Development Site: 725-747 North Milwaukee Avenue / 126-140 Lake Street
Applicant: Libertyville Land LLC
As amended – February 28, 2025

VILLAGE OF LIBERTYVILLE
LAND USE APPLICATION
PLANNED DEVELOPMENT + SPECIAL USE

SUPPLEMENTAL PROJECT NARRATIVE

The Applicant – *Libertyville Land LLC,* is seeking a *Planned Development*[1], in conjunction with two Special *Use Permits*[2], which – if approved, will allow for the construction and occupancy of a new multi-unit/multi-family residential building with accessory improvements to be located at the property commonly known as and comprising 725-747 North Milwaukee Avenue / 126-140 Lake Street, Libertyville, Illinois ("subject property" or "site"). The subject property is generally bounded by Brainerd Avenue (west), Lake Street (south), Milwaukee Avenue (east) and the Libertyville Metra Station (north). Accordingly, the new proposed building will encompass the northeast corner / intersection of Lake & Brainerd.

The subject property carries a *C-1 Downtown Core Commercial District* classification yet is situated outside of the *Libertyville Historic District*. The subject property represents and is comprised of 97,481 square feet of total "Site Area", which is to be sub-divided into individual Parcels A, B, and C, as further described herein. Parcel A (66,306 square feet) will most generally and relevantly involve the proposed new multi-unit residential development, the principal building (with underground garage) for which will represent approximately 137,000 square feet of total floor area.[3] Parcel B (14,046 square feet) will be held and maintained for a future phase of development, not included in the current proposal. Parcel C (14,372 square feet) will serve as a new internal drive, with parallel surface parking, that will functionally connect the development site to Milwaukee Avenue, while providing unencumbered vehicular access and circulation through and around the site. *[*The Applicant will be reusing the existing access point/curb-cut off of Milwaukee Avenue, but restricting movements in and out of the same in an effort to improve traffic conditions at and around the site.*]

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[1] The current C-1 zoning designation establishes generalized *Bulk & Density Standards* controlling standard developments. The Libertyville Zoning Code provides for supplemental *Planned Development* review and approval, to allow the relaxation of otherwise substantive standards and limitations, so to encourage and permit more significant developments. The proposed development contemplates moderated deviations to the following *B&D Standards*: density (minimum lot area per unit), height, off-street parking and loading.

[2] The current C-1 zoning designation allows for *residential* developments – by right, when such development is anchored by a *commercial* use (on the ground floor), while "all residential" developments are allowed pursuant to a *Special Use Permit*. Furthermore, no "use" located in the C-1 *Downtown Core Commercial District* is permitted to occupy more than 10,000 square feet of any building, without obtaining a *Special Use* permit.

[3] The allowable FAR for the C-1 zoning district is 3.0. The new building, as designed, has an FAR of +/- 2.0, less than the maximum allowed. The Applicant is seeking a *Special Use* permit to allow for the *residential use* to occupy more than 10,000 square feet of floor area within the new proposed four-story multi-family building.

The programming for the proposed development calls for the erection of a new four-story building, with an underground (lower level) parking garage below grade. The building, as rendered, will measure 62 feet in height (*to the top of the rooftop access stair structure*). Due to significant grading inconsistencies affecting the site, the building will "appear" lower along the south side (Lake Street), in consideration of the closest residential improvements.

The new building will be primarily rendered in masonry, with a reinforced concrete foundation and steel column-beam supports at the lower parking level. The above-grade floors will be supported by non-combustible load bearing exterior walls, along with load bearing wood stud interior walls, and wood truss floor/ceiling assemblies. The 4th floor will be rendered in a mansard style, with dormers and a metal standing seam to reflect the traditional character of the neighborhood.

As already briefly described, the new building will introduce a total of ninety-one (91) new rental housing units into the community. The 1st floor will contain twenty-three (23) units, with the 2nd and 3rd floors each containing twenty-four (24) units – as represented by a mix of one-bedroom and two-bedroom units[4], all with private balconies.[5] The 4th floor is conscientiously inset five feet (5'-0") from the lower floors, with a standing seam mansard roof style. The 4th floor[6] will contain twenty (20) units - similarly representing a mix of one-bedroom and two-bedroom units, all with private walkout terraces. The units will range in size according to functionality and modality – averaged and anticipated, as follows: one-bedroom units at 720 square feet; two-bedroom units at 1,050 square feet and two-bedroom plus den units at 1,200 square feet.

Accessory features of the proposed new development include a new landscaped surface parking lot along the north end of the site, in addition to an internal garage below the building. The lower-level garage[7] contains a total of eighty-five (85) vehicular parking spaces, which includes four (4) ADA spaces (with access aisle). Secured parking and designated storage for at least twenty-eight (28) bicycles will also be provided within the lower level. The garage is accessed by two interior stairs, as well as by two elevators, which similarly serve every upper floor of the building. Exterior doors provide direct pedestrian access to the outside from the garage, while two overhead garage doors accommodate vehicular access through the corresponding surface parking lot off of Brainerd Avenue and the new internal access drive. The outdoor parking lot will boast an additional twenty-nine (29) vehicular spaces, which includes two (2) ADA spaces, with low-emission affixed lighting to enhance safety and for the convenience of residents and pedestrians.

[4] 27 one-bedroom units + 64 two-bedroom units = 91 total units.
[5] 1st-3rd Floors = 27,100 gross square feet per floor (footprint).
[6] 4th Floor = 20,500 gross square feet (footprint).
[7] Below ground garage = 35,200 gross square feet

In sum, therefore, the new development will offer off-street parking accommodations for at least 114 vehicles (1.25 ratio),[8] with the interior parking specifically reserved for residents and the outdoor parking retained for visitors and unanticipated tenant over-flow/demand. [9]

Utilities, including a designated electrical and water room, are located at the lower level, as well as a trash & recycling center for residents.

The afore-mentioned "internal drive" will bisect the site – laterally (east-west) at the north end, with access and circulation to the west from Milwaukee Avenue and to the east through the internal surface parking on to Brainerd Avenue. A secondary outlet will extend to the north, providing access to the Metra parking lot. The programming for the new residential complex also calls for the provision of an off-street u-shaped loading zone at the front of the building – directly accessible from Brainerd Avenue, which is intended and designed to accommodate rideshare and delivery drop-off and pickup for residents of the new development and their guests.[10]

A new outdoor courtyard space will also be introduced at the front of the building, providing a communal oasis for residents and enriching the pedestrian experience along Brainerd Avenue. Of additional attraction and relevance, a new landscaped pedestrian path will be installed along the east side of the building, running the entire length of the site, thereby providing a safer pedestrian route from Lake Street to the Metra Station that may be enjoyed by tenants of the building and other local residents and visitors, alike. Accordingly, above and beyond the physical improvements, the new development will feature 27,282 square feet of functional and ornamental "open space", which greatly exceeds the minimum amount of open space required by Ordinance.[11]

The Applicant – *Libertyville Land LLC*, is under contract to purchase the property, with the intent and desire to introduce transit- served multi-family housing amongst Libertyville's historic single-family dominated neighborhoods and within immediate proximity to the Metra train station and the bustling downtown commercial corridor, thereby expanding the footprint and accessibility of downtown Libertyville.

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[8] Pursuant to Section 26-10-1.2 of the Zoning Ordinance, a minimum of 169 off-street parking spaces are required to serve the proposed new development, (1.85 ratio), with a reduction in such minimum baseline requirement offered as an allowed "deviation" for transit served locations and based on actual corroborated parking demand / utilization.

[9] Additional parking demand data tracked for other comparable suburban developments is being tendered to the Village's Planning Division as a supplement to and in further support of the subject land use applications and is further summarized in the corresponding *Special Use Standards* and Applicant's responses to the *Development Review Committee Report* (dated November 18, 2024). In sum, all such occupied and operating developments examined and comprising the parking demand study yield an average parking utilization ratio of at or LESS than one to one (1:1).

[10] *A professional "Traffic Impact Study" has been completed for the new development to consider potential effects the development may have on the existing traffic conditions. Such *Study* is part of the public record for this Land Use Application.

[11] Pursuant to Section 26-16-13.5(b)(5) of the Zoning Ordinance, the project is required to maintain a minimum 19,892 square feet of open space, which is 6,480 square feet less open space than that provided for the new development.

Working in tandem with and represented by - *Space Architects & Planners* (Architects & Designers) and *Gozdecki, Del Guidice, Americus & Brocato LLP* (Zoning & Land Use Counsel), the Applicant strives to provide a new development that conforms to and compliments the well-established character of Libertyville, striking a delicate balance between old-world charm and moderated modern enhancements, as a meaningful modulation between the traditional residential neighborhoods comprising the Historic District and the evolving core Commercial Corridor along Milwaukee Avenue.

The Applicant and their Development Team spent well over a year at the drawing board, with and in comparison, going feedback from community representatives and stakeholders, creating the programming for the new proposed development, with incredible deference and attention given to scale (height & massing), circulation, density, and materiality – especially as it relates and in comparison to other recent and anticipated developments in the immediate area, so to mitigate any even incidental or perceived undesired impact on the existing framework of the neighborhood and to maximize the broader reaching community benefits being delivered with construction and occupancy of the project. Accordingly, and in furtherance of these collaborative and community-driven efforts, the *Libertyville Committee of the Whole* has been informed of the project and has expressed general qualified support for the development and corresponding zoning relief required to permit the same. The Applicant also presented the project to the Village's Appearance Review Commission (ARC), at a public meeting held on October 21, 2024, at the conclusion of which the members of the ARC recommended approval of the proposed new development.

745-47 N. MILWAUKEE AVENUE / 126-40 LAKE STREET
ADDENDUM OF REVISIONS:

Date: 02.28.2025
Project address: 745-47 N. Milwaukee Ave / 126-40 Lake Street, Libertyville, IL 60048

ARCH SHEET CHANGES

A0.0

- Added Sheet A0.3 to the Sheet List
- Updated project image

A0.1

- Vehicle ramp from Lake St has been removed.
- A new man door with stairs up to grade in lieu of the driveway.
- Additional ride share and delivery zones with a new 3' wide concrete walk between retaining wall and drive.
- New accessible pathway from building stair 1 exit to south courtyard.
- Accessible parking spaces (including van accessible space) per IAC requirements.
- Pathway from north exit shifted to accommodate new tree planting.
- Transformer relocated to south side of site.
- New exit from water room in basement at grade.
- New exit from Stair 2 in basement at grade directly to exterior.
- Ambulance response point added.
- Ramp from South West Man door to lake street sidewalk added.
- Additional parking spot at parcel C added.

A0.2

- Updated to match site plan.

A0.3

- New sheet added to show Parcel B and C site plan.
- Precedent case studies for new concept at Parcel B.
- Parking Ratios added for possible future use groups.

A1.01

- Stair 2 exits directly to outside.
- H2o Room & Elec. Rooms switched locations.
- ADA spaces have been added with accessible aisles.
- Driveway from Lake St has been removed.
- New exit at South with stairs up to grade.
- Bike parking was adjusted.

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- Added mechanical and sprinkler notes to plan.

A1.02

- Stair 1 exits directly to outside.
- Relabeled Units 104, 105, &112 to 1 bed.

A1.03

- Dead end corridor dimensions added to plan.
- Exit Access travel distances added to plan.

A2.1

- North exterior elevation updated per new exits.
- South exterior elevation updated per new exit & louvers.

A2.2

- North courtyard exterior elevation updated per new exits.

A4.1

- Renders updated per exterior changes.

A4.3

- Render image updated per exterior changes.

CIVIL SHEET CHANGES

C.3-17

- Callout added to 4th single family residence water service disconnect
- Callout added for commercial building water service disconnect in Milwaukee Ave.
- Callout added to reuse and protect existing sanitary service for the commercial building on Milwaukee Ave.

C.7-17, C.8-17, C.9-17

- Grading has been revised for the circular drive per new site plan with sidewalk along the retaining wall and drop-off area
- Steps and ramps with railings added to walks with max. 5% running slope and max. 2% cross slope. Callouts and slopes added for all the walks.
- Transformer location has been changed from north of the building to south of the building.
- The south garage ramp has been eliminated and the pedestrian exit with stairs added. Grades from the pedestrian exit has been added.
- Walks within the courtyard area revised.

C.10-17, C.11-17, C.12-17

- Underground Detention system is now split into two, East Watershed Area and West Watershed Area. Two systems to have different HWLs. Two respective restrictor structures are now shown with one outfall to Metra station storm sewer system.
- Strom sewer rerouted to respective watershed areas.
- Watermain extension is revised to 8" and 7.5' offset from property lines and within 15' watermain easement.
- Watermain extension is now shown to tie-in to 16" main on Lake St.
- The existing 4" water service to the Metra station is now shown to tie-in to the new 8" watermain extension.
- Water service to the residential building is revised to tie-in to the 8" watermain extension loop.
- New 6" water service stab for the future commercial building is shown.
- The underground detention vault is now shown within the lots and 15' from the 8" watermain.

C.13-17

- The south garage ramp has been eliminated and the pedestrian exit with stairs added.
- Steps added to walks.
- Ramps and railings added to ADA exits.
- Sidewalk added along the retaining wall at the front circular drive.
- Drop-off and ambulance area added at the front circular drive.
- Parking and patio are shown commercial lot.
- Walks within the courtyard area revised.

LANDSCAPE SHEET CHANGES

L-1

- Landscape planting plans modified in response to architectural changes
- Shrub hedges around parking lots specified to be evergreen for 100% screening year round and maintained at 3' height.

LIGHTING SHEET CHANGES

LT-1

- H-EX3 bollards removed from north and south walking paths that were over the property line.
- Revised H-EX3 bollard layout at building front entry.

LT-2

- Updated lighting calculations based on new backgrounds

LT-3

- Revised lighting specification for fixture type H-EX1

PLAT OF SUBDIVISION CHANGES

Sheet 1 of 2

- Renamed “Preliminary” Plat of Subdivision

February 28th, 2025

Village of Libertyville
Development Review Committee
118 W Cook Ave.
Libertyville, IL 6004

Dear Heather,

Please find the comprehensive comments and our responses to each of them as required from the Development Review Committee Review and Report. We look forward to you continued review and comment.

PLANNING DIVISION COMMENTS:

Building Elevations

1. The "zinc" metal mansard roof proposed for the roof structure, as shown on the Sheet A4.3, Material Board, dated October 11, 2024, by Space Architects + Planners, is not a material commonly found within the C-1 Commercial District. Consideration should be given to an alternative roof material in accordance with Appearance Code Sec. 7-57(g).

   SA+P Response: The zinc-colored metal roof is a high-quality material requiring little maintenance over time and aligns with the aesthetic of the surrounding residential neighborhood. The design and aesthetic of the setback 4th floor has been previously reviewed and approved by the Appearance Review Committee.

2. The mansard roof constructed out of metal on the fourth story is not a roof shape commonly found within the C-1 Commercial District. Staff supports the setting back the fourth story however consideration should be given to a fourth story exterior design that is consistent with the first three stories in accordance with Appearance Code Sec. 7-57(h). Consideration should be given to a fourth story of brick and stone materials, with flat parapeted roof design that is commensurate with other C-1 Commercial District buildings.

   SA+P Response: The design of the 4th floor aligns with the aesthetic of the surrounding residential neighborhood as the development context is more akin to its neighboring residential district than the commercial uses along Milwaukee Ave. The building design has been previously reviewed and approved by the Appearance Review Committee.

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3. The proposed building height is 62 feet from the average grade to its highest point. At the northeast corner of the structure, the height is 51 feet from grade to the top of the fourth-floor parapet wall. At the southwest corner of the structure (corner of Brainerd Avenue and Lake Street), the height is 39 feet from grade to the top of the fourth-floor parapet wall, as shown on Sheet A2.0, Exterior Elevations, dated October 11, 2024, by Space Architects + Planners. Consideration should be given to how the proposed structure transitions to the adjoining single-family structures (Appearance Code Sec. 7-57(a)). Several Committee of the Whole meetings were held on the subject of downtown density and height, the most recent of which was on May 28, 2024, where the staff recommendation was to increase the by-right density and increase the allowable height from 45 feet (3 stories) to 60 feet (4 stories) in the C-1 and C-2 District with the provision of a 10 foot setback of the fourth story. The discussion on density remains ongoing.

   SA+P Response: Consideration of height along the corner of Brainerd and Lake has been thoughtfully considered and taken into account when placing the building on the site. The building has been set back 19'-7" from Lake St. sidewalk and 9'-4" from West Property Line. to create a landscape buffer which will help to reduce the scale along the streetscape and to its adjacent neighbors. Additionally, the 4th floor has been set back to reduce the scale from a pedestrian scale.

4. Sheet A2.1, Exterior Elevations, dated October 11, 2024, by Space Architects + Planners, has garage doors and man doors depicted on the north and south elevations of the proposed building. Provide a list of the materials and colors associated with the garage and man doors on the proposed building.

   SA+P Response: Garage and man doors will be matte black to match the windows on the building.

Site Plan

5. Staff notes that the applicant's traffic engineering consultant did not include the requested Parking Impact Study. A Parking Impact Study completed by the applicants Traffic Engineering Consultant shall be submitted by the applicant in order to provide the applicant the opportunity to justify the proposed reduction in the minimum required number of parking spaces as otherwise required by the Zoning Code. A sample site plan for Parcel B (for exemplary purposes only, not approval) demonstrating the ability to provide adequate parking within the lot limits would be beneficial. Further explanation of how Parcels A and B will share parking on Pacel C would be valuable.

   SA+P Response: A parking study has been submitted along with a sample plan for parcel B demonstrating adequate parking within the limits of parcels B and C for 2 commercial schemes.

6. Zoning Code Section 26-10-1.4(d)(7) states that no area of any parking lot or structure, excluding access ramps, shall have a slope in excess of five (5) percent. No ramp shall have a slope in excess of eight (8) Percent. Staff notes that the access ramp entering the underground parking garage from Lake Street has a downward slope from Lake Street to the garage entrance exceeding 23%. Please revise the grading to decrease this slope to 8% or less.

   SA+P Response: The parking garage access point will be removed at Lake St. This has a negligible effect on the ability to access the parking garage for the development residents. The code deviation will be removed as such.

7. Zoning Code Section 26-16-13.5(b)(5) is a Standard for Special Use Permits for Planned Developments that requires that Common Open Space be equal to or more than 30% of the total land area of the proposed development. The Common Open Space shall be self-contained to serve the residential development on Lot 1. Lot 1 is approximately 66,306 square feet in land area. Excluding the proposed building footprint, surface parking lot and access driveways, the remaining land area that could be considered common open space is approximately 13,150 square feet which is less than 20% of the total land area of Lot 1. The reduction of the minimum required Common Open Space shall be a deviation from the Zoning Code.

   SA+P Response: Our calculations list the Open space as 27,282 sf which is 41% of the site area. The code deviation will be removed as such.

8. The retaining wall located between the drop-off drive on the west side of the building and the outdoor courtyard is designed in such a way as to cause pedestrians to walk an extensive distance around said wall in order to access the courtyard and then into the building entrance. Please give consideration to revising this design in order to provide pedestrians a more direct route from drop off to the building entrance. Mitigate the use of steps and ramps for pedestrians as much as possible in this area

   SA+P Response: The design of the service and delivery drop off area is a function of the site grading and the location of the underground parking garage west wall. This area is designated for service and delivery vehicles specifically. Pedestrians entering the buildings have alternate paths leading directly from Brainerd St. accessible both from the Lake St. side as well as the Metra parking lot. Most building residents will enter from the parking garage or north parking lot.

9. Staff notes that the basement floor plan shows garbage bins in the center of the floor. Clarify how the waste disposal service access the garbage bins. If they are to be rolled to an outside location, please identify where they will be placed outside and note how long they will be placed outside. Any refuse container stored outside shall be screened.

SA+P Response: The contracted scavenger service will stage in the north parking lot and access the interior trash room and roll the dumpsters to the truck for disposal and return the refuse bins back into the garage. There will be no outside storage of refuse in this development.

ECONOMIC DEVELOPMENT DIVISION COMMENTS:

1. The proposed development will introduce a residential base that supports local business and contributes to the district's vibrancy. This project addresses current Village-wide housing demands and further strengthens the district's social and economic resilience.

   SA+P Response: Noted and agreed.

2. It is understood that that Parcel B (Lot 2) is not planned for development in the initial development phase. In light of the downtown's vacancy rate near zero with strong demand for additional commercial space, and the importance of continuity of the larger retail frontage on Milwaukee Avenue, Staff would like to draw attention to the importance of maintaining this parcel for future commercial building construction. This parcel is critical to our transit-oriented development strategy and could attract tenants that enrich downtown offerings. Efforts to leave a gap in the street-front could hinder potential development to the north identified in Comprehensive Plan concepts and the break in the street wall may inhibit pedestrian movements.

   SA+P Response: A concept plan for parcel B demonstrating adequate parking within the limits of parcels B and C for 2 commercial schemes has been included in the resubmitted plan set.

3. Aligned with the Comprehensive Plan (www.libertyville.com/comprehensiveplan), this area has been designated for transit-oriented development to encourage a mix of residential and commercial growth, focusing on new restaurants, entertainment, retail, hospitality and other businesses. The Comprehensive Plan outlines a Community Vision for the downtown station area, aiming to expand space for new retail and commercial activities while providing living options near downtown amenities and transportation.

   SA+P Response: Noted and agreed.

BUILDING DIVISION COMMENTS:

The following comments and requirements focus on accessibility, sanitation, fire protection, parking, and site design. The notes below are deficiencies found in the plan review which impact the current applications and are not intended to serve as building permit review. Revisions are required to address items below.

1. **Fire Protection and Egress Requirements for R-2 Occupancy:** Dimensions and measurements must be verified for travel distance and corridor limits, see supplemental memo for specifics. This may impact the residential unit count.

   SA+P Response: The plans have been reviewed and revised as required to meet all travel distance limits.

2. **2018 Illinois Accessibility Code (IAC) requirements.**
   - **Curb Ramps and Crosswalks:**
     - Maximum slope of 1:12 (8.33%) for curb ramps (IAC Section 403.3).
     - Crosswalk slopes must not exceed 1:48 (2%).
     - If utilizing the south parking garage ramp as an accessible pedestrian and wheelchair ramp a redesign is necessary.
   - **Loading Zones and Drop-Off Areas:** Must align with **IAC 209 and IAC 503** and be accessible with compliant slope and clearance.
     - The Brainerd Avenue circle drive does not comply.

   SA+P Response: The plans have been reviewed and adjusted as required. Coordination with Civil Engineer has been completed and their plans have been adjusted accordingly. Detailed grades of the curb ramps will be provided in final plans.

3. **Accessible Parking Requirements:**
   - **Minimum Ratios:**
     - 1 accessible space per 25 spaces (IAC 208.2).
     - At least 1 van-accessible space for every 6 accessible spaces.
   - **Location & Clearance:** Accessible spaces must be near building entrances and maintain 98 inches of vertical clearance for vans.
   - **Parking Stall Allocation:**
     - **Parcel C:** Provide 1 accessible parking stall (IAC Table 208.2).
     - **Exterior North Parking:** Provide 2 accessible stalls.
     - **Interior Parking:** Provide 4 accessible stalls.

   SA+P Response: The plans have been reviewed and adjusted as required and are included in the plan resubmittal.

4. **Garage and Egress ADA Compliance**

    - **Slope Limits:** Walking surfaces must not exceed a 1:20 (5%) slope unless designated as ramps (IAC 403.3).
    - **Ramps:** Landings required at top and bottom with handrails on both sides.
    - **Egress Path:** If all egress is on the first floor, paths must remain free of barriers.
    - Verify grading, slopes, of sidewalks, walking surfaces, and accessible routes to ensure compliance with the IAC 201

    SA+P Response: The plans have been reviewed and adjusted as required and are included in the plan resubmittal. Detailed grading of all ramps will be provided in final plans.

5. **Garage:**

    - Fire protection: Automatic sprinklers required (IBC 903.2.10).
    - Ensure ventilation meets **IMC 404** standards for safe air quality.
        - Consider the appearance on the outside of the building related to intake/exhaust locations.
        - HVAC equipment located within the garage may take up space(s) used for parking. This could impact parking count.

    SA+P Response: The louvers for the garage have been accounted for on the exterior of the building. The Sprinkler system and mechanical system will be included in the permit drawings. Mechanical notes have been added to the plans and any equipment required will be ceiling mounted as to not impact the parking layout.

6. **Pedestrian Safety Considerations Affecting Site Plan:**

    - **South Exit Ramp:** Design revision required due to an 8-foot grade change. The maximum ramp slope allowed is 1:12 (IAC 405).
    - **Path along West and East Sides:** Ensure walkways are no steeper than 5% (IAC 403.3).
    - Walk at the west side of the northwest building corner from the first-floor exit stair shall be a maximum of 5 percent slope or add steps. 2018 IAC 403.3
    - Pedestrian path along the east side of the building shall have a maximum slope of five percent. 2018 IAC 403.3
    - **Stairwells:** Must lead directly outside or extend with an exit passageway with 2-hour
    - construction (IBC 1023.1, 1024, 1028).
    - Stairwells – Shall lead directly to the exterior of the building or shall be extended to the exterior with an Exit Passageway (2-hour construction). 2018 IBC 1023.1, 1024 & 1028.

- Revision to building design may be necessary which could impact unit count/layout.
- **Bicycle Racks:** Ensure racks do not obstruct accessible routes or interfere with parking spaces.

SA+P Response: The plans have been reviewed, and stairwells now lead directly to the exterior as required and the revised drawings are included in the plan resubmittal. Grades and slopes of the walk has been added, steps and ramps are proposed where necessary.

FIRE DEPARTMENT COMMENTS:

1. Show the location of the fire sprinkler control room on the plans. Note that, as shown, the "water room" does not appear to meet the requirements for the location of this room. See the supplemental report for details of the requirements for the fire sprinkler control room.

   SA+P Response: The plans have been reviewed, and the Sprinkler Control room location was moved to the north side and updated drawings are included in the plan resubmittal.

2. Show the location of the ambulance response point and how emergency medical personnel will access the building. Note that, as currently shown, the circle drive and main entrance are not an ideal location. See the supplemental report for details of the requirements for the ambulance response

   SA+P Response: The Ambulance response point has been indicated on the revised drawings and are included in the plan resubmittal.

ENGINEERING DIVISION COMMENTS:

1. **Driveway Access at Lake Street** - The proposed parking garage driveway at Lake Street is not acceptable as designed. Please note the following:

   a. It is noted that the Planning Division has commented on this driveway exceeding the Zoning Code slope requirement for vehicular access ramps, and that Building Division has commented on this driveway exceeding the slope requirements for pedestrian ramps.

   b. Please refer to 'Other Comments' #11 within the Technical Memorandum dated 11/12/2024, prepared by Civiltech, Inc., which indicates a number of concerns regarding the design of the ramp as proposed, along with recommended design guidelines.

   c. Due to the aforementioned challenges regarding elevations and slopes in the current location, consideration may be given to the following design alternatives:

      i. Consider revising the Lake Street access as an entrance-only driveway, possibly located on the east building face to allow for a safe slope transition.

      OR

ii. Consider revising the plan and the TIS to eliminate vehicular access directly to Lake Street, in order to avoid the challenges inherent with a driveway sloping down toward the building. However, a pedestrian access point is still appropriate at this location.

SA+P Response: The parking garage access point will be removed at Lake St. This has a negligible effect on the ability to access the parking garage for the development residents.

2. **Driveway Access at Milwaukee Ave** – IDOT is ultimately responsible for approving the proposed driveway access point at Milwaukee Ave. Staff notes the following for the applicant's reference:

   a. The proposed driveway does not accommodate IDOT's geometric requirement for RI/RO driveways, including the minimum size of a raised triangular median. Staff anticipates that IDOT may require the center median of Milwaukee Avenue to be extended south to restrict potential left turning movements.

   b. Please refer to 'Other Comments' #10 within the Technical Memorandum dated 11/12/2024, prepared by Civiltech, Inc., which indicates additional concerns regarding the geometry of the proposed RI/RO access.

   c. It remains unknown if IDOT will accept the proposed RI/RO access. Engineering Division staff recommends that the subdivision plans should not be submitted for final approval until after the designer has obtained some form of concurrence from IDOT, indicating the Milwaukee Avenue access geometry will be acceptable. Please note that any significant change to the proposed access points (including driveway location and/or movement restrictions) after a Village Board approval would likely be considered a 'major change' to the original site plan approval, thus requiring the applicant to reapply for Village approval for said change.

SA+P Response: IDOT has approved the design and concept in principle. The Civil Engineer is addressing the minor comments from IDOT and we expect full approval forthcoming.

3. **Brainerd Avenue Circulation Drive, Parking for Deliveries / Ride Share** – Engineering Division Staff supports the idea of providing temporary parking for service vehicles along the front circulation drive, but notes that the designated parking stalls are located immediately adjacent to a large retaining wall, making them difficult to use effectively and potentially causing circulation and safety issues in cases where motorists park at a distance from the retaining wall. It is noted that the Building Division has also commented on the accessibility of these drop-off areas, please revise the site plan accordingly.

SA+P Response: The plans have been revised, and a sidewalk has been added adjacent to the retaining wall to allow passengers to effectively utilize the loading spaces safely and efficiently. The new plans are included in the plan re-submittal.

4. **Environmental Site Assessments –** A Phase I Environmental Site Assessment and a Phase II Preliminary Findings Draft Memorandum were provided by the Applicant, which identify the presence of Recognized Environmental Conditions (RECs) and Underground Storage Tanks (USTs). It is anticipated that additional steps are intended based on the documents provided. Please provide the following:

    a. A written narrative describing the Applicant's intentions for addressing the findings within these documents.

    b. Copies of any subsequent reports or documents that have been, or may be, prepared on the subject. At a minimum, it's anticipated that this would include the complete Phase II report, referenced in the Phase II Preliminary Findings Draft Memorandum dated 12/1/2022, prepared by Amereco, Inc.

SA+P Response: A written narrative describing remediation is already done and outlining the next steps for the environmental reports has been submitted.

SUPPLEMENTAL REVIEW MEMORANDUM

ENGINEERING DIVISION

1. Stormwater Detention – The proposed plans indicate that an underground stormwater detention system would be located under the parking lot north of the building.

    a. Please refer to the preliminary comments within the consultant review letter dated 10/23/2024, prepared by the Village's WDO Enforcement Officer (Scott Griffith, Kimley-Horn and Associates, Inc.)

    b. Complete 'existing' and 'proposed' impervious surface area calculations will be required for determination of the applicable stormwater detention requirements. These calculations should include the proposed Parcel B (in addition to Parcels A and C), for verification that future development of Parcel B is accommodated by the proposed stormwater management system.

    c. As noted within the consultant review letter, the Applicant should clarify how water quality volume will be accommodated in a manner that allows for long-term inspection and maintenance. In cases where detention volume is provided underground (as proposed), a BMP that incorporates native vegetation or hydrodynamic separator structures are typically proposed.

    d. Sheet 13.1 of the civil plan set shows that fire truck access would occur through the parking lot that is to be constructed over the proposed underground detention. Design documents will need to demonstrate that the underground detention product will structurally support the proposed heavy traffic loading (which may also include garbage trucks, moving trucks, etc.).

e. The proposed limits of the underground detention system shall not extend onto Village property, as currently shown.

SA+P Response: All comments have been reviewed and will be fully addressed in the permit plan submittal. See attached stormwater report. Infiltration trench or perforated pipes systems are established alternatives to Native vegetation when available real estate cannot accommodate it. Operation and Maintenance methods will be provided in the stormwater report during final plans. The precast vault will be designed to take load from moving trucks and fire trucks. Shop drawings from the vender will be provided with sign and seal from licensed structural engineer.

2. **Public Watermain** – Staff generally agrees with the concept of the looped public watermain system shown. The plans should be revised to address the following comments for future review:

   a. All public watermain shall be 8" diameter (except hydrant leads).

   b. All public water main within easements shall be Ductile Iron Pipe Class 55 in accordance with the Village's Engineering Design & Construction Standards.

   c. Public water main should be located a minimum of 7.5 feet from the subdivision boundary which is adjacent to private property on the east, and at least 15 feet from buildings or structural installations such as underground detention, retaining walls, etc.

   d. As currently proposed, the existing 4" water service for the Metra Station would run parallel to new public watermain and underneath the proposed improvements along Brained Ave. Revise the plans to show abandonment of that parallel portion of the 4" water service. Show a new 4" water service and valve connecting to the north end of the water main loop, to be tied into the Metra Station's existing water service line at a point near the northwest corner of the development site.

   e. The looped system should connect to the existing 16" watermain near the southwest corner of the site (not to the older 6" watermain).

   f. The proposed building water service shall be tapped into the new 8" Watermain (not the existing 6" main along Lake Street). Based on Fire Department comments, it's anticipated the fire sprinkler room would likely be located at the north end of the building, and the building water service would tap into the 8" main along or near the north side of the building.

SA+P Response: All comments have been reviewed and will be fully addressed in the permit plan submittal. Saying that, we have incorporated whatever we could in this submittal.

3. Existing Water and Sewer Services - Sheet 3 of the civil plans shows existing water and sewer services connecting to public mains in Lake Street, and indicates that these services shall be abandoned and disconnected at the (respective) main, which is in accordance with Village requirements. However, it appears that there may be additional existing water and sanitary sewer connections to be verified, which would also need to be properly abandoned. This includes verification of the water and sanitary services to the building which fronts on Milwaukee Avenue, and such utility disconnect work within the State right-of-way will also need to be shown on plans submitted to IDOT for review and permit approval.

   SA+P Response: Will be fully addressed in the permit plan submittal. However, Sheet 3 has been updated to show the additional water service disconnects and disconnects for the commercial property on Milwaukee ave., existing sanitary service to the commercial property on Milwaukee Ave, is shown to be reused.

4. It is anticipated that future development of Parcel B and the adjacent property to the west would connect to the proposed water main loop via pressure taps, in order to provide the necessary water service or water main connections.

   SA+P Response: Noted and will be addressed accordingly in the permitting of parcel B.

5. The plans should show a proposed location where sanitary service for Parcel B would connect to public sanitary sewer main. It's unknown if such a connection would be allowed within Metra property.

   SA+P Response: The revised plans will indicate the re-use of the existing sanitary lines and will be fully addressed in the permit plan submittal.

6. Appropriate easements will need to be delineated on the Final Plat of Subdivision and/or separate easement documents, which would likely include, but not necessarily be limited to the following:
   a. All public watermain shall be situated within a 15' wide Village Utility Easement. Provisions language would be provided by staff for inclusion in the final plat.
   b. Easements for cross-access and installation and maintenance of development improvements within Village-owned property. It's anticipated that this would also require some form of recorded easement or license agreement between the Village and the developer.
   c. Access easement(s) over Lot 3 (Parcel C)
   d. Blanket Public Utility & Drainage Easement should be provided over Lot 3 (Parcel C)
   e. Public service and utility easements
   f. f. Private utility easement(s) for serving Lot 2 (Parcel B)

   SA+P Response: All required easements will be coordinated prior to permit plan submittal.

7. Based on the proposed plans, the project results in a hydrologic disturbance of 5,000 sq. ft. or greater. Therefore a Watershed Development Permit application will be required along with all corresponding supporting documents (i.e. final engineering plans, stormwater calculations, cost estimates, etc.).

   SA+P Response: A watershed permit application will be filed accordingly at permit submittal.

8. Based on the information submitted, permits from the following outside agencies will be required:
   a. IDOT Highway / Utility Permit
   b. IEPA Sanitary Construction Permit
   c. IEPA Water Construction and Operating Permit
   d. IEPA NPDES Permit (for construction disturbance greater than 1 acre)

   SA+P Response: Permits from all of the above agencies to be obtained during the permitting of the project and prior to construction commencement.

9. The final Architectural floor plans and Plumbing drawings will need to be provided for review to the Lake County Public Works Department (LCPW). The Applicant is required to provide information to LCPW to determine the amount of any applicable Lake County Sanitary Connection Fee for the redevelopment of these parcels. The Applicant may contact LCPW directly at 847.377.7500.

   SA+P Response: Noted – Plans will be provided for review by LCPW during the permitting phase. The development team will reach out regarding the connection fees accordingly.

PLANNING DIVISION

Preliminary Landscape Plan

1. Per the Zoning Code (26-13-3.1) every parking lot shall be buffered and screened with appropriate screening devices such as decorative walls, fences, or berms. The landscaping and screening treatment shall be designed and maintained to a height of at least three (3) feet along every non-residential lot line. Sheet L-3, "Preliminary Landscape Plan", dated October 11, 2024, by Space Architects + Planners, shows deciduous shrubs on the west end of the surface parking lot north of the proposed residential building. The landscaping intended for screening should be planted with evergreen for year-round opaqueness.

   SA+P Response: The intent for the landscaping around the parking lot will be an evergreen shrub hedge maintained at 3' height.

Preliminary Plat of Subdivision

2. The plat of subdivision submitted is labeled Final Plat of Subdivision. The current petition is for Preliminary Plat of Subdivision. Please relabel accordingly.

SA+P Response: The Plat of Subdivision has been relabeled as "Preliminary".

Agreements

3. This proposal will require a Development Agreement. Collaboration between the Village and the applicant will be needed to produce a draft Development Agreement and be ready for submittal prior to the Village Board taking action on the Planned Development Final Plan.

SA+P Response: The applicant will work with the Village to produce a Draft development agreement as requested prior to permit submittal.

4. Declaration of Covenants and Restrictions shall be required. Multiple lots and potentially separate future property owners will make use of the internal drive that is designated by Parcel C in the applicant's narrative (Lot 3 on the proposed plat of subdivision). Covenants are needed to establish maintenance responsibilities and access rights for this drive.

SA+P Response: Covenants will be established to establish maintenance responsibilities prior to permit submittal.

BUILDING DIVISION

1. Accessible Units Compliance
   - **IAC 233.6.4 Required Adaptable Dwelling Units**. The owner shall provide not less than 20% of the dwelling units as adaptable. Either the accessible or adaptable dwelling units shall be distributed throughout the building to provide a variety of sizes and locations
     - Ensure units meet minimum door widths (32 inches) and maneuvering clearances (30"x 48").
   - **Minimum Unit Requirements:** For multifamily buildings IBC 1107.6.2.2
     - 2% Type A (fully accessible), ALL Type B (adaptable for future accessibility).

