. NORTH COURT PALATINE, ILLINOIS 60067 (847) 520–8410
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184–002695 EXP. 04–30–25

VILLAGE OF BUFFALO GROVE DETAILS
SELF STORAGE FACILITY
105 LEXINGTON DRIVE
BUFFALO GROVE, ILLINOIS

REVISIONS			
NO.	DATE	DESCRIPTION	

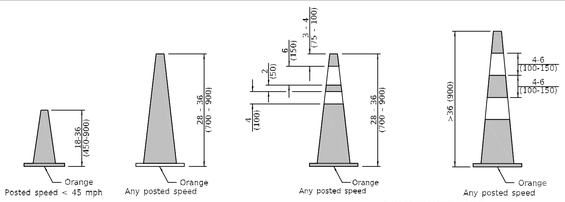
DRAWN BY: KRL
CHECKED BY: DMH
DATE: 4–6–23
SCALE: N.T.S.

DRAWING NO. C–7

JOB NO. 23–10

THE REVISION OF ELECTRONIC DATA TRANSMISSION BY USE THEREOF UNDERSIGNED AND ARISES AS FOLLOWS: PURCHASE OF ALL OF THE CAD DRAWINGS PROVIDED FOR THIS PROJECT MAY BE TRANSMITTED TO THE USER IN ELECTRONIC CAD FILES. THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE CAD FILES. IN THE EVENT OF ANY DISCREPANCY BETWEEN THE CAD FILES AND THE HARD COPY PLANS PREPARED BY THE ENGINEER, THE HARD COPY PLANS SHALL GOVERN. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF TEXT STABILITY IN THE CAD FILES DUE TO DATA CONVERSION AND PLOTTING DIFFERENCES BETWEEN VARIOUS SOFTWARE AND HARDWARE CONFIGURATIONS. ANY REUSE OF THE CAD FILES FOR THE PURPOSE OF PREPARING A SET OF 4 INCH EQUALS 20 FEET PAPER DRAWINGS, DIFFERENTIATE IN ANY WAY FROM THE ENGINEER'S PAPER DRAWINGS FOR THIS PROJECT, OR FOR ANY PURPOSE OTHER THAN THE SOLE PURPOSE OF PREPARING A SET OF 4 INCH EQUALS 20 FEET PAPER DRAWINGS FOR THIS PROJECT, SHALL BE AT THE RECEIVER'S SOLE RISK AND WITHOUT LIABILITY TO THE ENGINEER. THE CAD FILES SHALL NOT BE USED BY THE RECEIVER ON ANY OTHER PROJECT, FOR ANY ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS. THE CAD FILES ARE NOT GUARANTEED AS TO COMPATIBILITY WITH ANY SYSTEM NOT USED BY THE ENGINEER. ANY TRANSFER OF THESE CAD FILES TO THIRD PARTIES SHALL BE SUBJECT TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. THE RECEIVER SHALL NOT REMOVE OR ALTER THE ENGINEER'S PROFESSIONAL SEAL OR TITLE BLOCK FROM THE DRAWINGS OR DOCUMENTS AND ELECTRONIC FILES. THE SHARING OF SEALED HARD-COPY CONSTRUCTION DOCUMENTS SHALL CONFORM TO THE ENGINEER'S POLICY FOR SEALING DOCUMENTS. ANY MODIFICATIONS TO THE CAD FILES SHALL BE CLEARLY AND FULLY DOCUMENTED BY THE PARTY MAKING THE MODIFICATIONS. ANY DISTRIBUTION OF MODIFIED CAD FILES SHALL INCLUDE THE ENTIRE ORIGINAL FILE. ANY UNAUTHORIZED MODIFICATIONS TO THE CAD FILES SHALL BE AT THE SOLE RISK OF THE PARTY MAKING THE MODIFICATIONS AND FOR WHICH THAT PARTY SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND ENGINEER'S CONSULTANTS. ANY TRANSFER OF THESE CAD FILES SHALL NOT BE CONSTRUED AS A SALE OF GOODS UNDER THE UNIFORM COMMERCIAL CODE, BUT SHALL BE CONSIDERED AS THE PROVISION OF SERVICES. ANY REUSE OF THE CAD FILES WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE RECEIVER'S SOLE RISK AND WITHOUT LIABILITY TO THE ENGINEER. THE RECEIVER SHALL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND ENGINEER'S CONSULTANTS FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEY'S FEES, ARISING OUT OF THE UNAUTHORIZED MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM AGAINST NORTHWESTERN ENGINEERING CONSULTANTS, P.C. FOR ANY ERRORS OR OMISSIONS IN THE DATA PROVIDED ON ANY ELECTRONIC MEDIA. THE RECEIVER SHALL BE SOLELY RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THE DATA AFTER ACCEPTANCE. ALL COPYRIGHT AND OTHER INTELLECTUAL PROPERTY INTERESTS IN THIS DATA.

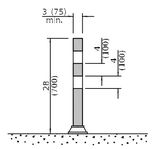
Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)



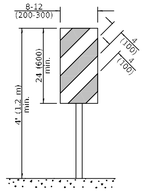
DAYTIME USE

DAY OR NIGHTTIME USE

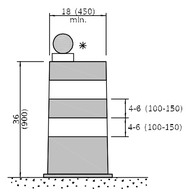
CONES



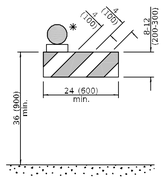
TUBULAR MARKER



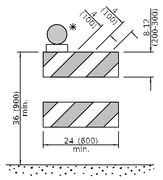
VERTICAL PANEL
FOST MOUNTED



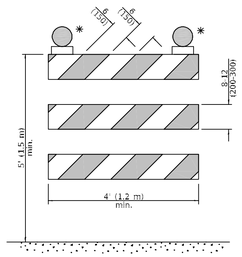
DRUM



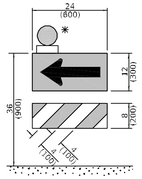
TYPE I BARRICADE



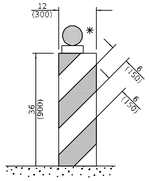
TYPE II BARRICADE



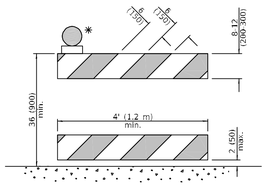
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

✳ Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

All dimensions are in inches (millimeters) unless otherwise shown.

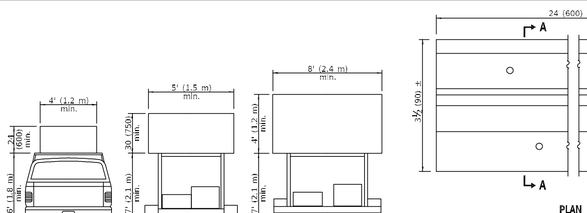
DATE	REVISIONS
1-1-19	Revised cone usage and added cones >36" (900 m) height.
1-1-18	Revised END WORK ZONE SPEED LIMIT sign from orange to white background.

Illinois Department of Transportation
APPROVED January 1, 2019 BUREAU OF TRAFFIC AND ENGINEERING
APPROVED January 1, 2019 BUREAU OF ROAD AND ENVIRONMENT
BDE 613 (REV. 1-1-19)

TRAFFIC CONTROL DEVICES

(Sheet 1 of 3)

STANDARD 701901-08

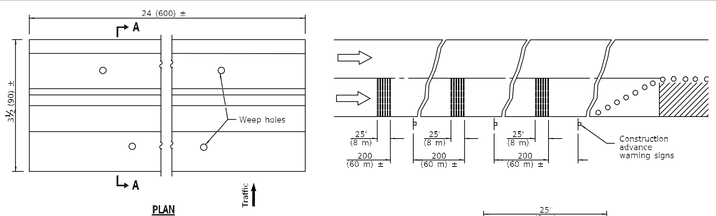


TYPE A ROOF MOUNTED

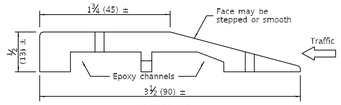
TYPE B ROOF OR TRAILER MOUNTED

TYPE C TRAILER MOUNTED

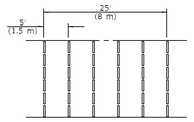
ARROW BOARDS



PLAN

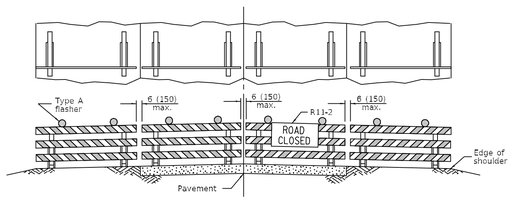


SECTION A-A



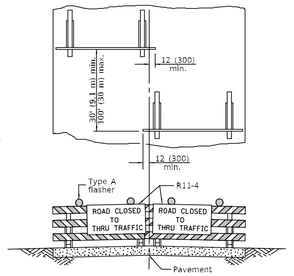
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