SA+P Response: The Adaptable and Accessible units will be fully detailed and addressed in the permit submittal.

2. Exit Door Discrepancies

- **Correction Required:**
  - Modify exit doors leading directly into parking garages to comply with IBC 1027.6.
  - Ensure all exits lead to public ways or designated safe areas.

SA+P Response: The plans have been revised and included in the resubmittal.

3. **Sanitation Plan – Trash Chute and Garbage Collection**
   - **Trash Room Fire Rating:** 2-hour fire-rated separation required between trash rooms and adjacent spaces (IBC 509.4). Above or adjacent to dwelling units IBC 711. Doors to trash room to be self-closing and fire-rated.
   - **Sprinkler Systems:** Install sprinklers in waste collection rooms (IBC 903.2.10).
     - **Note:** Clearance of 11-12 feet may suffice if rolling bins to an exterior point is feasible.
   - **Loading Zones:** Comply with **IBC 1104.3** and **IAC 209** for unobstructed access and pedestrian safety.
   - **Travel Distance and Corridor Limits:**
     - Sprinklered: Maximum 250 feet travel distance to exits (IBC 1017.2).
     - **Dead-End Corridors:**
       - 50 feet limit if sprinklered; 20 feet if unsprinklered (IBC 1020.4).
       - Dead end corridors on floors 2, 3 & 4 shall not exceed 50 feet. 2018 IBC 1020.4
   - **Balconies as Alternative Egress:** Compliant if connected to exterior stairs or fire-rated exits (IBC 1030.1).

SA+P Response: The plans have been reviewed and comply with travel distances and corridor limits. Trash room fire rating and sprinkler system information will be included in the permit submittal. Balconies are not used as an alternative egress.

4. Additional Sound Design Consideration
   - **Sound Transmission:** Ensure walls between residential and non-residential spaces meet **STC 60 ratings** (IBC 1206).
   - **Pedestrian Safety Alerts:** Consider adding strobe lights or audible signals at garage doors to alert pedestrians when doors open/close.
   - **Separation of Development Phases:** Ensure alignment between the site plan and full build-out phases to minimize design conflicts.
   - **Coordinate with Refuse Collector:** Review clearance and circulation needs with sanitation providers to confirm practical waste collection solutions.

SA+P Response: The plans have been reviewed and will be adjusted as required for permit submittal.

5. Electric Vehicle (EV) Charging Compliance
   - **Public Act 102-0662:** Projects for which construction permits are issued after January 1, 2026 must comply with this new State statute.
     - 40% of parking spaces must be EV-ready.
     - Any EV spaces marked accessible must comply with **IAC 502** for accessible parking standards.

SA+P Response: EV spaces and charging will be addressed in the permit submittal.

FIRE DEPARTMENT

1. Plans do not show the location of the fire sprinkler control/fire alarm control panel room. The location of the room must be approved by the fire prevention bureau. The requirements of this location are:

   - Must be accessible to the Libertyville Ladder Tower with access roads compliant with the 2018 International Fire Code (IFC) Chapter 5 and Appendix D.
   - Must have an unobstructed, hard surface from the road to the building.
   - Must have direct access into the room from the exterior. And this exterior door must be accessible at grade.
   - This room must be located near an entry point to the building that firefighters can conduct operations through. This includes ready access to stairwells and the parking garage.
   - Note that a Knox Lock Box will be required at this location and that the fire department connection will be located at this point.
     - Note that a fire hydrant must be located within 150' of the fire department connection.
   - Must be large enough to fit all necessary fire alarm and fire suppression equipment and controls with room for servicing said equipment.

SA+P Response: The plans have been reviewed, and the Sprinkler Control room location a was moved to the north side and updated drawings addressing all requirements will be included in the permit submittal.

2. Ambulances are normally expected to respond to the main entrance unless an alternate response point is identified. Note that the circle drive at the main entrance has some challenges as an EMS response point as currently shown. Show the intended response point of an ambulance. To provide emergency medical services to the residents of the building, the following are required:

   - Ability to reliably park in a safe location
   - Ability to park close enough to the building to easily transport people and equipment in and out of the building with due regard for patient privacy and minimal exposure to the elements
     - Due to the retaining wall, the ambulance would need to stop a considerable distance from the door to utilize the access ramp.
     - A fire lane would be required to maintain access to the ramp and a clear exit path for the apparatus.

- If this location is separate from the fire access point, it will require a separate Knox Lock Box to grant EMS access into the building
- The EMS entrance shall have easy access to an elevator sized for the stretcher
    - Elevator Car Requirements. (Libertyville Municipal Fire Code Sec. 606.10) Elevator cars are to accommodate the ambulance stretcher. At least one elevator shall be of such a size and arrangement to be accommodate a 24 inch x 84 inch ambulance stretcher in the horizontal, open position. The cab size is to be a minimum 5'-5" x 6'-8" clear platform and a minimum 3500 lb. capacity with a 42" side slide door.
    - If only one elevator is designed as described above, it shall be the one closest to the ambulance response point.

SA+P Response: The plans have been reviewed, and the ambulance response point has been noted and updated drawings addressing all requirements will be included in the permit submittal.

3. Fire hydrants will be required on the site and spaced according to the 2018 International Fire Code (IFC) Chapter 5 and Appendix C.

SA+P Response: The plans will be revised and included in the permit submittal.

4. All new construction requires fire suppression and fire alarm systems.
    - The fire alarm system must be directly connected to the Libertyville Fire Department's dispatch center via the villages dedicated radio network.
    - The suppression system will include fire department standpipes.

SA+P Response: Fire suppression and alarm systems will be addressed in a separate permit submittal.

KIMLEY HORN COMMENTS

1. No formal preliminary stormwater report was provided for review. It is recommended that a preliminary report be provided to address any assumptions made by the engineer at this point in the process so comments can be addressed.

SA+P Response: A preliminary report has been provided for review.

2. Calculations provided in the plan set were reviewed and it was determined that the methodology used to determine the required stormwater storage volume for the development is not an approved method per the WDO. It is recommended that this calculation be revised to verify that the proposed design is still applicable.

SA+P Response: An approved method per the WDO will be supplied for review.See attached stormwater report.

3. The design of the required water quality volume is proposed to be provided using an open bottom underground stormwater storage vault. This should be further evaluated as it is unclear how this will be maintained to insure functionality over time.

SA+P Response: The plans have been reviewed and adjusted as required. The vault has an access panel to get into the vault and any silt deposit will be removed. Saying that, the outfall structures that discharge into the vault will have snouts to restrict debris and any significant silt.

4. Additional comments will be provided upon receipt and detailed review of the stormwater management report.

SA+P Response: Noted.

CIVILTECH COMMENTS

Traffic Analysis Comments

1. An updated IDOT access permit onto Milwaukee Avenue will be required for this development due to the change in land use and density proposed. If not already done so, a plan submittal to IDOT including the TIS should be made as soon as possible to begin the permit review process and minimize development delays.

SA+P Response: IDOT has approved the design and concept in principle. The Civil Engineer is addressing the minor comments from IDOT and we expect full approval forthcoming.

2. We concur with the A.M. and P.M. peak hours selected for analysis based on the collected traffic count data and proximity to the Libertyville Metra station.

SA+P Response: Noted.

3. We concur with the background growth rates and assumptions provided in Section 4 of the TIS used to generate 2030 No-Build traffic volumes per CMAP traffic projections.

SA+P Response: Noted.

4. We concur with the redistribution of some of the southbound right turn volume at the Milwaukee Avenue/Lake Street intersection to the proposed RIRO access to the development due to the new cross- access into the Metra lot from the proposed development.

SA+P Response: Noted.

5. We concur with the use of the ITE Trip Generation manual in determining the magnitude of site-generated trips for the proposed development. The raw A.M. and P.M. peak hour and weekday daily trip generation estimates as presented in Table 3 of the TIS are reasonable based on the square footages stated in the report.

SA+P Response: Noted.

6. While we concur with the 15% reduction in trips generated by the residential part of the development due to access to public transit, the source of the 10% reduction in restaurant trips based on walkability should be cited. While we agree that there may be some level of walking trips to the restaurant given the density of the downtown area, the source of the reduction should be explained similarly to how the public transit trip reduction is explained.

SA+P Response: The 10 percent reduction in the traffic to be generated by the restaurant due to its walkability and proximity to downtown Libertyville was based on our experience working on similar type of TOD developments in both the suburbs and the City of Chicago. Further, it should be noted that the traffic study did not take any reductions for the traffic that is currently generated by the existing uses on the site. As such, it provides for a conservative (worst-case) analysis.

7. We concur with the directional distribution of site-generated trips as shown in Figure 6 of the TIS based on the prevailing traffic volumes along Milwaukee Avenue, Lake Street, and Brainerd Avenue, as well as the ease of ingress and egress from the proposed site access locations.

SA+P Response: Noted.

8. We concur that, based on the findings of the 2030 Build capacity analyses provided in Tables 4 and 7 of the TIS, the additional traffic generated by the proposed mixed-use development will have negligible impact on the roadway network. The proposed site access configurations will be sufficient to accommodate traffic entering and exiting the proposed site.

SA+P Response: Noted.

Parking Evaluation Comments

1. While the TIS report indicates that a parking evaluation is included in the document, there was no parking analysis provided.

SA+P Response: A parking memorandum report addressing the adequacy of the residential parking has been prepared by KLOA, Inc and is included as part of the submittal.

2. The current site plan specifies 133 total parking spaces, with 115 for the residential building and 18 for the restaurant land use. The following table compares the parking provided by the site plan to the Village of Libertyville Code:

Table 1. Parking Comparison Summary

Land Use	Site Plan	Village Code
Mid-Rise Multifamily Housing	115	169
Sit-Down Restaurant	18	35
Total Spaces	133	204
Surplus/Deficiency		-71 spaces

Per the Libertyville Municipal Code, the proposed parking supply is 54 spaces too low for the density of the proposed residential use and 17 spaces too low for the proposed size of the restaurant use.

A parking evaluation should be included to provide a rationale for the parking ratios used in determining the parking supply for the development. In particular, the low number of parking spaces for the restaurant land use should be justified. Since the residential parking will have a similar afternoon peak as the restaurant, there will likely not be available spillover parking within the residential area for restaurant users (and it may be prohibited to ensure adequate residential spaces). While the TIS cites a 10% reduction in trips due to walking trips, the total parking supply is 35% less than that required by Village code.

SA+P Response: A parking memorandum report addressing the adequacy of the residential parking has been prepared by KLOA, Inc and is included as part of the submittal. The parking for the restaurant will meet the minimum requirements of the Village of Libertyville. A supplemental drawing and parking calculations has been included as part of the Drawings package resubmittal.

Other Comments

1. The RIRO entrance off Milwaukee Avenue has entrance and exit widths of 13 feet. Per IDOT's *Policy on Access Driveways to State Highways*, the required width of the entrance and exit lanes for a RIRO access is 14 feet to 24 feet. Therefore, the RIRO access as designed does not meet IDOT requirements and should be revised. This may also address the overtracking of the fire truck vehicle onto the RIRO island shown on Sheet 13.1 in the site plans.

SA+P Response: IDOT has approved the design and concept in principle. The Civil Engineer is addressing the minor comments from IDOT and we expect full approval forthcoming.

2. The design of the driveway into the underground parking area from Lake Street shows an 8% grade, followed by a 23.35% grade, and then another 8% grade in the span of about 40 feet. We have several concerns about the design of this ramp, namely:

   - Generally, building codes do not permit parking ramp slopes more than 12% to 14%, and parking structure design guidance recommends no more than a 16% slope. The proposed site plan has a ramp at 23.35%, which exceeds both amounts.
   - When there is a difference in slopes of more than 10%, a transition slope is required to prevent vehicles from "bottoming out" between the two slopes. The difference in slope for the ramp on the site plan is 15.35%, indicating that a transition slope would be required on either side of the 23.35% slope section.
   - Level areas of at least 15' in length should be provided in advance of a pedestrian crossing for visibility for exiting drivers. The current site plan shows no such level area prior to the sidewalk along Lake Street.
   - Given the steep slopes proposed and exposure to the elements, ice and snow removal is a concern for the access ramp as well.

   SA+P Response: The parking garage access point will be removed at Lake St. This has a negligible effect on the ability to access the parking garage for the development residents.

   We appreciate your consideration and will be happy to answer any questions that may come up.

   Sincerely,

   J Keller

   Jay Keller, AIA NCARB LEED AP BD+C
   Principal – SPACE Architects + Planners

Kenig,Lindgren,O'Hara,Aboona,Inc.

9575 West Higgins Road, Suite 400 | Rosemont, Illinois 60018
p: 847-518-9990 | f: 847-518-9987

MEMORANDUM TO: Sara K. Barnes
Gozdecki, Del Giudice, Americus & Brocato LLP

FROM: Michael A. Werthmann, PE, PTOE
Principal

DATE: February 26, 2025

SUBJECT: Traffic Study Addendum - Development Plan Modifications
Lake Street and Brainerd Avenue Mixed-Use Development
Libertyville, Illinois

This memorandum is an addendum to the October 23, 2024 traffic study prepared by Kenig, Lindgren. O'Hara, Aboona, Inc. (KLOA, Inc.) for a mixed-use development to be located in Libertyville, Illinois. The L-shaped site, which is currently occupied by Liberty Square and several residential houses, is generally bounded by the Village of Libertyville Metra station and parking lot to the north, Milwaukee Avenue (IL 21) and a commercial building to the east, Lake Street and a commercial building to the south, and Brainerd Avenue to the west. The purpose of this addendum was to review the current development plan and ascertain if the modifications had any impact on the findings and recommendations of the October 23, 2024 traffic study.

Original and Current Development Plan

The *original development* plan assumed in the 2024 traffic study proposed a mixed-use development that included a multi-family apartment building an apartment building with 91 dwelling units, 85 below-grade interior parking spaces, and 29 surface parking spaces located on the west part of the site and an approximately 3,500 square-foot sit-down restaurant with approximately 18 parking spaces located on the northeast corner of the site. As part of the development, a circulation road was proposed to extend around the south and west sides of the restaurant parcel between Milwaukee Avenue and the Metra station parking lot. Access to the development was to be provided via a full-movement access drive on Lake Street, a full-movement access drive on the Brainerd Avenue/Metra station access road, and via several access drives located on the proposed circulation road.

The *current development plan* generally proposes the same development plan except for the following modifications:

- The access drive proposed on Lake Street has been eliminated.
- The east side of the development is now proposed to be developed with approximately 4,500 square feet of restaurant and/or retail space with a total of 38 parking spaces.
- The surface parking lot located directly north of the residential building is proposed to provide 29 parking spaces as opposed to the 30 parking spaces.

A copy of the revised site plan is located in the Appendix.

Current Development Plan Access System

Under the current development plan, access to the development will be provided via the following access drives:

- A proposed full-movement access drive located on the east side of Brainerd Avenue/Metra station access road approximately 325 feet north of Lake Street. This access drive will provide one inbound lane and one outbound lane to/from the proposed apartment building surface parking lot. The outbound movements at this access drive should be under stop sign control.

- Full-movement access drives to the apartment building below-grade parking, the apartment building surface parking lot, and the proposed restaurant parking lot will be located along the proposed circulation road. All three access drives will provide one inbound lane and one outbound lane with the outbound lanes under stop sign control.

- A drop-off/pick-up lane located on the east side of Brainerd Avenue/Metra station access road at approximately the midpoint of the site. The drop-off/pick-up lane will provide one-way, northbound traffic flow with the south access drive restricted to inbound access only and the north access drive restricted to outbound access only.

It should be noted that access to the apartment building below-grade parking will also be provided via the apartment building surface parking lot.

Evaluation of the Modifications to the Site Plan

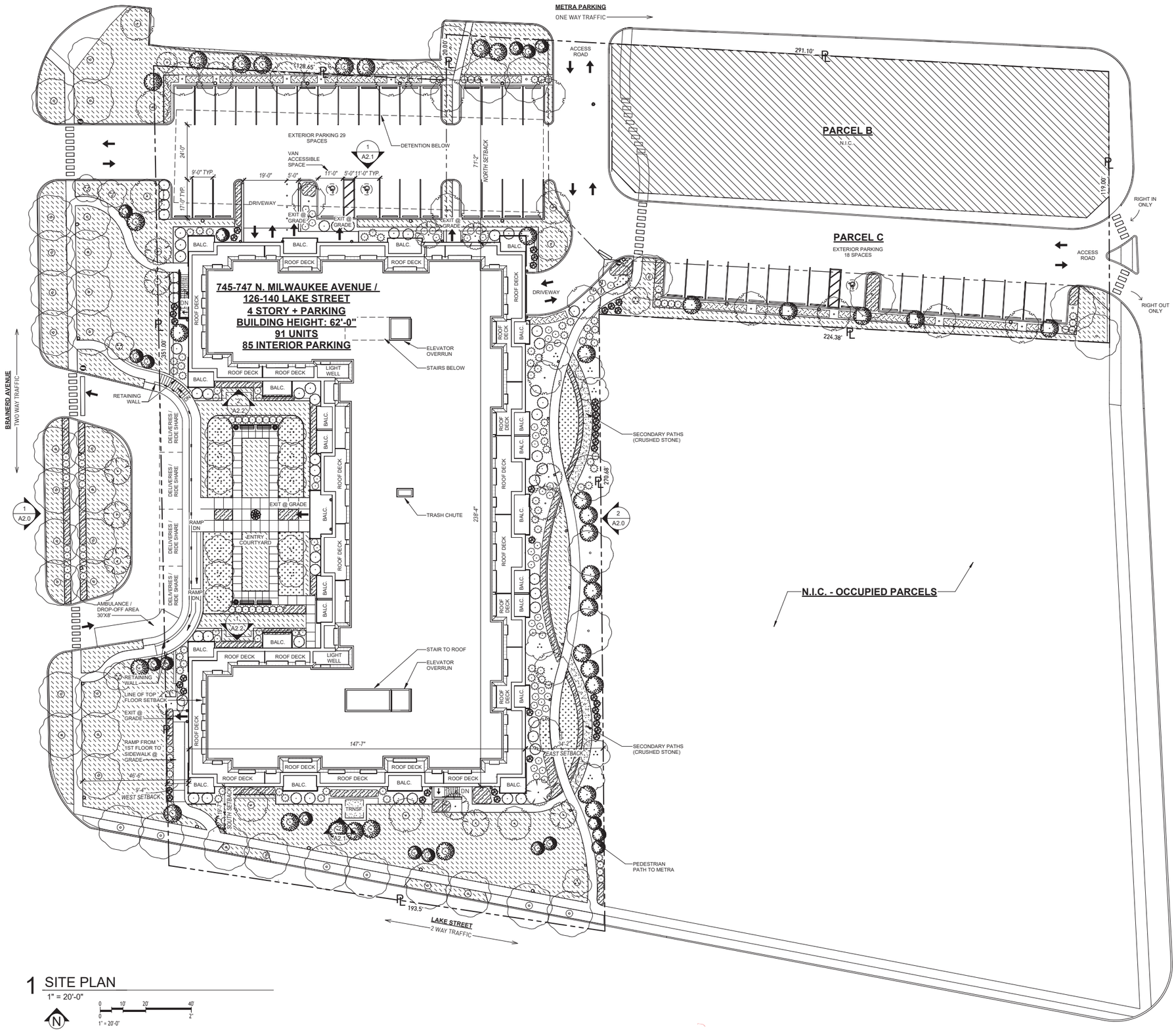
The Lake Street access drive serving the apartment building below-grade parking proposed in the original development plan has been eliminated from the current development plan. It is anticipated that the traffic projected to use the Lake Street access drive will likely access the development via the Brainerd Avenue/Metra station access road access drive. Further, the majority of any additional traffic generated by the additional 1,000 square feet of restaurant or retail space currently proposed for the east side of the development will use the circulation road and its intersection with Milwaukee Avenue. Based on the following, the elimination of the access drive will have a limited impact on the projected operation of the area roadway system and the findings and recommendations of the 2024 traffic study are still valid:

- As a Transit Oriented Development (TOD), the overall volume of traffic to be generated by the development will be reduced due to the public transportation and alternative modes of transportation serving the area and the location of the development within downtown Libertyville. Further, the increase in traffic that will be generated by the additional 1,000 square feet of restaurant or retail space currently proposed for the east side of the development will be limited.

- The volume of traffic previously projected to use the Lake Street access drive was limited given the multiple access drives serving the development with access provided via both Brainerd Avenue/Metra station access road and the proposed circulation road that will intersect Milwaukee Avenue.

- The capacity analysis has shown that the Brainerd Avenue/Metra station access road and its intersection with Lake Street has sufficient reserve capacity to accommodate the limited additional traffic previously projected to use the Lake Street access drive, particurly considering the new circulation road proposed as part of the development will reduce the Metra station traffic traversing Brainerd Avenue/Metra station access road. In addition, the circulation road and its intersection with Milwaukee Avenue both have sufficient reserve capacity to accommodate the limited additional traffic that may be generated by the additional 1,000 square feet of restaurant or retail space currently proposed for the east side of the development.

Appendix



1 SITE PLAN

1" = 20'-0"

0 10' 20' 40'

0 2"

1" = 20'-0"

PERMIT STAMP

SPACE

ARCHITECTS + PLANNERS

2149 N. TALMAN AVENUE
CHICAGO, IL 60647
312 829 6666
www.spacearchplan.com

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Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

SHEET TITLE

SITE PLAN OF PROPOSAL

SHEET #

A0.1

Kenig,Lindgren,O'Hara,Aboona,Inc.

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p: 847-518-9990 | f: 847-518-9987

MEMORANDUM TO: Sara K. Barnes
Gozdecki, Del Giudice, Americus & Brocato LLP

FROM: Michael A. Werthmann, PE, PTOE

DATE: February 26, 2025

SUBJECT: Parking Evaluation
Milwaukee and Lake Residential Development
Libertyville, Illinois

This memorandum summarizes the results of a parking evaluation conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the residential portion of a proposed mixed-use development to be located in Libertyville, Illinois. The L-shaped site, which is currently occupied by Liberty Square and several residential homes, is generally bounded by the Village of Libertyville Metra station and parking lot to the north, Milwaukee Avenue (IL 21) and a commercial building to the east, Lake Street and a commercial building to the south, and Brainerd Avenue to the west. As proposed, the residential portion of the development is to consist of 91 units with 27 one-bedroom units and 64 two-bedroom units and will provide a total of 115 parking spaces (85 below-grade interior parking spaces and 29 surface parking spaces). Further, given the location of the development within downtown Libertyville and its proximity to the Metra station and other public transportation and alternative modes of transportation, the development is considered a Transit Oriented Development (TOD).

Village of Libertyville Parking Requirements

The Village of Libertyville zoning ordinance requires 1.5 parking spaces per unit for one-bedroom units and 2.0 parking spaces per unit for two-bedroom units. As such, the residential portion of the development is required to provide 169 parking spaces based on the Village's requirements. As such, the 114 parking spaces proposed by the development are 55 parking spaces less than the Village's requirements.

Parking Reductions Due to the Development's Location and Characteristics

Given the residential development is considered a TOD and other characteristics, the maximum parking demand of the residential portion of the development is projected to be lower than the Village's parking requirements based on the following:

- Numerous studies have shown that TODs have a lower parking demand than typical developments. For example, *Empty Parking Spaces: Real Parking Needs at Five TODs*, published by Smart Growth America, found that the parking demand of the five TODs were 55 to 80 percent lower than what would be estimated based on parking generation rates published by ITE. The lower parking demand of TODs is due in part to the proximity of TODs to public transportation and alternative modes of transportation.

- Approximately 27 units within the development will be one-bedroom units. *Stalled Out: How Empty Parking Spaces Diminish Neighborhood Affordability*, published by the Center for Neighborhood Technology (CNT), is a study that summarizes the results and findings of parking surveys performed at 41 TODs in the City of Chicago. The study showed that parking demand for buildings comprised entirely of studio and one-bedroom units was approximately one-half the parking demand of buildings comprised entirely of two- and three-bedroom units.

- Further reducing the car ownership at TODs is the growth of ride hailing and car sharing services over the past decade. The reliability and affordability of these services as well as rental car services has greatly reduced the need to own a vehicle, particularly considering the costs of the vehicle, gas, maintenance, and parking.

Institute of Transportation of Engineers (ITE) Parking Rates

The maximum parking demand of the residential portion of the development was estimated based on parking generation rates contained in *Parking Generation Manual*, 6th Edition, published by the Institute of Transportation Engineers (ITE). For the purpose of this study, the parking demand of the residential portion of the development was based on the following ITE parking generation rates:

- Multifamily Housing - 2+ BR (Low-Rise) - Not Close to Rail Transit
- Multifamily Housing - 2+ BR (Low-Rise) - Close to Rail Transit

Copies of the ITE rates are included in the Appendix. In addition, the residential peak parking demand was determined based on both the number of units and the number of bedrooms. **Table 1** shows the estimated residential peak parking demand based on the ITE rates for both the number of units and bedrooms. From Table 1 it can be seen that the residential portion of the development is projected to have a peak parking demand between 103 to 116 vehicles based on the number of units and only 88 to 105 vehicles based on the number of bedrooms. The 114 parking spaces to be provided by the development is greater than the estimated maximum parking demand based on the various scenarios presented in Table 1 except for the ITE rates based on the number of units with buildings not close to rail service, which has an estimated parking demand of 113 to 116 vehicles which is one vehicle greater than the 114 parking spaces to be provided by the residential portion of the development.

Table 1
RESIDENTIAL PORTION OF THE DEVELOPMENT
ESTIMATED MAXIMUM PARKING DEMAND – ITE PARKING RATES

	Maximum Parking Demand Number of Units (91)	Maximum Parking Demand Number of Beds (155)
ITE Rates - Not Close to Rail	113 to 116 vehicles	105 vehicles
ITE Rates - Close to Rail	103 vehicles	88 vehicles
Note: Residential portion of the development is to provide a total of 114 parking spaces.		

Overflow Parking

The residential portion of the development is located adjacent to the Metra station parking lot and across Lake Street from the Village of Libertyville's north parking deck and other public parking lots. If necessary, the adjacent public parking can be used for overflow visitor parking. To determine the availability of parking in the adjacent public parking facilities, KLOA, Inc. performed parking inventory and occupancy parking surveys at the following facilities:

- The north parking deck
- The public parking adjacent to the east side of the parking deck
- The Metra station parking lot

The parking surveys were conducted on Thursday, Friday, and Saturday, November 7, 8, and 9, from 6:00 P.M. to 11:00 P.M. The results of the parking surveys are summarized in tables located in the Appendix and show that more than sufficient public parking is available in the various adjacent public parking facilities to accommodate any overflow parking that may be required for the residential portion of the development.

Appendix

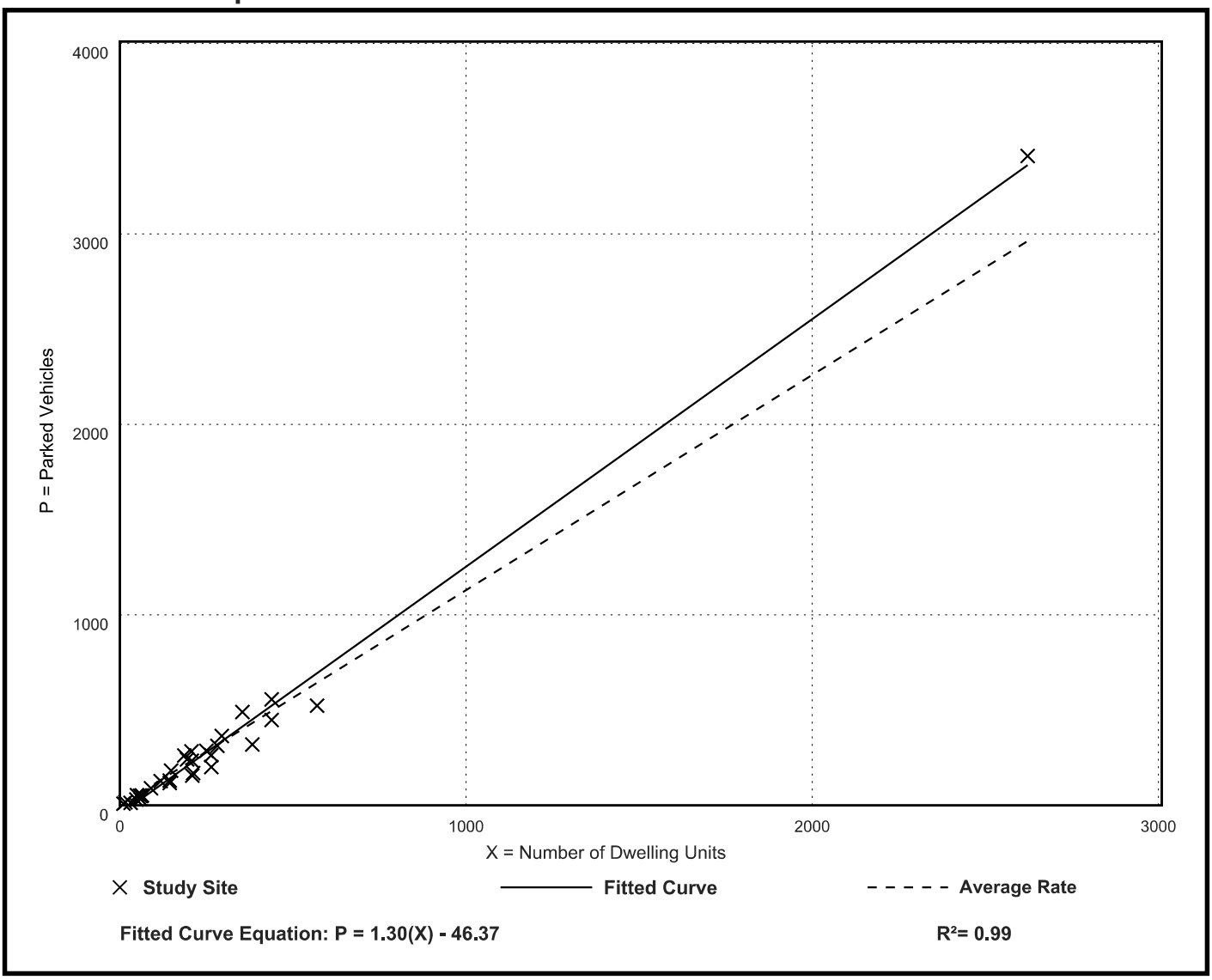
Multifamily Housing - 2+ BR (Low-Rise) Close to Rail Transit (220)

Peak Period Parking Demand vs: **Dwelling Units**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 272

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.13	0.45 - 1.41	0.86 / 1.28	1.05 - 1.21	0.22 (19%)

Data Plot and Equation



Fitted Curve Equation: P = 1.30(X) - 46.37

R^2= 0.99

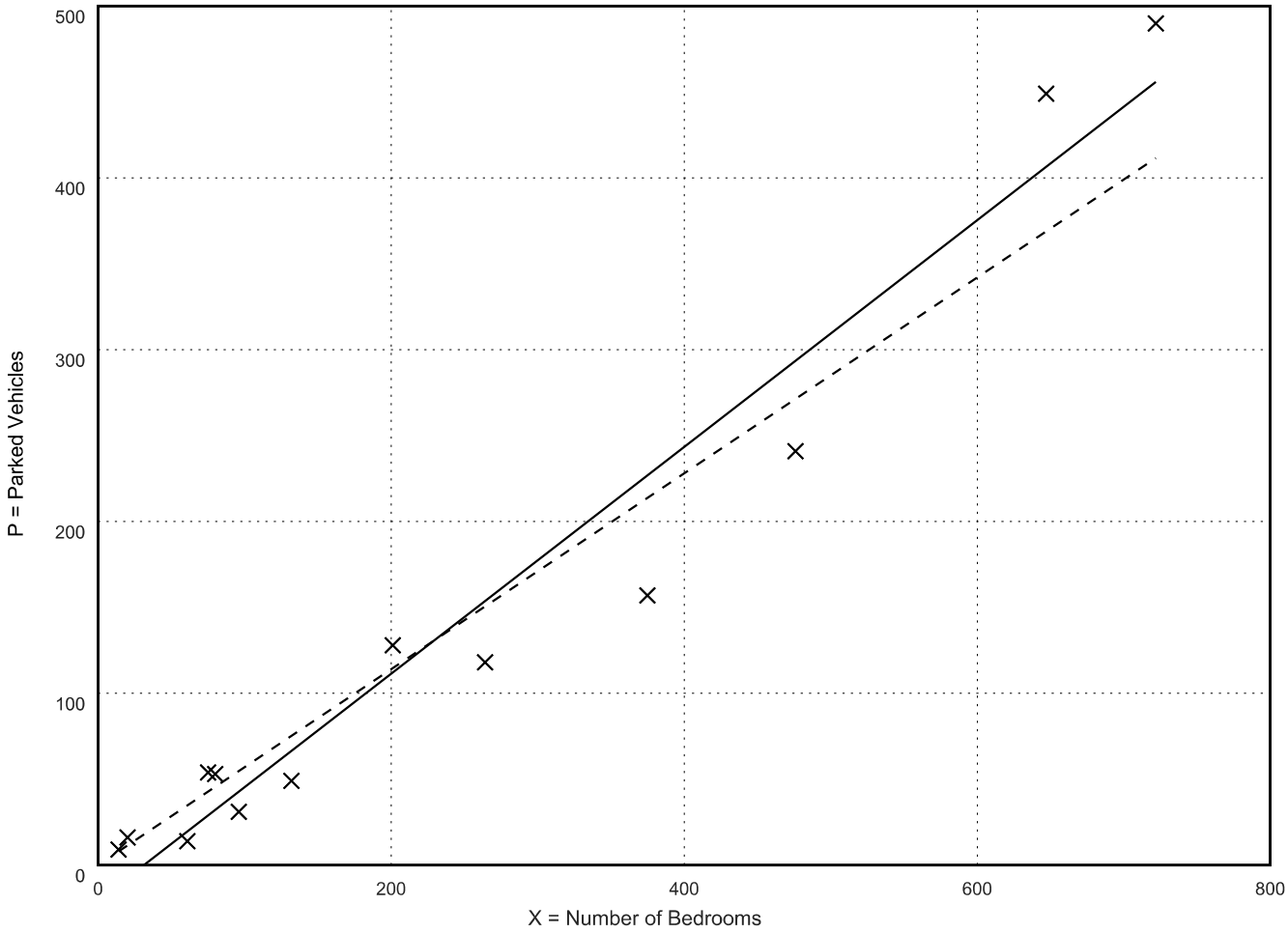
Multifamily Housing - 2+ BR (Low-Rise) Close to Rail Transit (220)

Peak Period Parking Demand vs: **Bedrooms**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 13
Avg. Num. of Bedrooms: 243

Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.57	0.23 - 0.80	0.44 / 0.72	***	0.14 (25%)

Data Plot and Equation



Fitted Curve Equation: P = 0.66(X) - 20.67

R^2= 0.95

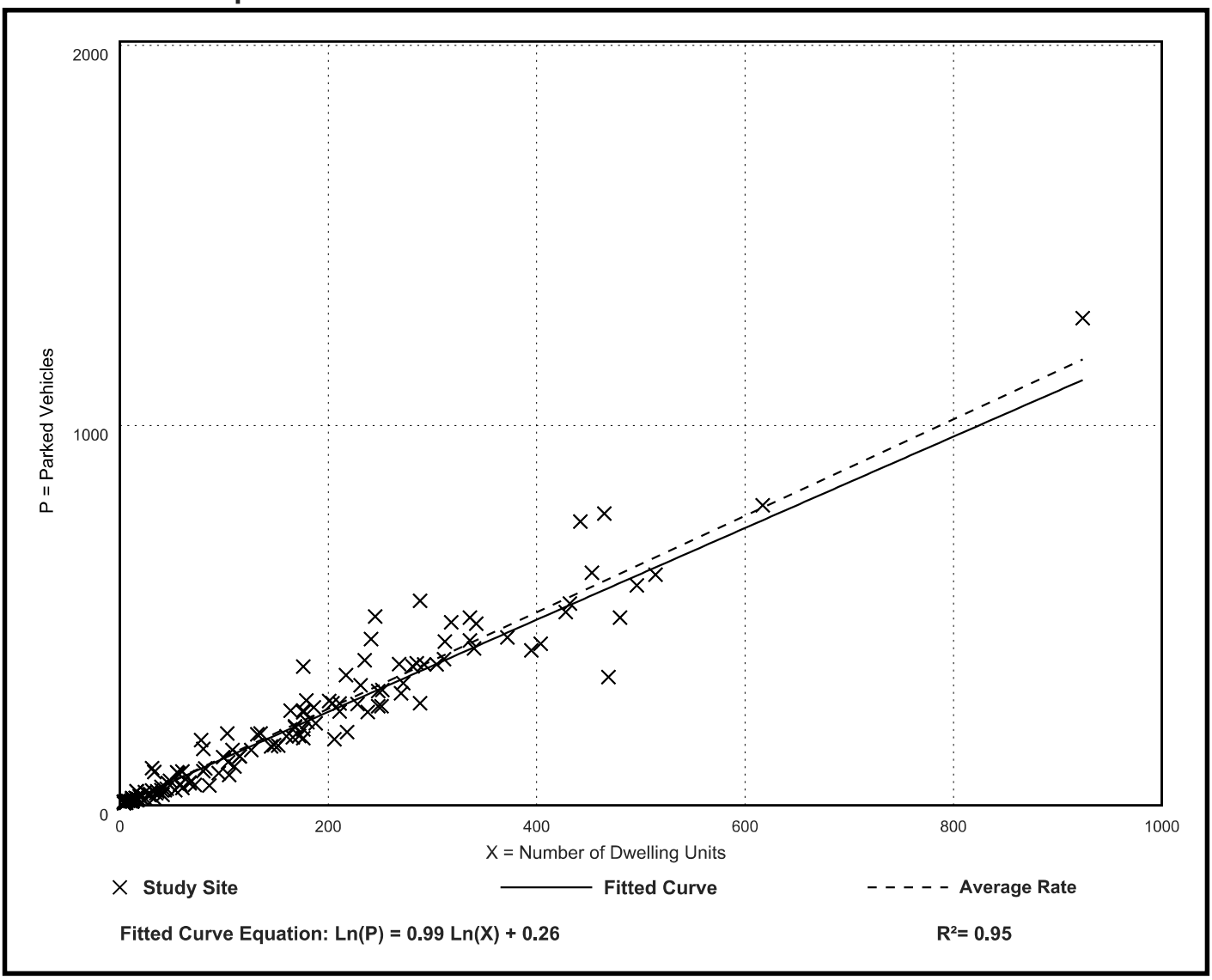
Multifamily Housing - 2+ BR (Low-Rise) Not Close to Rail Transit (220)