ROAD CLOSED TO THRU TRAFFIC

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD

Illinois Department of Transportation
APPROVED January 1, 2019 BUREAU OF TRAFFIC AND ENGINEERING
APPROVED January 1, 2019 BUREAU OF ROAD AND ENVIRONMENT
BDE 613 (REV. 1-1-19)

TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

STANDARD 701901-08

NORTHWESTERN ENGINEERING CONSULTANTS, P.C.
675 N. NORTH COURT PALATINE, ILLINOIS 60067 (847) 520-8410
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-002695 EXPIRES 4-30-2025

IDOT HIGHWAY STANDARDS
SELF STORAGE FACILITY
105 LEXINGTON DRIVE
BUFFALO GROVE, ILLINOIS

NO.	DESCRIPTION	DATE

REVISIONS

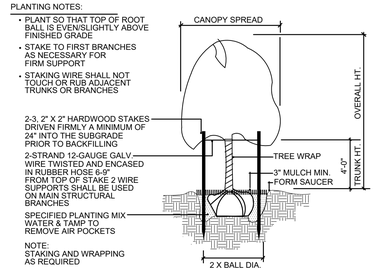
DRAWN BY: KRL
CHECKED BY: DMH
DATE: 4-6-23
SCALE: N.T.S.

DRAWING NO.
C-8

JOB NO.
23-10

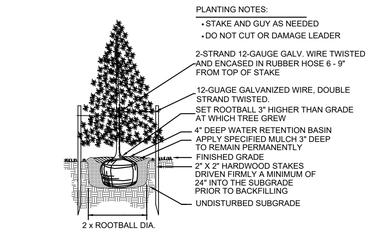
THE RECEIVER OF ELECTRONIC DATA ("RECEIVER") AGREES AND ASSUMES AS FOLLOWS:
THE ELECTRONIC CADD FILES, THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE ELECTRONIC CADD FILES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ELECTRONIC CADD FILES ARE PROVIDED TO THE RECEIVER AS A CONVENIENCE TO THE RECEIVER AND ARE NOT A SUBSTITUTE FOR, NOR ARE THEY TO BE RELIED UPON INSTEAD OF, THE SIGNED AND SEALED HARD-COPY CONSTRUCTION DOCUMENTS PREPARED BY THE ENGINEER. IN THE EVENT OF ANY DISCREPANCY BETWEEN THE ELECTRONIC CADD FILES AND THE SIGNED AND SEALED HARD-COPY CONSTRUCTION DOCUMENTS PREPARED BY THE ENGINEER, THE SIGNED AND SEALED HARD-COPY CONSTRUCTION DOCUMENTS SHALL GOVERN. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF LONG TERM STABILITY OF THE CADD FILES DUE TO UNKNOWN AND UNCONTROLLABLE FACTORS OF FUTURE ALTERATIONS, MODIFICATIONS, CORRUPTION, OR DEGRADATION OF THE CADD FILES DUE TO ENVIRONMENTAL EXPOSURE, AGING, OR USE. THE ELECTRONIC CADD FILES ARE BELIEVED TO BE REASONABLY ACCURATE AND SHALL NOT BE MODIFIED OR TRANSFERRED TO ANY OTHER PARTY WITHOUT PRIOR WRITTEN PERMISSION OF NORTHWESTERN ENGINEERING CONSULTANTS, P.C. THE RECEIVER, BY ACCEPTANCE OF THIS CADD FILES, AGREES TO INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND ENGINEER'S CONSULTANTS FROM ANY AND ALL CLAIMS, LIABILITIES, LOSSES, AND COSTS, INCLUDING BUT NOT LIMITED TO LEGAL FEES AND COSTS ARISING OUT OF OR CONCERNING ANY USE OF THESE ELECTRONIC CADD FILES OR ANY MODIFICATION OR ANY USE OF THESE MATERIALS. THE RECEIVER SHALL MAKE NO CLAIM AND WAIVES ANY CLAIM IT MIGHT HAVE AGAINST THE ENGINEER FOR ANY LOSS, DAMAGE, OR EXPENSE, WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL, AND, TO THE FULLEST EXTENT PERMITTED BY LAW, THE RECEIVER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND ENGINEER'S CONSULTANTS FROM ANY AND ALL CLAIMS, LIABILITIES, LOSSES, AND COSTS, INCLUDING BUT NOT LIMITED TO LEGAL FEES AND COSTS ARISING OUT OF OR CONCERNING THE RECEIVER'S USE OF THE ELECTRONIC CADD FILES,

PLANTING DETAILS



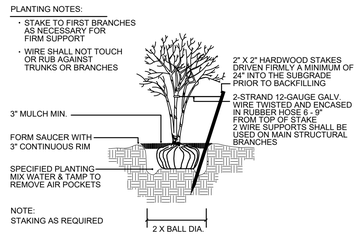
TREE PLANTING & STAKING

NOT TO SCALE



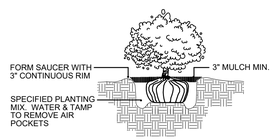
EVERGREEN TREE PLANTING

NOT TO SCALE



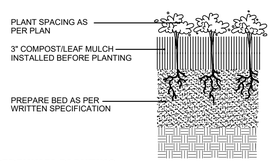
MULTI-TRUNK TREE STAKING

NOT TO SCALE



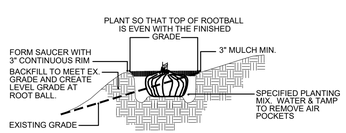
SHRUB PLANTING

NOT TO SCALE



PERENNIAL PLANTING

NOT TO SCALE



HILLSIDE PLANTING

NOT TO SCALE

NOTES - GENERAL LANDSCAPE

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE STANDARDS AND CODES.
2. CALL J.U.L.I.E. UTILITY LOCATING SERVICE (TEL 800.892.0123), 48 HOURS PRIOR TO THE START OF ANY DIGGING.
3. GENERAL PLANT NOTES:
   A. ALL PLANT MATERIAL SHALL CONFORM IN SIZE AND GRADE IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK.
   B. ALL PLANT MATERIAL SHALL BE MAINTAINED ALIVE, HEALTHY, AND FREE FROM DISEASE AND PESTS.
   C. ALL NEW PLANT MATERIAL SHALL BE FROM A LOCAL SOURCE WHENEVER POSSIBLE (LESS THAN 50 MILES).
   D. PLANTS SHALL BE ALLOWED TO GROW IN THEIR NATURAL FORM / HABIT. PLANTS SHALL NOT BE PRUNED/HEDGED UNLESS ABSOLUTELY NECESSARY (DUE TO VISIBILITY OR HAZARD OBSTRUCTION).
   E. ALL LANDSCAPED AREAS SHALL BE FREE OF WEEDS, LITTER, AND SIMILAR SIGNS OF DEFERRED MAINTENANCE.
4. LOCATIONS OF PROPOSED PLANT MATERIAL MAY BE ADJUSTED AT TIME OF INSTALLATION DUE TO FINAL ENGINEERING AND FINAL LOCATION OF SITE UTILITIES.
5. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SPREADING TOPSOIL (6"-12" DEEP), FINE GRADING, AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS. ALL SOILS SHALL BE FREE OF CONSTRUCTION DEBRIS, PRIOR TO INSTALLING ANY PLANT MATERIAL.
6. PRIOR TO SPREADING TOPSOIL, THE LANDSCAPE CONTRACTOR SHALL INSPECT AND ACCEPT ALL BASE GRADES. ANY DEVIATION FROM GRADES INDICATED ON THE GRADING PLAN SHALL BE CORRECTED BEFORE PLACING ANY TOPSOIL.
7. ALL SHRUB, GROUNDCOVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE PREPARED WITH A SOIL AMENDMENT MIX - 1/3 TOPSOIL, 1/3 MUSHROOM COMPOST, AND 1/3 TORPEDO SAND. MATERIAL SHALL BE ROTO-TILLED JUST PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
8. ALL PLANTING ISLANDS SHALL BE MOUNDED TO PROVIDE POSITIVE DRAINAGE.
9. ALL PLANTING BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SPADED EDGE BORDER, UNLESS METAL OR OTHER BORDER IS SPECIFIED.
10. ALL PLANTING BED AREAS SHALL MAINTAIN A MAX. 3" DEEP LAYER OF SHREDDED HARDWOOD MULCH (COLOR: NON-DYED, BROWN).
11. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING SCHEDULE WITH LANDSCAPE MAINTENANCE CONTRACTOR, TO ENSURE PROPER WATERING OF PLANTED AND SODDED AREAS AFTER INITIAL INSTALLATION.
12. LANDSCAPE CONTRACTOR SHALL COORDINATE WORK WITH OTHER CONTRACTORS ON SITE TO MINIMIZE ANY REDO OF COMPLETED LANDSCAPE WORK AND DAMAGE TO PLANT MATERIAL.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN LAYOUT WORK. UPON REQUEST, LANDSCAPE ARCHITECT SHALL BE AVAILABLE TO ASSIST/APPROVE CONTRACTOR LAYOUT.
14. EVERY ATTEMPT HAS BEEN MADE TO DEPICT ALL EXISTING UTILITY LINES. CONTRACTOR SHALL USE PRECAUTION WHEN DIGGING. CONTRACTOR SHALL MAKE THEMSELVES THOROUGHLY FAMILIAR WITH ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY DIGGING, VERIFYING LOCATIONS AND DEPTHS OF ALL UTILITIES.
15. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BID SUBMITTAL, TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
16. PLANT LIST QUANTITIES PROVIDED AT TIME OF FINAL PLANS ARE APPROXIMATIONS. CONTRACTORS ARE RESPONSIBLE FOR COMPLETING THEIR OWN QUANTITY TAKE-OFFS. IF A DISCREPANCY IS FOUND BETWEEN THE PLAN AND THE PLANT LIST, THEN THE PLAN SHALL PREVAIL.
17. PLANT SUBSTITUTIONS ARE ALLOWED DUE TO PLANT AVAILABILITY OR PLANTING TIME OF YEAR, ONLY WITH THE PRIOR CONSENT OF THE LANDSCAPE ARCHITECT. IF SUBSTITUTIONS ARE MADE WITHOUT PRIOR CONSENT, THE LANDSCAPE ARCHITECT MAINTAINS THE RIGHT TO REJECT MATERIAL IN THE FIELD, AT THE COST TO THE CONTRACTOR.
18. CONTRACTOR TO PROVIDE TEST OF EXISTING AND IMPORTED SOILS PER SPECIFICATIONS. PLANTING SOIL SHALL BE AMENDED PER SPECIFICATIONS.
19. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AREAS OF POOR DRAINAGE OR OTHER UNUSUAL SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING PITS.
20. ALL TURF SHALL SHALL BE KENTUCKY BLUEGRASS BLEND SOD (MINERAL, NOT PEAT), PER VILLAGE, SEED IS NOT ALLOWED.
21. CONTRACTOR SHALL RESTORE LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO FORM A SMOOTH, FULL, EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
22. LANDSCAPE DETAILS SHOWN ARE FOR DESIGN INTENT ONLY. LANDSCAPE ARCHITECT ASSUMES NO LIABILITY. CONTRACTOR IS RESPONSIBLE FOR ERECTING AND INSTALLING PROPERLY BUILT AMENITIES PER CODE, PER SITE CONDITIONS (FINAL GRADING & UTILITY LOCATIONS), AND PER AREA CLIMATE CONDITIONS. ALL LANDSCAPE SITE DETAILS FOR STRUCTURES AND FOOTINGS SHALL BE REVIEWED & APPROVED BY A STRUCTURAL ENGINEER.
23. CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A ONE-YEAR WARRANTY ON ALL PLANT MATERIAL, IN PERPETUITY.
24. (IF APPLICABLE) CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A THREE-YEAR MONITORING AND MAINTENANCE PROGRAM ON ALL NATURALIZED DETENTION AREAS.

PROJECT TEAM

DEVELOPER:
BUFFALO GROVE STORAGE, LLC.
2121 W. WALTON STREET
CHICAGO, IL 60622
TEL (815) 417-4550

CONTACT: JIM LAPETINA

ARCHITECT:
ARCHITECTS' STUDIO
257 N. WEST AVENUE, SUITE 100
ELMHURST, IL 60126
TEL (630) 617-5990

CONTACT: JEFF BUDGELL

CIVIL ENGINEER:
NORTHWESTERN ENGINEERING CONSULTANTS
675 N. NORTH COURT, SUITE 160
PALATINE, IL 60067
TEL (847) 520-8410

CONTACT: DAN HAVLIR

LANDSCAPE ARCHITECT:
DICKSON DESIGN STUDIO, INC.
9 CRYSTAL LAKE ROAD, SUITE 110
LAKE IN THE HILLS, IL 60156
TEL (224) 241-8181

CONTACT: SHARON DICKSON / JEFF TORRENS

SHEET INDEX

L0.1 PROJECT TEAM
GENERAL LANDSCAPE NOTES
PLANTING DETAILS

L1.0 LANDSCAPE PLAN
PLANT & MATERIALS LIST

dickson design
STUDIO
9 CRYSTAL LAKE ROAD
SUITE 110
LAKE IN THE HILLS, IL 60156
(224) 241 8181

CLIENT NAME AND ADDRESS

BUFFALO GROVE STORAGE, LLC
2121 W. WALTON STREET
CHICAGO, IL

PLAN DATE

MARCH 16, 2023

REVISIONS

1.	03/24/23 PER STAFF COMMENTS
2.	04/27/23 PER SITE PLAN (DET. ADDED & BLDG ENLARGED)
3.	05/23/23 CIVIL & ARCH UPDATE
4.	06/26/23 SOUTH STRIP ISLANDS PER STAFF COMMENTS
5.	
6.	
7.	
8.	
9.	
10.	

PROJECT NAME AND SHEET TITLE

BUFFALO GROVE SELF STORAGE
105 LEXINGTON DRIVE
BUFFALO GROVE, IL

PRELIMINARY LANDSCAPE PLAN

SHEET NUMBER

L0.1

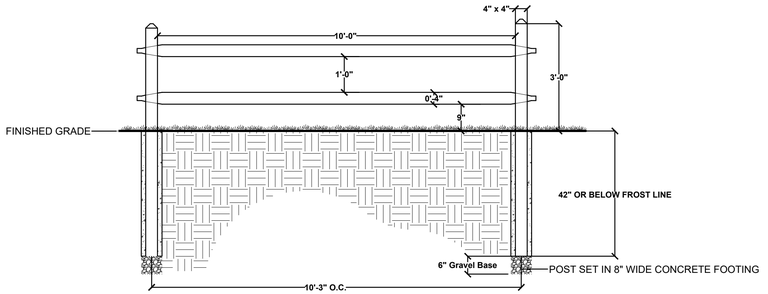
Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