Peak Period Parking Demand vs: Dwelling Units
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 143
Avg. Num. of Dwelling Units: 154

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.27	0.58 - 3.16	1.07 / 1.59	1.22 - 1.32	0.29 (23%)

Data Plot and Equation



Fitted Curve Equation: Ln(P) = 0.99 Ln(X) + 0.26

R^2= 0.95

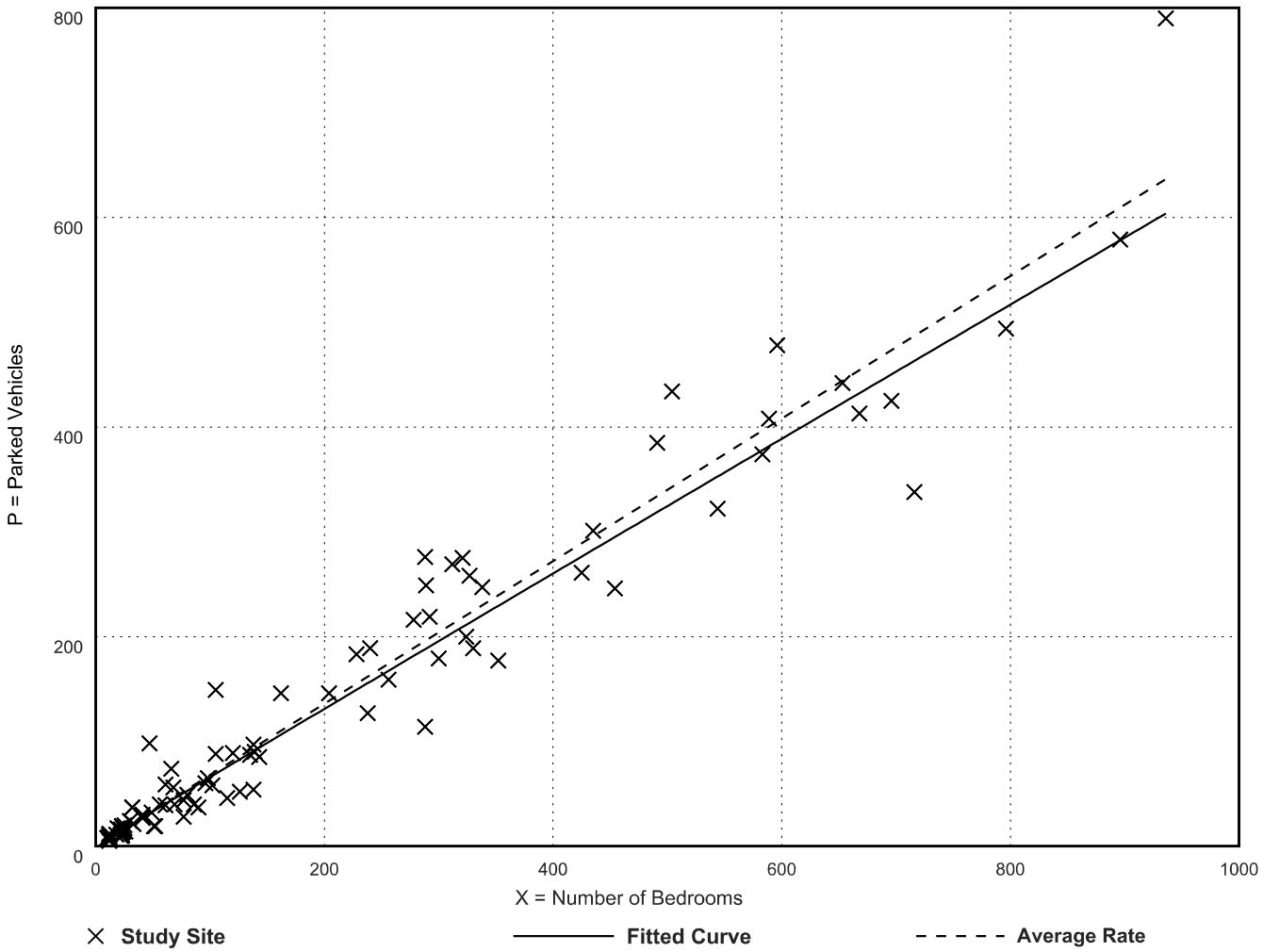
Multifamily Housing - 2+ BR (Low-Rise) Not Close to Rail Transit (220)

Peak Period Parking Demand vs: **Bedrooms**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 97
Avg. Num. of Bedrooms: 192

Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.68	0.36 - 2.09	0.61 / 0.86	0.65 - 0.71	0.16 (24%)

Data Plot and Equation



Fitted Curve Equation: Ln(P) = 0.99 Ln(X) - 0.37

R^2= 0.95

Table 1
PARKING DECK AND PARKING LOT ADJACENT TO PARKING DECK
PARKING SURVEYS
THURSDAY, NOVEMBER 7, 2024

Time	Parking Deck				Parking Lot			
	Level 1	Level 2	Level 3	Total	30 Min	3 Hr	HC	Total
Inventory	**132**	**123**	**103**	**358**	**5**	**34**	**2**	**41**
6:00 PM	34	26	0	60	5	33	1	39
6:30 PM	32	48	4	84	5	33	2	40
7:00 PM	31	62	7	100	5	33	2	40
7:30 PM	30	62	9	101	5	34	2	41
8:00 PM	32	57	8	97	5	29	1	35
8:30 PM	31	45	7	83	5	24	1	30
9:00 PM	28	38	5	71	4	21	1	26
9:30 PM	24	20	3	47	4	15	0	19
10:00 PM	18	10	2	30	2	11	0	13
10:30 PM	16	7	1	24	0	9	0	9
11:00 PM	15	7	1	23	0	7	0	7

Level 1 is signed for employee permit parking from 8:00 AM to 5:00 PM Monday through Friday
Level 2 is signed for customer four-hour parking

Table 2
PARKING DECK AND PARKING LOT ADJACENT TO PARKING DECK
PARKING SURVEYS
FRIDAY, NOVEMBER 8, 2024

Time	Parking Deck				Parking Lot			
	Level 1	Level 2	Level 3	Total	30 Min	3 Hr	HC	Total
Inventory	**132**	**123**	**103**	**358**	**5**	**34**	**2**	**41**
6:00 PM	45	81	5	131	5	34	0	39
6:30 PM	41	108	42	191	5	34	0	39
7:00 PM	42	112	74	228	5	34	1	40
7:30 PM	42	114	94	250	5	34	1	40
8:00 PM	41	95	84	220	5	33	1	39
8:30 PM	38	84	69	191	5	34	1	40
9:00 PM	30	69	51	150	4	34	1	39
9:30 PM	29	61	39	129	4	26	1	31
10:00 PM	30	46	22	98	4	22	1	27
10:30 PM	21	32	15	68	4	24	0	28
11:00 PM	19	21	10	50	4	21	0	25

Level 1 is signed for employee permit parking from 8:00 AM to 5:00 PM Monday through Friday
Level 2 is signed for customer four-hour parking

Table 3
PARKING DECK AND PARKING LOT ADJACENT TO PARKING DECK
PARKING SURVEYS
SATURDAY, NOVEMBER 9, 2024

Time	Parking Deck				Parking Lot			
	Level 1	Level 2	Level 3	Total	30 Min	3 Hr	HC	Total
Inventory	**132**	**123**	**103**	**358**	**5**	**34**	**2**	**41**
6:00 PM	35	65	3	103	5	33	0	38
6:30 PM	34	96	9	139	5	34	2	41
7:00 PM	33	106	29	168	5	34	2	41
7:30 PM	35	107	41	183	5	34	2	41
8:00 PM	35	97	41	173	3	31	1	35
8:30 PM	36	80	33	149	5	28	1	34
9:00 PM	34	70	27	131	5	28	1	34
9:30 PM	33	49	16	98	3	27	1	31
10:00 PM	30	41	10	81	2	23	0	25
10:30 PM	22	31	8	61	1	20	0	21
11:00 PM	18	19	8	45	1	14	0	15

Level 1 is signed for employee permit parking from 8:00 AM to 5:00 PM Monday through Friday
Level 2 is signed for customer four-hour parking

Table 4
METRA PARKING LOT
PARKING SURVEYS
THURSDAY, NOVEMBER 7, 2024

Time	Metra Parking Lot						Total
	A	B	C	D	E	F	
Inventory	**166**	**20**	**11**	**46**	**14**	**25**	**282**
6:00 PM	4	6	7	18	3	10	**48**
6:30 PM	39	4	7	14	1	7	**72**
7:00 PM	33	2	5	11	1	6	**58**
7:30 PM	31	2	4	8	1	6	**52**
8:00 PM	22	1	3	7	1	4	**38**
8:30 PM	21	2	3	7	1	4	**38**
9:00 PM	16	2	3	4	0	4	**29**
9:30 PM	12	2	3	4	0	4	**25**
10:00 PM	6	0	3	3	0	4	**16**
10:30 PM	6	1	3	3	0	4	**17**
11:00 PM	6	1	3	3	0	4	**17**

Zones A, B and C are signed as permit parking spaces prior to 8:30 AM and $2.00 daily fee parking spaces after 8:30 AM

Zones D, E, and F are signed as $2.00 daily fee parking spaces

Parking is prohibited between 2:00 AM and 4:00 AM

Free parking on weekends and Holidays

Table 5
METRA PARKING LOT
PARKING SURVEYS
FRIDAY, NOVEMBER 8, 2024

Time	Metra Lot						Total
	A	B	C	D	E	F	
Inventory	**166**	**20**	**11**	**46**	**14**	**25**	**282**
6:00 PM	23	1	5	23	3	3	**58**
6:30 PM	22	1	5	22	3	3	**56**
7:00 PM	19	1	4	26	3	4	**57**
7:30 PM	19	1	4	20	3	4	**51**
8:00 PM	16	1	3	18	3	3	**44**
8:30 PM	14	1	3	18	3	3	**42**
9:00 PM	13	0	3	14	2	3	**35**
9:30 PM	12	0	3	12	2	3	**32**
10:00 PM	11	0	2	11	2	3	**29**
10:30 PM	11	0	2	11	2	3	**29**
11:00 PM	9	0	2	9	2	3	**25**

Zones A, B and C are signed as permit parking spaces prior to 8:30 AM and $2.00 daily fee parking spaces after 8:30 AM

Zones D, E, and F are signed as $2.00 daily fee parking spaces

Parking is prohibited between 2:00 AM and 4:00 AM

Free parking on weekends and Holidays

Table 6
METRA PARKING LOT
PARKING SURVEYS
SATURDAY, NOVEMBER 9, 2024

Time	Metra Lot						Total
	A	B	C	D	E	F	
Inventory	**166**	**20**	**11**	**46**	**14**	**25**	**282**
6:00 PM	19	1	3	19	0	3	**45**
6:30 PM	17	1	3	19	0	3	**43**
7:00 PM	17	1	3	18	0	4	**43**
7:30 PM	16	1	3	18	0	5	**43**
8:00 PM	12	0	3	14	0	5	**34**
8:30 PM	12	0	3	14	0	4	**33**
9:00 PM	12	0	3	13	0	3	**31**
9:30 PM	12	0	3	12	0	3	**30**
10:00 PM	10	0	2	10	0	2	**24**
10:30 PM	10	0	2	10	0	2	**24**
11:00 PM	11	0	1	10	0	2	**24**

Zones A, B and C are signed as permit parking spaces prior to 8:30 AM and $2.00 daily fee parking spaces after 8:30 AM

Zones D, E, and F are signed as $2.00 daily fee parking spaces

Parking is prohibited between 2:00 AM and 4:00 AM

Free parking on weekends and Holidays



Insert Title Page

ContinuumDevelopment

Continuum Development
1259 W Madison Street
Chicago, IL 60607

Village of Libertyville
118 W Cook Avenue
Libertyville, IL 60048

Re: Proposed Development at Lake / Brainerd - Residential Parking Requirements

To Whom It May Concern,

The proposed 91 unit luxury multifamily development at the corner of Lake and Brainerd contains 80 interior and 34 exterior parking stalls for a total of 114 stalls. While the implied parking ratio of 1.25 is less than the Village of Libertyville's code requirements, the Developer is fully confident that the proposed parking count is sufficient for the following reasons:

- The residential plans on Parcel A include 114 stalls. Of the 91 units, 27 are one bedroom units and the remaining 64 are two bedroom units. Assuming one bedroom units require a single stall, as is common in the market, the remaining 88 stalls are allocated to the remaining (64) two bedroom units. This equates to a 1.36 ratio for two bedrooms.
- At 1.25, the proposed parking ratio is the highest the Development team has ever proposed in a new suburban project. Typically, the Development team has proposed a ratio of 1:1 (or marginally higher). On previous projects, the team's thesis was that any potential renter who required more than one stall would simply lease elsewhere and that the pool of renters who required only one stall would be sufficiently large.
- The team's actual experience suggests actual parking demand is noticeably weaker than anticipated. On other suburban projects, most of which have a substantially higher percentage of two bedroom units than the proposed, the Developer has yet to lease 100% of parking. As evidence of this trend, below is a summary of actual parking counts and leasing at the Development team's other suburban projects:

Parking Data - Past Projects

Address	Units	Unit Mix (S/1/2)	% 2 Bedroom	Parking Count	Parking Ratio	Parking Leased (#)	Parking Leased (%)
1555 Ridge Ave, Evanston	68	8/20/40	58.82%	61	0.90	56	91.80%
435 Madison Ave, Oak Park	42	0/6/36	85.71%	43	1.02	39	90.70%
*835 Lake St, Oak Park	78	0/8/70	89.74%	95	1.22	78	82.11%
*133 Ashland Ave, Chicago	89	0/7/82	92.13%	90	1.01	78	86.67%
Proposed - Lake & Brainerd	**91**	**0/27/64**	**70.33%**	**114**	**1.25**	**N/A**	**N/A**

**Projects are in final stages of leasing*

- This approach is further corroborated by a parking study conducted by KLOA using data from the industry-standard *Parking Generation Manual* from the Institute of Traffic Engineers. The formulas employed in this publication suggest a *maximum* of 113-116 vehicles demanded at the project based on the number of units and assuming the site is NOT located close to rail. The following chart illustrates that the proposed parking count of 114 stalls is within the range of industry standards, particularly given its location.

Estimated Parking Demand - ITE Parking Rates		
	Maximum Parking Demand # of Units: 91	**Maximum Parking Demand # of Beds: 158**
ITE Rates - Not Close to Rail	113 to 116 Vehicles	107 Vehicles
ITE Rates - Close to Rail	103 Vehicles	90 Vehicles

Source: KLOA Study (November 2024) citing the industry standard 'Parking Generation Manual 6th Edition, published by the Institute of Transportation Engineers

NOTE: THE ABOVE (KLOA STUDY) NEEDS TO BE UPDATED BASED ON 155 BEDS

- To compare the project's proposed parking ratio and industry standards against the local standards, the team completed a survey, shown below, covering a wide range of new developments with respect to year built, location, size, etc. This data suggests that the proposed parking ratio of 1.25 is also in line with the market.

Parking Data - Competitive Set						
Building Name	**Municipality**	**Yr Built/Approved**	**Units**	**Parking**	**Ratio**	**TOD*** **
Albion Highland Park*	Highland Park	2021	161	194	1.20	Y
55 St Johns	Highland Park	2023	26	29	1.12	Y
McGovern House	Highland Park	2017	73	117	1.60	Y
115 Lake St	Libertyville	2016	34	36	1.06	Y
The Atworth at Mellody Farm	Vernon Hills	2018	260	293	1.13	N
Hawthorn Row (Phase II)	Vernon Hills	2026	249	373	1.50	N
The Domaine at Hawthorn Row	Vernon Hills	2023	313	470	1.50	N
Everleigh	Vernon Hills	2022	173	218	1.26	N
Station 250	Mundelein	2024	165	184	1.12	Y
Maple Street Lofts	Mount Prospect	2021	192	245	1.28	Y
Prospect Place	Mount Prospect	2023	80	94	1.18	Y
Woodview Apartments	Deerfield	2015	248	418	1.69	N
AMLI Deerfield	Deerfield	2016	241	264	1.10	N
1850 Glenview	Glenview	2024	62	73	1.18	Y
Midtown Square**	Glenview	2014	138	171	1.24	Y
Ravinia Crossing**	Ravinia	2020	30	30	1.00	Y
Station 440	Highwood	2022	48	68	1.42	Y
Station 246	Highwood	2020	31	38	1.23	Y
Total/Average					**1.27**	
Average TOD					**1.22**	
Average 2020 - Present					**1.24**	
Proposed - Lake & Brainerd	**Libertyville**		**91**	**114**	**1.25**	

- It's important to note that the above chart references approved or constructed residential units and parking counts, rather than actual usage or what ratio is required by each municipality's code. That there are any divergences from code reflects two related considerations: 1) there is sufficient precedent from nearby communities to make exceptions where appropriate and 2) some projects receive credit for their location. Highland Park, for example, provides a 15% reduction to required parking if the development site is designated as transit-oriented, as defined by proximity to public transportation such as a Metra station. Libertyville has no such ordinance available to the new developments.
- However, the building across the street at 115 Lake Street, formerly known as Manchester Square apartments, is both mixed use and has a parking ratio of 1.06
- Guest parking is a concern that often arises from community members when reviewing new multifamily development projects. In the case of the proposed development, the Developer requested a parking study of existing Village assets. This study suggests that short term guests of the proposed project have numerous options. Even at times of peak demand, the nearby parking deck and Metra station lots have more than 100 open stalls, *each*. Please refer to KLOA's parking study data for more information.
- Lastly, the Developer was significantly constrained by multiple factors unique to this site:
    - The site has long been intended to serve as a connection between the Metra and the downtown. Consequently, the need for the north/south pedestrian path reduced buildable area for interior stalls and surface area for exterior stalls.
    - The Developer's desire to mitigate the scale/massing of the development through extensive landscaping and significant setbacks reduced the buildable area on the south and east portions of the site.
    - For these reasons and to limit the disturbance to neighbors, the Developer was also constrained in locating external parking solely on the north side of the site.
    - To decrease traffic congestion at the intersection of Lake and Milwaukee, the installation of the east/west private road reduced functionality and buildable area, particularly on parcel B.
    - As a result, any multifamily-designated parking placed on parcel B would render that site economically unviable, as any future retail use would require its own extensive parking.

BONO CONSULTING
CIVIL ENGINEERS
A Sevee & Maher Engineers company

STORMWATER REPORT

PROJECT

MULTI FAMILY BUILDING

745-747 N. MILWAUKEE AVE / 126-140 LAKE ST.,
LIBERTYVILLE, LAKE COUNTY, ILLINOIS

PREPARED BY:
BONO CONSULTING, INC.
SME COMPANY
1018 BUSSE HIGHWAY
PARK RIDGE, IL 60068

ISSUE	PREPARED BY	DATE
1	AV	2-25-2025

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1. N/A

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1. N/A

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- Scheduled Maintenance Program for Permanent Stormwater Facilities

1018 Busse Hwy, Park Ridge, IL-60068. PH: (847) 823.3300, (847) 823.3302 FAX: (847) 823.3303

TAB 1 – Project Overview

- Completed Stormwater Permit Application – Attached
- Narrative description of development

Narrative description of development

General: Proposed multi-family residential building is proposed on at 2.173ac. lot which is part of 2.205ac. lot. new multi-family building to have lower level with parking and residential units above. an access drive is proposed through the site from Milwaukee to Metra railroad station/parking lot.

Area Summary:
Total area of site: 2.205 acres
Area of the site of be developed at present: 2.173 acres
Disturbed area of site: 2.173 acres

Special protection areas: There are no floodplain or wetlands on site.

Upstream tributary: There is no upstream tributary area for the site.

Combined/separate sewer area info: Proposed project is located in a separate sewer area. storm sewer will discharge to storm sewer in the Metra parking lot.

Detention/volume control facility: Detention is required per local & county requirements. volume reduction facility is required per county requirements. underground detention system with open bottom is proposed for the site.

Sanitary sewers: 6" sanitary services from the building are proposed to connect to new sanitary manhole on the site. from the manhole the sanitary service is proposed to connect to the sanitary sewer main located on lake street.

Soils/infiltration rate: Silty clays

Groundwater elevation: n/a

Existing site consists of four (4) single family residences lots and two commercial properties. The property is surrounded by commercial properties on the east & south, with parking garage to the south. Single family residences are to the west and Metra train station parking lot and station to the north.

There is a substantial grade change on site, which necessitates to split the project into two watershed areas, with different high water level and detention systems.

1018 Busse Hwy, Park Ridge, IL-60068. PH: (847) 823.3300, (847) 823.3302 FAX: (847) 823.3303

There should be no impacts on stormwater due to the proposed stormwater detention, post construction best management practices and pipe system detailed on the civil engineering plans.

Project Highlights

The project has been designed with two watershed areas and two underground detention system along the north property line and a vast system of pipes that will capture all on-site stormwater runoff prior to discharging to existing stormwater system of the area. The outfall from the two-watershed areas is towards north, discharging to existing storm sewer system within Metra parking lot. The underground detention system with open bottom will serve as detention & volume control facility to promote groundwater infiltration while also addressing the quantitative detention requirements of the Village of Libertyville and the Lake County Stormwater Ordinances, and sedimentation controls.

The two watershed areas are divided based on the grade changes. The entire site is divided into west and east watershed areas. The west watershed area includes the new multi-family residential building and portion of access drive. Th east watershed area include the commercial lot and the access drive.

Precast detention vault system is designed for the new impervious area created on 4.138 ac. parcel. MWRD Nomograph has been used to calculate detention. Detention is calculated using County adopted rainfall data or Bulletin 75.

Proposed System
West Watershed Area: Proposed storm sewer system which picks up runoff from roof of the existing building, courtyard area, the lawns to the south and east of the new building and the parking lot to the north. The proposed system drains to the precast concrete detention vault located below north parking lot. Outfall from the detention vault after going through the restrictor structure discharges to the storm sewer system within Metra Station parking lot.

East Watershed Area: Proposed storm sewer system which picks up runoff from access drive and the commercial lot. The proposed system drains to the precast concrete detention vault located below future parking lot on commercial lot. Outfall from the detention vault after going through the restrictor structure discharges to the outfall storm sewer system of west watershed area before discharging to storm sewer system within Metra Station parking lot.

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TAB 2 – Stormwater Submittal

- The existing and proposed conditions including drainage details are found in the engineering drawings Sheets 1 – 17, Issue/Revision B dated 02.25.2025. We calculated the runoff volume from the site. The system was designed based on the bulletin 75 Nomograph. The is divided into East Watershed Area and West Watershed Area. Based on Nomograph the required storage for East Watershed area is 0.529*0.589=0.312 ac.ft. Similarly, the required storage for West Watershed area is 0.52*1.584=0.823 ac.ft. The detention is being provided via open bottom precast detention vault.
- The county requirement for total volume contraol storage required will be 1.1" of rainfall over new impervious area. For East Watershed Area is calculated out to be 20,949*1.1/12=1,920 cu.ft. For West Watershed Area is calculated out to be 51,053*1.1/12=4,680 cu.ft. The volume control is provided at the bottom of the open bottom detention vault. below outlet pipe and & underdrain to drain the system within max 94 hrs. The volume provided in East Watershed Area is 2,630 cu.ft. and for West Watershed Area is 5,259 cu.ft.
- An allowable release rate of 0.15 cfs/ac. used to determine the restrictor. For East Watershed Area is calculated out to be 0.589*0.15=0.088 cfs. A minimum 3" vortex restrictor size is proposed. For West Watershed Area is calculated out to be 1.584*0.15=0.238 cfs. A minimum 2" plate restrictor is proposed. The sizing calculations can be found below.
- The system has been designed with overflow over the weir located to the respective restrictors.
- The East detention system will overland overflow the Milwaukee ROW through the overflow catch basin. The West detention system will overland overflow through catch basins in the access drive to the Metra station parking lot.
- The sediment and erosion control plan is provided in the engineering drawings.
- The land use opinion from the Soil and Water District is provided.
- Several Best Management Practices were incorporated into the design:
  1. Silt fencing and stabilized construction entrances during construction.
  2. Inlet, filter baskets on existing structures on the road.
  3. Turf reinforcement matting on steep swales.

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Lake & Brainard, Libertyville, IL

Date: 2.25.25

	Existing		Proposed		Watershed West		Watershed East	
	Sq. Ft.	Acres	Sq. Ft.	Acres	Sq. Ft.	Acres	Sq. Ft.	Acres
Total Site Area	96,062	2.205						
Lot1+Lot2+Lot3 Area	96,062	2.205						
Project Area of Site	96,062	2.205			69,012	1.584	25,655	0.589
Building (included Bsmt.)	0	0.000	37,791	0.868	34,284	0.787	3,508	0.081
Walks, Decks, Patio	0	0.000	9,071	0.208	4,166	0.096	3,510	0.081
Access & Parking	0	0.000	26,535	0.609	12,603	0.289	13,932	0.320
Impervious Area	0	0.000	73,397	1.685	51,053	1.172	20,949	0.481
			76.41%		73.98%		81.66%	
Pervious Area	0	0.000	22,665	0.520	17,959	0.412	4,706	0.108

Disturbed area of Site	2.205	**Ac.**
Increase in Impervious Area	1.685	

COMPOSITE RUNOFF CURVE NUMBER (*CN*)

PROJECT: **Multi-Family Residence** **PERMIT NUMBER:**

LOCATION: **Brainerd Ave. & Lake Street, Libertyville** **DATE:** **02.25.25**

TYPE OF AREA (SELECT WITH DROP-DOWN)

X DETAINED AREA

UNRESTRICTED AREA

UPSTREAM AREA

MAJOR STORMWATER SYSTEM

OTHER: (East Watershed Area)

CONDITION (SELECT WITH DROP-DOWN)

X PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Area	D	98	0.48	47.14
Pervious Area	D	80	0.11	8.64
TOTALS:			0.59	55.78

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{55.78}{0.59} \rightarrow \textbf{Composite CN} = \textbf{94.70}$$

COMPOSITE RUNOFF CURVE NUMBER (*CN*)

PROJECT: **Multi-Family Residence** **PERMIT NUMBER:**

LOCATION: **Brainerd Ave. & Lake Street, Libertyville** **DATE:** **02.25.25**

TYPE OF AREA (SELECT WITH DROP-DOWN)

X DETAINED AREA

UNRESTRICTED AREA

UPSTREAM AREA

MAJOR STORMWATER SYSTEM

OTHER: (West Watershed Area)

CONDITION (SELECT WITH DROP-DOWN)

X PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

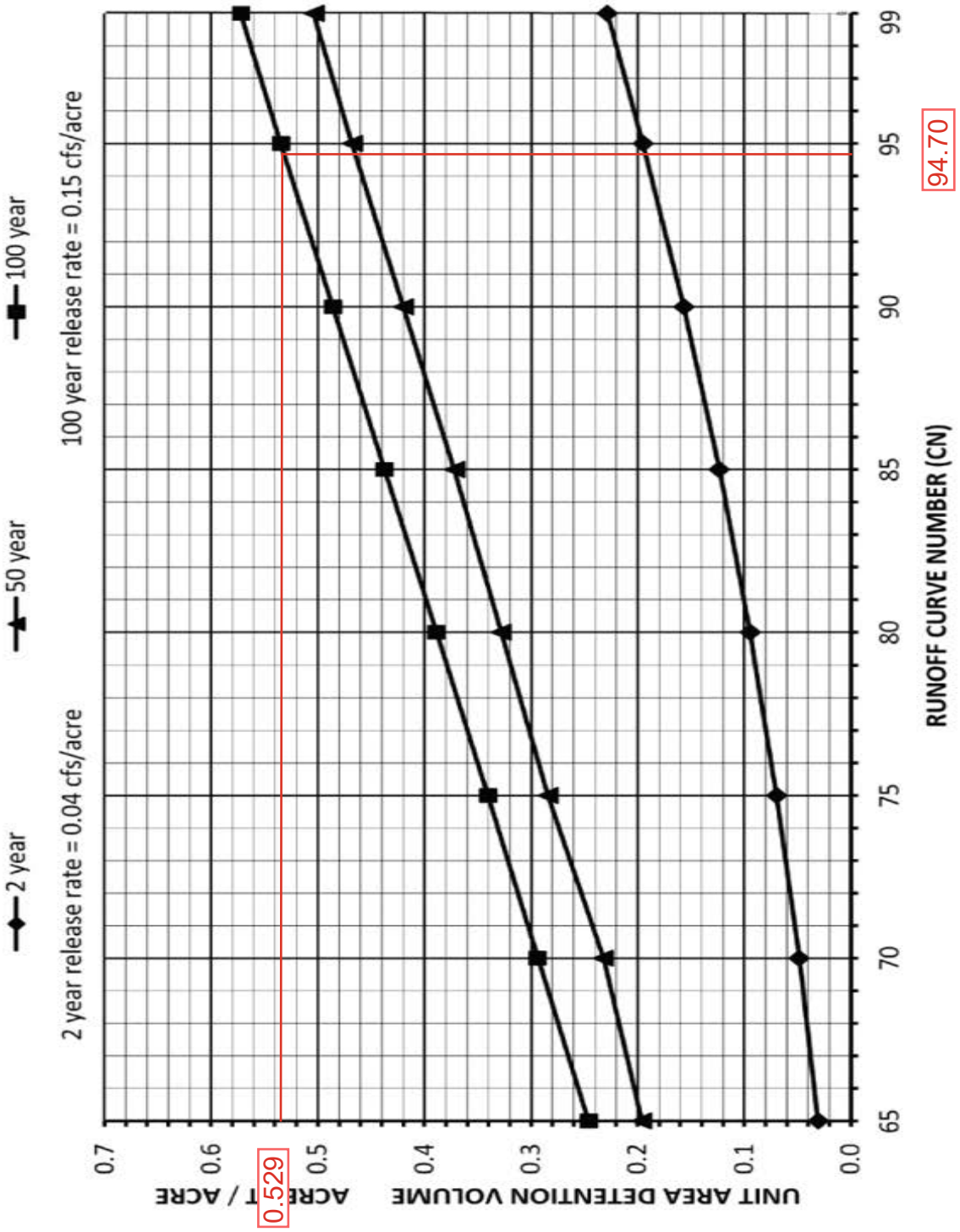
Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Area	D	98	1.17	114.86
Pervious Area	D	80	0.41	32.96
TOTALS:			1.58	147.82

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{147.82}{1.58} \rightarrow \textbf{Composite CN} = \textbf{93.32}$$

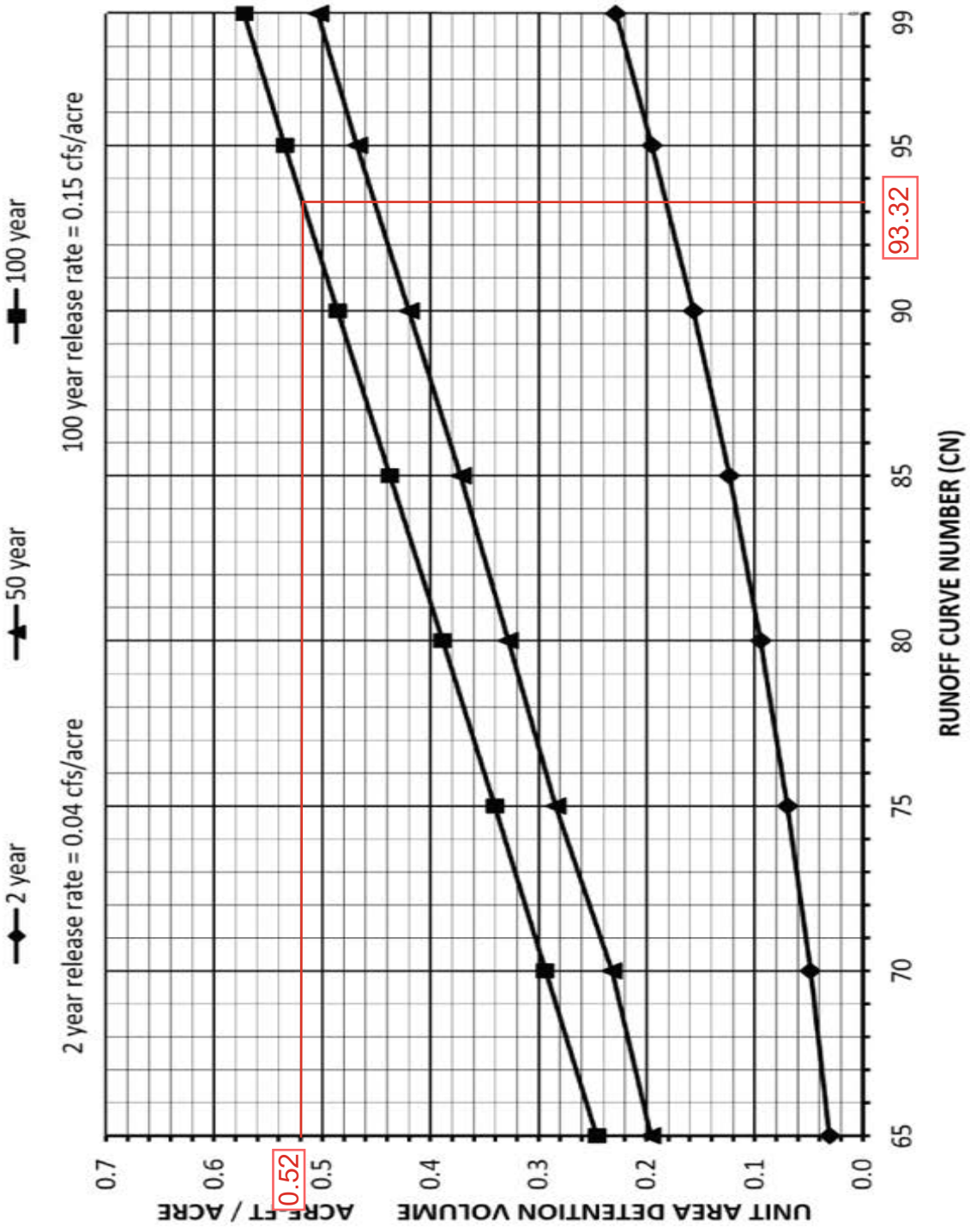
Appendix K: Detention Volume Versus Curve Number

EAST WATERSHED AREA



Appendix K: Detention Volume Versus Curve Number

WEST WATERSHED AREA



BEST MANAGEMENT PRACTICES

(East Watershed Area)

Impervious Area (Net New)	20,949 s.f.	

VOLUME REDUCTION BEST MANAGEMENT PRACTICES

Volume Control Requirements	**1.1**	Inches Rainfall
Volume Control Storage Required	1,920	Cu. Ft.

PROPOSED

Size of the infiltration Vault=	5259	
V = 4600X0.5	2630	Cu. Ft.
Propososed Volume	2,630	
Total Volume Reduction Storage Provided =	**2,630**	**Cu. Ft.**

BEST MANAGEMENT PRACTICES

(West Watershed Area)

Impervious Area (Net New)	51,053 s.f.	

VOLUME REDUCTION BEST MANAGEMENT PRACTICES

Volume Control Requirements	**1.1**	Inches Rainfall
Volume Control Storage Required	4,680	Cu. Ft.

PROPOSED

Size of the infiltration Vault=	5259	
V = 6500X1.00	5259	Cu. Ft.
Propososed Volume	5,259	
Total Volume Reduction Storage Provided =	**5,259**	**Cu. Ft.**

Release Rate Calculation (Qr) and Restrictor Sizing Calculation

(EAST WATERSHED AREA)

RELEASE RATE CALCULATION

Area of Site	=	0.589	Ac.
Release Rate	=	0.150	CFS/Ac.
Release Rate	=	**0.088**	CFS

RESTRICTOR SIZE CALCULATION

Orifice Design

Require Q =	0.088 cfs	Det. HWL =	693.00
Cd =	0.61	Orifice Invert:	691.00
Max. Head =	1.94	Orifice Cent.	691.06
Orifice Area:	0.0123		

Calculated Max. Restrictor Discharge: 0.084

Restrictor Diameter = ***1.5 inches***

USE 3" VORTEX RESTRICTOR

Release Rate Calculation (Qr) and Restrictor Sizing Calculation

(WEST WATERSHED AREA)

RELEASE RATE CALCULATION

Watershed Ar	=	1.584	Ac.
Release Rate	=	0.150	CFS/Ac.
Release Rate	=	**0.238**	CFS

RESTRICTOR SIZE CALCULATION

Orifice Design

Require Q =	0.238 cfs	Det. HWL =	697.00
Cd =	0.61	Orifice Invert:	691.00
Max. Head =	5.92	Orifice Cent.	691.08
Orifice Area:	0.0197		

Calculated Max. Restrictor Discharge: 0.235

Restrictor Diameter = ***1.9 inches***

USE 2" PLATE RESTRICTOR

TAB 3 - Floodplain Submittal

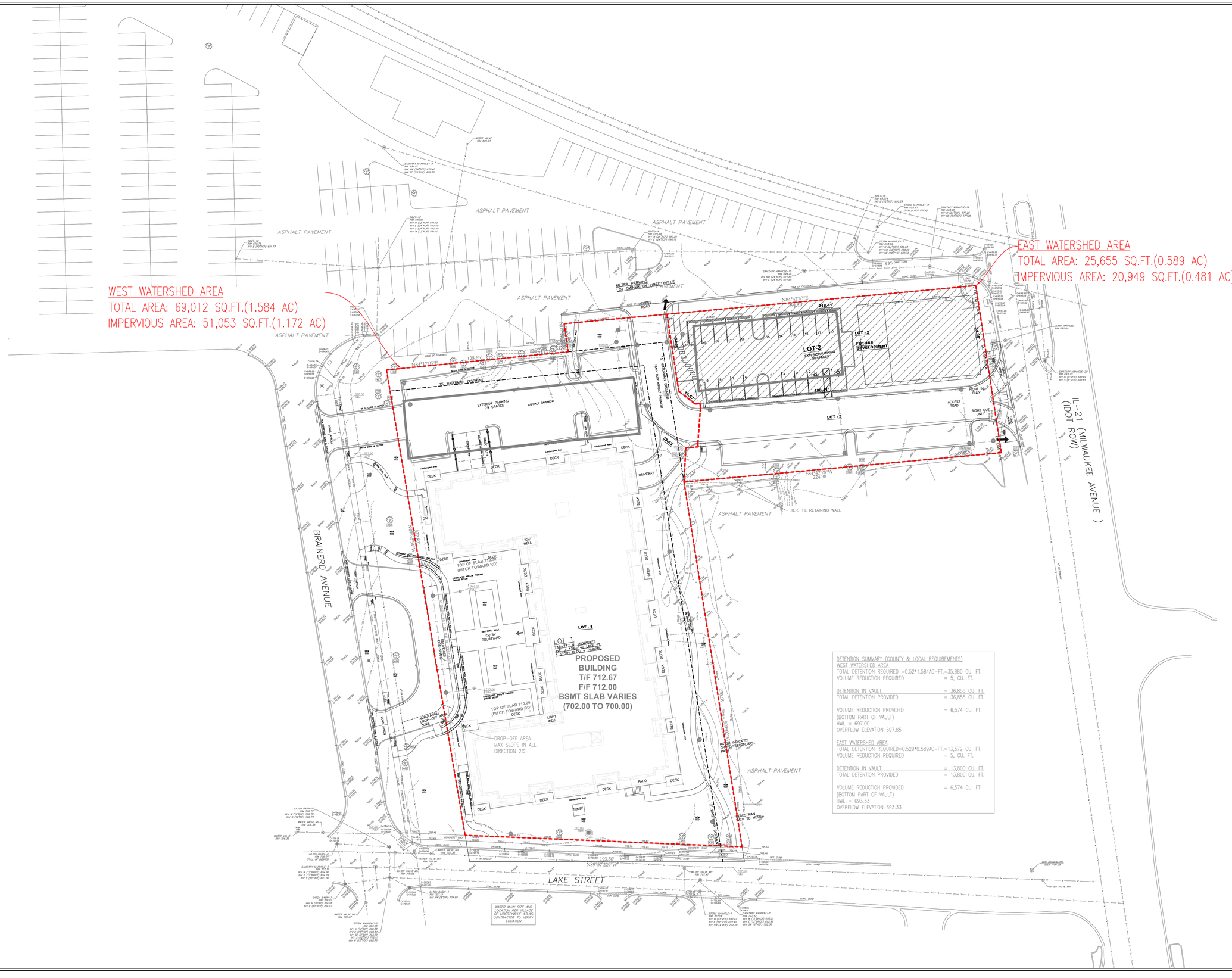
Not Applicable.

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TAB 4 - Wetland Submittal

- Not Applicable.

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DETENTION SUMMARY (COUNTY & LOCAL REQUIREMENTS)

WEST WATERSHED AREA

TOTAL DETENTION REQUIRED =0.52*1.584AC-FT.=35,880 CU. FT.
VOLUME REDUCTION REQUIRED = 5, CU. FT.

DETENTION IN VAULT = 36,855 CU. FT.
TOTAL DETENTION PROVIDED = 36,855 CU. FT.

VOLUME REDUCTION PROVIDED = 6,574 CU. FT.
(BOTTOM PART OF VAULT)
HWL = 697.00
OVERFLOW ELEVATION 697.85

EAST WATERSHED AREA

TOTAL DETENTION REQUIRED=0.529*0.589AC-FT.=13,572 CU. FT.
VOLUME REDUCTION REQUIRED = 5, CU. FT.

DETENTION IN VAULT = 13,800 CU. FT.
TOTAL DETENTION PROVIDED = 13,800 CU. FT.

VOLUME REDUCTION PROVIDED = 6,574 CU. FT.
(BOTTOM PART OF VAULT)
HWL = 693.33
OVERFLOW ELEVATION 693.33

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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A Veteran Owned Business Company
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SME
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ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

WATERSHED AREAS EXHIBIT

MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST., LIBERTYVILLE, LAKE COUNTY, IL

NOT FOR CONSTRUCTION

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THIS DRAWING SHALL NOT BE USED, REPRODUCED, MODIFIED OR SOLD EITHER WHOLLY OR IN PART, EXCEPT WHEN AUTHORIZED IN WRITING BY THE ENGINEER.

PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
30 0 30
SCALE: 1"=30'-0

WA

AMERECO, INC.
CONSULTING • ENGINEERING • PROJECT MANAGEMENT ®15
MORE THAN 30 YEARS OF EXCEPTIONAL SERVICE

February 21, 2025

Mr. Tom Meador
Libertyville Land, LLC
1259 West Madison Street
Chicago, IL 60607

Re: Environmental Assessment Status Update
725-747 N. Milwaukee Avenue
126-134, 138, 140 Lake Street
Libertyville, IL 60048
Project #25.2437.1

Dear Mr. Meador:

As requested, this document has been prepared to provide an update on the status of the environmental assessments being conducted at 725-747 N. Milwaukee Avenue, 126-134, 138, 140 Lake Street, Libertyville, IL 60048, the *Site*. In accordance with your authorization, Amereco is conducting a Limited Phase II Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E1903-11. The Limited Phase II ESA was conducted in response to the identification of Recognized Environmental Conditions (RECs) in the E. Cooney Associates, Inc (ECA) Phase I ESA Report, dated November 1, 2022.

Two Limited Phase II ESA field events have been conducted, an initial investigation in November 2022 and further assessment in December 2024. During this time, the Owner of the Site elected to remove and close an underground storage tank (UST) located on the property. This was completed on October 22, 2024 by Shrack Environmental. A release was noted and reported to IEPA (LUST ID #2024-0817). A Focused Site Investigation Report, Remedial Objectives Report, Remedial Action Plan, and Remedial Action Completion Report were completed by the Owner pursuant to applicable regulations and have been submitted to the IEPA for closure.

Based on the findings of the UST closure, subsequent investigation, and the Phase II ESA, the release of petroleum associated with historic operations on the property has had minimal impact and poses little risk to human health and the environment. The source has been removed and the limited impacts identified can be controlled to mitigate the risk. The Phase II ESA Report is nearly complete and will be shared with the IEPA Project Manager to ensure inclusion in their review for closure of the LUST.

It is our professional opinion that the Site meets the requirements for a letter of “No Further Remediation.” Given future development plans, there are no environmental conditions identified that would result in a known risk to human or environmental health and safety. A Phase I ESA will be prepared prior to final Site acquisition to satisfy All Appropriate Inquires [40 CFR Part 312]. However, given that Site use has not changed since the 2022 ECA Phase I, additional RECs are not anticipated.

Please let us know if you have any questions.

Respectfully submitted,

Zachary Heine, CHMM
Director of Operations

MILWAUKEE & LAKE

745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

ABBREVIATIONS

A.C.T.	ACOUSTICAL CEILING TILE	E.J.	EXPANSION JOINT	L.F.	LINEAR FOOT	R.C.P	REFLECTED CEILING PLAN
A.D.	AREA DRAIN	E.O.	ELECTRICAL OUTLET	L.H.	LEFT HAND	R.D.	ROOF DRAIN
A.F.F.	ABOVE FINISHED FLOOR	E.W.C.	ELECTRIC WATER COOLER	L.H.R.	LEFT HAND REVERSE	R.H.	RIGHT HAND
A.P.	ACCESS PANEL	EJEC.	EJECTOR	L.P.	LOW POINT	R.H.R.	RIGHT HAND REVERSE
A/C	AIR CONDITIONING	ELEC.	ELECTRICAL	LAM.	LAMINATE	R.O.	ROUGH OPENING
ACOUS.	ACOUSTICAL	ELEV.	ELEVATOR	LAUN.	LAUNDRY	REC.	RECESSED
ADH.	ADHESIVE	EMER.	EMERGENCY	LAV.	LAVATORY	REF.	REFRIGERATOR
ADJ.	ADJUSTABLE	ENCL.	ENCLOSURE	LB(S).	POUND(S)	REFR.	REFERENCE
ALT.	ALTERNATE	ENGR.	ENGINEER	LKR.	LOCKER	REQ.	REQUIRED
ALUM.	ALUMINUM	ENT.	ENTRANCE	LT.	LIGHT	RESIL.	RESILIENT
ANCH.	ANCHOR	EQ.	EQUAL	LTWT.	LIGHTWEIGHT	REV.	REVISION
ANOD.	ANODIZED	EQUIP.	EQUIPMENT	LVT.	LUXURY VINYL TILE	RFG.	ROOFING
APPROX.	APPROXIMATE	EXC.	EXCAVATION			RM.	ROOM
ARCH.	ARCHITECTURAL	EXH.	EXHAUST	M.	METER		
ASPH.	ASPHALT	EXIST.	EXISTING	M.H.	MANHOLE	S.	SOUTH
ASST.	ASSISTANT	EXP.	EXPANSION	M.O.	MASONRY OPENING	S. SK.	SERVICE SINK
AUTO	AUTOMATIC	EXPO.	EXPOSED	M.S.	MOP SINK	S.A.	SUPPLY AIR
		EXT.	EXTERIOR	MACH.	MACHINE	S.C.	SOLID CORE
B.M.	BENCHMARK			MAINT.	MAINTENANCE	S.C.W.	SOLID CORE WOOD
B.O.	BY OTHERS	F. BR.	FACE BRICK	MAS.	MASONRY	S.F.	SQUARE FOOT (FEET)
B.T.B.	BACK-TO-BACK	F.A.	FIRE ALARM	MATL.	MATERIAL	S.M.	SMOKE DETECTOR
B.U.R.	BUILT-UP ROOFING	F.D.	FLOOR DRAIN	MAX.	MAXIMUM	S.P.	STANDPIPE
B/	BOTTOM OF	F.E.	FIRE EXTINGUISHER	MECH.	MECHANICAL	S.S.	STAINLESS STEEL
BB.	BASEBOARD	F.T.F.	FACE TO FACE	MEMB.	MEMBRANE	S.T.C.	SOUND TRANSMISSION CLASS
BD.	BOARD	F/	FACE OF	MEZZ.	MEZZANINE	SAN.	SANITARY
BITUM.	BITUMINOUS	FAB.	FABRIC	MFR.	MANUFACTURER	SCHED.	SCHEDULE
BLDG.	BUILDING	FDN.	FOUNDATION	MIN.	MINIMUM	SECT.	SECTION
BLKG.	BLOCKING	FIN.	FINISH	MIR.	MIRROR	SHT.	SHEET
BLR.	BOILER	FL.	FLOOR	MISC.	MISCELLANEOUS	SHWR.	SHOWER
BM.	BEAM	FLEX.	FLEXIBLE	MOV.	MOVEABLE	SIM.	SIMILAR
BOT.	BOTTOM	FLUOR.	FLUORESCENT	MTD.	MOUNTED	SPEC.	SPECIFICATION
BRG.	BEARING	FPRF.	FIREPROOF	MTG.	MOUNTING	SPKR.	SPEAKER
BSMT.	BASEMENT	FRT.	FIRE RETARDANT TREATED	MTL.	METAL	SPRINK.	SPRINKLER
		FT.	FOOT (FEET)	MUL.	MULLION	SQ.	SQUARE
C.B.	CATCH BASIN	FTG.	FOOTING			STA.	STATION
C.G.	CORNER GUARD	FURN.	FURNACE	N.	NORTH	STD.	STANDARD
C.I.P.	CAST IN-PLACE	FURR.	FURRING	N.I.C.	NOT IN CONTRACT	STL.	STEEL
C.J.	CONTROL JOINT	FUT.	FUTURE	N.T.S.	NOT TO SCALE	STOR.	STORAGE
C.L.	CENTERLINE			N/A	NOT APPLICABLE	STRUC.	STRUCTURAL
C.M.	CARBON MONOXIDE DETECTOR	G.	GAS	NO.	NUMBER	SUMP.	SUMP PUMP
C.M.U	CONCRETE MASONRY UNIT	G.C.	GENERAL CONTRACTOR	NOM.	NOMINAL	SUSP.	SUSPENDED
C.O.	CLEANOUT	G.T.	GREASE TRAP			SYM.	SYMMETRICAL
C.T.	CERAMIC TILE	GA.	GAUGE	O.A.	OVERALL		
C.W.	COLD WATER	GALV.	GALVANIZED	O.C.	ON CENTER	T&B	TOP & BOTTOM
CAB.	CABINET	GEN.	GENERAL	O.D.	OUTSIDE DIAMETER	T&G	TONGUE & GROOVE
CCTV.	CLOSED CIRCUIT TELEVISION	GL.	GLASS	O.F.D.	OVERFLOW DRAIN	T.	TREAD
CIRC.	CIRCULATION	GND.	GROUND	OF/CI.	OWNER FURNISHED /	T.V.	TELEVISION
CLG.	CEILING	GR.	GRADE		CONTRACTOR INSTALLED	T/	TOP OF
CLO.	CLOSET	GYP.	GYPSUM BOARD	OFF.	OFFICE	TEL.	TELEPHONE
COL.	COLUMN			OPNG.	OPENING	TEMP.	TEMPERED
CONC.	CONCRETE	H.B.	HOSE BIBB	OPP.	OPPOSITE	THK.	THICK
CONF.	CONFERENCE	H.C.	HOLLOW CORE	OPP. H.	OPPOSITE HAND	TOPO.	TOPOGRAPHY
CONN.	CONNECTION	H.M.	HOLLOW METAL	OVHD.	OVERHEAD	TRTD.	TREATED
CONST.	CONSTRUCTION	H.O.	HOLD OPEN			TYP.	TYPICAL
CONT.	CONTINUOUS	H.P.	HIGH POINT	P. LAM	PLASTIC LAMINATE		
CONTR.	CONTRACTOR	H.V.A.C.	HEATING, VENTILATING	P.A.	PUBLIC ACCESS	U.L.	UNDERWRITERS LABORATORIES
COORD.	COORDINATE		& AIR CONDITIONING	P.C.	PRE-CAST	U.N.O.	UNLESS NOTED OTHERWISE
CPT.	CARPET	H.W.	HOT WATER	P.F.	PANEL FABRIC	UNEXC.	UNEXCAVATED
CTR.	CENTER	H.W.H.	HOT WATER HEATER	P.L.	PROPERTY LINE	UNF.	UNFINISHED
		HDW.	HARDWARE	P.S.F.	POUNDS PER SQUARE FOOT	UR.	URINAL
D.F.	DRINKING FOUNTAIN	HDWD.	HARDWOOD	P.S.I.	POUNDS PER SQUARE INCH	UTIL.	UTILITY
D.O.	DOOR OPENING	HORIZ.	HORIZONTAL	PAV.	PAVING		
D.P.	DAMPPROOFING	HR.	HOUR	PL.	PLATE	V.C.T.	VINYL COMPOSITION TILE
D.S.	DOWNSPOUT	HT.	HEIGHT	PLAS.	PLASTER	V.I.F.	VERIFY IN FIELD
DBL.	DOUBLE	HTG.	HEATING	PLUMB.	PLUMBING	V.T.	VINYL TILE
DEG.	DEGREE	HYD.	HYDRANT	PLWD.	PLYWOOD	V.W.C.	VINYL WALL COVERING
DEMO	DEMOLISH			PNL.	PANEL	VENT.	VENTILATION
DEPT.	DEPARTMENT	I.D.	INSIDE DIAMETER	PNT.	PAINT	VERT.	VERTICAL
DIA.	DIAMETER	ID	INTERIOR DESIGNER	POL.	POLISHED	VEST.	VESTIBULE
DIAG.	DIAGONAL	IN.	INCH(ES)	PROP.	PROPERTY		
DIFF.	DIFFUSER	INCAND.	INCANDESCENT	PT.	POINT	W.	WEST
DIM.	DIMENSION	INCL.	INCLUDE(D)	PTD.	PAINTED	W.C.	WATER CLOSET
DISP.	DISPENSER	INSUL.	INSULATION	PTN.	PARTITION	W.F.	WIDE FLANGE
DIV.	DIVISION	INT.	INTERIOR			W.I.	WROUGHT IRON
DN.	DOWN	INTER.	INTERMEDIATE	QT.	QUARRY TILE	W.I.C.	WALK-IN-CLOSET
DR.	DOOR	INV. EL.	INVERT ELEVATION	QTY.	QAUNTITY	W.M.	WIRE MESH
DTL.	DETAIL					W.W.F.	WELDED WIRE FABRIC
DW.	DISHWASHER	JAN.	JANITOR	R.	RISER	W/	WITH
DWG.	DRAWING	JST.	JOIST	R.A.	RETURN AIR	W/D	WASHER / DRYER
		JT.	JOINT	R/W.	RIGHT-OF-WAY	W/O	WITHOUT
E.	EAST			RAD.	RADIUS	WD.	WOOD
EA.	EACH	K.D.	KNOCK DOWN	RECEP.	RECEPTION	WGT.	WEIGHT
EL.	ELEVATION	K.O.	KNOCK OUT	REF.	REFERENCE	WIN.	WINDOW
ELAS.	ELASTOMERIC	KIT.	KITCHEN	REINF.	REINFORCING	WPFG.	WATERPROOFING
E.P.	ELECTRICAL PANEL	K.S.	KITCHEN SINK	R.B.	RUBBER BASE	WSCT.	WAINSCOT

PROJECT TEAM

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ARCHITECT:

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HUGH LIGHTING DESIGN
PETER HUGH - LIGHTING DESIGNER
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708.822.2366

SHEET LIST - PD

SHEET #	CONTENTS
ARCHITECTURAL	
A0.0	PROJECT DATA
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A0.2	EXTENDED SITE PLAN OF PROPOSAL
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A1.03	2ND FLOOR PLAN
A1.04	3RD FLOOR PLAN
A1.05	4TH FLOOR PLAN
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-	ALTA / NSPS LAND TITLE SURVEY
--	PRELIMINARY PLAT OF SUBDIVISION

SYMBOLS & MATERIALS LEGEND

NORTH ARROW

ELEVATION IDENTIFIER (XX / XXXX)

CALLOUT MARKER (1 / AX.XX, SIM)

SECTION LINE (1 / A101, SIM)

LEVEL MARKER (Name / +/- Elevation)

FINISH MATERIAL (MATERIAL)

ELEVATION CHANGE

PARTITION TAG (1i)

DOOR TAG: INSTANCE (1)

DOOR TAG: TYPE (1t)

WINDOW TAG (1t)

KEY NOTE TAG (G)

EQUIPMENT TAG (1t)

REVISION TAG (/1)

REVISION

HIDDEN LINE

CENTER LINE

PROPERTY LINE

BREAK LINE

EARTH

GRANULAR FILL

WOOD FRAMING

WOOD BLOCKING

WOOD

PLYWOOD

CONCRETE

BRICK

C.M.U.

STONE

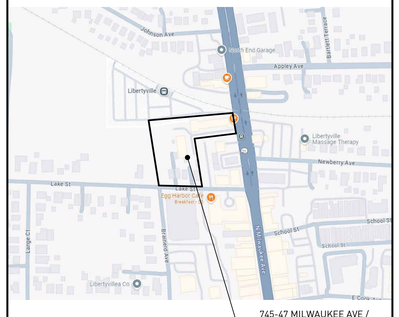
STEEL

BATT INSULATION

RIGID INSULATION

SPRAY INSULATION

LOCATION MAP/ IMAGE





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Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
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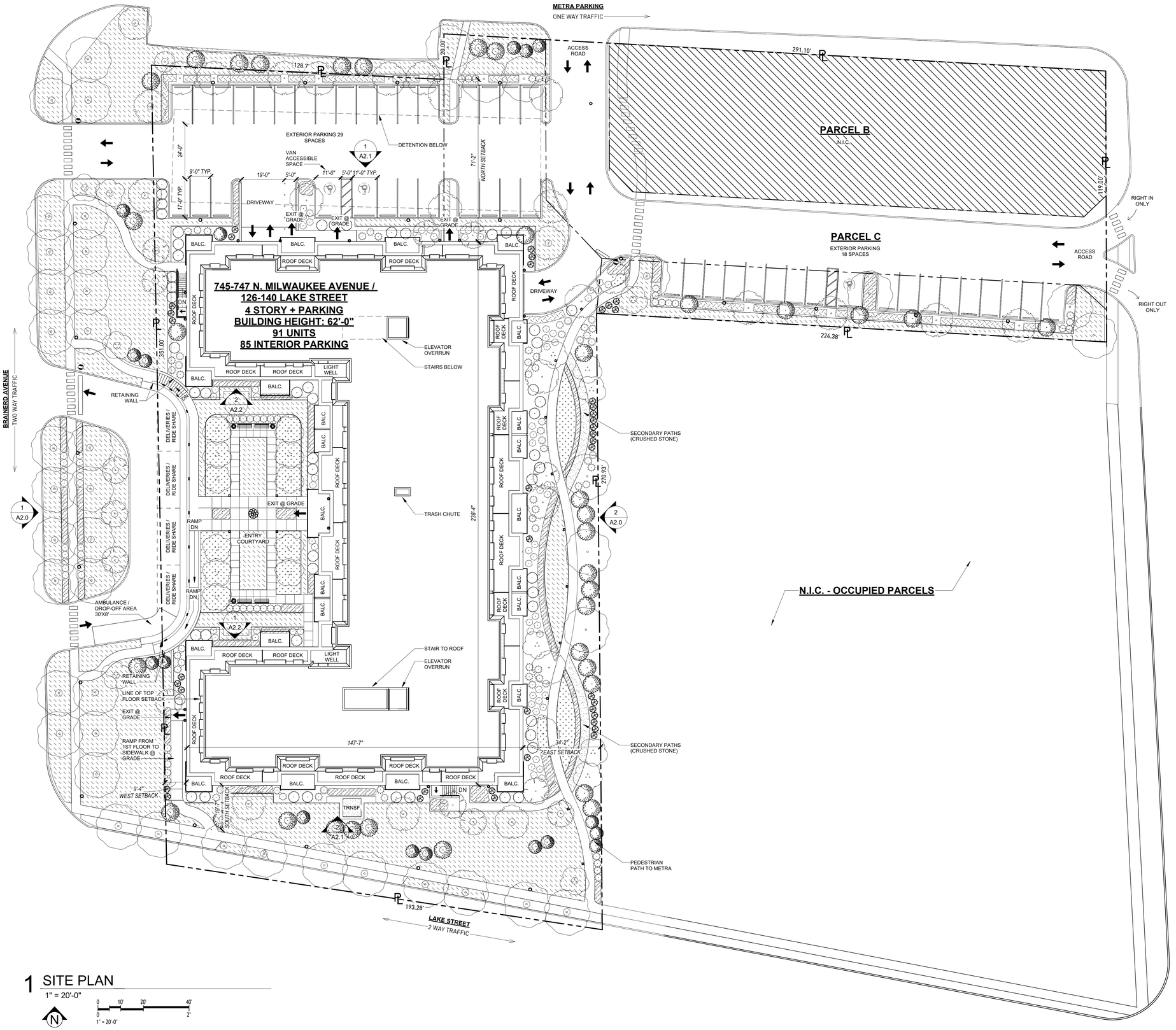
CERTIFICATION

SHEET TITLE

PROJECT DATA

SHEET #

A0.0



1 SITE PLAN

1" = 20'-0"

0 10' 20' 40'

0 1" = 20'-0" 2"

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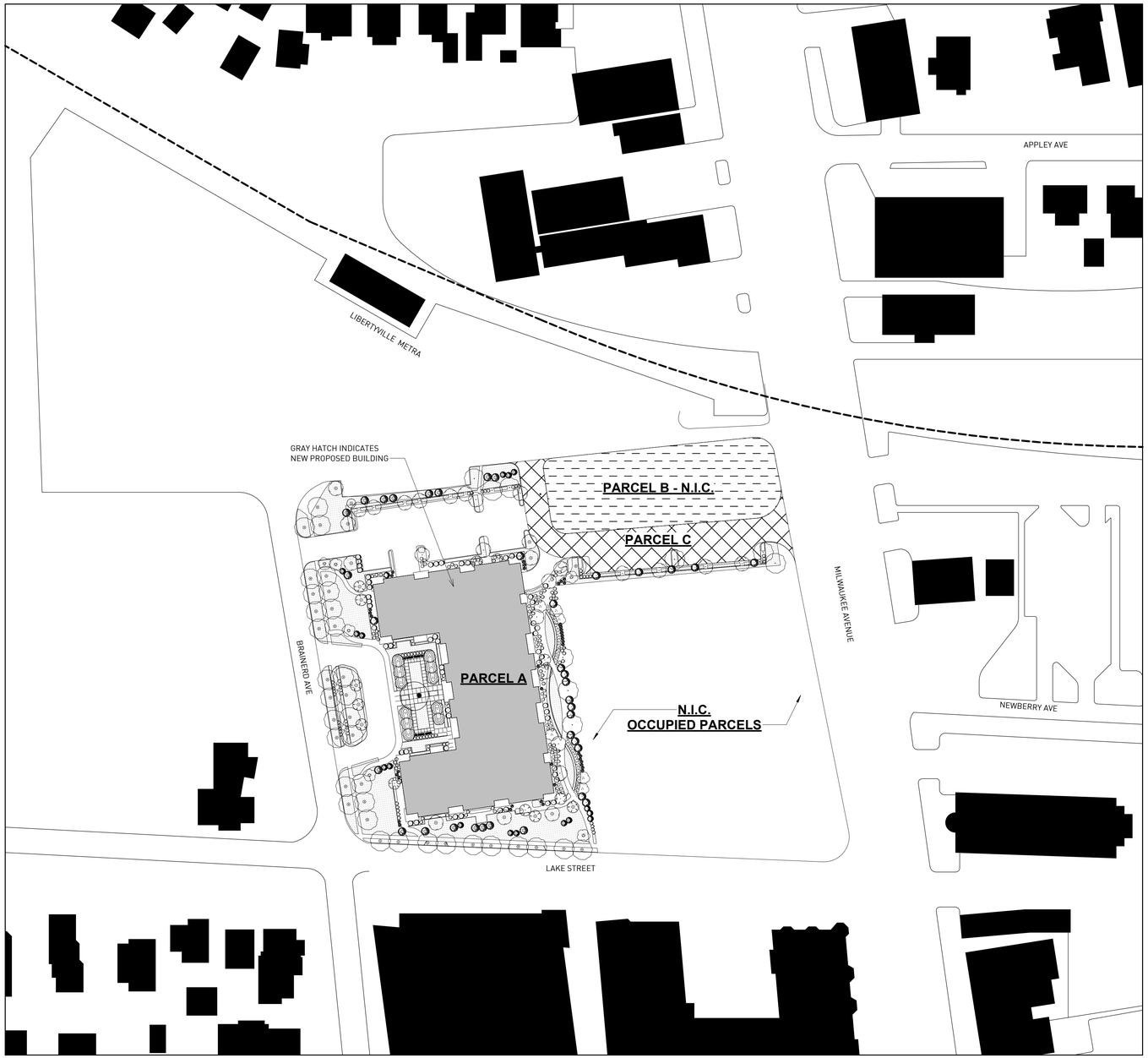
CERTIFICATION

SHEET TITLE

SITE PLAN OF PROPOSAL

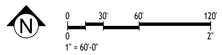
SHEET #

A0.1



2 EXPANDED SITE PLAN

1" = 60'-0"





1 AERIAL IMAGE

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CERTIFICATION

SHEET TITLE

EXTENDED SITE PLAN OF PROPOSAL

SHEET #

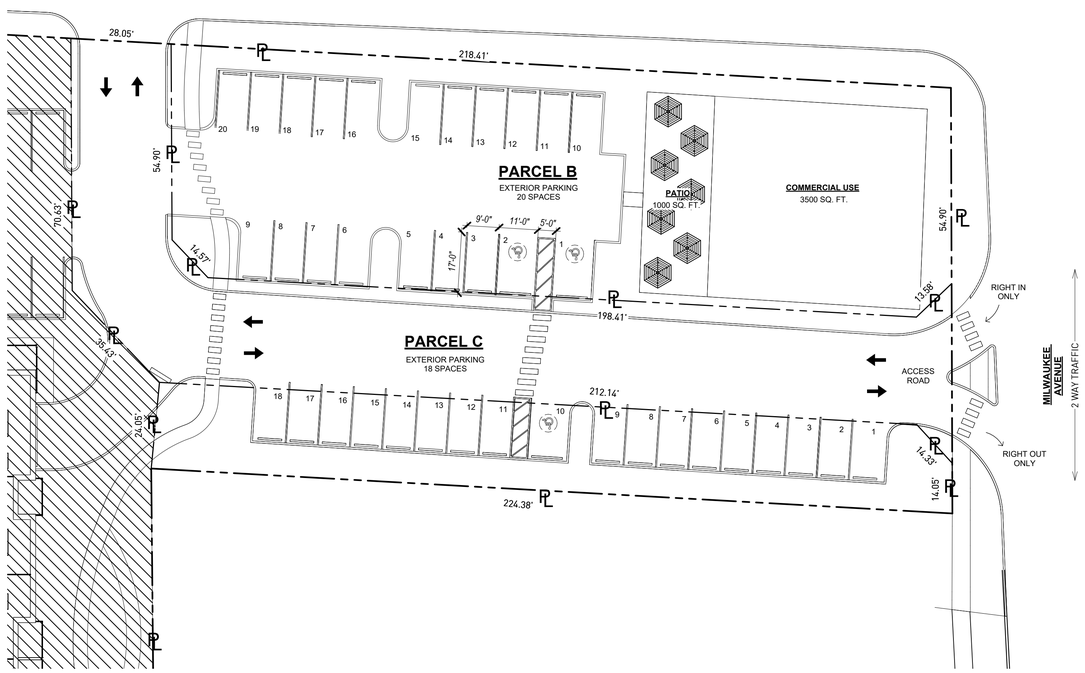
A0.2



PARCEL B RESTAURANT PRECEDENT CASE STUDY 1:
MICKEY FINN'S, LIBERTYVILLE



PARCEL B SINGLE STORY RETAIL PRECEDENT CASE STUDY 1:



1 SITE PLAN - PARCEL B & C

1" = 20'-0"

0 10' 20' 40'
0 1" = 20'-0"

PARCEL B PARKING RATIOS:

PER ARTICLE 10 OF ZONING CODE

RESTAURANT: 3,500 SQ FT INTERIOR* 1,000 SQ FT EXT. PATIO**	1 FOR EACH 100 SQ FT OF FLOOR AREA (MINIMUM OF 10)	**20 SPOTS** **5 SPOTS**
RETAIL USE: 4,500 SQ FT	1 FOR EACH 250 SQ FT OF FLOOR AREA	**18 SPOTS**

*PER EXCEPTION D OF ARTICLE 10, THE FIRST 1,500 SQ FT WITHIN ANY NEW BUILDING IN THE C-1 COMMERCIAL DISTRICT CAN BE EXCLUDED
**THE FIRST 500 SQ FT OF OUTDOOR DINING SPACE CAN BE EXCLUDED

2 PARKING CALCULATIONS

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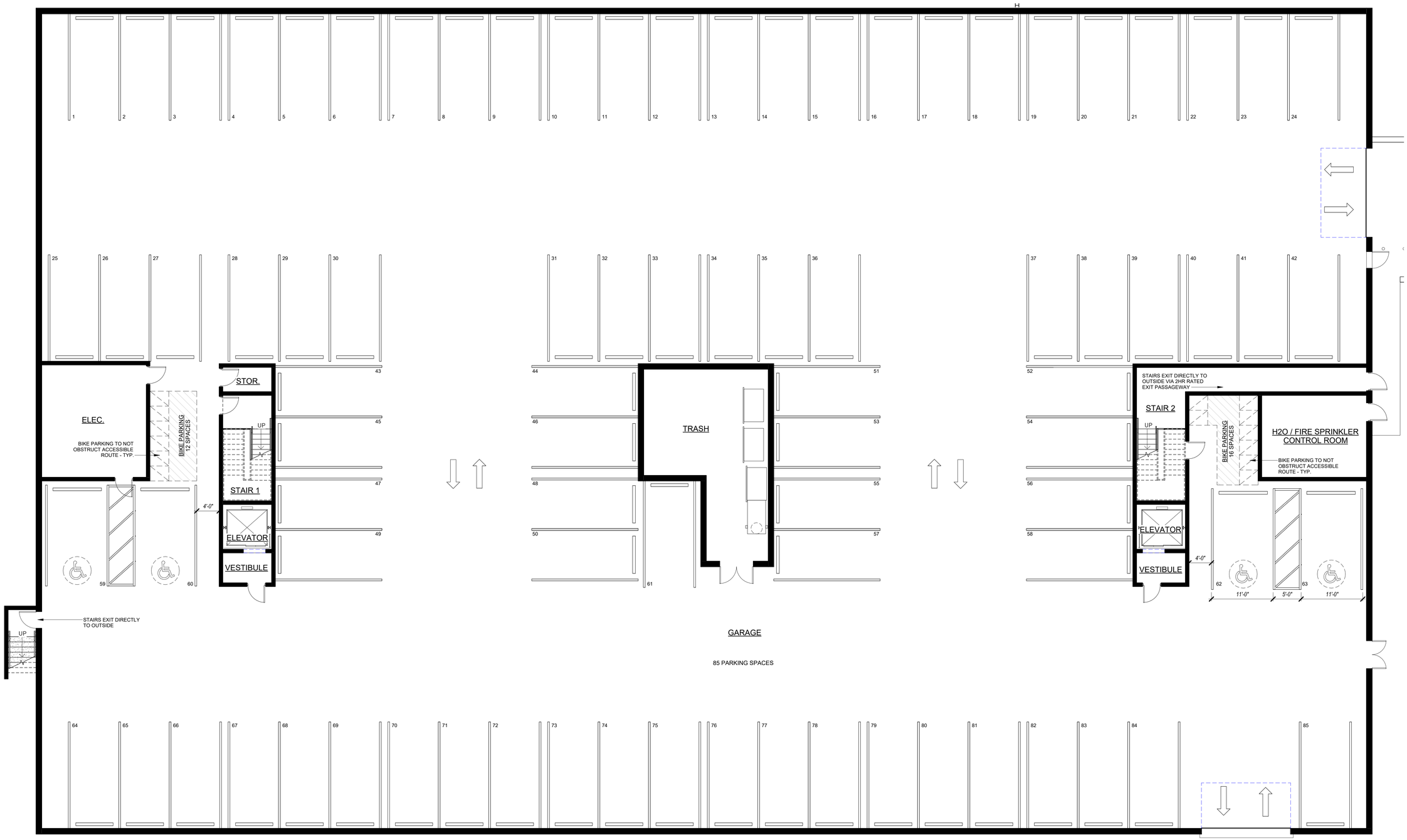
SHEET TITLE

SITE PLAN OF PROPOSAL
PARCEL B & C

SHEET #

A0.3

PARKING SPACE TOTAL: 85
REGULAR - 81
ADA - 4



1 PARKING LEVEL PLAN

1/8" = 1'-0"

0 4' 8' 16'
0 1/8" = 1'-0" 2'

GARAGE GSF: 35,200 SF

BUILDING HEIGHT: 62' - 0"

NOTES:

-MECHANICAL VENTILATION SYSTEMS FOR ENCLOSED PARKING GARAGES SHALL OPERATE CONTINUOUSLY OR SHALL BE AUTOMATICALLY OPERATED BY MEANS OF CARBON MONOXIDE DETECTORS APPLIED IN CONJUNCTION WITH NITROGEN DIOXIDE DETECTORS. SUCH DETECTORS SHALL BE LISTED IN ACCORDANCE WITH UL 2075 AND INSTALLED IN ACCORDANCE WITH THEIR LISTING AND THE MANUFACTURERS' INSTRUCTIONS. AUTOMATIC OPERATION SHALL CYCLE THE VENTILATION SYSTEM BETWEEN THE FOLLOWING TWO MODES OF OPERATION:
1. FULL-ON AT AN AIRFLOW RATE OF NOT LESS THAN 0.75 CFM PER SQ. FT. OF THE FLOOR AREA SERVED.
2. STANDBY AT AN AIRLFOW RATE OF NOT LESS THAN 0.05 CFM PER SQ. FT. OF THE FLOOR AREA SERVED.

-CONNECTING VESTIBULE AREAS AND SIMILAR USES THAT ARE ACCESSORY TO A PUBLIC GARAGE SHALL BE MAINTAINED AT A POSITIVE PRESSURE AND SHALL BE PROVIDED WITH VENTILATION IN ACCORDANCE WITH SECTION 403.3.1 OF IMC.
-AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT BUILDINGS CLASSIFIED AS PARKING GARAGES WHERE ANY OF THE FOLLOWING CONDITIONS EXISTS:
1. WHERE THE FIRE AREA OF THE ENCLOSED PARKING GARAGE IN ACCORDANCE WITH SECTION 406.6 EXCEEDS 12,000 SQ FT.
2. WHERE THE ENCLOSED PARKING GARAGE IN ACCORDANCE WITH SECTION 406.6 IS LOCATED BENEATH OTHER GROUPS
3. WHERE THE FIRE AREA OF THE OPEN PARKING GARAGE IN ACCORDANCE WITH SECTION 406.5 EXCEEDS 48,000 SQ FT.