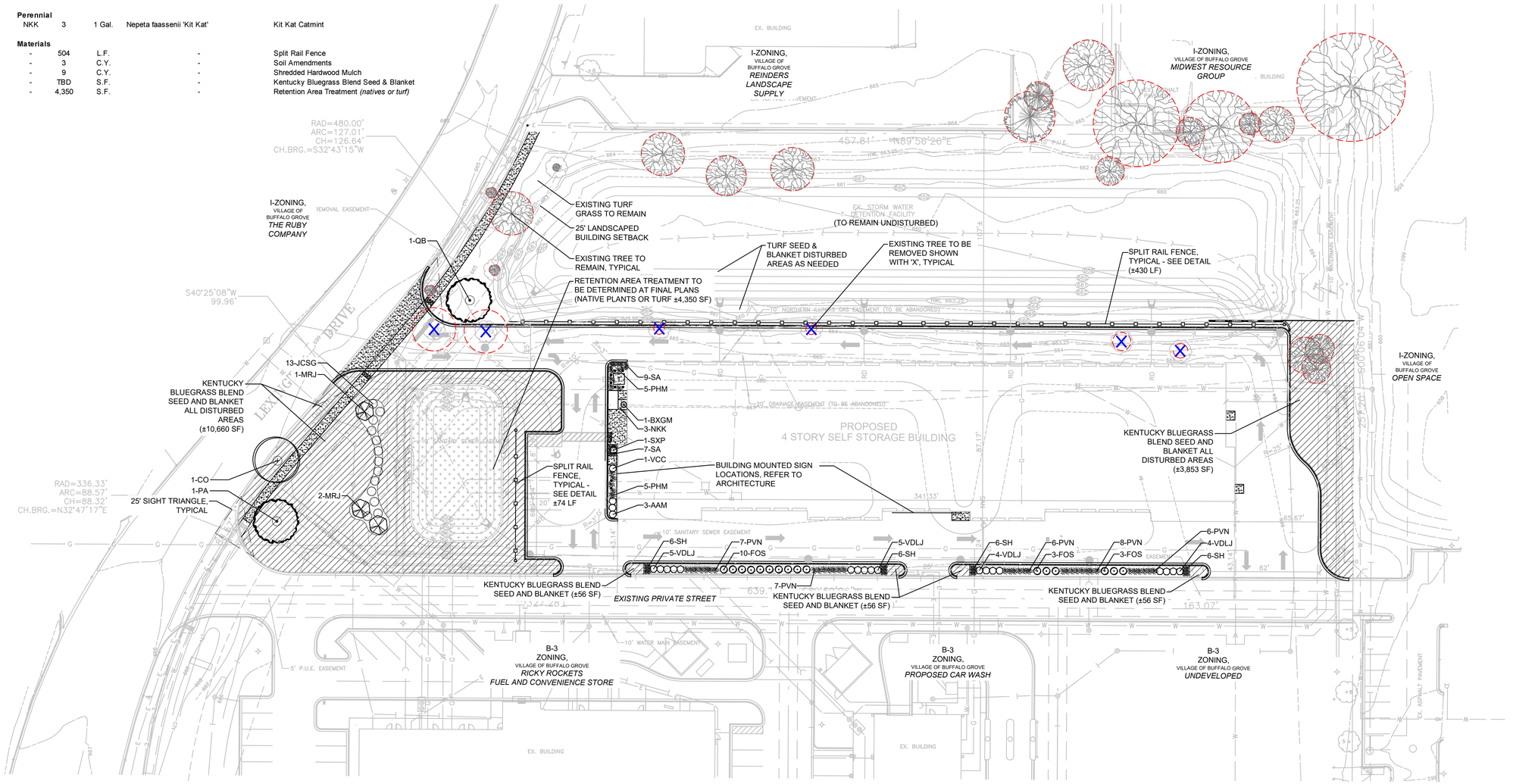
PLANT & MATERIALS LIST

CODE	QTY	SIZE	BOTANIC NAME	COMMON NAME
Shade Trees				
CO	1	2.5" caliper	Celtis occidentalis	Hackberry
PA	1	2.5" caliper	Platanus acerifolia 'Morton Circle'	Exclamation London Planetree
QB	1	2.5" caliper	Quercus bicolor	Swamp White Oak
Ornamental Trees				
MRJ	3	6' high	Malus x 'Red Jewel'	Red Jewel Flowering Crabapple
Evergreen Shrubs				
JCSG	13	3 Gal./24"	Juniperus chinensis 'Sea Green'	Sea Green Juniper
BXGM	1	42" high	Buxus x 'Green Mountain'	Green Mountain Boxwood
Large Deciduous Shrubs				
AAM	3	36" high	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry
FOS	16	36" high	Forsythia ovata 'Sunrise'	Sunrise Early Forsythia
VDLJ	18	36" high	Viburnum dentatum 'KLMseventeen'	Little Joe Arrowwood Viburnum
SXP	1	36" high	Syringa x 'Penda'	Bloomerang Lilac
VC	1	36" high	Viburnum carlesii	Koreanspice Viburnum
Ornamental Grasses				
PHM	10	3 Gal.	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass
PVN	38	3 Gal.	Panicum virgatum 'Northwind'	Northwind Switch Grass
SH	24	1 Gal.	Sporobolus heterolepsis	Prairie Dropseed
SA	13	1 Gal.	Sesleria autumnalis	Autumn Moor Grass
Perennial				
NKK	3	1 Gal.	Nepeta faassenii 'Kit Kat'	Kit Kat Catmint
Materials				
-	504	L.F.	-	Split Rail Fence
-	3	C.Y.	-	Soil Amendments
-	9	C.Y.	-	Shredded Hardwood Mulch
-	TBD	S.F.	-	Kentucky Bluegrass Blend Seed & Blanket
-	4,350	S.F.	-	Retention Area Treatment *(natives or turf)*

DETAIL: SPLIT RAIL FENCE

SCALE: 1/2" = 1'-0"





TREE PRESERVATION & REMOVAL AND PROPOSED LANDSCAPE PLAN

SCALE: 1" = 30'-0"

NORTH

0 15' 30' 60'

dickson design STUDIO
9 CRYSTAL LAKE ROAD
SUITE 110
LAKE IN THE HILLS, IL 60156
(224) 241 8181

CLIENT NAME AND ADDRESS

BUFFALO GROVE STORAGE, LLC
2121 W. WALTON STREET
CHICAGO, IL

PLAN DATE

MARCH 16, 2023

REVISIONS

1.	03/24/23 PER STAFF COMMENTS
2.	04/27/23 PER SITE PLAN (DET. ADDED & BLDG ENLARGED)
3.	05/23/23 CIVIL & ARCH UPDATE
4.	06/26/23 SOUTH STRIP ISLANDS PER STAFF COMMENTS
5.	
6.	
7.	
8.	
9.	
10.	

PROJECT NAME AND SHEET TITLE

BUFFALO GROVE SELF STORAGE
105 LEXINGTON DRIVE
BUFFALO GROVE, IL

PRELIMINARY LANDSCAPE PLAN

SHEET NUMBER

L1.0

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

47'-4"

5'-6"

4'-4½"

Extra Space Storage®

Qty. 1 set

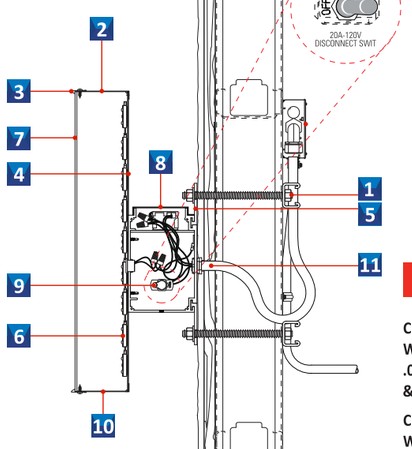
DISCONNECT SWITCHES AT RIGHT END OF ALL RACEWAYS

260 SF

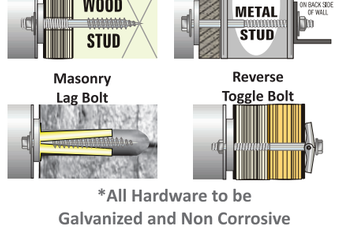
SPECIFICATION

1. NON-CORROSIVE INSTALLATION HARDWARE: GALVANIZED - 3/8˝ MASONRY ANCHORS
2. 5" FABRICATED ALUMINUM LETTER RETURNS SEE MFG. NOTE FOR GAUGE. GLOSS BLACK PAINT INTERIOR WITH LIGHT ENHANCING PAINT
3. TRIM CAP RETAINER METALLIC SILVER
4. FLAT ALUMINUM BACK
5. ¼" THICK METAL FLAT BAR FOR A SECURE INSTALLATION
6. US LED SV3-3-12-W
7. 3/16" #7328 ACRYLIC FACE WHITE WITH 1ST SURFACE TRANSLUCENT & PERFORATED VINYL AS SHOWN
8. LOW VOLTAGE ELECTRONIC POWER SUPPLY MOUNTED IN 7¼" X 4½" EXTRUDED .050 ALUM. RACEWAY SUPPORT/WIRING BOX PAINTED T.B.D.
9. VISIBLE CUT-OFF SWITCH WITH FLIP-UP COVER
10. ¼" WEEP HOLES (2) TWO PER LETTER
11. GROUNDED WALL PASS-THRU SEALED WATER TIGHT. WHIP ON LEFT SIDE.