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Hugh LIGHTING DESIGN

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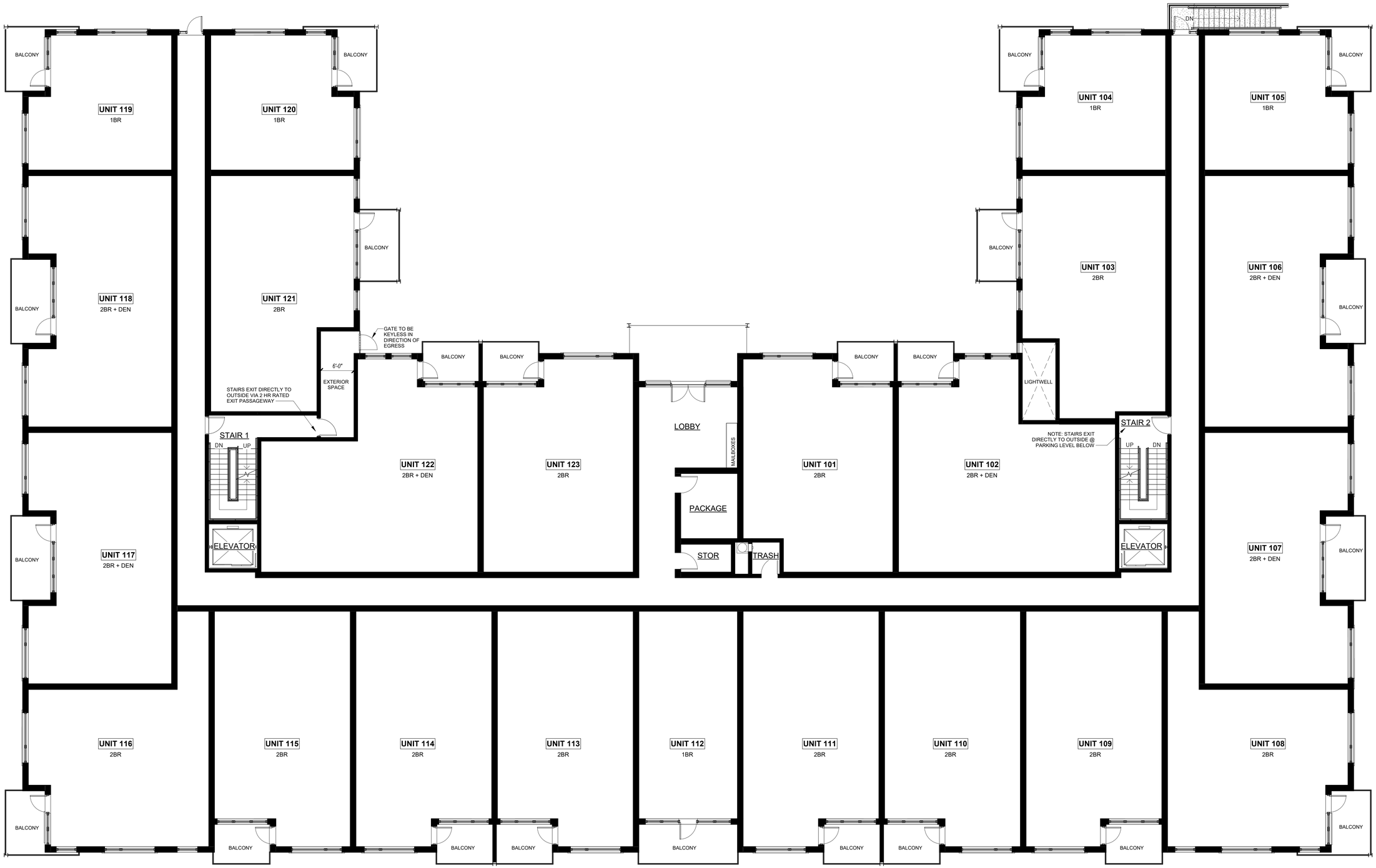
CERTIFICATION

SHEET TITLE

LOWER LEVEL PARKING PLAN

SHEET #

A1.01



1 1ST FLOOR PLAN

1/8" = 1'-0"

N

0 4' 8' 16'
0 1/8" = 1'-0" 2'

1ST FLOOR GSF: 27,100 SF

BUILDING HEIGHT: 62' - 0"

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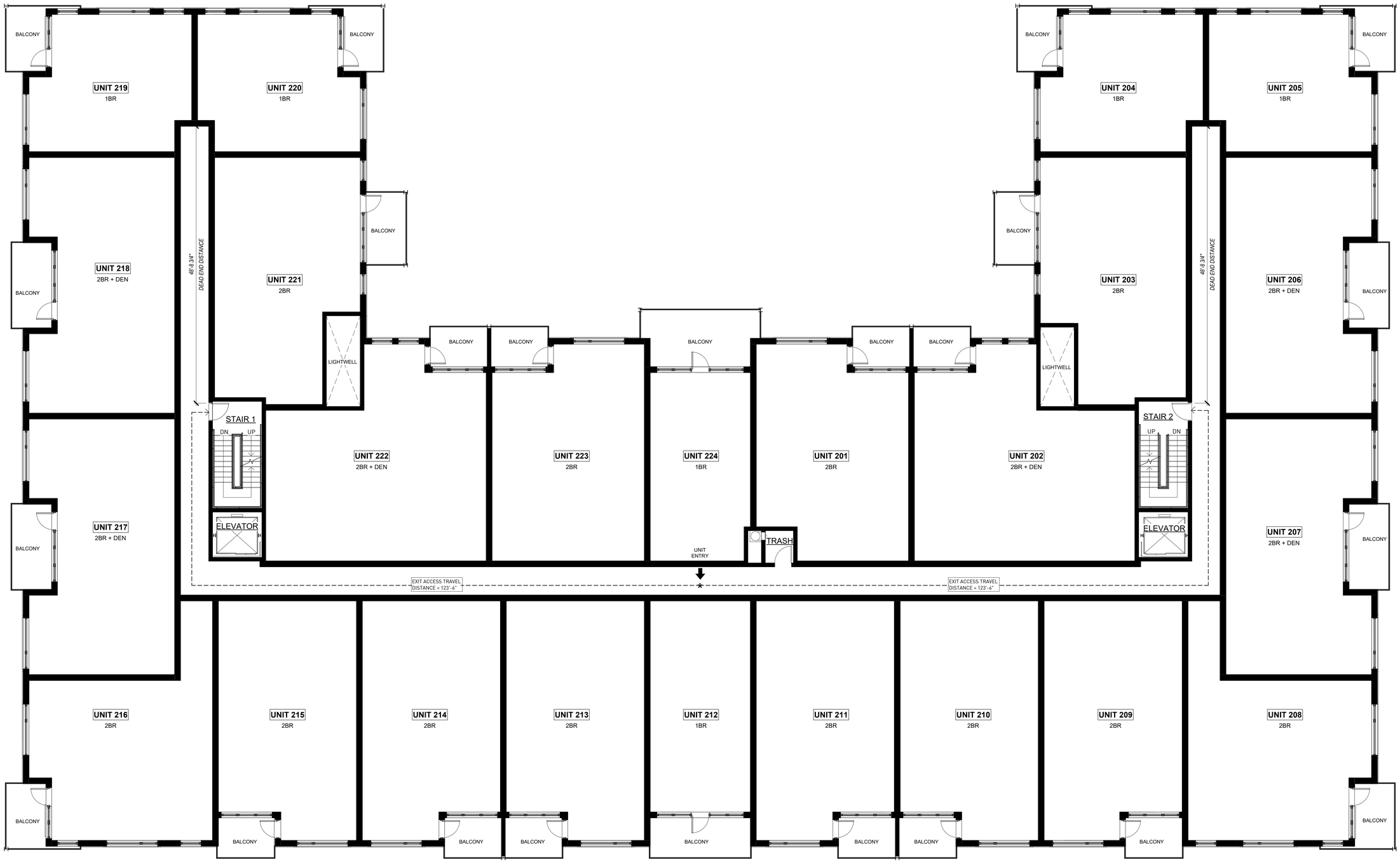
CERTIFICATION

SHEET TITLE

1ST FLOOR PLAN

SHEET #

A1.02



1 2ND FLOOR PLAN

1/8" = 1'-0"

0 4' 8' 16'
0 1/8" = 1'-0" 2"

2ND FLOOR GSF: 27,100 SF

BUILDING HEIGHT: 62' - 0"

PER 1BC TABLE 1017.2:
MAXIMUM EXIT ACCESS TRAVEL DISTANCE = 250'-0" MAX

PER IBC 1020.5, EXCEPTION 2:
MAXIMUM DEAD END CORRIDOR DISTANCE = 50'-0" MAX.

*BUILDING IS FULLY SPRINKLERED

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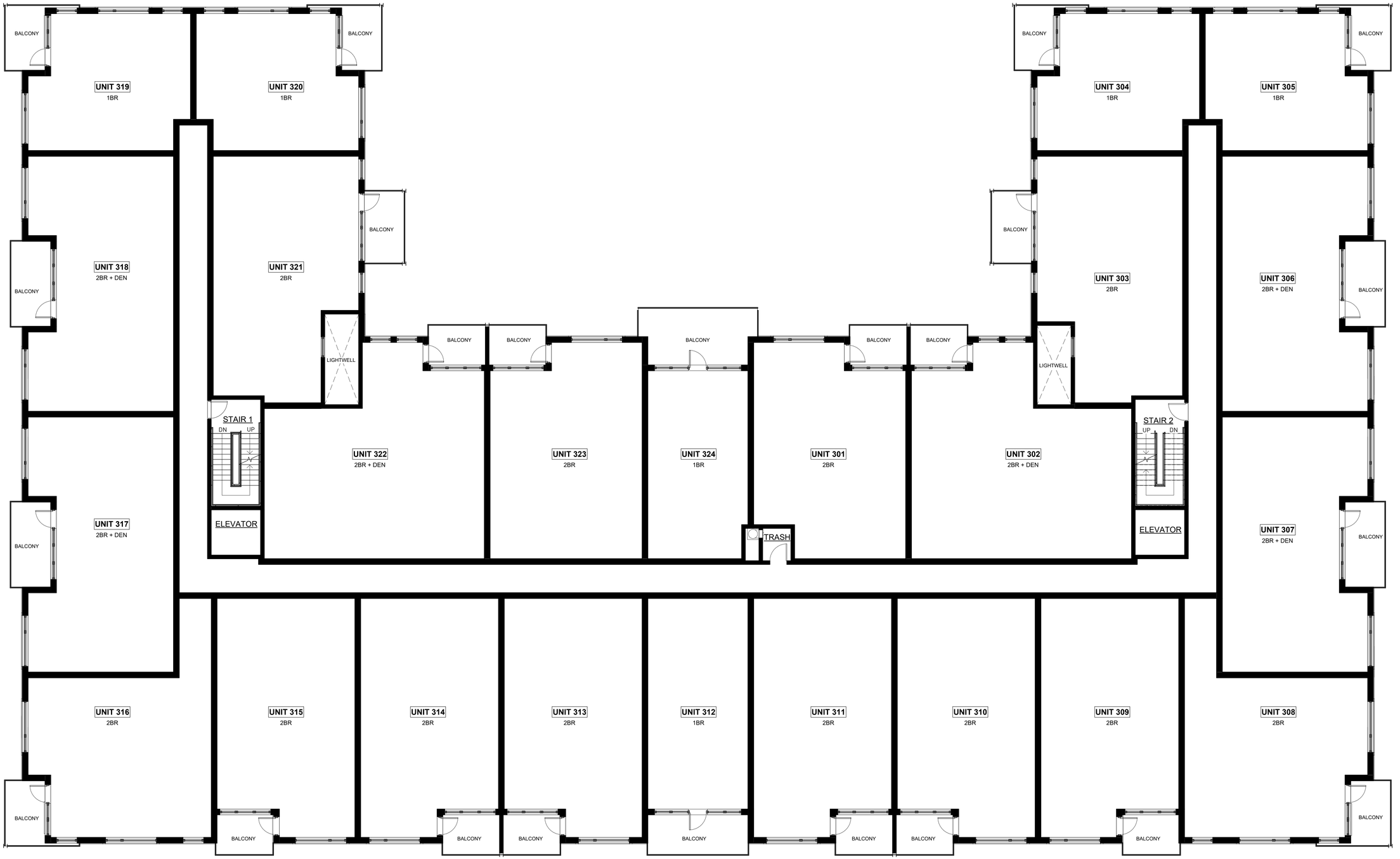
CERTIFICATION

SHEET TITLE

2ND FLOOR PLAN

SHEET #

A1.03



1 3RD FLOOR PLAN

1/8" = 1'-0"

0 4' 8' 16'
0 1/8" = 1'-0" 2'

3RD FLOOR GSF: 27,100 SF

BUILDING HEIGHT: 62' - 0"

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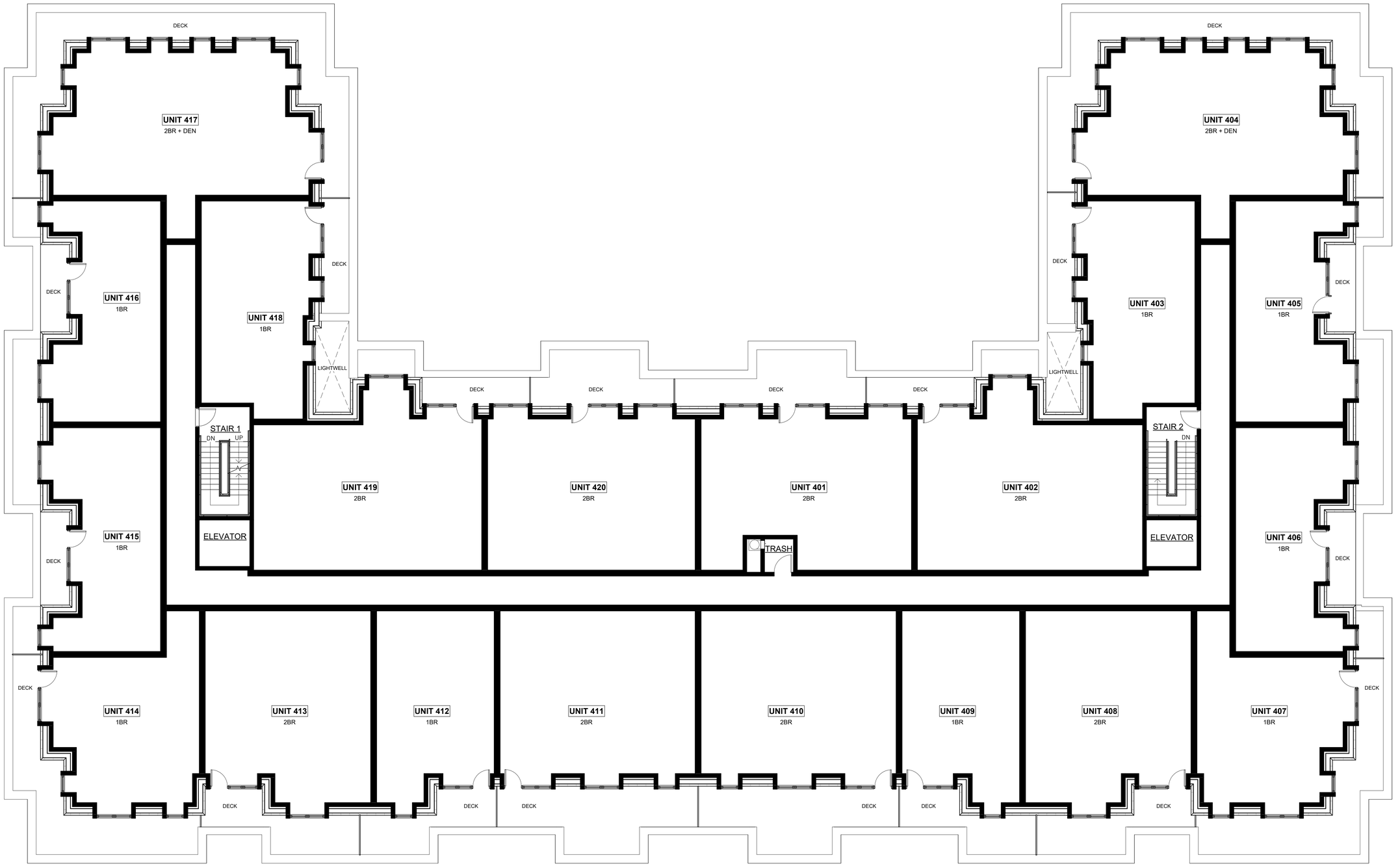
CERTIFICATION

SHEET TITLE

3RD FLOOR PLAN

SHEET #

A1.04



1 4TH FLOOR PLAN

1/8" = 1'-0"

0 4' 8' 16'
0 1/8" = 1'-0" 2'

4TH FLOOR GSF: 20,500 SF

BUILDING HEIGHT: 62' - 0"

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CERTIFICATION

SHEET TITLE

4TH FLOOR PLAN

SHEET #

A1.05



2 EAST EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2"
1/8" = 1'-0"



1 WEST EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2"
1/8" = 1'-0"

ARCHITECTURAL 0' - 0" IS EQUAL TO 712' - 0" ON CIVIL DWGS. ARCHITECTURAL AVG. GRADE IS EQUAL TO 708' - 0" ON CIVIL DWGS.

BUILDING HEIGHT IS MEASURED FROM THE AVG. GRADE TO THE T/ STAIR OVERRUN. AVERAGE GRADE IS DEFINED AS "THE AVERAGE ELEVATION OF THE GROUND SURFACE, IN ITS NATURAL STATE, MEASURED AT FIVE-FOOT INTERVALS AROUND THE BASE OF THE STRUCTURE" PER SEC. 26-2-2 OF LIBERTYVILLE ZONING ORDINANCE.

THE MEASURED BUILDING HEIGHT IS 62' - 0".

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CERTIFICATION

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET #

A2.0

ARCHITECTURAL 0' - 0" IS EQUAL TO 712' - 0" ON CIVIL DWGS. ARCHITECTURAL AVG. GRADE IS EQUAL TO 708' - 0" ON CIVIL DWGS.

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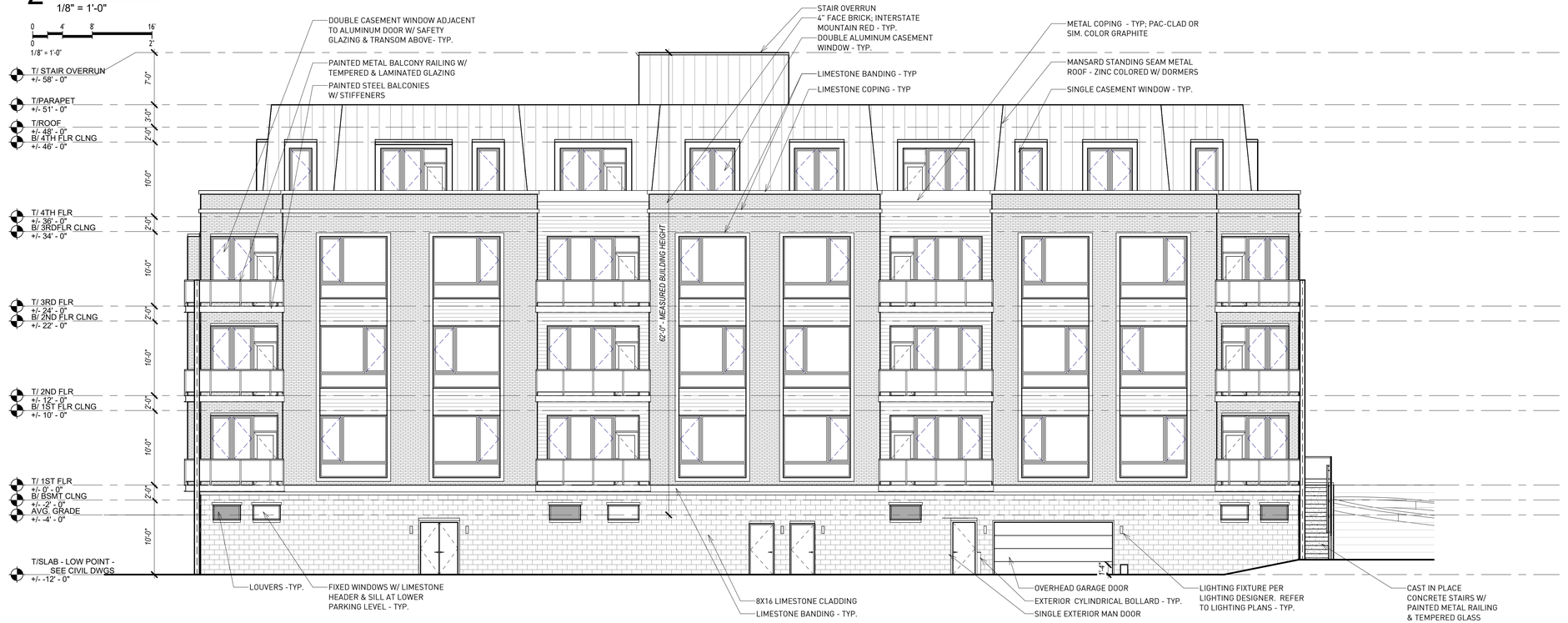
THE MEASURED BUILDING HEIGHT IS 62' - 0".



2 SOUTH EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"



1 NORTH EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"

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126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET #

A2.1

SEE 1/A2.0 FOR ANNOTATIONS



3 WEST COURTYARD EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"



1 NORTH COURTYARD EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"



2 SOUTH COURTYARD EXTERIOR ELEVATION

1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"

ARCHITECTURAL 0' - 0" IS EQUAL TO 712' - 0" ON CIVIL DWGS. ARCHITECTURAL AVG. GRADE IS EQUAL TO 708' - 0" ON CIVIL DWGS.

BUILDING HEIGHT IS MEASURED FROM THE AVG. GRADE TO THE T/ STAIR OVERRUN. AVERAGE GRADE IS DEFINED AS "THE AVERAGE ELEVATION OF THE GROUND SURFACE, IN ITS NATURAL STATE, MEASURED AT FIVE-FOOT INTERVALS AROUND THE BASE OF THE STRUCTURE" PER SEC. 26-2-2 OF LIBERTYVILLE ZONING ORDINANCE.

THE MEASURED BUILDING HEIGHT IS 62' - 0".

PERMIT STAMP

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PARK RIDGE, IL 60068 FAX: (847) 803-0303
bbono@bonoconsulting.com
Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
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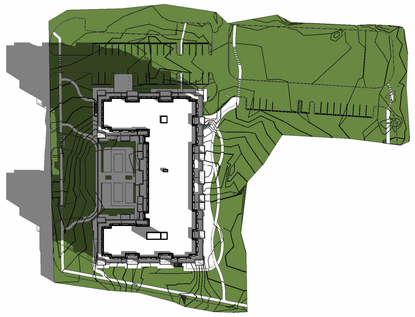
CERTIFICATION

SHEET TITLE

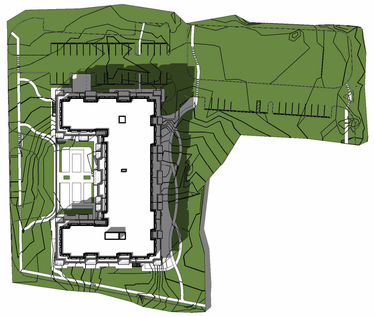
EXTERIOR ELEVATIONS

SHEET #

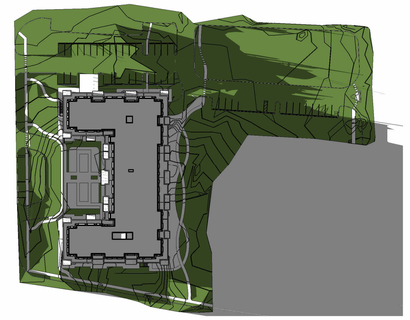
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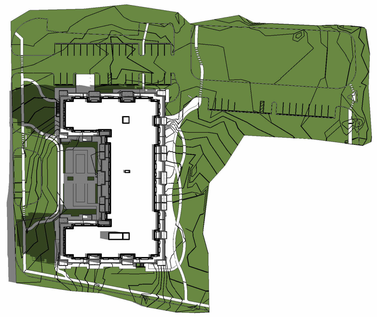
1 MARCH 21ST - 8AM



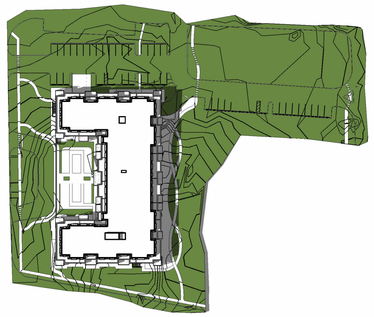
5 MARCH 21ST - 2PM



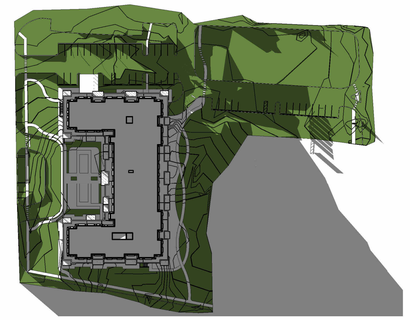
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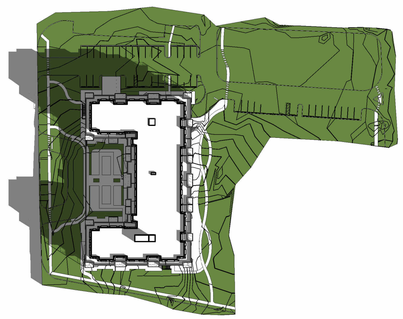
2 JUNE 21ST - 8AM



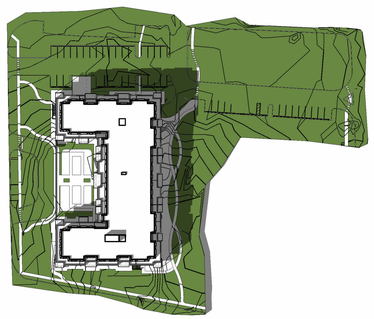
6 JUNE 21ST - 2PM



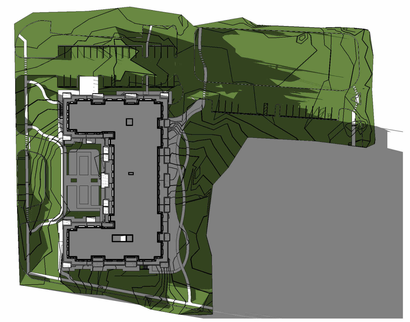
10 JUNE 21ST - 8PM



3 SEPTEMBER 21ST - 8AM



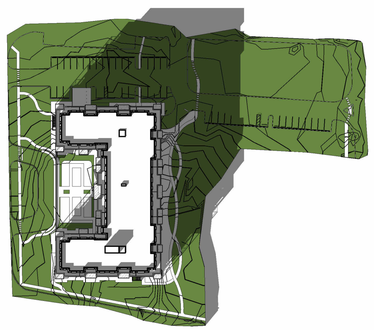
7 SEPTEMBER 21ST - 2PM



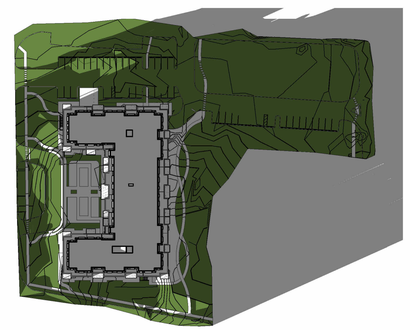
11 SEPTEMBER 21ST - 8PM



4 DECEMBER 21ST - 8AM



8 DECEMBER 21ST - 8PM



12 DECEMBER 21ST - 8PM

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bono@bonoconsulting.com

Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

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ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

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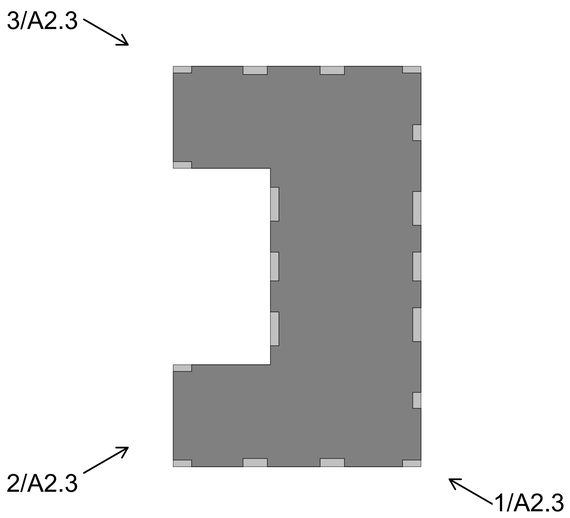
CERTIFICATION

SHEET TITLE

SHADOW STUDIES

SHEET #

A4.0



KEY PLAN



3 RENDER NW
12" = 1'-0"



2 RENDER IMAGE SW



1 RENDER IMAGE SE

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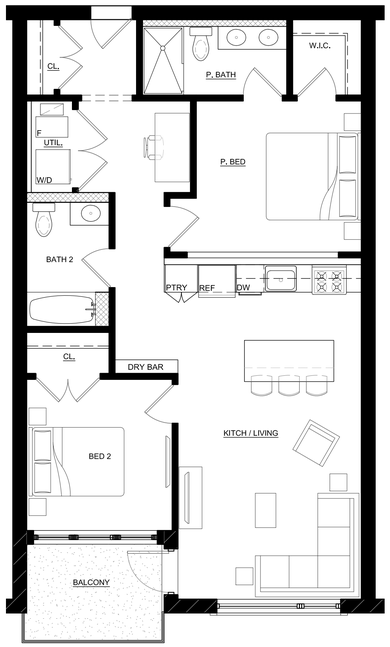
CERTIFICATION

SHEET TITLE

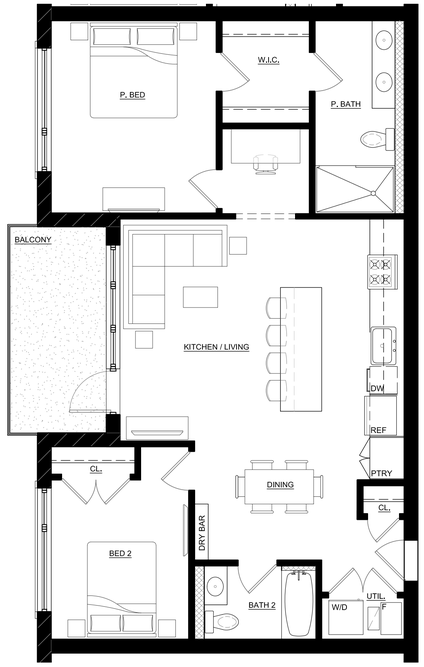
EXTERIOR RENDERS

SHEET #

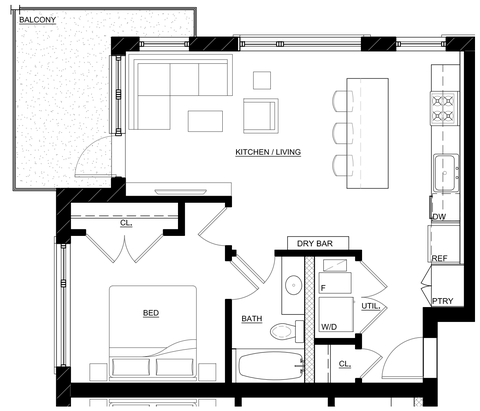
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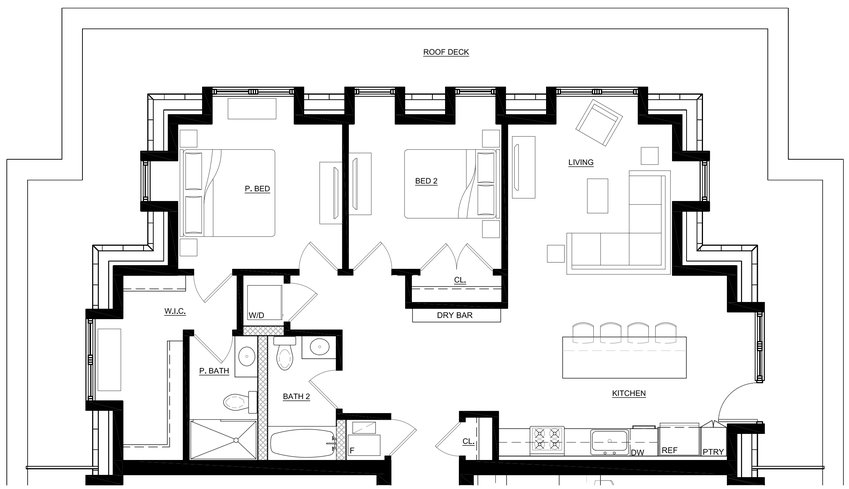
6 UNIT 315
SCALE: 3/16" = 1'-0"



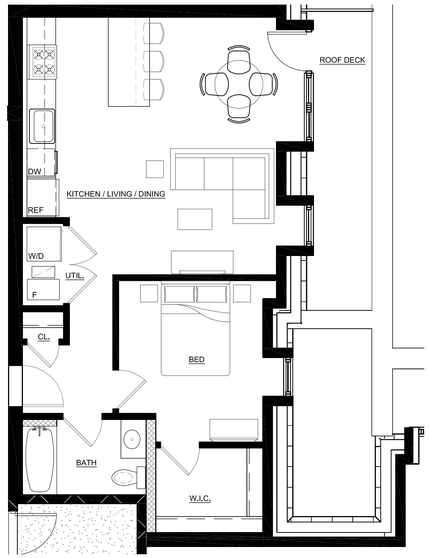
5 UNIT 318
SCALE: 3/16" = 1'-0"



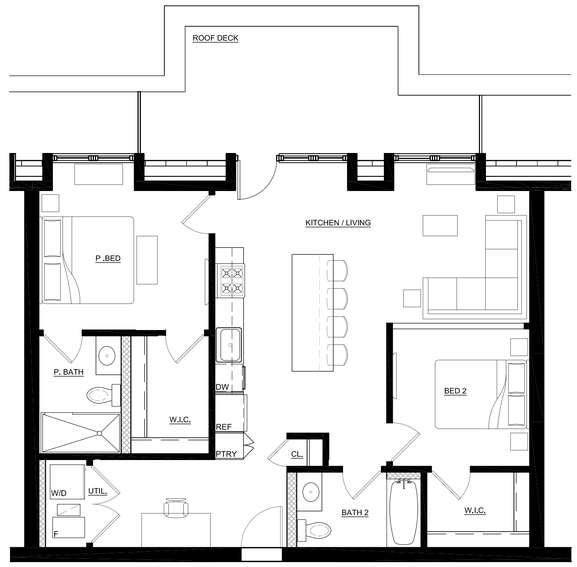
4 UNIT 319
SCALE: 3/16" = 1'-0"



3 UNIT 417
SCALE: 3/16" = 1'-0"



2 UNIT 418
SCALE: 3/16" = 1'-0"



1 UNIT 420
SCALE: 3/16" = 1'-0"

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ASSOCIATES - MB, JP

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SHEET TITLE

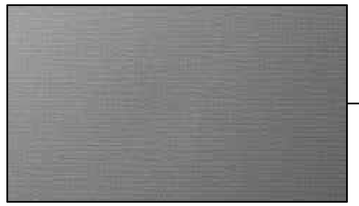
SAMPLE FLOOR PLANS

SHEET #

A4.2



COMPOSITE PANELING - WOOD FINISH
MANUFACTURER: MAIBEC
COLOR: JATOBA MEDIUM 204-08



MANSARD ROOF
MANUFACTURER: PAC-CLAD
COLOR: ZINC



EXPOSED PAINTED STEEL
MANUFACTURER: PAC-CLAD
COLOR: CHARCOAL



METAL COPING @ WOOD SIDING & BRICK
MANUFACTURER: PAC-CLAD
COLOR: SANDSTONE



WINDOW FRAMES, DOORS & MULLIONS
MANUFACTURER: PAC-CLAD
COLOR: MATTE BLACK



FACE BRICK
MANUFACTURER: INTERSTATE BRICK
COLOR: MOUNTAIN RED



LIMESTONE
MANUFACTURER: INDIANA LIMESTONE
COLOR: STANDARD BUFF-1



1 MATERIAL BOARD
12" = 1'-0"

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CERTIFICATION

SHEET TITLE

MATERIAL BOARD

SHEET #

A4.3

BENCHMARK INFO

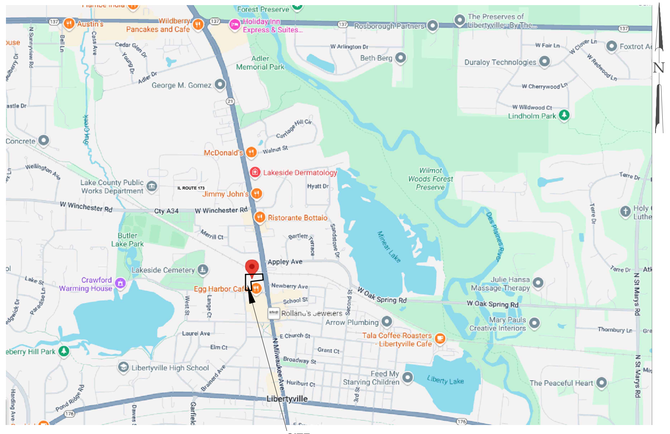
SITE BENCHMARK IS A CROSS CUT ON THE NORTH ARROW BOLT OF A FIRE HYDRANT ON THE NORTH SIDE OF IL-173, APPROXIMATELY 180 FEET EAST OF THE EAST PROPERTY LINE. ELEV 812.752, TRANSFERRED FROM LAKE COUNTY BENCHMARK 2-5A, ELEV 780.63 NAVD 88

MULTI-FAMILY BUILDING
SITE DEVELOPMENT PLAN
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST., LIBERTYVILLE, LAKE COUNTY, IL

SECTION: 16
TOWNSHIP: 44N
RANGE: 11E

PIN: 1116300020, 1116300021, 1116300022, 1116300024, 1116300023

SITE LOCATION MAP



PRELIMINARY ENGINEERING

DRAWING INDEX:

1. TITLE SHEET, LEGEND, SITE LOCATION, & AERIAL MAP
2. EXISTING TOPOGRAPHY
3. DEMOLITION PLAN
4. PHASE – I –SOIL EROSION & SEDIMENTATION CONTROL PLAN
5. PHASE – II –SOIL EROSION & SEDIMENTATION CONTROL PLAN
6. SWPPP [NOT INCLUDED]
7. PROPOSED GRADING & DRAINAGE PLAN – OVERALL SITE
8. PROPOSED GRADING & DRAINAGE PLAN – NORTH SECTION
9. PROPOSED GRADING & DRAINAGE PLAN – SOUTH SECTION
10. PROPOSED UTILITIES PLAN – OVERALL SITE
11. PROPOSED UTILITIES PLAN – NORTH SECTION
12. PROPOSED UTILITIES PLAN – SOUTH SECTION
13. SITE PLAN & GEOMETRIC PLAN – OVERALL SITE

13.1 FIRE DEPARTMENT EXHIBIT

14. CONSTRUCTION NOTES [NOT INCLUDED]
15. STANDARD DETAILS [NOT INCLUDED]
16. STANDARD DETAILS – CONTINUED [NOT INCLUDED]
17. HIGHWAY STANDARD DETAILS [NOT INCLUDED]

AERIAL MAP



1. I HEREBY CERTIFY THAT THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT THE SUBJECT PROPERTY, THE SURROUNDING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY WITH RESPECT TO STORMWATER DRAINAGE, AND THAT A SAFE OVERFLOW ROUTE HAS BEEN ESTABLISHED.