SECTION DETAIL



MOUNTING DETAILS



*All Hardware to be Galvanized and Non Corrosive

COLOR SCHEDULE

GREEN	#2500-106 BRILLIANT
GREY	METALLIC SILVER TRIMCAP
BLACK	PMS BLACK #2500-022
WHITE	

ELECTRICAL REQUIREMENT

L.E.D.	"USLED" WHITE L.E.D. MODULES
POWER SUPPLY	24V "ADVANCE" POWER SUPPLY
AMPS	0.79A
CIRCUITS	(1) 20A-120V
DISCONNECT	(1) 20A-120V

MANUFACTURING NOTES

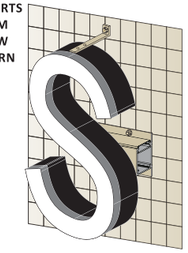
CHANNEL LETTER SETS SMALLER THAN 48" WILL BE CONSTRUCTED USING .040 ALUMINUM RETURNS & .063 ALUMINUM BACKS

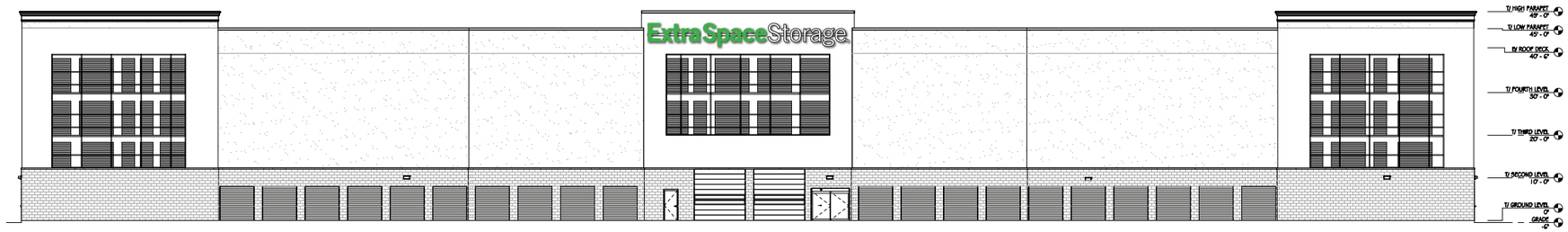
CHANNEL LETTER SETS 48"-71" WILL BE CONSTRUCTED USING .063 ALUMINUM RETURNS & .090 ALUMINUM BACKS

REGISTRATION MARK TO BE BLACK VINYL ON ALUMINUM TAB ATTACHED TO BACK OF "e" CHANNEL LETTER.

BRACING DETAIL

WHEN NEEDED SUPPORTS TO BE .090" ALUMINUM PAINTED TO MATCH RW POP-RIVITED TO RETURN (FACING UP TO HIDE FROM SIGHT)





4 A2.2 PRELIMINARY SOUTH ELEVATION (FRONT)
SCALE: 1/32" = 1'-0"

Customer is responsible for bringing sufficient power to the location(s) of illuminated signage.

"This Document is owned by, and the information contained in it is proprietary to, Parvin-Clauss Sign Company. By receipt hereof the holder agrees not to use the information, disclose it to any third party, nor reproduce this document without the prior written consent of Parvin-Clauss Sign Company. Holder also agrees to immediately return this document upon request of Parvin-Clauss Sign Company."

© Copyright 2023 by Parvin-Clauss Sign Co.

Parvin-Clauss SIGN COMPANY

Design ▪ Fabrication ▪ Installation ▪ Maintenance

165 Tubeway Drive ▪ Carol Stream ▪ Illinois 60188
Tel/630-510-2020 ▪ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

DESIGN BUILD STORAGE

Extra Space Storage
105 Lexington Drive
Buffalo Grove, IL 60089

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / KZ

DRAWN BY: Bill Marlow

DATE: 5.09.23

SCALE: 1/4" = 1'

SHEET NO.: 1 of 2

ESTIMATE / JOB NUMBER: 12304

FILE NAME: DBS12304

REVISIONS:

1 5.24.23
2 7.05.23 - O.A.H.
3
4
5
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

26'-4"

3'-1"

2'-5"

Extra Space Storage®

81 SF

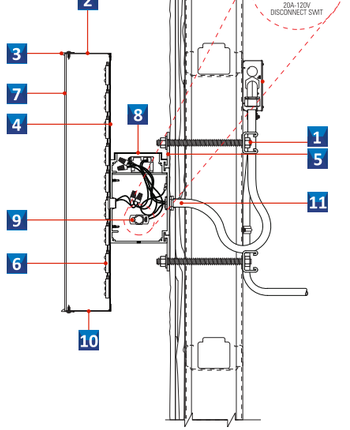
Qty. 1 set

DISCONNECT SWITCHES AT RIGHT END OF ALL RACEWAYS

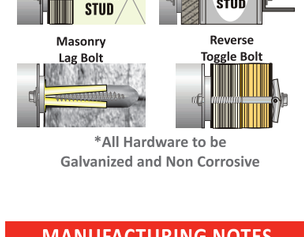
SPECIFICATION

1. NON-CORROSIVE INSTALLATION HARDWARE: GALVANIZED - 3/8 MASONRY ANCHORS
2. 5" FABRICATED ALUMINUM LETTER RETURNS SEE MFG. NOTE FOR GAUGE. GLOSS BLACK PAINT INTERIOR WITH LIGHT ENHANCING PAINT
3. TRIM CAP RETAINER METALLIC SILVER
4. FLAT ALUMINUM BACK
5. ¼" THICK METAL FLAT BAR FOR A SECURE INSTALLATION
6. US LED SV3-3-12-W
7. 3/16" #7328 ACRYLIC FACE WHITE WITH 1ST SURFACE TRANSLUCENT & PERFORATED VINYL AS SHOWN
8. LOW VOLTAGE ELECTRONIC POWER SUPPLY MOUNTED IN 7¼" X 4½" EXTRUDED .050 ALUM. RACEWAY SUPPORT/WIRING BOX PAINTED T.B.D.
9. VISIBLE CUT-OFF SWITCH WITH FLIP-UP COVER
10. ¼" WEEP HOLES (2) TWO PER LETTER
11. GROUNDED WALL PASS-THRU SEALED WATER TIGHT. WHIP ON LEFT SIDE.

SECTION DETAIL



MOUNTING DETAILS



*All Hardware to be Galvanized and Non Corrosive

COLOR SCHEDULE

GREEN	#2500-106 BRILLIANT
GREY	METALLIC SILVER TRIMCAP
BLACK	PMS BLACK #2500-022
WHITE	

ELECTRICAL REQUIREMENT

L.E.D.	"USLED" WHITE L.E.D. MODULES
POWER SUPPLY	24V "ADVANCE" POWER SUPPLY
AMPS	0.79A
CIRCUITS	(1) 20A-120V
DISCONNECT	(1) 20A-120V

MANUFACTURING NOTES

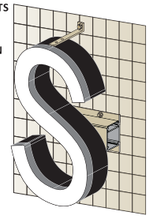
CHANNEL LETTER SETS SMALLER THAN 48" WILL BE CONSTRUCTED USING .040 ALUMINUM RETURNS & .063 ALUMINUM BACKS

CHANNEL LETTER SETS 48"-71" WILL BE CONSTRUCTED USING .063 ALUMINUM RETURNS & .090 ALUMINUM BACKS

REGISTRATION MARK TO BE BLACK VINYL ON ALUMINUM TAB ATTACHED TO BACK OF "e" CHANNEL LETTER.

BRACING DETAIL

WHEN NEEDED SUPPORTS TO BE .090" ALUMINUM PAINTED TO MATCH RW POP-RIVITED TO RETURN (FACING UP TO HIDE FROM SIGHT)





1 A-2.2 PRELIMINARY WEST ELEVATION

SCALE: 1/16" = 1'-0"

Customer is responsible for bringing sufficient power to the location(s) of illuminated signage.

"This Document is owned by, and the information contained in it is proprietary to, Parvin-Clauss Sign Company. By receipt hereof the holder agrees not to use the information, disclose it to any third party, nor reproduce this document without the prior written consent of Parvin-Clauss Sign Company. Holder also agrees to immediately return this document upon request of Parvin-Clauss Sign Company." © Copyright 2023 by Parvin-Clauss Sign Co.