ABHIJIT VEER
062-067076
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

EXP. 11-30-25

ENGINEER

02/27/2025
DATE

PROJECT NARRATIVE

GENERAL: PROPOSED MULTI-FAMILY RESIDENTIAL BUILDING IS PROPOSED ON AT 2.173AC. LOT WHICH IS PART OF 2.205AC. LOT. NEW MULTI-FAMILY BUILDING TO HAVE LOWER LEVEL WITH PARKING AND RESIDENTIAL UNITS ABOVE. AN ACCESS DRIVE IS PROPOSED THROUGH HE SITE FROM MILWAUKEE TO METRA RAILROAD STATION/PARKING LOT.

AREA SUMMARY:
TOTAL AREA OF SITE: 2.205 ACRES
AREA OF THE SITE OF BE DEVELOPED AT PRESENT: 2.173 ACRES
DISTURBED AREA OF SITE: 2.173 ACRES

SPECIAL PROTECTION AREAS: THERE ARE NO FLOODPLAIN OR WETLANDS ON SITE.

UPSTREAM TRIBUTARY: THERE IS NO UPSTREAM TRIBUTARY AREA FOR THE SITE.

COMBINED/SEPARATE SEWER AREA INFO: PROPOSED PROJECT IS LOCATED IN A SEPARATE SEWER AREA. STORM SEWER WILL DISCHARGE TO STORM SEWER IN THE METRA PARKING LOT.

DETENTION/VOLUME CONTROL FACILITY: DETENTION IS REQUIRED PER LOCAL & COUNTY REQUIREMENTS. VOLUME REDUCTION FACILITY IS REQUIRED PER COUNTY REQUIREMENTS. UNDERGROUND DETENTION SYSTEM WITH OPEN BOTTOM IS PROPOSED FOR THE SITE.

SANITARY SEWERS: 6" SANITARY SERVICES FROM THE BUILDING ARE PROPOSED TO CONNECT TO NEW SANITARY MANHOLE ON THE SITE. FROM THE MANHOLE THE SANITARY SERVICE IS PROPOSED TO CONNECT TO THE SANITARY SEWER MAIN LOCATED ON LAKE STREET.
SOILS/INFILTRATION RATE: SILTY CLAYS

GROUNDWATER ELEVATION: N/A

NOTE

The location of existing underground utilities, such as water mains, sewers, gas lines, etc., as shown on the plans, has been determined from the best available information and is given for the convenience of the Contractor. However, the Owner and the Engineer do not assume responsibility in the event that during construction, utilities other than those shown may be encountered, and that the actual location of those which are shown may be different from the location as shown on the plans.

Bono Consulting, Inc. is not responsible for the safety of any party at or on the construction site. Safety is the sole responsibility of the contractor and any other person or entity performing work or services. Neither the owner nor engineer assumes any responsibility for the job site safety of persons engaged in the work or the means or methods of construction.

Current Standard Specifications of the Judicial Authority shall apply to the construction on this project.

Note: The exact location of all utilities shall be verified by the contractor prior to construction activities. For utility locations call:
J.U.L.I.E. 1 (800) 892-0123

LEGEND:

	EXISTING	PROPOSED
PROPERTY LINE		
SANITARY SEWER LINE		
WATER LINE		
STORM SEWER LINE		
STORM MANHOLE		
SANITARY MANHOLE		
COMBINED SEWER		
COMBINED MANHOLE		
CATCH BASIN		
INLET		
WATER VALVE VAULT		
WATER VALVE		
GRADE		
DRAINAGE DIVIDE		
CURB & GUTTER		
CLEANOUT		
DOWNSPOUT (ROOF DRAINS)		
WATER B. BOX		
TREE PROTECTION FENCE		
CONSTRUCTION FENCE		
INLET FILTER BASKET		
TRAFFIC DIRECTION PAVEMENT MARKING		
FIRE HYDRANT		
RETAINING WALL W/RAILING		
TOP OF CURB BOTTOM OF CURB		T/C XXX.XX B/C XXX.XX
TOP OF CURB BOTTOM OF GUTTER		T/C XXX.XX B/G XXX.XX
WALK BOTTOM OF WALK		W XXX.XX B/W XXX.XX
DESPRESSED CURB BOTTOM OF GUTTER		D/C XXX.XX B/G XXX.XX
MOUNTABLE CURB		M/C XXX.XX B/C XXX.XX

DATE	REVISIONS	ISSUE
10-09-2024	PRELIMINARY PLAN	A
02-27-2025	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	B

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:

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nwillow@bonoconsulting.com

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ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

TITLE SHEET, LEGEND, SITE LOCATION MAP, & AERIAL MAP
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. , LIBERTYVILLE, LAKE COUNTY, IL

NOT FOR CONSTRUCTION

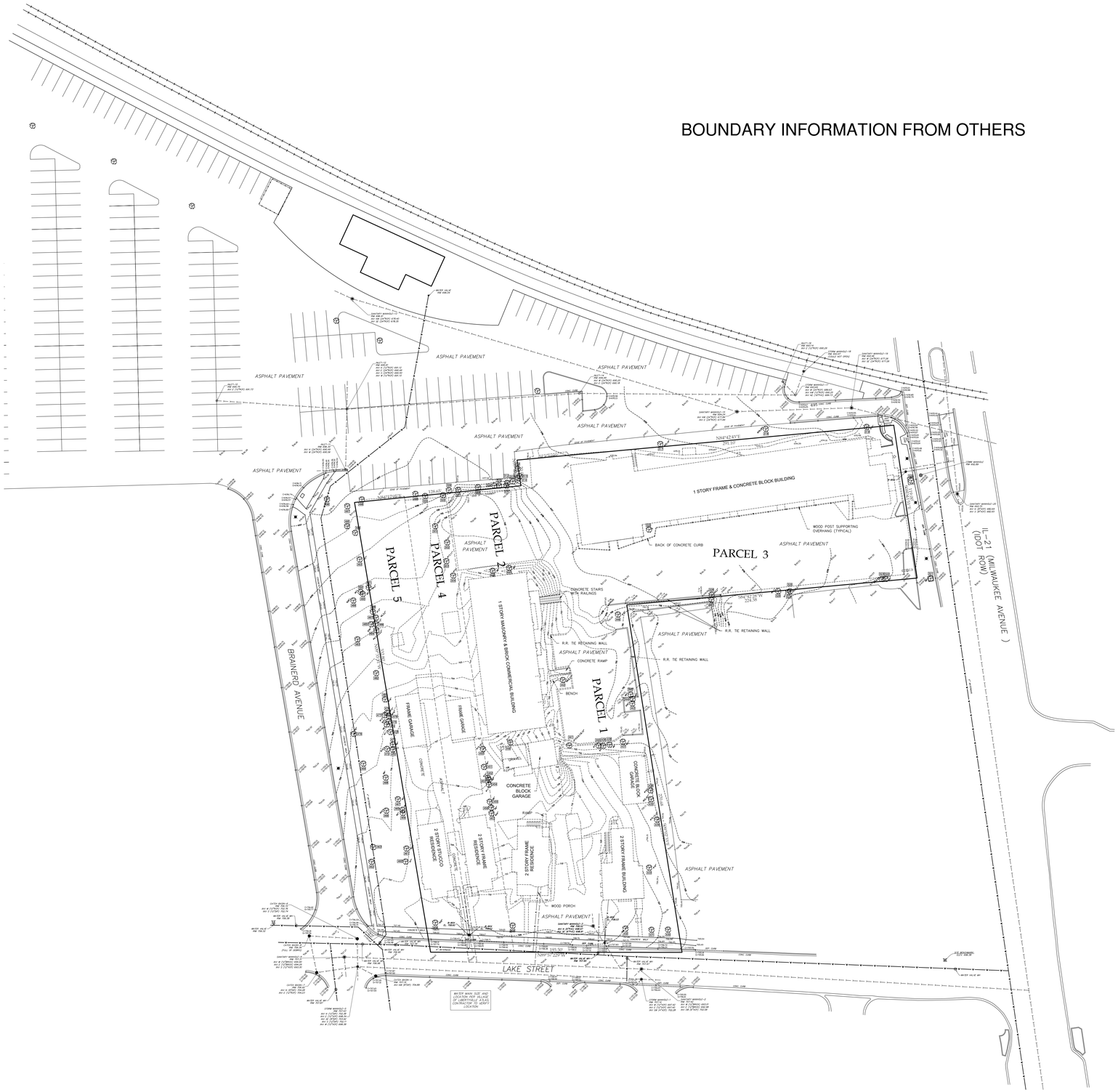
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
0
SCALE: NTS

SHEET NUMBER
1 OF 17

COMMONLY KNOWN AS: NO. STREET, VILLAGE, ILLINOIS.

BOUNDARY INFORMATION FROM OTHERS



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING ELEVATION
- PROPOSED ELEVATION
- EXISTING SANITARY
- COMBINATION SEWER
- PROPOSED SANITARY SEWER
- PROPOSED COMBINATION SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED PERFORATED PIPE
- EXISTING WATERMAIN
- PROPOSED WATERMAIN
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND CABLE
- EXISTING TREE
- REMOVE TREE
- TEMPORARY TREE FENCE
- TEMPORARY SILT / CONSTRUCTION FENCE
- SUMP PUMP (PROPOSED/EXISTING)
- EJECTOR PUMP (PROPOSED/EXISTING)
- DOWNSPOUT (IN-GROUND) (PROPOSED)
- SWALE (PROPOSED)
- OUTLET / POP-UP EMITTER
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- CLEANOUT
- B BOX
- WOOD UTILITY POLE
- LIGHT POLE
- FLARED END SECTION (F.E.S.)
- INLET / DRAIN
- WATER VALVE VAULT / WATER METER
- SIGN
- MANHOLE (UNCLASSIFIED)
- FIRE HYDRANT
- TREE TAG NO.
- STOP LIGHT
- GAS VALVE
- ROOT PRUNE
- AUGERING
- PATCHING
- TOP OF GARAGE SLAB
- TOP OF FOUNDATION
- FINISH FLOOR
- TOP OF WALL
- TOP OF WINDOW WELL
- CURB AND GUTTER ELEVATIONS

PARCEL 1:

THAT PART OF LOT 4 OF SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDAN, DESCRIBED AS FOLLOWS, TO WIT; BEGINNING AT A POINT ON THE SOUTH LINE OF SAID LOT 4, 5.078 CHAINS WEST OF THE SOUTHEAST CORNER THEREOF; THENCE NORTH 8.5 DEGREES WEST, 4 CHAINS; THENCE NORTH 85 DEGREES EAST, 1.01 CHAINS; THENCE SOUTHERLY TO A POINT 4.014 CHAINS WEST OF SAID SOUTHEAST CORNER OF LOT 4; THENCE WEST TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS

PARCEL 2:

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO WIT: COMMENCING AT A POINT ON THE SOUTH LINE OF SAID LOT 4 LOCATED NORTH 89.5 DEGREES WEST 394.2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4; THENCE NORTH 8.5 DEGREES WEST 356.9 FEET; THENCE NORTH 95 DEGREES EAST 64.7 FEET; THENCE SOUTH 8.5 DEGREES EAST 99 FEET; THENCE SOUTHERLY 264 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 4, 59.052 FEET EASTERLY OF THE PLACE OF BEGINNING; THENCE NORTH 89.5 DEGREES WEST 59.052 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

PARCEL 3

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING IN THE CENTER OF MILWAUKEE AVENUE IN THE VILLAGE OF LIBERTYVILLE, AT A POINT NORTH 8 ½ DEGREES WEST 414.35 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4; AND RUNNING THENCE SOUTH 85 DEGREES WEST 330 FEET; THENCE SOUTH 8 ½ DEGREES EAST 119 FEET; THENCE NORTH 85 DEGREES EAST 330 FEET TO THE CENTER OF SAID AVENUE AND THENCE NORTH 8 ½ DEGREES WEST 119 FEET TO THE PLACE OF BEGINNING (EXCEPT THAT PART THEREOF DESCRIBED AS FOLLOWS: COMMENCING IN THE CENTER OF MILWAUKEE AVENUE AT A POINT NORTH 8 ½ DEGREES WEST 414.35 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4; THENCE SOUTH 85 DEGREES WEST TO A POINT 40 FEET WESTERLY OF THE CENTER OF SAID MILWAUKEE AVENUE, MEASURED AT RIGHT ANGLES TO SAID CENTER LINE; THENCE SOUTH 8 ½ DEGREES EAST PARALLEL WITH THE CENTER LINE OF SAID MILWAUKEE AVENUE, 119 FEET; THENCE NORTH 85 DEGREES EAST TO SAID CENTER LINE OF MILWAUKEE AVENUE AND THENCE NORTHERLY ALONG THE CENTER OF SAID MILWAUKEE AVENUE, 119 FEET TO THE PLACE OF BEGINNING), IN LAKE COUNTY, ILLINOIS.

PARCEL 4

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS: COMMENCING AT A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS NORTH 89 ½ DEGREES WEST 426.2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4; THENCE NORTH 8 ½ DEGREES WEST 351 FEET; THENCE NORTH 85 DEGREES EAST 32 FEET; THENCE SOUTH 8 ½ DEGREES EAST TO A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS 32 FEET EASTERLY FROM THE POINT OF BEGINNING; THENCE NORTH 89 ½ DEGREES WEST 32 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

PARCEL 5

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING ON THE SOUTHERLY LINE OF SAID LOT 4, AT A POINT NORTH 89 ½ DEGREES WEST 458.2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4; THENCE NORTH 8 ½ DEGREES WEST, 351 FEET; THENCE NORTH 85 DEGREES EAST, 32 FEET; THENCE SOUTH 8-1/2 DEGREES EAST TO A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS 32 FEET EASTERLY FROM THE POINT OF BEGINNING; THENCE 89 ½ DEGREES WEST 32 FEET TO THE POINT OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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EXISTING TOPOGRAPHY

MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 240973

START DATE: AUG. 01, 2024

GRAPHIC SCALE
40 0 40

SCALE: 1"=40'-0

SHEET NUMBER
2 OF 17

Tag #	Common Name	Scientific Name	Size	Cond.	Form	Notes
430	Silver Maple	*Acer saccharinum*	36	2	3	Codominant stems, included bark. SE corner 126 Lake.
431	Sugar Maple	*Acer saccharum*	8	2	3	Overtopped.
432	Norway Maple	*Acer platanoides*	21	3	3	Heavy dieback, decay, girdling roots.
433	Magnolia	*Magnolia spp.*	16	3	3	Trunk decay, one sided.
434	Norway Maple	*Acer platanoides*	15,13,14	2	4	Codominant stems, included bark, trunk decay.
435	Boxelder	*Acer negundo*	22,30	5	5	Trunk decay, heavy dieback.
436	Boxelder	*Acer negundo*	19	4	5	Decay, broken top, dieback.
437	Lacebark Elm	*Ulmus parvifolia*	21	3	4	Dieback, codominant stems, included bark, girdling roots.
438	Eastern Redcedar	*Juniperus virginiana*	6	2	3	One sided.
439	Eastern Redcedar	*Juniperus virginiana*	7	2	3	One sided.
440	Eastern Redcedar	*Juniperus virginiana*	7	2	3	One sided.
441	Amur Maple	*Acer ginnala*	10,5,6,7 ,8,10	3	3	Dieback, decay.
442	River Birch	*Betula nigra*	8,8,7,7	1	1	By 105 office entry.
443	Black Walnut	*Juglans nigra*	30	4	4	Heavy dieback, decay, in raised planter.
444	Hackberry	*Celtis occidentalis*	5	2	4	Overtopped.
445	Eastern Redcedar	*Juniperus virginiana*	6	2	3	Overtopped.
446	Colorado Spruce	*Picea pungens*	16	2	3	Dieback.
447	Crabapple	*Malus spp.*	8	3	3	Decay, dieback.
448	Crabapple	*Malus spp.*	8	3	3	Decay, dieback.
449	American Elm	*Ulmus americana*	17	3	4	Dieback, codominant stems, included bark.
450	Boxelder	*Acer negundo*	15,16	3	4	Dieback, codominant stems, included bark.
451	American Elm	*Ulmus americana*	9	2	4	Overtopped.
452	Black Walnut	*Juglans nigra*	15	2	3	Codominant stems.
453	Boxelder	*Acer negundo*	9	2	4	Overtopped.
454	Boxelder	*Acer negundo*	11	2	3	
455	Boxelder	*Acer negundo*	6	3	4	Broken top.
456	Boxelder	*Acer negundo*	9	3	4	Dieback, overtopped.
457	American Elm	*Ulmus americana*	24	6	6	Dead.
458	Sugar Maple	*Acer saccharum*	38	4	2	Heavy dieback, codiminant stems, decay. In front of 134 Lake.
459	Norway Maple	*Acer platanoides*	29	4	3	Codominant stems, girdling roots. In front of 140 Lake.
460	Mulberry	*Morus alba*	7	2	3	
461	Boxelder	*Acer negundo*	25	3	3	Dieback, one sided.
462	White Pine	*Pinus strobus*	25	3	2	Heavy dieback.
463	Douglas Fir	*Pseudotsuga menziesii*	15	3	3	Dieback.
464	Buckthorn	*Rhamnus cathartica*	5	3	3	
465	Norway Maple	*Acer platanoides*	6	2	3	
466	Norway Spruce	*Picea abies*	24	2	1	
467	Norway Maple	*Acer platanoides*	5	2	3	One sided.
468	Boxelder	*Acer negundo*	8	3	3	Dieback.
469	Sugar Maple	*Acer saccharum*	24	2	3	Codominant stems, included bark.
470	Sugar Maple	*Acer saccharum*	12	3	3	Dieback, overtopped.
471	Norway Maple	*Acer platanoides*	9	2	3	Overtopped.
472	White Pine	*Pinus strobus*	16	6	6	Dead.
473	Boxelder	*Acer negundo*	11	5	5	Trunk decay, leaning.
474	Boxelder	*Acer negundo*	6	4	4	Trunk decay, dieback.
475	Black Walnut	*Juglans nigra*	25	3	2	Broken limbs, dieback.
476	Sugar Maple	*Acer saccharum*	14	2	3	
477	Boxelder	*Acer negundo*	13	3	3	Dieback, leaning.
478	Boxelder	*Acer negundo*	15	3	4	Dieback, leaning.
479	Larch	*Larix decidua*	9	5	5	Half dead.
480	Black Cherry	*Prunus serotina*	16	2	3	Dieback. NW of garage.
481	Norway Spruce	*Picea abies*	7	3	3	Dieback, thin crown.
482	Black Walnut	*Juglans nigra*	17	1	1	
483	Norway Spruce	*Picea abies*	30	2	1	Dieback.
484	Buckthorn	*Rhamnus cathartica*	4,3,2,2, 2,2	5	5	Half dead.
485	Boxelder	*Acer negundo*	36	5	5	Trunk decay, heavy dieback.
486	American Elm	*Ulmus americana*	13	2	4	Overtopped.
487	Buckthorn	*Rhamnus cathartica*	3,3,2	3	3	
488	American Elm	*Ulmus americana*	13	2	4	Overtopped, codominant stems.
489	Mulberry	*Morus alba*	28	5	5	Basal decay, heavy dieback, codominant stems.
490	Boxelder	*Acer negundo*	5	3	4	Broken leader.
491	Buckthorn	*Rhamnus cathartica*	4,2	3	3	
492	Boxelder	*Acer negundo*	4	3	3	Dieback.
493	Sugar Maple	*Acer saccharum*	37	4	2	Trunk decay, heavy dieback.
494	Black Walnut	*Juglans nigra*	20	2	4	Overtopped, leaning, dieback.
495	Buckthorn	*Rhamnus cathartica*	3,2,1	2	3	
496	Boxelder	*Acer negundo*	22,16	5	5	Trunk decay, heavy dieback. NW corner of site.
497	Honeylocust	*Gleditsia triacanthos*	24	3	3	Heavy dieback.
498	American Elm	*Ulmus americana*	8	2	4	Overtopped.
499	Black Walnut	*Juglans nigra*	15	2	3	Codominant stems.
500	Mulberry	*Morus alba*	8,8	3	4	Codominant stems, included bark, dieback.
501	Colorado Spruce	*Picea pungens*	24	6	6	Dead.
502	Black Walnut	*Juglans nigra*	11	1	3	Overtopped.
503	Norway Maple	*Acer platanoides*	17,11	4	4	Codominant stems, trunk decay, included bark, dieback.
504	Black Walnut	*Juglans nigra*	14	2	3	Trunk decay, conflict with #503.
505	Hackberry	*Celtis occidentalis*	10	1	2	
506	Boxelder	*Acer negundo*	6,6	4	4	Decay, overtopped, dieback.
507	Buckthorn	*Rhamnus cathartica*	8,5,7,5,4	4	4	Trunk decay, dieback.
508	Buckthorn	*Rhamnus cathartica*	4,5,2	4	4	Trunk decay, dieback.
509	Green Ash	*Fraxinus pennsylvanica*	12	6	6	Dead.
510	Buckthorn	*Rhamnus cathartica*	2,3,2,3	3	3	
511	Buckthorn	*Rhamnus cathartica*	3,4,3,2	2	3	
512	Silver Maple	*Acer saccharinum*	18	3	3	Dieback.
513	Buckthorn	*Rhamnus cathartica*	3,3,3,2	4	4	
514	American Elm	*Ulmus americana*	8	2	4	Overtopped.
515	Buckthorn	*Rhamnus cathartica*	3,3,3,2,1	3	4	
516	Boxelder	*Acer negundo*	10	5	5	Half dead.
517	American Elm	*Ulmus americana*	20,19	3	4	Codominant stems, sap ooze.
518	Siberian Elm	*Ulmus pumila*	29,28	5	5	Heavy dieback, codiminant stems, trunk decay. Included bark, sap ooze.
519	Colorado Spruce	*Picea pungens*	16	2	3	Dieback, one sided. NE corner of site.
520	Honeylocust	*Gleditsia triacanthos*	2	2	2	Dieback, in planter on Milwaukee Ave.
521	Hybrid Elm	*Ulmus spp.*	4	2	2	In planter on Milwaukee Ave.
522	Crabapple	*Malus spp.*	9	5	5	Half dead, between parking lots.
523	Boxelder	*Acer negundo*	8,8,9	3	3	Dieback, codominant stems, between parking lots.
524	American Elm	*Ulmus americana*	7	2	3	
525	Buckthorn	*Rhamnus cathartica*	2,2,2,1	2	3	
526	American Elm	*Ulmus americana*	4,2	2	3	
527	Black Walnut	*Juglans nigra*	7,6,5	2	3	Between parking lots.
528	Boxelder	*Acer negundo*	3,2	3	3	Dieback, between parking lots.
529	River Birch	*Betula nigra*	10,8,6	2	3	Dieback, codiminant stems, included bark. Near 741 office entry.

Tree Condition. A visual assessment and rating of the overall health and vigor of the tree, as follows:

1 – Excellent
2 - Very Good
3 – Good
4 – Below Average
5 - Poor
6 - Dead

Tree Form. A visual assessment and rating of the form of the tree, as follows.

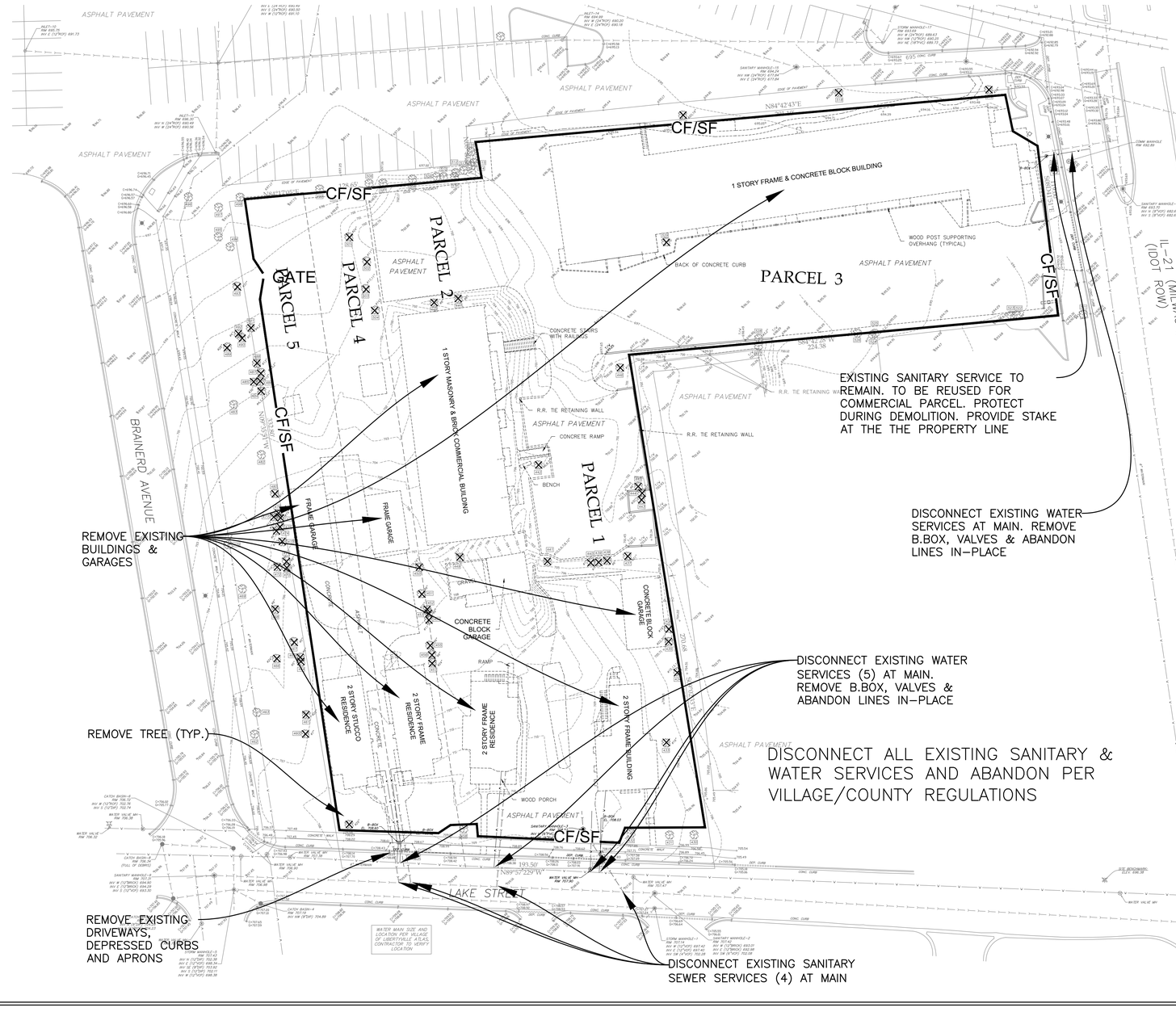
1 – Excellent
2 - Very Good
3 – Good
4 – Below Average
5 - Poor
6 - Dead

Prepared by: David Coulter, Osage Inc.
ISA Certifed Arborist #IL-0094 (Exp. 12/31/25)

N

DEMOLITION NOTES

1. Install temporary tree protection fencing (if shown) prior to any demolition work..
2. Install temporary 6' high chain link fence around the proposed work area as shown on the drawing.
3. Contractor to call JULIE at 1-800-892-0123. minimum of 48 hours prior to initiating any excavation or demolition.
4. Contractor shall verify the exact elevation and location of all existing utilities and appurtenances prior to construction, to avoid interferences.
5. Appropriate precautions shall be taken to avoid damage to and to protect existing utilities and appurtenances in the vicinity of work. Contractor shall be responsible for the protection of all underground or overhead utilities even though they may not be shown on the plans. any utility that is damaged during construction shall be repaired to the satisfaction of the AHJ and the owner, or replaced.
6. Any open excavations, or potentially dangerous areas shall be fenced or guarded in an acceptable manner at the end of each day for the protection of the contractor's employees and general public safety.
7. **Bono Consulting Inc is not liable for any construction site safety**. Contractor to take all OSHA regulated and applicable local safety precautions to safe gaurd all potentially hazard sites/work.
8. Contractor is responsible for keeping roads free of excessive debris at all times.
9. Any soil, mud or debris that is washed, tracked, or deposited onto the street shall be removed before the end of each day.
10. Topographic survey by Bono Consulting.
11. All excavation shall be tapered, or, shored and maintained pumped dry.
12. Do not create dust or other nuisance to neighboring properties during construction
13. "No trespassing" signs shall be mounted on the fencing in conspicuous locations until construction is completed and approved
14. Any gate in the perimeter fence shall be adequately hinged to prevent entry, except to allow ingress and egress to and from site, such gate must be looked at all times, other than permitted hours of construction.



DATE	10-09-2024	02-27-2025								
REVISIONS	PRELIMINARY PLAN	PRELIMINARY PLAN SUPPLEMENTAL SUBMISSION								
ISSUE	A	B								

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:

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DEMOLITION & TREE PRESERVATION PLAN

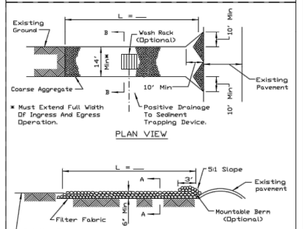
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
30 0 30
SCALE: 1"=30'-0
SHEET NUMBER
3 OF 17

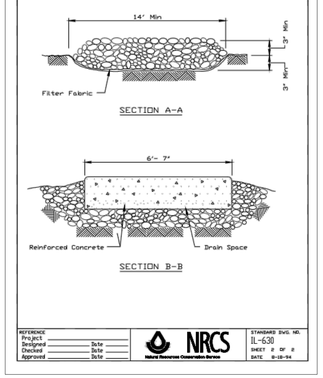
STABILIZED CONSTRUCTION ENTRANCE PLAN



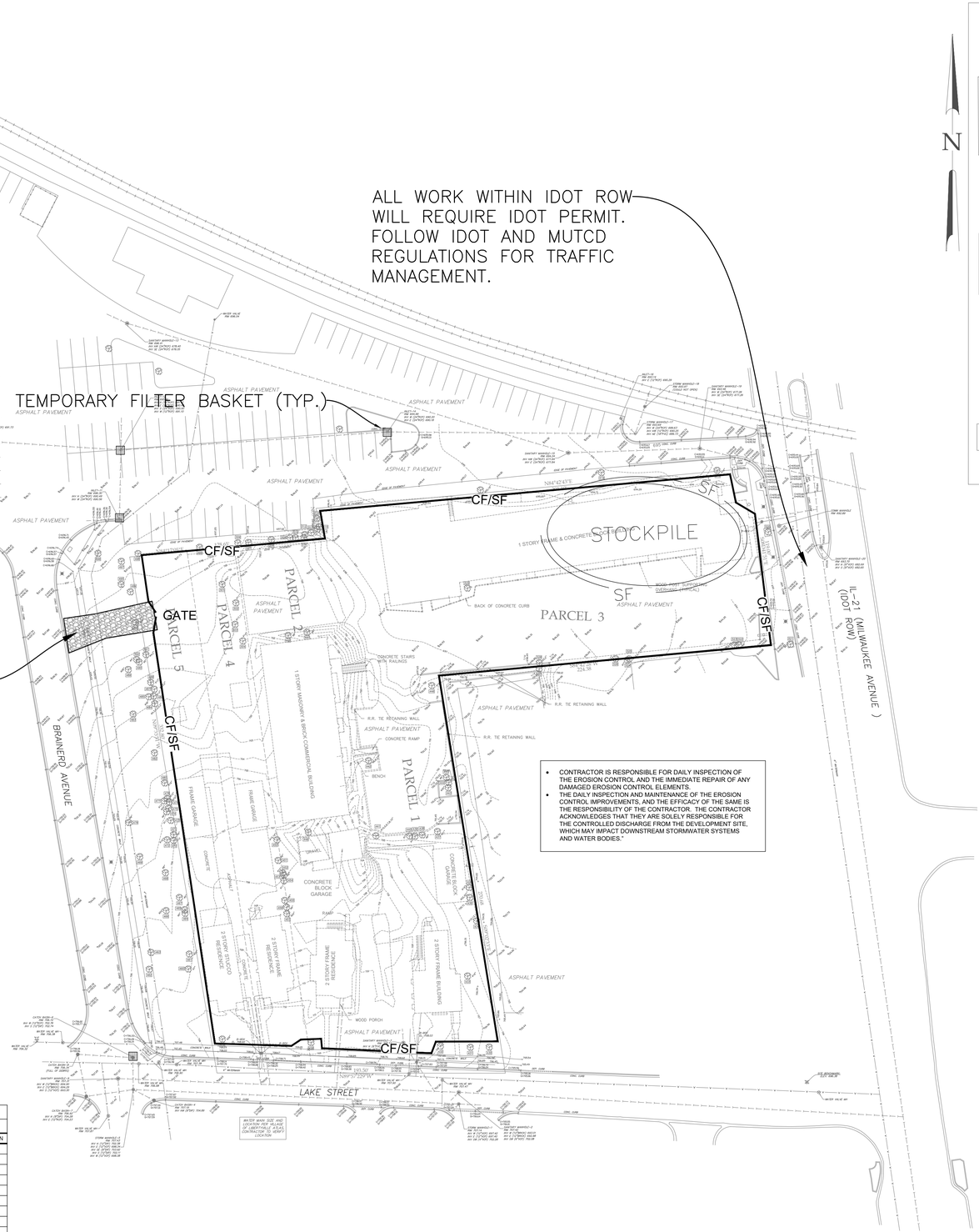
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE		STANDARD SVG. NO.
Project	NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____		SHEET 1 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		

STABILIZED CONSTRUCTION ENTRANCE PLAN



REFERENCE		STANDARD SVG. NO.
Project	NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____		SHEET 2 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		



- CONTRACTOR IS RESPONSIBLE FOR DAILY INSPECTION OF THE EROSION CONTROL AND THE IMMEDIATE REPAIR OF ANY DAMAGED EROSION CONTROL ELEMENTS.
- THE DAILY INSPECTION AND MAINTENANCE OF THE EROSION CONTROL IMPROVEMENTS, AND THE EFFICACY OF THE SAME IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR ACKNOWLEDGES THAT THEY ARE SOLELY RESPONSIBLE FOR THE CONTROLLED DISCHARGE FROM THE DEVELOPMENT SITE, WHICH MAY IMPACT DOWNSTREAM STORMWATER SYSTEMS AND WATER BODIES."

SEEDING INFORMATION
CONTRACTOR TO SEED ALL DISTURBED AREA.
TURF GRASS SEED MIX:
FURNISH AND APPLY SUNNY TURF GRASS SEED MIX (TIMOTHY-33.3% / ORCHARDGRASS-33.3% / KENTUCKY BLUEGRASS-33.3%, SEEDING RATE=70 LBS./ACRE AND COMMON OATS=30 LBS./ACRE FOR A TOTAL 100 LBS./ACRE. OVERSEED WITH 10 LBS./ACRE ANNUAL RYE.
SEEDING MUST COMMENCE WITHIN 1 WEEK OF THE COMPLETION OF FINAL GRADING.

TEMPORARY SEEDING, SPECIES, RATES, & DATES

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

SPECIES	LBS/ ACRE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OATS	90												
CEREAL RYE	90												
WINTER WHEET	90												
WINTER MULCH	25												

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
TEMPORARY CONSTRUCTION EXITS																									
TEMPORARY CONTROL MEASURES																									
SEDIMENT CONTROL BASINS																									
STRIP & STOCKPILE TOPSOIL																									
ROUGH GRADE																									
STORM FACILITIES																									
SITE CONSTRUCTION																									
PERMANENT CONTROL STRUCTURES																									
FOUNDATION / BUILDING CONSTRUCTION																									
FINISH GRADING																									
LANDSCAPING/SEED/FINAL STABILIZATION																									

1) CONTRACTOR SHALL UPDATE THE TABLE BY DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
2) TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

BEST MANAGEMENT PRACTICES SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

PHASE - I
1. INSTALL TREE PROTECTION FENCING AND EROSION CONTROL SILT FENCE, INLET FILTER BASKETS, MAINTAIN THROUGH OUT PROJECT.
2. USE BRAINERD FOR CONSTRUCTION ACCESS DRIVEWAY FOR CONSTRUCTION. INSTALL STABILIZED CONSTRUCTION ENTRANCE. OBSERVE ALL APPROPRIATE MUTCD/IDOT TRAFFIC CONTROL MEASURES FOR CONSTRUCTION TRAFFIC ENTERING HIGHWAY. CONTRACTOR IS RESPONSIBLE FOR KEEPING ROADS FREE OF MUD AND DEBRIS.
3. PROTECT TREES THAT ARE SHOWN TO BE PROTECTED.
4. CLEAR AND REMOVE BRUSH AND TREES.
5. CONSTRUCT DETENTION FACILITY WITHIN 30DAYS OF TREE REMOVAL/BRUSH CLEARING.
6. INSTALL UTILITIES AND PERFORM MASS GRADING.

HALT ALL ACTIVITIES AND CONTACT THE VILLAGE TO PERFORM INSPECTION AND CERTIFICATION OF BMPs. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT THE STORMWATER PRE-CONSTRUCTION MEETING WITH THE CONSTRUCTION MANAGER, AGENCY(IES) AND GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

ALL EXCEPTIONS NOTED ON THE BMP CERTIFICATION FORM MUST BE ADDED TO THE FIRST DAILY REPORT AS A DEFICIENCY OR DEFICIENCIES AND RESOLVED WITHIN 24-HOURS. BMPs CAN NOT BE CERTIFIED IF ANY EXCEPTION REQUIRES GREATER THAN 24-HOURS TO RESOLVE.

DAILY INSPECTIONS AND REPORTING USING THE SWPPP MANAGEMENT TOOL MUST START THE DAY OF OR IMMEDIATELY AFTER BMP CERTIFICATION.

7. CONSTRUCT AND STABILIZE SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS).
8. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.).
9. BEGIN CLEARING AND GRUBBING THE SITE.
10. BEGIN GRADING THE SITE.

PHASE II
1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. IF ACTIVITY WILL RESUME WITHIN 14 DAYS, TEMPORARY SEEDING IS NOT REQUIRED.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL RIP RAP AROUND OUTLET STRUCTURES AS EACH OUTLET STRUCTURE IS INSTALLED.
4. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
5. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
9. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
10. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION REPORT, MARKED 'READY TO TERMINATE PERMIT', IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED VIA THE SWPPP MANAGEMENT TOOL.
11. STABILIZE SITE AND INSTALL ALL FENCES CONCURRENTLY.

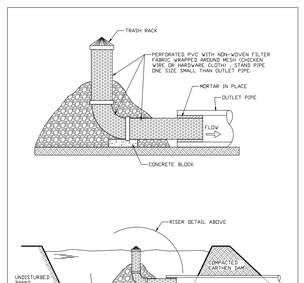
NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPs HAVE BEEN COMPLETELY INSTALLED.

SILT FENCE WITH WIRE SUPPORT PLAN



NOTES:
1. Silt Fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization. Silt fence shall be placed on the flattest area available.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1, Class 2 with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 30 sq. in.

REFERENCE		STANDARD SVG. NO.
Project		IUM-608(W)
Designed ____ Date ____		SHEET 1 OF 2
Checked ____ Date ____		DATE 3-16-2012
Approved ____ Date ____		



TO BE INSTALLED IN SEDIMENTATION BASINS

NOT TO SCALE

SEDIMENTATION BASIN & PERFORATED RISER DISCHARGE SYSTEM

ISSUE	REVISIONS	DATE
A	PRELIMINARY PLAN	10-09-2024
B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:

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PHASE - I -SOIL EROSION & SEDIMENTATION CONTROL PLAN

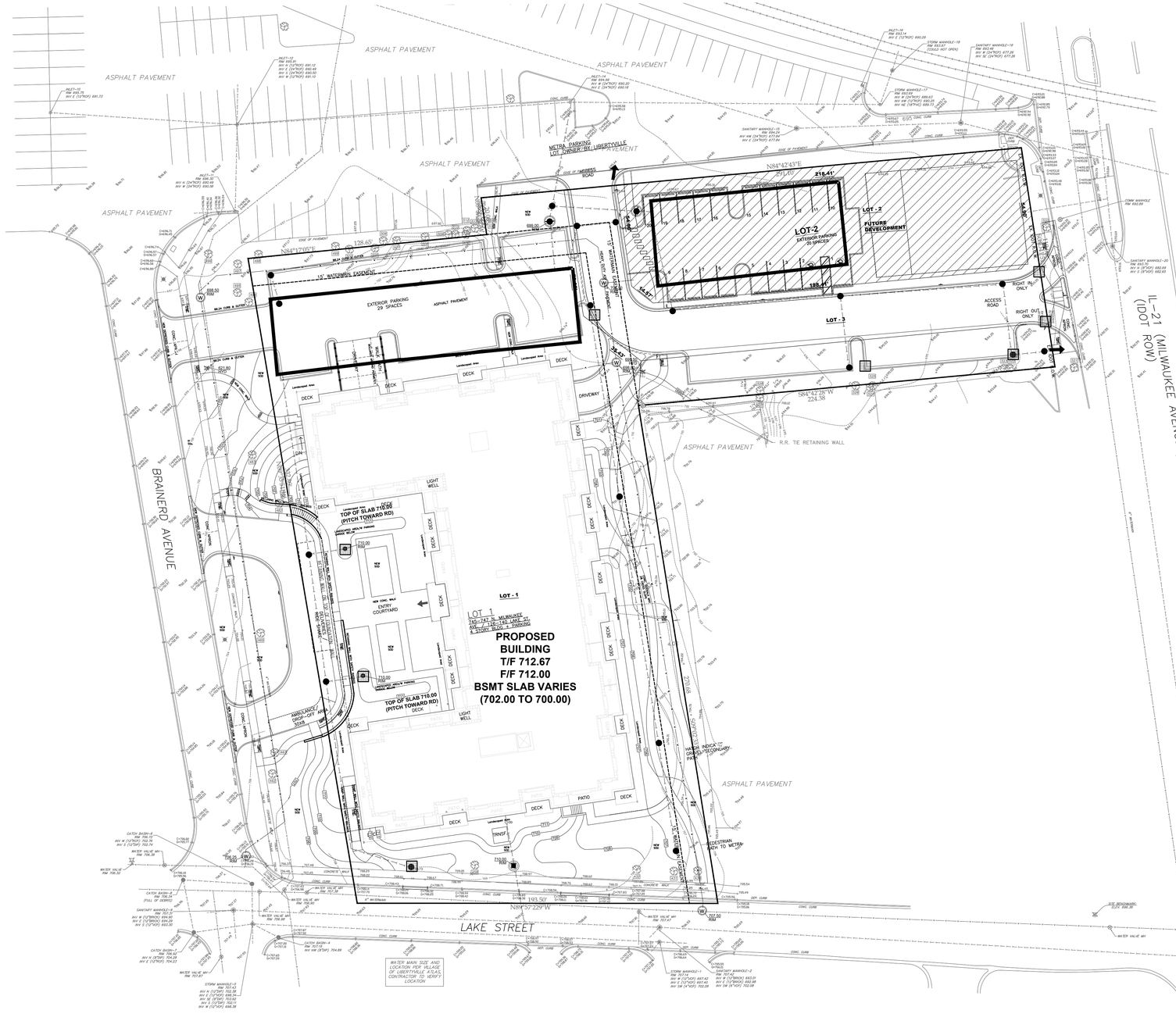
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

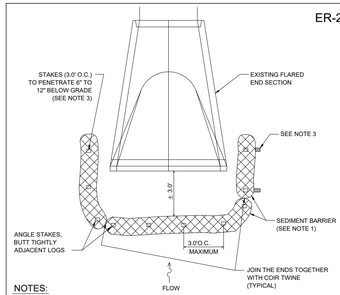
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
4 OF 17





ER-2

NOTES:

1. COIR LOGS, GRAVEL BAGS (OR APPROVED BY THE ENGINEER EQUAL) EROSION CONTROL AND SEDIMENT BARRIER MATERIAL SHALL BE USED.
2. SEDIMENT BARRIERS SHALL BE PLACED WITH ENDS TIGHTLY ABUTTING THE ADJACENT SEDIMENT BARRIERS TO CREATE A CONTINUOUS BARRIER.
3. WOODEN WEDGES AND/OR STAPLES AS PER MANUFACTURER'S PRODUCT SPECIFICATIONS MAY BE USED FOR SEDIMENT BARRIER STABILIZATION.
4. INSPECTION OF SEDIMENT BARRIERS SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF HALF INCH (1/2") PER DAY OR EQUAL SNOW MELT. REPAIR OR REPLACEMENT OF SEDIMENT BARRIER SHALL BE MADE PROMPTLY AS NEEDED.
5. REMOVE ACCUMULATED SEDIMENT WHEN SEDIMENT DEPTH AT THE BARRIER IS APPROXIMATELY EQUAL TO ONE-HALF OF BARRIERS HEIGHT.
6. SEDIMENT BARRIERS SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION AND ONLY WHEN DIRECTED BY VILLAGE ENGINEERING.

REVISED: 1-1-20

NOT TO SCALE

FLARED END SECTION EROSION CONTROL DETAIL

EROSION CONTROL BLANKET

FILTER BASKET

N

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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PHASE II - SOIL EROSION & SEDIMENTATION CONTROL PLAN

MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

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PROJECT NUMBER: 240973

START DATE: AUG. 01, 2024

GRAPHIC SCALE
30 0 30

SCALE: 1"=30'-0

SHEET NUMBER
5 OF 17

STORMWATER POLLUTION PREVENTION PLAN

A COPY OF THIS PLAN, ALONG WITH ALL INSPECTION REPORTS, WILL BE KEPT AT THE SITE AT ALL TIMES.
THE PERMITEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THE PERMIT COVERAGE EXPIRES OR IS TERMINATED.

SITE DESCRIPTION:

PROJECT NAME AND LOCATION:
COMFORT CARE SENIOR LIVING – 406 MONAVILLE RD., LAKE VILLA, LAKE COUNTY, IL.

PROJECT DESCRIPTION:
NEW 1 STORY BUILDING WITH PARKING LOT DEVELOPMENT TO BE CONSTRUCTED ON A VACANT PROPERTY/FARM LAND.

TOTAL SITE AREA = 8.809 ACRES

TOTAL AREA DISTURBED = 5.164 ACRES

RUNOFF COEFFICIENT OF SITE AFTER CONSTRUCTION = CN-83.75

SOILS: VARIES, PREDOMINATELY SILTY CLAY LOAM

RECEIVING WATERS: EAGLE CREEK

EXISTING SITE CONDITIONS: FARM LAND

ADJACENT/OFFSITE AREAS: EXISTING SINGLE-FAMILY RESIDENCES TO WEST ACROSS THE CREEK, & EAST.TO THE NORTH ARE SINGLE-FAMILY RESIDENTIAL SUBDIVISION.

REFER TO IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT FOR ADDITIONAL SITE INFORMATION.

EROSION AND SEDIMENT CONTROLS

REFER TO THE IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT, AND THIS SWPPP.

STABILIZATION PRACTICES:

EXISTING VEGETATION SHALL BE PROTECTED AS MUCH AS POSSIBLE
TEMPORARY SEEDING AND MULCHING SHALL OCCUR WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY LAND DISTURBING ACTIVITIES.
EROSION CONTROL BLANKETS SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE SEEDING OF SLOPES 6:1 OR GREATER.

STRUCTURAL PRACTICES:

INLET FILTERS SHALL BE INSTALLED IN EXISTING DRAINAGE STRUCTURES PRIOR TO ANY GROUND DISTURBING ACTIVITIES.
A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE ESTABLISHMENT OF PROPOSED GRADES AT THE ENTRANCE LOCATION.

STORM WATER MANAGEMENT

REFER TO THE IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT AND THE STORMWATER MANAGEMENT CALCULATIONS FOR ADDITIONAL INFORMATION

RUNOFF:
THE SITE DRAINS TO THE STORM SEWER LOCATED ON SITE AND DRAINS TO EAGLE CREEK TO THE WEST.

VELOCITY DISSIPATION
THE SITE UTILIZES STORM SEWERS.

WASTE DISPOSAL

ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE SITE FOR DISPOSAL IN PERMITTED DISPOSAL FACILITIES. THE PROJECT SITE WILL BE KEPT CLEAR OF ALL HUMAN AND CONSTRUCTION DEBRIS. NO BUILDING MATERIALS, GAS OR OIL SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE. A SECURELY LIDDED DUMPSTER WILL BE PROVIDED FOR STANDARD SOLID WASTE.

HAZARDOUS WASTE WILL BE DISPOSED OF AS SPECIFIED BY THE VILLAGE OF LAKE VILLA, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, OR THE MANUFACTURER OF THE MATERIAL, WHICH EVER IS STRICTER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL HAZARDOUS WASTE PRODUCED AS A PART OF THIS CONSTRUCTION PROJECT.

SANITARY WASTE WILL BE COLLECTED IN PORTABLE UNITS AND DRAINED AS SPECIFIED BY THE VILLAGE OF LAKE VILLA.

ANY SPILLED OIL, GAS, OR OTHER CONSTRUCTION MATERIAL WILL BE CONTAINED AND CLEANED IMMEDIATELY. CONTAMINATED SOIL WILL BE DISPOSED OF IN AN APPROVED MANNER AT A LICENSED LANDFILL.

A SINGLE CONCRETE WASHOUT AREA WILL BE DESIGNATED BY THE CONTRACTOR FOR USE DURING THE DURATION OF THE PROJECT. THE WASHOUT AREA WILL BE DUG OUT OR BERMED UP TO CONTAIN ALL WASHOUT MATERIAL. ALL AFFECTED SOILS AND CONCRETE SPOILS WILL BE REMOVED FROM THE SITE UPON COMPLETION OF THE CONCRETE PLACEMENT ACTIVITIES.

OTHER REQUIREMENTS

THE VILLAGE OF LAKE VILLA CODE WILL GOVERN ALL EROSION CONTROL AND STORMWATER MANAGEMENT OPERATIONS.

IF ANY SITE AREA IS TO REMAIN DISTURBED FOR OVER 14 DAYS THEN 7 DAYS AFTER THE LAST DISTURBANCE THE CONTRACTOR MUST INITIATE STABILIZATION MEASURES.

NO FUEL OR OIL WILL BE STORED ON-SITE WITHOUT PROPER CONTAINMENT AND WRITTEN PERMISSION FROM THE VILLAGE OF LAKE VILLA.

THE CONTRACTOR WILL PREVENT OFF-SITE TRACKING OF SEDIMENTS. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT SUFFICIENT, FURTHER MEASURES MUST BE IMPLEMENTED. ANY SEDIMENT LEFT ON THE PUBLIC ROADWAY WILL BE CLEANED OFF EVERY NIGHT.

DUST CONTROL, IF DEEMED NECESSARY BY THE VILLAGE ENGINEER, WILL BE DONE BY MEANS OF A WATER TRUCK SPRAYING WATER ON THE SURFACE OF THE SITE.

NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THIS SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER MAIN AND FIRE HYDRANT FLUSHING.
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)
- UNCONTAMINATED GROUND AND SURFACE WATER FROM DEWATERING EXCAVATIONS AND DETENTION BASINS
- DUST CONTROL WATER

ALL NON-STORMWATER DISCHARGES WILL BE DIRECTED TO THE EXISTING STORM SEWERS

DEMOLITION AND RECONSTRUCTION SCHEDULE OF CONSTRUCTION

1. INSTALL SILT FENCE AND EROSION CONTROL MEASURES.
2. CONSTRUCT IMPROVEMENTS.
3. COMPLETE RESTORATION.
4. REMOVE TEMPORARY EROSION CONTROL MEASURES.

MAINTENANCE AND INSPECTION PROCEDURES

THE GENERAL CONTRACTOR FOR THIS PROJECT IS RESPONSIBLE FOR MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES IN GOOD AND EFFECTIVE OPERATING CONDITIONS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL REGULAR INSPECTIONS REQUIRED BY THE NPDES GENERAL PERMIT #2 INCLUDING RECORDING AND KEEPING A RECORD OF EACH INSPECTION. THIS PROCESS WILL CONTINUE UNTIL FINAL STABILIZATION IS ACHIEVED AND A NOTICE OF TERMINATION IS RECEIVED BY THE OWNER. INSPECTIONS WILL BE PERFORMED AND RECORDED BY QUALIFIED INDIVIDUALS TRAINED BY THE GENERAL CONTRACTOR AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER.

DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

BASED ON THE RESULTS OF THE INSPECTIONS, MODIFICATIONS NECESSARY SHALL BE IMPLEMENTED WITHIN 7 DAYS OF THE INSPECTION.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. ANY NECESSARY REPAIRS WILL BE INITIATED IMMEDIATELY.

SEDIMENT BUILDUP WILL BE REMOVED FROM SILT FENCES WHEN IT HAS REACHED 1/3 THE HEIGHT OF THE FABRIC.

SEDIMENT BUILDUP WILL BE REMOVED FROM OTHER EROSION CONTROLS AS NEEDED TO MAINTAIN STORMWATER FLOW THROUGH THE SITE AND AVOID SEDIMENT FROM BYPASSING THE EROSION CONTROLS.

EROSION CONTROL MEASURES WILL BE REPAIRED, MAINTAINED, OR INCREASED AT THE DIRECTION OF THE LOCAL SOIL AND WATER CONSERVATION DISTRICT, THE VILLAGE OF LAKE VILLA OR THE PARK DISTRICT'S ENGINEER.

A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. THE REPORT SHALL SUMMARIZE THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORMWATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN TO SOLVE ANY PROBLEMS OBSERVED. THE INSPECTION REPORT SHALL BE SIGNED BY A QUALIFIED INDIVIDUAL PER NPDES GENERAL PERMIT NO. 2.

INSPECTION REPORTS SHALL BE RETAINED AS A PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS AFTER FINAL STABILIZATION AND A NOTICE OF DISCONTINUATION HAS BEEN SUBMITTED TO THE DEPARTMENT.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS A PART OF THIS CERTIFICATION.

GENERAL CONTRACTOR

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

SUB-CONTRACTOR #1

_____
SUB-CONTRACTORS RESPONSIBILITY

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

USE ADDITIONAL SHEETS FOR ADDITIONAL SUB-CONTRACTORS.
EACH SHEET WILL HAVE THE PROJECT NAME AND LOCATION AS DESCRIBED IN THE SITE DESCRIPTION ON THIS SHEET.
EACH ADDITIONAL SUB-CONTRACTOR WILL PROVIDE THEIR RESPONSIBILITY, COMPANY NAME, ADDRESS AND PHONE NUMBER, PRINTED NAME AND TITLE, SIGNATURE AND DATE.
THIS INFORMATION WILL BE KEPT WITH THIS PLAN.

OWNERS'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS A PART OF THIS CERTIFICATION.

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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SWPPP

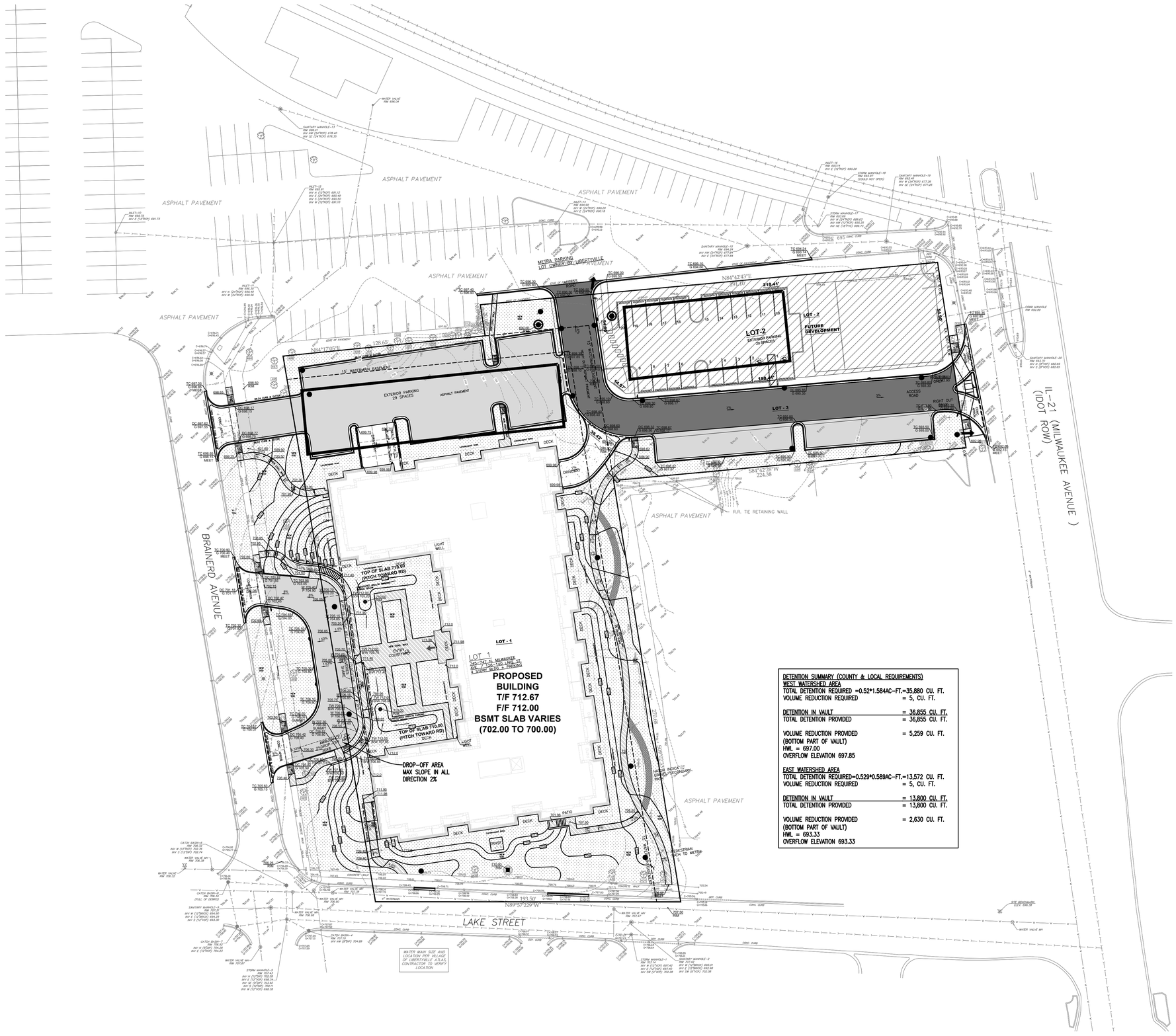
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
30 0 30
SCALE: 1"=30'-0

SHEET NUMBER
6 OF 17



GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY OTHERS.
10. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 4H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.

DETENTION SUMMARY (COUNTY & LOCAL REQUIREMENTS)

WEST WATERSHED AREA

TOTAL DETENTION REQUIRED =0.52*1.584AC-FT.=	35,880 CU. FT.
VOLUME REDUCTION REQUIRED	= 5, CU. FT.
DETENTION IN VAULT	= 36,855 CU. FT.
TOTAL DETENTION PROVIDED	= 36,855 CU. FT.
VOLUME REDUCTION PROVIDED	= 5,259 CU. FT.
(BOTTOM PART OF VAULT)	
HWL = 697.00	
OVERFLOW ELEVATION 697.85	

EAST WATERSHED AREA

TOTAL DETENTION REQUIRED=0.529*0.589AC-FT.=	13,572 CU. FT.
VOLUME REDUCTION REQUIRED	= 5, CU. FT.
DETENTION IN VAULT	= 13,800 CU. FT.
TOTAL DETENTION PROVIDED	= 13,800 CU. FT.
VOLUME REDUCTION PROVIDED	= 2,630 CU. FT.
(BOTTOM PART OF VAULT)	
HWL = 693.33	
OVERFLOW ELEVATION 693.33	

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
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4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021
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PROPOSED GRADING, & DRAINAGE PLAN
OVERALL SITE
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

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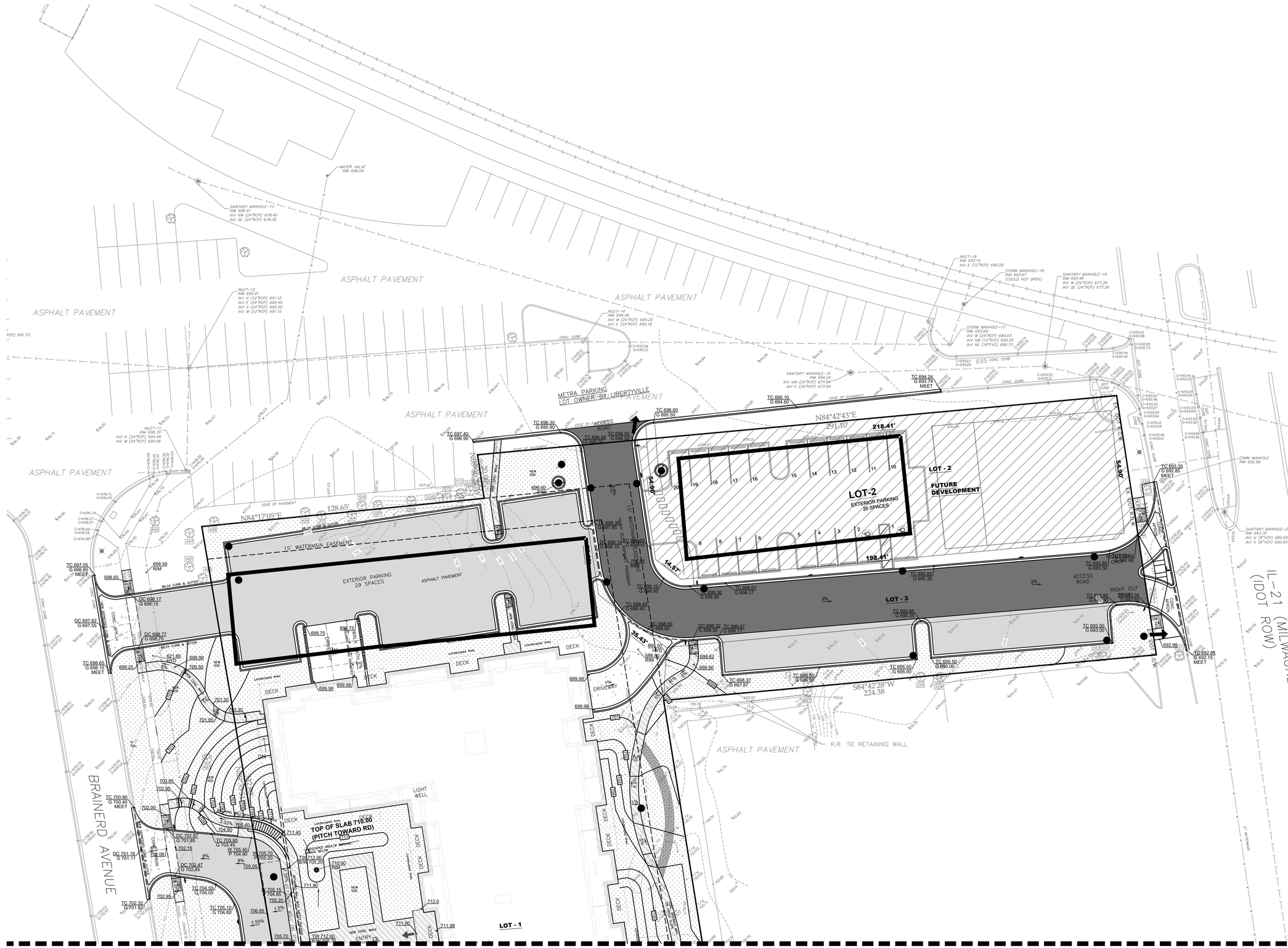
PROJECT NUMBER: 240973

START DATE: AUG. 01, 2024

GRAPHIC SCALE
30 0 30

SCALE: 1"=30'-0

SHEET NUMBER
7 OF 17



MATCH LINE SEE SHEET 9

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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nwalker@bonoconsulting.com
DESIGN FIRM NO: 184.005867.0002

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PROPOSED GRADING, & DRAINAGE PLAN
NORTH SECTION
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

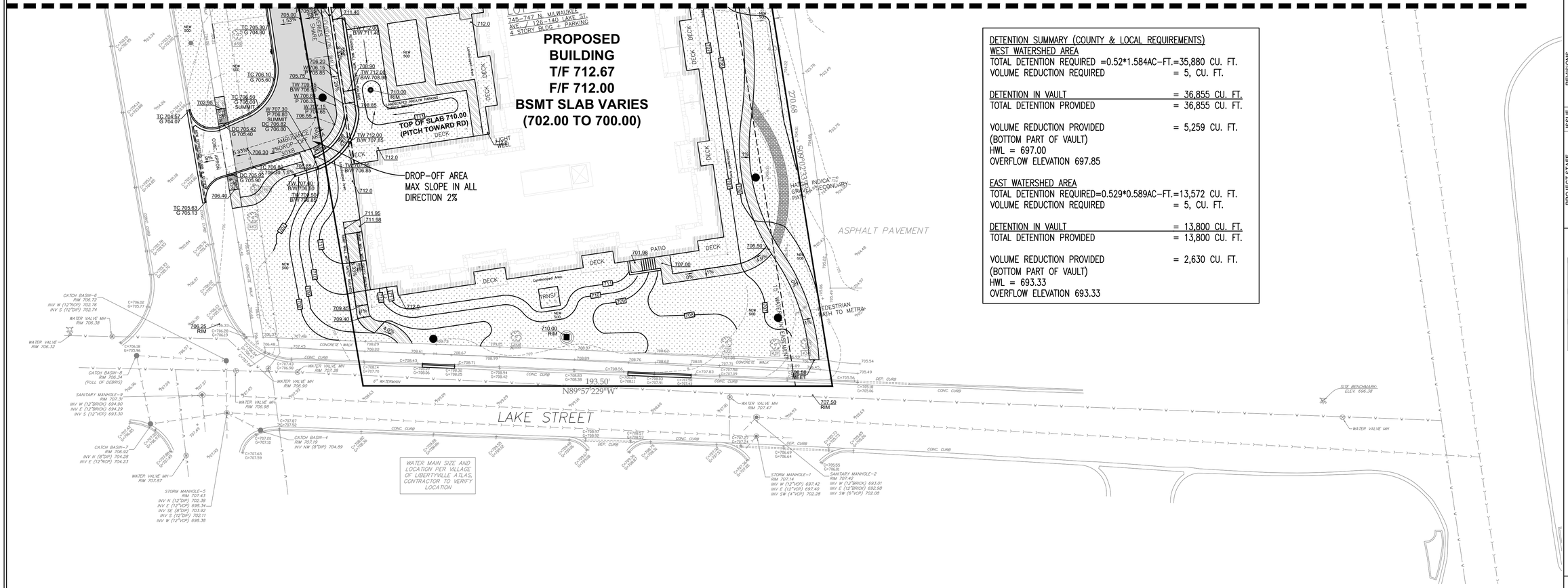
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
8 OF 17

MATCH LINE SEE SHEET 8



DETENTION SUMMARY (COUNTY & LOCAL REQUIREMENTS)

WEST WATERSHED AREA

TOTAL DETENTION REQUIRED =0.52*1.584AC-FT.=35,880 CU. FT.
VOLUME REDUCTION REQUIRED = 5, CU. FT.

DETENTION IN VAULT = 36,855 CU. FT.
TOTAL DETENTION PROVIDED = 36,855 CU. FT.

VOLUME REDUCTION PROVIDED = 5,259 CU. FT.
(BOTTOM PART OF VAULT)
HWL = 697.00
OVERFLOW ELEVATION 697.85

EAST WATERSHED AREA

TOTAL DETENTION REQUIRED=0.529*0.589AC-FT.=13,572 CU. FT.
VOLUME REDUCTION REQUIRED = 5, CU. FT.

DETENTION IN VAULT = 13,800 CU. FT.
TOTAL DETENTION PROVIDED = 13,800 CU. FT.

VOLUME REDUCTION PROVIDED = 2,630 CU. FT.
(BOTTOM PART OF VAULT)
HWL = 693.33
OVERFLOW ELEVATION 693.33

DATE	REVISIONS	ISSUE
10-09-2024	PRELIMINARY PLAN	A
02-27-2025	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	B

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEERI P.E.
ENGINEER:
TECHNICIAN:

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PROPOSED GRADING, & DRAINAGE PLAN

SOUTH SECTION

MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE: 20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
9 OF 17

Lake & Brainard, Libertyville, IL

Date: 2.25.25

	Existing Sq. Ft.	Existing Acres	Proposed Sq. Ft.	Proposed Acres
Total Site Area	96,062	2.205		
Lot area Excluding ROW	94,667	2.173		
Project Area of Site	94,667	2.173		
Building (included Bsmt.)	0	0.000	37,791	0.868
Walks, Decks, Patio	0	0.000	7,676	0.176
Access & Parking	0	0.000	26,535	0.609
Impervious Area	0	0.000	72,002 76.06%	1.653
Pervious Area	0	0.000	22,665	0.520
Disturbed area of Site	2.173	Ac.		
Increase in Impervious Area	1.653			

BEST MANAGEMENT PRACTICES
(West Watershed Area)

Impervious Area (Net New)	51,053 s.f.	
VOLUME REDUCTION BEST MANAGEMENT PRACTICES		
Volume Control Requirements	1.1	Inches Rainfall
Volume Control Storage Required	4,680	Cu. Ft.
PROPOSED		
Size of the infiltration Vault= V = 6500X1.00	5259 5259	Cu. Ft.
Proposed Volume	5,259	
Total Volume Reduction Storage Provided =	**5,259**	**Cu. Ft.**

Release Rate Calculation (Qr) and Restrictor Sizing Calculation

(WEST WATERSHED AREA)

RELEASE RATE CALCULATION

Watershed A	=	1.584	Ac.
Release Rate	=	0.150	CFS/Ac.
Release Rate	=	**0.238**	CFS

RESTRICTOR SIZE CALCULATION

Orifice Design			
Require Q =	0.238 cfs	Det. HWL =	697.00
Cd =	0.61	Orifice Invert:	691.00
Max. Head =	5.92	Orifice Cent.	691.08
Orifice Area:	0.0197		
Calculated Max. Restrictor Discharge:		0.235	

Restrictor Diameter = ***1.9 inches***

USE 2" PLATE RESTRICTOR

BEST MANAGEMENT PRACTICES
(East Watershed Area)

Impervious Area (Net New)	20,949 s.f.	
VOLUME REDUCTION BEST MANAGEMENT PRACTICES		
Volume Control Requirements	1.1	Inches Rainfall
Volume Control Storage Required	1,920	Cu. Ft.
PROPOSED		
Size of the infiltration Vault= V = 4600X0.5	5259 2630	Cu. Ft.
Proposed Volume	2,630	
Total Volume Reduction Storage Provided =	**2,630**	**Cu. Ft.**

Release Rate Calculation (Qr) and Restrictor Sizing Calculation

(EAST WATERSHED AREA)

RELEASE RATE CALCULATION

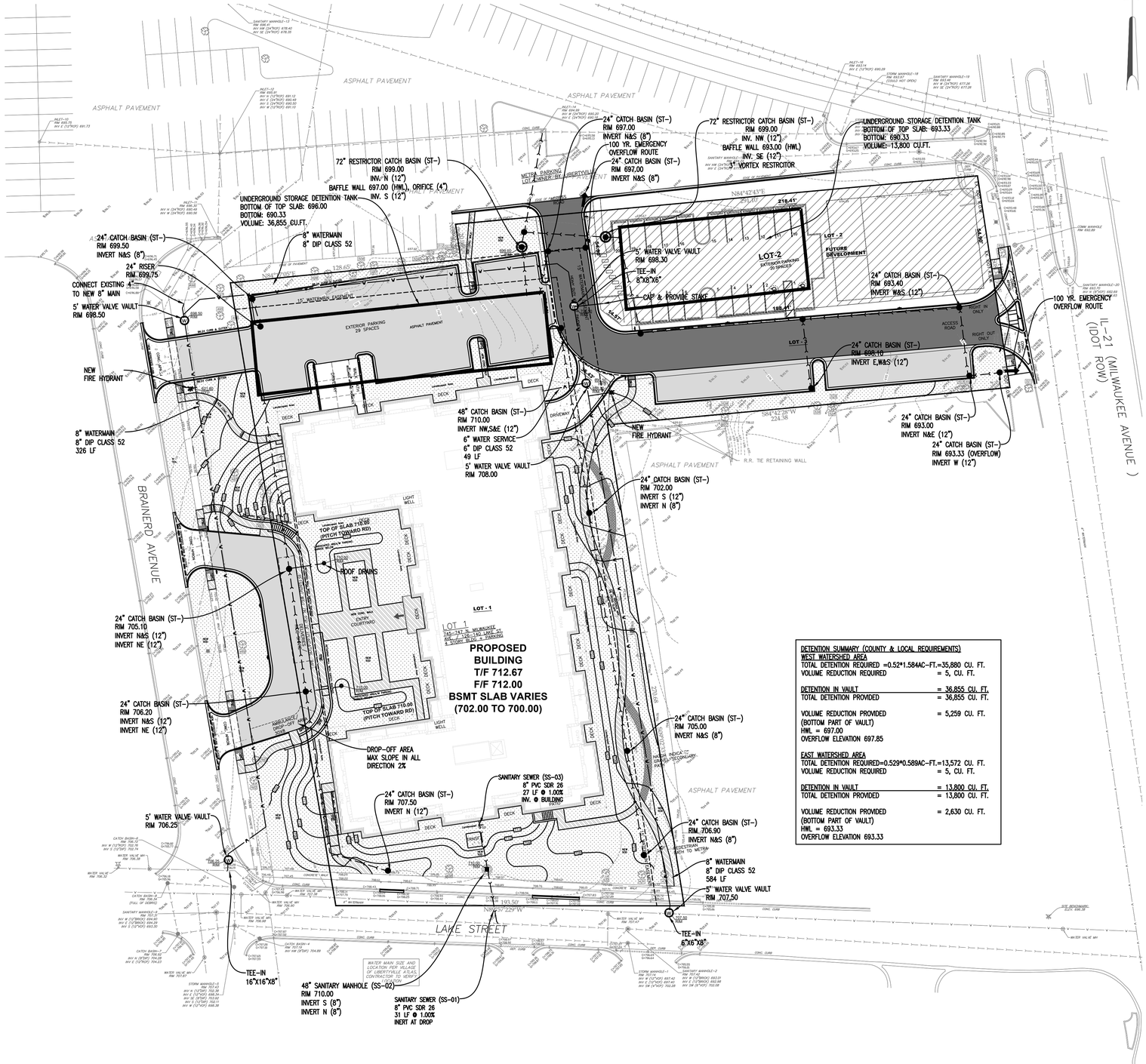
Area of Site	=	0.589	Ac.
Release Rate	=	0.150	CFS/Ac.
Release Rate	=	**0.088**	CFS

RESTRICTOR SIZE CALCULATION

Orifice Design			
Require Q =	0.088 cfs	Det. HWL =	693.00
Cd =	0.61	Orifice Invert:	691.00
Max. Head =	1.94	Orifice Cent.	691.06
Orifice Area:	0.0123		
Calculated Max. Restrictor Discharge:		0.084	

Restrictor Diameter = ***1.5 inches***

USE 3" VORTEX RESTRICTOR



DETENTION SUMMARY (COUNTY & LOCAL REQUIREMENTS)

WEST WATERSHED AREA
TOTAL DETENTION REQUIRED =0.52*1.584AC-FT.=35,880 CU. FT.
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TOTAL DETENTION PROVIDED = 36,855 CU. FT.