Parvin-Clauss SIGN COMPANY
Design ▪ Fabrication ▪ Installation ▪ Maintenance
165TubewayDrive▪CarolStream▪Illinois60188
Tel/630-510-2020 ▪ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

DESIGN BUILD STORAGE

Extra Space Storage
105 Lexington Drive
Buffalo Grove, IL 60089

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / KZ

DRAWN BY: Bill Marlow

DATE: 5.09.23

SCALE: 1/2" = 1'

SHEET NO.: 2 of 2

ESTIMATE / JOB NUMBER: 12304

FILE NAME: DBS12304

REVISIONS:

1 5.24.23 - size
2 7.05.23
3
4
5
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

Luminaire list (Site 1)								
Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Light loss factor	Connected load	Quantity
1				1x	11398 lm	0.80	82.2 W	22

#	Name	Parameter	Min	Max	Average	Min/average	Min/max
1	Calculation surface 3	Perpendicular illuminance	0.000 lx	193 lx	1.00 lx	0.00	0.00



Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

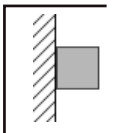
AMBERT

BR

DESCRIPTION

Specification grade architectural LED wallpack replacement for up to 250 watt HPS/ MH. Long life and low energy consumption utilizing CREE LED make this an exceptional value for exterior wall/entrance illumination. Low cost and easy to install.





ORDERING INFORMATION

Model	Watts	Lumen	Optic	Color Temp.	CRI	Optional	Finis
LI-WMK80XYZ	80	9240	A = 80x100	1 = 3000K 2 = 4000K 3 = 5000K	80	1 = Dimmable 2 = Occupancy Sensor 3 = Photocell	B

Ordering Example:
LI-WMK80XYZ-80-A-1-1-BR

Project name:

www.ledindustriesusa.com

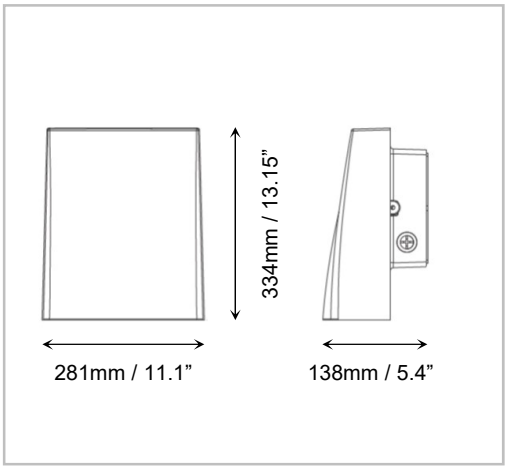
Tel.: 800 784 0698
13450 FM 529
Houston, TX 77041

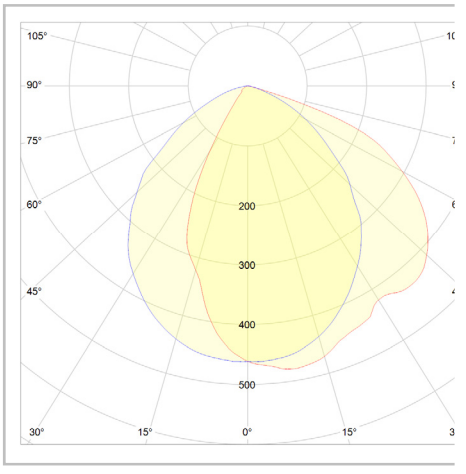
Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

AMBERT

BR

- Material: Die-cast aluminum housing with power coated color. No mercury and cool to the touch. High conductive, waterproof, aging resistance, salt mist resistance ,Make sure the safety and long lifetime. Tempered, borosilicate, UV & Fire resistant high output glass lens with seamless, silicone gasket to prevent leaks.
- Led type: CREE LED'S.
- Electrical: 120～ 277Vac, 50/60Hz Driver included.
- Power factor: ≥90%
- Led efficiency: 150 lm/W
- Color temperature: 3000K, 4000K, 5000K
- Operation temperature: -20°C to 40°C
- Color Rendering Index (CRI): ≥ 80
- THD%: < 20%
- IP Rating: IP65





Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

Project name:

www.ledindustriesusa.com

Tel.: 800 784 0698
13450 FM 529
Houston, TX 77041

architects' studio

May 15, 2023

Nicole Woods, AICP
Director of Community Development
Village of Buffalo Grove
50 Raupp Boulevard
Buffalo Grove, IL 60089
NWoods@VBG.org

RE: 105 Lexington Drove
Development Application
Planned Unit Development Standards – Response

PLANNED UNIT DEVELOPMENT STANDARDS

In addition to the special use standards, all planned unit developments shall meet the following general standards:

1. Have the minimum areas as ser forth in Section 17.16.060.
   Response:
   The minimum areas as set forth in Section 17.16.060 are met or are varied in this application.

2. The uses permitted in such development are not of such a nature or so located as to exercise an under detrimental influence or effect upon the surrounding neighborhood:
   Response:
   The proposed use of this PUD will not present a detrimental influence or effect upon the surrounding neighborhood. This project will complete the redevelopment of the four-lot Bluestone subdivision with a benign, neighborhood friendly use that provides a service to the neighborhood and offers minimal noise and traffic to the neighborhood and will act as a buffer between the more congested commercial uses to the south and the lighter commercial uses to the north and the residential uses to the NW.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

3. The plan effectively treats the developmental possibilities of the subject property, making appropriate provisions for the preservation of streams, wooded areas, scenic views, floodplain areas, and similar physical features.
   Response:
   All required provisions will be made with respect to the preservation of streams, wooded areas, scenic views, floodplain areas, and other similar features. All stormwater is being handled onsite in compliance with all codes and ordinances.

4. All requirements pertaining to commercial, residential, institutional or other uses established in the planned unit development conform to the requirements for each individual classification as established elsewhere in this Title, except as may be specifically varied for the proper planning of the planned unit development;
   Response:
   All requirements pertaining to Commercial uses as established in the PUD will conform to the requirements for Commercial use as established elsewhere in this Title except as is specifically varied for the proper planning of this PUD.

5. The Planning and Zoning Commission shall determine that the area and width of the lot shall be sufficient for the proposed use, and that the development of the property in the proposed manner creates no outlots which will be difficult to develop in an appropriate manner.
   Response:
   Development of this project creates no outlots.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

architects' studio

May 15, 2023

Nicole Woods, AICP
Director of Community Development
Village of Buffalo Grove
50 Raupp Boulevard
Buffalo Grove, IL 60089
NWoods@VBG.org

RE: 105 Lexington Drove
Development Application
Special Use Standards – Response

17.28.040 Criteria for Special Use.

A. All special uses shall meet the following criteria:
   1. The special use will serve the public convenience at the location of the subject property; or the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, or general welfare; **Approval of this Special Use Request will serve the public convenience at the location of the subject property by providing a service to residents that is in demand and currently underserved in this area. All the users of this facility will be local residents and business owners.**
   2. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with said special use, the size of the subject property in relation to such special use, and the location of the site with respect to streets giving access to it shall be such that it will be in harmony with the appropriate, orderly development of the district in which it is located; **The shape of this site, long and narrow, presents a hardship for any development. The use as a climate controlled self-storage facility, given the very low customer trips and lack of heavy material deliveries as would be common for other commercial uses, offers a buffer between the heavier commercial uses to the south and the less intense commercial uses to the north and the residential to the north-west.**

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

3. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning district, nor substantially diminish and impair other property valuations with the neighborhood;
   This use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning district because this use is quite possibly the lowest intensity use as there could be. This facility will have one or possibly two overlapping employees, There are no toxic, smelly processes, and on a busy day there may be 6-8 or t-10 customer visits. Additionally, most loading and unloading is done inside the building.
4. The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder or discourage the development and use of adjacent land and buildings in accord with the zoning district within which they lie;
   The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder, or discourage the development and use of adjacent land and building in accord with the zoning district within which they lie because the proposed use is as benign a use as could possibly be proposed. Additionally, this is the last parcel to develop in the immediate commercially zoned district within which the subject parcel lies.
5. Adequate utilities, access roads, drainage, and/or other necessary facilities have been or will be provided;
   All necessary utilities exist at the site and can adequately serve the proposed development. With 6 to 8 or 10 customer visits on a busy day the surrounding access roads are adequate to handle this facility. The impact on adjacent roads will be insignificant. Drainage has / will be provided for per all applicable codes and ordinances. Access to internal loading and unloading will be from a private road that runs along the south property line.
6. Parking areas shall be of adequate size for the particular special use, which areas shall be properly located and suitably screened from adjoining residential uses, and the entrance and exit driveways to and from these parking areas shall be designed so as to prevent traffic hazards, eliminate nuisance and minimize traffic congestion in the public streets;
   The minimal required parking for this facility will be constructed per Buffalo Grove codes and ordinances and screened per the Buffalo Grove landscaping ordinance.

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

B. The special use shall in all other respects conform to the applicable regulations of the zoning district in which it is located, except as such regulations may be varied. Notwithstanding the foregoing, business planned unit developments shall conform with Section 17.44.040 (D) unless varied.

C. The Planning and Zoning Commission may recommend and the Corporate Authorities my impose such conditions and restrictions upon the subject property, the location, the construction and design of buildings and use of the property benefited by such special use as may be necessary or appropriate to comply with the foregoing criteria.

D. Notwithstanding Chapter 17.52, the Planning and zoning Commission my recommend and the Corporate Authorities may vary the regulations of the zoning district in which the special use is located subject to the general objectives of Section 17.28.050(A)(1)-(3), except for planned unit developments which shall meet the general objectives of Section 17.28.050(A)(1)-(7).

(Ord. 2004-100 & 2,2004)
(Ord. No. 2014-43, & 21, 6-16-2014)

Attachment: Plan Set (Self-Storage Development - 105 Lexington Drive)

Action Item : Petition to the Village of Buffalo Grove for an Amendment to Ordinance 2009-15, Which Adopted the "Village Comprehensive Plan Update 2009" for the Dundee Road TIF Area to Have a Mixed-Use Future Land Designation Including Commercial, Office, Residential, Civic/Cultural, and Public Uses

Recommendation of Action

Village staff recommends approval of the amendment to the Comprehensive Plan.

The Village is currently in the process of establishing the Dundee Road Tax Increment Financing District. The Village kicked off this process in February 2023 and is holding the public hearing for the TIF District on July 17, 2023. To achieve alignment with the Dundee Road TIF District?s Redevelopment Plan, an amendment to the existing Comprehensive Plan is being proposed. The proposed amendment is to designate mixed-use as the future land use for the Dundee Road TIF District area.

The Planning & Zoning Commission (PZC) shall open the public hearing and take public testimony. The PZC shall make a recommendation to the Village Board concerning the request for the Comprehensive Plan amendment.

ATTACHMENTS:

- Staff Report (DOCX)

Trustee Liaison	**Staff Contact**
Village Manager Bragg, Weidenfeld	Kelly Purvis, Community Development

Wednesday, July 19, 2023	

VILLAGE OF BUFFALO GROVE
PLANNING & ZONING COMMISSION
STAFF REPORT

MEETING DATE:	July 19, 2023
SUBJECT PROPERTY LOCATION:	Dundee Road TIF District Area
PETITIONER:	Village of Buffalo Grove
PREPARED BY:	Kelly Purvis, Deputy Director of Community Development
REQUEST:	Petition to the Village of Buffalo Grove for an amendment to Ordinance 2009-15, which adopted the "Village Comprehensive Plan Update 2009" for the Dundee Road TIF area to have a mixed-use future land designation including Commercial, Office, Residential, Civic/Cultural, and Public uses as outlined in the Dundee Road Tax Increment Financing District Eligibility Report and Redevelopment Plan and Project.
EXSITING LAND USE AND ZONING:	The area for which the amendment is requested, currently includes the following uses: Commercial, Office, Vacant, and Public (school); and the following zoning designations: B-1, B-3, B-4, R-E, and R-1.
COMPREHENSIVE PLAN:	The 2009 Village Comprehensive Plan calls for this area to be a variety of uses including Commercial, Office, Public/Semi-Public, Parks/Open Space.

The Village is currently in the process of establishing the Dundee Road Tax Increment Financing District. The Village kicked off this process in February 2023 and is holding the public hearing for the TIF District on July 17, 2023. To achieve alignment with the Dundee Road Tax Increment Financing District's Redevelopment Plan, an amendment to the existing Comprehensive Plan is being proposed.

Comprehensive Plans are long-term (15-20 year) frameworks and guides for communities. They are meant to be flexible and adaptable to changing conditions and a municipality can choose to update its plan or a part of its plan at any time to match the local needs, interests, or opportunities. The Village's current Comprehensive Plan was adopted in 2009. The Lake Cook Corridor Market Study and Plan and the Prairie View Metra Station Area Plan were approved as an amended element to the Comprehensive Plan in 2018 and 2019, respectively.

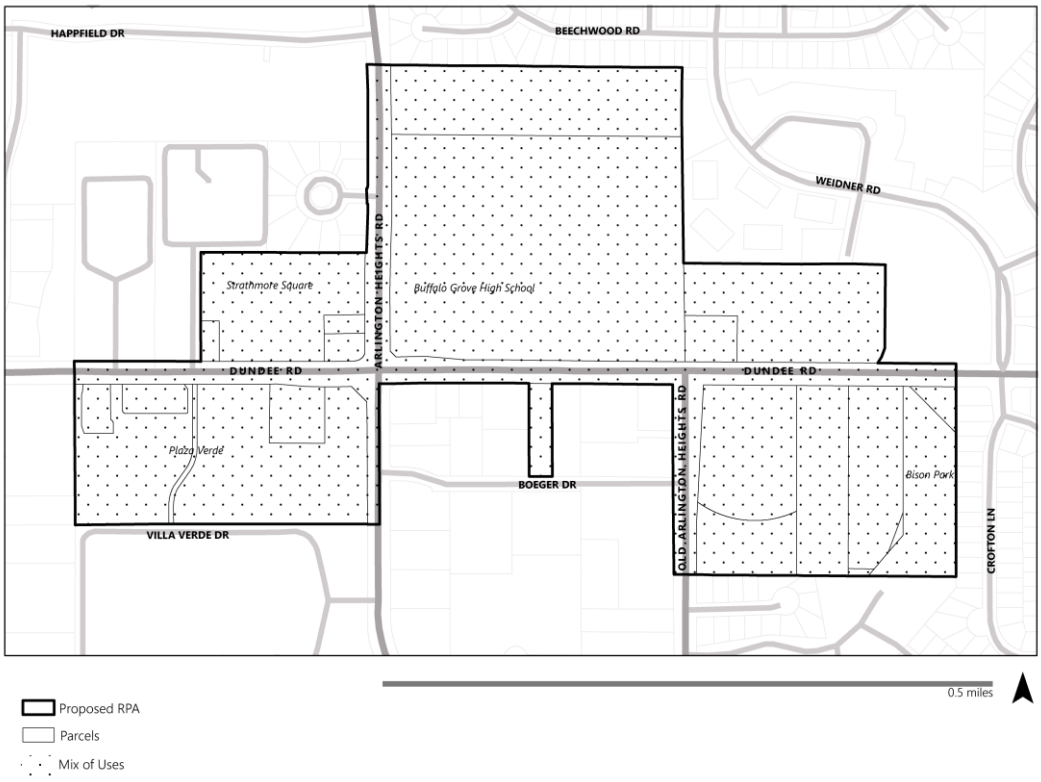
The proposed amendment is to designate mixed-use as the future land use for the Dundee Road TIF District area. This area, which is shown below in Exhibit 1 below, extends east-west along Dundee Road with most parcels adjacent to two intersections: Dundee Road and Arlington Heights Road, and Dundee Road and Old Arlington Heights Road. As outlined in the Dundee Road Tax Increment Financing District

Attachment: Staff Report (Comp Plan Amendment - Dundee Road TIF)

Eligibility Report and Redevelopment Plan and Project, the mixed-use designation would allow for the following uses:

- Commercial
- Office
- Residential
- Civic/Cultural
- Public

Exhibit 1. Proposed Future Land Use for the Dundee Road TIF District Area



It should be noted that Village staff is currently working on a new Comprehensive Plan for the Village, which takes a deeper dive into the Dundee and Milwaukee Corridors. The new comprehensive plan will ensure alignment with the Dundee Road Tax Increment Financing District's Redevelopment Plan.

Such action was not necessary with the 2020 Lake Cook Corridor Tax Increment Finance District as the TIF District was aligned with the future land uses of the Comprehensive Plan via the adoption of the Lake Cook Corridor Market Study and Plan as an element and amendment to the Comprehensive Plan.

STAFF RECOMMENDATION

Staff recommends approval of an amendment to Ordinance No. 2009-15, which adopted the "Village Comprehensive Plan Update 2009", for the Dundee Road TIF area to have a mixed-use future land use designation including Commercial, Office, Residential, Civic/Cultural, and Public uses as outlined in the Dundee Road Tax Increment Financing District Eligibility Report and Redevelopment Plan and Project.

Attachment: Staff Report (Comp Plan Amendment - Dundee Road TIF)

ACTION REQUESTED

The Planning & Zoning Commission (PZC) shall open the public hearing and take public testimony. The PZC shall make a recommendation to the Village Board concerning the request for the Comprehensive Plan amendment.

Suggested PZC Motion:

The PZC recommends approval of an amendment to Ordinance No. 2009-15, which adopted the "Village Comprehensive Plan Update 2009", for the Dundee Road TIF area to have future land use designation of mixed-use including Commercial, Office, Residential, Civic/Cultural, and Public uses as outlined in the Dundee Road Tax Increment Financing District Eligibility Report and Redevelopment Plan and Project.

Attachment: Staff Report (Comp Plan Amendment - Dundee Road TIF)

MINUTES OF THE REGULAR MEETING OF THE PLANNING AND ZONING COMMISSION OF THE VILLAGE OF BUFFALO GROVE HELD IN THE COUNCIL CHAMBERS, 50 RAUPP BOULEVARD, BUFFALO GROVE, ILLINOIS ON WEDNESDAY, JUNE 21, 2023

Call to Order

The meeting was called to order at 7:30 PM by Commissioner Mitchell Weinstein

Public Hearings/Items For Consideration - None

Regular Meeting

Other Matters for Discussion

1. Comprehensive Plan Reengagement - Staff Will Facilitate a Discussion with the PZC Regarding the Reengagement of the Community in the Comprehensive Planning Process (Trustee Weidenfeld) (Staff Contact: Kelly Purvis)

Purvis, Deputy Community Development Director, gave a presentation on the reengagement of the Buffalo Grove Comprehensive Plan, specifically the reason for updating the existing conditions report, taking the project in-house, and the project timeline.

Purvis provided the commissioners with a worksheet that included questions about the community including the strengths, issues, and overall vision of the Village as well as the Dundee and Milwaukee Corridors.

All the Commissioners took time completing the worksheet.

Purvis reviewed the questions one by one and gathered their responses.

The Commissioners spoke about the potential uses of both corridors and what they may look like 10-20 years down the road.

When asked about the strengths of the community, Commissioner Moodhe started off the conversation.

Com. Moodhe expressed diversity as a strength and a reoccurring desire amongst the community. Additionally, he mentioned the stability and reliability of village governance.

Com. Worlikar expressed the Villages schools as a strength and a draw to the community.

Com. Spunt expressed great village services as a strength to the community along with activities for families and children.

Minutes Acceptance: Minutes of Jun 21, 2023 7:30 PM (Approval of Minutes)

Com. Davis expressed diversity and the growing population within our geographic area.

Com. Richards mentioned the park district services as a great strength along with their programs and the greenspace that allows people to be active outdoors. Additionally, he mentioned the fiscal responsibility.

Chairperson Weinstein expressed that residents of Buffalo Grove tend to stay for a long time, which goes along with the aging population. Additionally, he added comments he had heard during a steering committee where developers expressed the ease of working with the village for development as a strength.

Com. Saxena expressed the village does a great job at providing the essentials, whether it is grocery, medical, recreation and more.

Overall, the commissioners expressed the strengths of the Dundee Corridor include its contiguous land, traffic density, housing density, the location of BG High School, and its potential for mixed use development and overall growth.

When asked about the strengths of the Milwaukee Corridor, the commissioners expressed high traffic area, good access, potential to work with surrounding communities, and the potential for businesses to be located in the corridor (restaurant, entertainment, services, offices).

When asked about the issues facing the community, Commissioner Spunt started off the conversation.

Com. Spunt expressed the number of lanes on major roads as an issue – there are not enough lanes to handle more traffic that may come.

Com. Worlikar expressed the need for more room at the schools. Additionally, he mentioned improved public transportation as a need for the future.

Com. Saxena expressed the need to scale village services to keep pace with anticipated growth.

Com. Weinstein expressed the need for affordable housing and rising property taxes as issues.

Com. Moodhe expressed additional connectivity in these corridors which may become more high density in years to come. He also mentioned more public transportation.

Com. Davis expressed the need for more things to do that keep you within the boundaries of the village in addition to the great residential areas.

Minutes Acceptance: Minutes of Jun 21, 2023 7:30 PM (Approval of Minutes)

Com. Richards expressed the need for more business in buffalo grove so that we have more visitors coming in to work.

Overall, when asked about the issues facing Dundee Corridor, commissioners mentioned the dilapidated dealerships, safety of the road conditions in the winter, odd lot sizes, and property assemblage.

When asked about the issues facing the Milwaukee Corridor, commissioners mentioned the ownership/rights of land/property along the corridor as well as floodplain issues, lack of development, and too many gas stations.

When asked what their vision would be for the future of the community, Com. Moodhe started off the conversation.

Com. Moodhe expressed the desire for a strong mix or residential and a mix of various businesses.

Com. Spunt expressed the desire for a good comprehensive plan to help guide the community like we have been doing.

Com. Worlikar expressed the desire for a community identity. Additionally, he mentioned the desire for expanded community services such as parks, schools, and programs.

Com. Richards expressed the desire for intentional technology readiness such as solar and EV. Additionally, creating e-services for the community.

Com. Saxena expressed the desire for services for the aging population.

When asked about the vision for the Dundee Corridor, overall, the commissioners expressed the desire for a high-density area with mixed uses, and total revitalization of the area. Additionally, the possibility of creating an entertainment district and playing off the traffic that moves through the area.

When asked about the vision for the Milwaukee Corridor, overall, the commissioners expressed the desire for a strong retail corridor, business districts/employment opportunities, more restaurants, and creating an identity for the corridor itself.

Lastly, Purvis asked the commissioners is their thoughts, ideas and/or vision of the community, Dundee Corridor or Milwaukee Corridor have changed over the past 3 years. Commissioner Moodhe started off the conversation.

Minutes Acceptance: Minutes of Jun 21, 2023 7:30 PM (Approval of Minutes)

Com. Moodhe said that in the past he would not have said there was a need for high density and mixed use areas, but now he would like to see more of that.

Com. Spunt spoke to the changes that are occurring around us that have played into his thoughts, ideas and or vision of the community and the corridors.

Com. Davis spoke to diversity and the need for a community identity.

Com. Weinstein said he would like us to identify our strengths and build off them as our foundation for creating the plan. Additionally, creating fast casual places for those who now work in a hybrid environment who are looking for those types of restaurants.

Com. Worlikar talked about office space verses the hybrid work environment post-covid. How will the labor market drive our development and how can we be flexible as the market changes.

Com. Saxena spoke to the labor market and keeping a pulse on industry treads.

Purvis concluded the discussion by presenting the next steps in the reengagement of the comprehensive plan.

Approval of Minutes

1. Planning and Zoning Commission - Regular Meeting - May 17, 2023 7:30 PM

RESULT:	**ACCEPTED [6 TO 0]**
AYES:	Moodhe, Spunt, Weinstein, Richards, Worlikar, Davis
ABSTAIN:	Sujat Sazen
ABSENT:	Zill Khan, Amy Au

Chairman's Report

Chairperson Weinstein congratulated Com. Saxena for joining the commission and congratulated Com. Richards on his appointment to vise chairperson.

Committee and Liaison Reports

Com. Richards provided the liaison report for the last Village Board meeting.

Staff Report/Future Agenda Schedule

Purvis provided the commission with updates including the resignation of Com. Khan from the Planning and Zoning Commission and future agenda items.

Public Comments and Questions

Minutes Acceptance: Minutes of Jun 21, 2023 7:30 PM (Approval of Minutes)

Adjournment

The meeting was adjourned at 9:23 PM

Action Items

Kelly Purvis

APPROVED BY ME THIS 21st DAY OF June, 2023

Minutes Acceptance: Minutes of Jun 21, 2023 7:30 PM (Approval of Minutes)