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(BOTTOM PART OF VAULT)
HWL = 697.00
OVERFLOW ELEVATION 697.85

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TOTAL DETENTION REQUIRED=0.529*0.589AC-FT.=13,572 CU. FT.
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DETENTION IN VAULT = 13,800 CU. FT.
TOTAL DETENTION PROVIDED = 13,800 CU. FT.

VOLUME REDUCTION PROVIDED = 2,630 CU. FT.
(BOTTOM PART OF VAULT)
HWL = 693.33
OVERFLOW ELEVATION 693.33

UTILITY NOTES:

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER OR WATER MAIN LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
10. ELEVATIONS GIVEN FOR STORM SEWER STRUCTURES LOCATED IN CURB LINE ARE PAVEMENT ELEVATIONS.
11. ALL WATER MAIN SHALL BE 5'-6" BELOW FINISHED GRADE TO TOP OF MAINS UNLESS NOTED OTHERWISE.
12. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
13. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
14. PROVIDE CONCRETE COLLAR AT ALL NEW STORM STRUCTURE IN PAVEMENT, NOT ADJACENT TO CURB. SEE CONCRETE COLLAR DETAIL ON DETAIL SHEET.
15. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO SANITARY MANHOLES.
16. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
17. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
18. ALL STORM MANHOLES IN PAVEMENT SHALL BE OPEN LID UNLESS OTHERWISE NOTED.
19. ALL UNDERGROUND IMPROVEMENTS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS. IN THE EVENT OF CONFLICTING GUIDELINES, THE MORE RESTRICTIVE SHALL GOVERN.

ISSUE	REVISIONS	DATE
A	PRELIMINARY PLAN	10-09-2024
B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:

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DESIGN FIRM NO. 184.008837-0002

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PROPOSED UTILITY PLAN
OVERALL SITE
MULTI-FAMILY BUILDING
745-747 N. MILWAUKEE AVE / 126-140 LAKE ST. ,
LIBERTYVILLE, LAKE COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE 30 0 30 60
SCALE: 1"=30'-0

SHEET NUMBER
10 OF 17

ASPHALT PAVEMENT

WATER VALVE
RIM 696.04

SANITARY MANHOLE-13
RIM 696.41
INV NW (24"RCP) 678.40
INV SE (24"RCP) 678.35

INLET-10
RIM 695.75
INV E (12"RCP) 691.73

INLET-12
RIM 695.91
INV N (12"RCP) 691.12
INV E (24"RCP) 690.49
INV S (24"RCP) 690.50
INV W (12"RCP) 691.10

INLET-11
RIM 696.30
INV N (24"RCP) 690.49
INV W (24"RCP) 690.56

INLET-14
RIM 694.99
INV W (24"RCP) 690.20
INV E (24"RCP) 690.16

INLET-16
RIM 693.14
INV E (12"RCP) 690.29

STORM MANHOLE-18
RIM 693.97
(COULD NOT OPEN)

SANITARY MANHOLE-19
RIM 693.46
INV W (24"RCP) 677.26
INV SE (24"RCP) 677.26

24" CATCH BASIN (ST-)
RIM 697.00
INVERT N&S (8")
100 YR. EMERGENCY
OVERFLOW ROUTE
24" CATCH BASIN (ST-)
RIM 697.00
INVERT N&S (8")

72" RESTRICTOR CATCH BASIN (ST-)
RIM 699.00
INV. N (12")
BAFFLE WALL 697.00 (HWL), ORIFICE (4")
INV. S (12")

72" RESTRICTOR CATCH BASIN (ST-)
RIM 699.00
INV. NW (12")
BAFFLE WALL 693.00 (HWL)
INV. SE (12")
3" VORTEX RESTRCITOR

UNDERGROUND STORAGE DETENTION TANK
BOTTOM OF TOP SLAB: 693.33
BOTTOM: 690.33
VOLUME: 13,800 CU.FT.

METRA PARKING
LOT OWNER BY LIBERTYVILLE

EDGE OF PAVEMENT
ACCESS ROAD

UNDERGROUND STORAGE DETENTION TANK
BOTTOM OF TOP SLAB: 696.00
BOTTOM: 690.33
VOLUME: 36,855 CU.FT.

24" CATCH BASIN (ST-)
RIM 699.50
INVERT N&S (8")

24" RISER
RIM 699.75

CONNECT EXISTING 4"
TO NEW 8" MAIN

5' WATER VALVE VAULT
RIM 698.50

8" WATERMAIN
8" DIP CLASS 52

N84°42'43"E
291.10'

218.41'

LOT - 2

FUTURE
DEVELOPMENT

LOT-2
EXTERIOR PARKING
20 SPACES

5' WATER VALVE VAULT
RIM 698.30
TEE-IN
8"X8"X6"
CAP & PROVIDE STAKE

54.99'

198.41'

14.57'

24" CATCH BASIN (ST-)
RIM 693.40
INVERT W&S (12")

100 YR. EMERGENCY
OVERFLOW ROUTE

IL-21 (MILWAUKEE AVENUE)
(IDOT ROW)

RIGHT IN
ONLY

RIGHT OUT
ONLY

LOT - 3

24" CATCH BASIN (ST-)
RIM 698.10
INVERT E,W&S (12")

15' WATERMAIN EASEMENT

EXTERIOR PARKING
29 SPACES

ASPHALT PAVEMENT

N84°75'E
128.65'

NEW
FIRE HYDRANT

8" WATERMAIN
8" DIP CLASS 52
326 LF

48" CATCH BASIN (ST-)
RIM 710.00
INVERT NW,S&E (12")

6" WATER SERVICE
6" DIP CLASS 52
49 LF

5' WATER VALVE VAULT
RIM 708.00

NEW
FIRE HYDRANT

S84°42'28"W
224.38

24" CATCH BASIN (ST-)
RIM 693.00
INVERT N&E (12")

24" CATCH BASIN (ST-)
RIM 693.33 (OVERFLOW)
INVERT W (12")

24" CATCH BASIN (ST-)
RIM 702.00
INVERT S (12")
INVERT N (8")

R.R. TIE RETAINING WALL

BRAINERD AVENUE

TOP OF SLAB 710.00
(PITCH TOWARD RD)

LANDSCAPED AREA/W PARKING
GRADE BELOW

710.00
RIM

ROOF DRAINS

NEW CONC. WALK
ENTRY

LIGHT
WELL

LOT - 1

24" CATCH BASIN (ST-)

MATCH LINE SEE SHEET 12

N

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025
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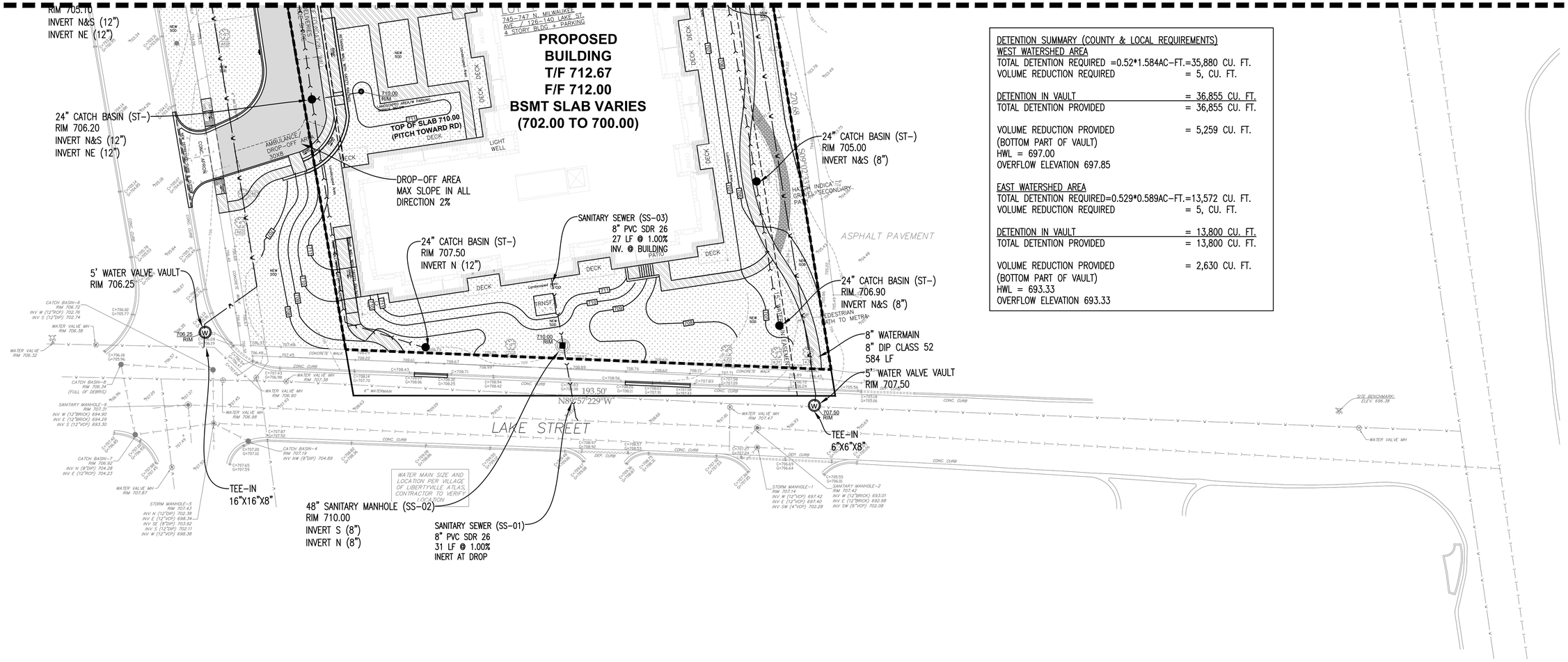
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PROJECT NUMBER: 240973
START DATE: AUG. 01, 2024
GRAPHIC SCALE
20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
11 OF 17

MATCH LINE SEE SHEET 11



DETENTION SUMMARY (COUNTY & LOCAL REQUIREMENTS)

WEST WATERSHED AREA

TOTAL DETENTION REQUIRED =0.52*1.584AC-FT.	=35,880 CU. FT.
VOLUME REDUCTION REQUIRED	= 5, CU. FT.
DETENTION IN VAULT	= 36,855 CU. FT.
TOTAL DETENTION PROVIDED	= 36,855 CU. FT.
VOLUME REDUCTION PROVIDED	= 5,259 CU. FT.

(BOTTOM PART OF VAULT)
HWL = 697.00
OVERFLOW ELEVATION 697.85

EAST WATERSHED AREA

TOTAL DETENTION REQUIRED=0.529*0.589AC-FT.	=13,572 CU. FT.
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DETENTION IN VAULT	= 13,800 CU. FT.
TOTAL DETENTION PROVIDED	= 13,800 CU. FT.
VOLUME REDUCTION PROVIDED	= 2,630 CU. FT.

(BOTTOM PART OF VAULT)
HWL = 693.33
OVERFLOW ELEVATION 693.33

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	B. BONO P.E.	A	PRELIMINARY PLAN	10-09-2024
ENGINEER:	A. VEER P.E.	B	PRELIMINARY PLAN-SUPPLEMENTAL SUBMISSION	02-27-2025
ENGINEER:				
TECHNICIAN:				

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PROPOSED UTILITY PLAN
SOUTH SECTION
MULTI-FAMILY BUILDING
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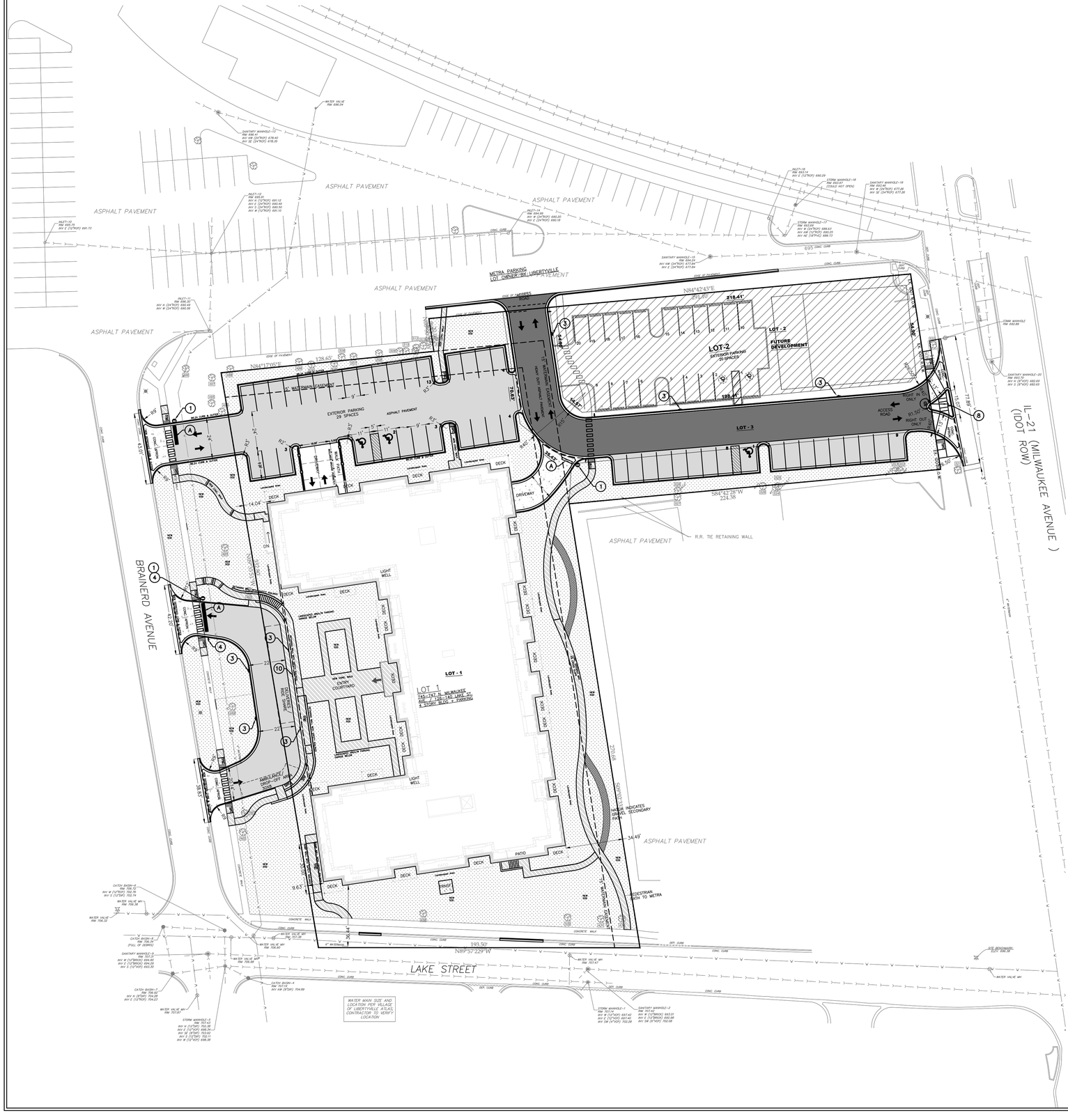
PROJECT NUMBER: 240973

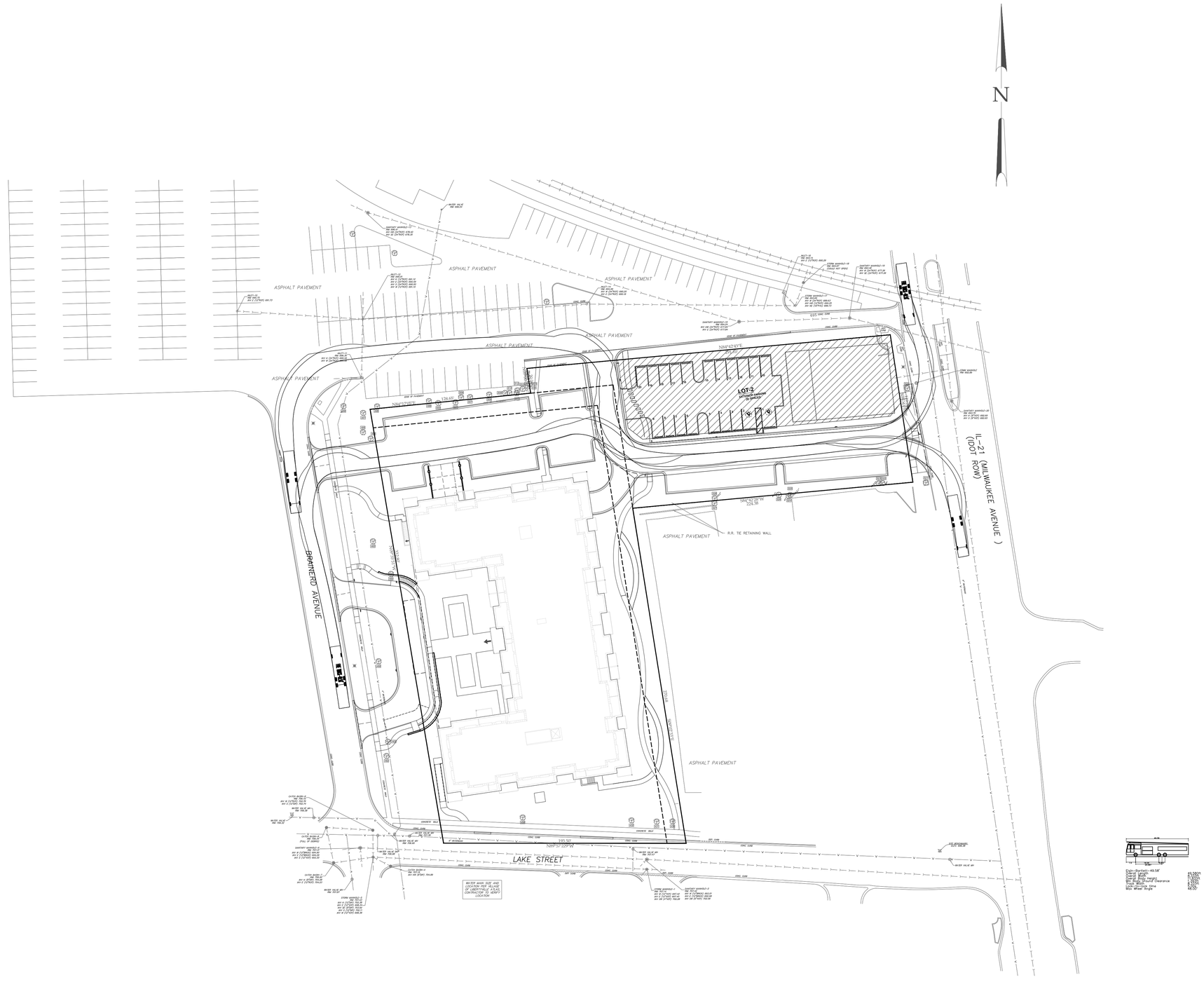
START DATE: AUG. 01, 2024

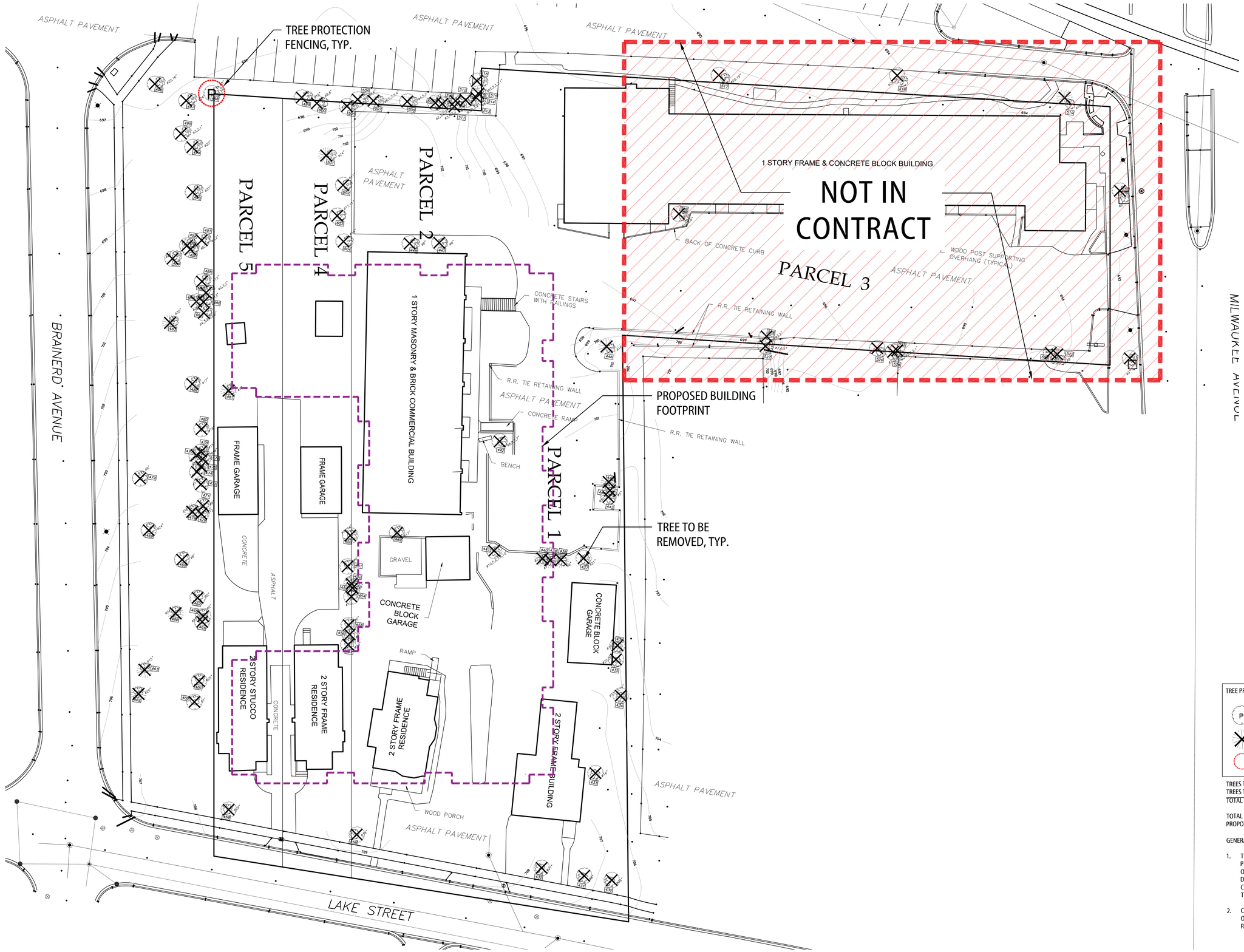
GRAPHIC SCALE
20 0 20

SCALE: 1"=20'-0

SHEET NUMBER
12 OF 17


ASPHALT PAVEMENT
METRA PARKING
LOT OWNED BY LIBERTYVILLE
N84°42'43"E
218.41'
LOT-2
EXTERIOR PARKING
20 SPACES
FUTURE
DEVELOPMENT
LOT - 3
N84°42'43"E
N84°17'00"E
128.65'
EXTERIOR PARKING
29 SPACES
ASPHALT PAVEMENT
ACCESS
ROAD
91.50'
RIGHT OUT
ONLY
IL-21 (MILWAUKEE AVENUE)
(IDOT ROW)
S84°42'28"W
224.36'
R.R. TIE RETAINING WALL
BRAINERD AVENUE
LOT - 1
745-747 N. MILWAUKEE
AVE / 126-140 LAKE ST.
4 STORY BLDG. 4 PARKING
AMBULANCE /
HANDICAP ONLY
PARKING
ENTRY
COURTYARD
DECK
PATIO
LIGHT
WELL
TRNSF
PEDESTRIAN
PATH TO METRA
LAKE STREET
N89°57'29"W
193.50'
WATER MAIN SIZE AND
LOCATION PER VILLAGE
OF LIBERTYVILLE ATLAS,
CONTRACTOR TO VERIFY
LOCATION
STORM MANHOLE-1
RIM 707.74
INV E (12"POF) 697.42
INV E (12"POF) 697.42
INV SW (4"POF) 703.08
SANITARY MANHOLE-2
RIM 707.42
INV E (12"SVC) 693.91
INV E (12"SVC) 693.86
INV SW (8"VCP) 703.08
SIZE #ROHASMIC
ELEC #98.38
WATER VALVE MH
RIM 707.47
WATER VALVE MH
RIM 706.32
CATCH BASIN-4
RIM 706.72
INV W (12"POF) 702.76
INV S (12"SVC) 702.76
WATER VALVE MH
RIM 706.39
CATCH BASIN-2
RIM 706.54
(TOLL OF 0SSPPS)
SANITARY MANHOLE-9
RIM 707.01
INV W (12"SVC) 694.86
INV E (12"SVC) 694.86
INV S (12"POF) 693.30
CATCH BASIN-1
RIM 706.67
INV W (12"SVC) 704.09
INV S (12"POF) 704.23
WATER VALVE MH
RIM 707.83
STORM MANHOLE-5
RIM 706.50
INV N (12"POF) 702.50
INV E (12"POF) 698.34
INV S (12"POF) 698.34
INV E (12"POF) 702.01
INV W (12"POF) 698.39
CATCH BASIN-3
RIM 706.67
INV W (12"SVC) 704.09
INV S (12"POF) 704.23
WATER VALVE MH
RIM 706.00
WATER VALVE MH
RIM 707.14
WATER VALVE MH
RIM 706.88
CATCH BASIN-4
RIM 707.14
INV NW (8"SVP) 704.89
WATER VALVE MH
RIM 707.10
WATER VALVE MH
RIM 707.10
CONCRETE WALK
CONC CURB
GRV CURB
CONC GUTTER
CONCRETE WALK
CONC CURB
CONC CURB
CONC CURB


N
LOT 2
LOT AREA = 140,000 SQ. FT. (3.214 ACRES)
N90°42'43"E
203.00'
N90°42'43"E
203.00'
N90°42'43"E
203.00'



1 TREE SURVEY AND PRESERVATION PLAN

1" = 20'-0"

TREE PROTECTION KEY

- P — EXISTING TREE TO BE PRESERVED
- EXISTING TREE TO BE REMOVED
- CRITICAL ROOT ZONE

TREES TO BE PRESERVED: 1
TREES TO BE REMOVED: 98
TOTAL TREES TAGGED: 99

TOTAL QUANTITIES (IN VICINITY OF DISTURBANCE AND PROPOSED IMPROVEMENTS)

GENERAL NOTES

1. THE INTENT IS TO KEEP THE EXISTING TREES TO BE PRESERVED IN TACT THROUGHOUT THE DURATION OF CONSTRUCTION ON-SITE. IF THE TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING PER THE MUNICIPALITY'S ORDINANCE.

2. CONTRACTOR IS RESPONSIBLE FOR THE HAUL-OFF OF ALL TREES AND OTHER VEGETATION TO BE REMOVED.

0 20' 40' 60' 80' feet

1" = 20'

N

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bbono@bonoconsulting.com
Hugh LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

SHEET TITLE

TREE SURVEY & PRESERVATION PLAN

SHEET #

L-1

February 25, 2025

Species Group	Tag #	Common Name	Scientific Name	Size	Cond.	Form	Notes	Action	Tree Replacement Rate
B	430	Silver Maple	*Acer saccharinum*	36	2	3	Codominant stems, included bark. SE corner 126 Lake.	Remove	2
B	431	Sugar Maple	*Acer saccharum*	8	2	3	Overtopped.	Remove	2
B	432	Norway Maple	*Acer platanoides*	21	3	3	Heavy dieback, decay, girdling roots.	Remove	2
B	433	Magnolia	*Magnolia spp.*	16	3	3	Trunk decay, one sided.	Remove	2
B	434	Norway Maple	*Acer platanoides*	15,13,14	2	4	Codominant stems, included bark, trunk decay.	Remove	2
C	435	Boxelder	*Acer negundo*	22,30	5	5	Trunk decay, heavy dieback.	Remove	Not Required
C	436	Boxelder	*Acer negundo*	19	4	5	Decay, broken top, dieback.	Remove	Not Required
B	437	Lacebark Elm	*Ulmus parvifolia*	21	3	4	Dieback, codominant stems, included bark, girdling roots.	Remove	2
B	438	Eastern Redcedar	*Juniperus virginiana*	6	2	3	One sided.	Remove	2
B	439	Eastern Redcedar	*Juniperus virginiana*	7	2	3	One sided.	Remove	2
B	440	Eastern Redcedar	*Juniperus virginiana*	7	2	3	One sided.	Remove	2
A	441	Amur Maple	*Acer ginnala*	10,5,6,7, 8,10	3	3	Dieback, decay.	Remove	3
B	442	River Birch	*Betula nigra*	8,8,7,7	1	1	By 105 office entry.	Remove	2
B	443	Black Walnut	*Juglans nigra*	30	4	4	Heavy dieback, decay, in raised planter.	Remove	2
A	444	Hackberry	*Celtis occidentalis*	5	2	4	Overtopped.	Remove	3
B	445	Eastern Redcedar	*Juniperus virginiana*	6	2	3	Overtopped.	Remove	2
B	446	Colorado Spruce	*Picea pungens*	16	2	3	Dieback.	Remove	2
A	447	Crabapple	*Malus spp.*	8	3	3	Decay, dieback.	Remove	3
A	448	Crabapple	*Malus spp.*	8	3	3	Decay, dieback.	Remove	3
C	449	American Elm	*Ulmus americana*	17	3	4	Dieback, codominant stems, included bark.	Remove	1
C	450	Boxelder	*Acer negundo*	15,16	3	4	Dieback, codominant stems, included bark.	Remove	1
C	451	American Elm	*Ulmus americana*	9	2	4	Overtopped.	Remove	1
B	452	Black Walnut	*Juglans nigra*	15	2	3	Codominant stems.	Remove	2
C	453	Boxelder	*Acer negundo*	9	2	4	Overtopped.	Remove	1
C	454	Boxelder	*Acer negundo*	11	2	3		Remove	1
C	455	Boxelder	*Acer negundo*	6	3	4	Broken top.	Remove	1
C	456	Boxelder	*Acer negundo*	9	3	4	Dieback, overtopped.	Remove	1
C	457	American Elm	*Ulmus americana*	24	6	6	Dead.	Remove	Not Required
B	458	Sugar Maple	*Acer saccharum*	38	4	2	Heavy dieback, codiminant stems, decay. In front of 134 Lake.	Remove	2
B	459	Norway Maple	*Acer platanoides*	29	4	3	Codominant stems, girdling roots. In front of 140 Lake.	Remove	2
D	460	Mulberry	*Morus alba*	7	2	3		Remove	Not Required
C	461	Boxelder	*Acer negundo*	25	3	3	Dieback, one sided.	Remove	4
B	462	White Pine	*Pinus strobus*	25	3	2	Heavy dieback.	Remove	4
B	463	Douglas Fir	*Pseudotsuga menziesii*	15	3	3	Dieback.	Remove	4
D	464	Buckthorn	*Rhamnus cathartica*	5	3	3		Remove	Not Required
B	465	Norway Maple	*Acer platanoides*	6	2	3		Remove	4
B	466	Norway Spruce	*Picea abies*	24	2	1		Remove	4
B	467	Norway Maple	*Acer platanoides*	5	2	3	One sided.	Remove	4
C	468	Boxelder	*Acer negundo*	8	3	3	Dieback.	Remove	4
B	469	Sugar Maple	*Acer saccharum*	24	2	3	Codominant stems, included bark.	Remove	4
B	470	Sugar Maple	*Acer saccharum*	12	3	3	Dieback, overtopped.	Remove	4
B	471	Norway Maple	*Acer platanoides*	9	2	3	Overtopped.	Remove	4
B	472	White Pine	*Pinus strobus*	16	6	6	Dead.	Remove	Not Required
C	473	Boxelder	*Acer negundo*	11	5	5	Trunk decay, leaning.	Remove	Not Required
C	474	Boxelder	*Acer negundo*	6	4	4	Trunk decay, dieback.	Remove	4
B	475	Black Walnut	*Juglans nigra*	25	3	2	Broken limbs, dieback.	Remove	4
B	476	Sugar Maple	*Acer saccharum*	14	2	3		Remove	4
C	477	Boxelder	*Acer negundo*	13	3	3	Dieback, leaning.	Remove	4
C	478	Boxelder	*Acer negundo*	15	3	4	Dieback, leaning.	Remove	4
D	479	Larch	*Larix decidua*	9	5	5	Half dead.	Remove	Not Required
C	480	Black Cherry	*Prunus serotina*	16	2	3	Dieback. NW of garage.	Remove	4
B	481	Norway Spruce	*Picea abies*	7	3	3	Dieback, thin crown.	Remove	2
B	482	Black Walnut	*Juglans nigra*	17	1	1		Protect	4
B	483	Norway Spruce	*Picea abies*	30	2	1	Dieback.	Remove	4
D	484	Buckthorn	*Rhamnus cathartica*	4,3,2,2,2 ,2	5	5	Half dead.	Remove	Not Required
C	485	Boxelder	*Acer negundo*	36	5	5	Trunk decay, heavy dieback.	Remove	Not Required
C	486	American Elm	*Ulmus americana*	13	2	4	Overtopped.	Remove	4
D	487	Buckthorn	*Rhamnus cathartica*	3,3,2	3	3		Remove	Not Required
C	488	American Elm	*Ulmus americana*	13	2	4	Overtopped, codominant stems.	Remove	4
D	489	Mulberry	*Morus alba*	28	5	5	Basal decay, heavy dieback, codominant stems.	Remove	Not Required
C	490	Boxelder	*Acer negundo*	5	3	4	Broken leader.	Remove	4
D	491	Buckthorn	*Rhamnus cathartica*	4,2	3	3		Remove	Not Required
C	492	Boxelder	*Acer negundo*	4	3	3	Dieback.	Remove	4
B	493	Sugar Maple	*Acer saccharum*	37	4	2	Trunk decay, heavy dieback.	Remove	4
B	494	Black Walnut	*Juglans nigra*	20	2	4	Overtopped, leaning, dieback.	Remove	4
D	495	Buckthorn	*Rhamnus cathartica*	3,2,1	2	3		Remove	Not Required
C	496	Boxelder	*Acer negundo*	22,16	5	5	Trunk decay, heavy dieback. NW corner of site.	Remove	Not Required
B	497	Honeylocust	*Gleditsia triacanthos*	24	3	3	Heavy dieback.	Remove	4
C	498	American Elm	*Ulmus americana*	8	2	4	Overtopped.	Protect	-
B	499	Black Walnut	*Juglans nigra*	15	2	3	Codominant stems.	Remove	4
D	500	Mulberry	*Morus alba*	8,8	3	4	Codominant stems, included bark, dieback.	Remove	Not Required
B	501	Colorado Spruce	*Picea pungens*	24	6	6	Dead.	Remove	Not Required
B	502	Black Walnut	*Juglans nigra*	11	1	3	Overtopped.	Remove	2
B	503	Norway Maple	*Acer platanoides*	17,11	4	4	Codominant stems, trunk decay, included bark, dieback.	Remove	2
B	504	Black Walnut	*Juglans nigra*	14	2	3	Trunk decay, conflict with #503.	Remove	2
A	505	Hackberry	*Celtis occidentalis*	10	1	2		Remove	3
C	506	Boxelder	*Acer negundo*	6,6	4	4	Decay, overtopped, dieback.	Remove	4
D	507	Buckthorn	*Rhamnus cathartica*	8,5,7,5,4	4	4	Trunk decay, dieback.	Remove	Not Required
D	508	Buckthorn	*Rhamnus cathartica*	4,5,2	4	4	Trunk decay, dieback.	Remove	Not Required
D	509	Green Ash	*Fraxinus pennsylvanica*	12	6	6	Dead.	Remove	Not Required
D	511	Buckthorn	*Rhamnus cathartica*	3,4,3,2	2	3		Remove	Not Required
B	512	Silver Maple	*Acer saccharinum*	18	3	3	Dieback.	Remove	4
D	513	Buckthorn	*Rhamnus cathartica*	3,3,3,2	4	4		Remove	Not Required
C	514	American Elm	*Ulmus americana*	8	2	4	Overtopped.	Remove	4
D	515	Buckthorn	*Rhamnus cathartica*	3,3,3,2,1	3	4		Remove	Not Required
C	516	Boxelder	*Acer negundo*	10	5	5	Half dead.	Remove	Not Required
									178

TREES ON PARCEL 3

Species Group	Tag #	Common Name	Scientific Name	Size	Cond.	Form	Notes	Action	Tree Replacement Rate
C	517	American Elm	*Ulmus americana*	20,19	3	4	Codominant stems, sap ooze.	Remove	4
D	518	Siberian Elm	*Ulmus pumila*	29,28	5	5	Heavy dieback, codiminant stems, trunk decay. Included bark, sap ooze.	Remove	Not Required
B	519	Colorado Spruce	*Picea pungens*	16	2	3	Dieback, one sided. NE corner of site.	Remove	4
B	520	Honeylocust	*Gleditsia triacanthos*	2	2	2	Dieback, in planter on Milwaukee Ave.	Remove	4
B	521	Hybrid Elm	*Ulmus spp.*	4	2	2	In planter on Milwaukee Ave.	Remove	4
A	522	Crabapple	*Malus spp.*	9	5	5	Half dead, between parking lots.	Remove	Not Required
C	523	Boxelder	*Acer negundo*	8,8,9	3	3	Dieback, codominant stems, between parking lots.	Remove	1
C	524	American Elm	*Ulmus americana*	7	2	3		Remove	1
D	525	Buckthorn	*Rhamnus cathartica*	2,2,2,1	2	3		Remove	Not Required
C	526	American Elm	*Ulmus americana*	4,2	2	3		Remove	1
B	527	Black Walnut	*Juglans nigra*	7,6,5	2	3	Between parking lots.	Remove	4
C	528	Boxelder	*Acer negundo*	3,2	3	3	Dieback, between parking lots.	Remove	1
B	529	River Birch	*Betula nigra*	10,8,6	2	3	Dieback, codiminant stems, included bark. Near 741 office entry.	Remove	2
									26

KEY

Tree to be Protected
Tree to be Removed
Public Tree to be Removed

Tree Condition. A visual assessment and rating of the overall health and vigor of the tree, as follows:
1 – Excellent
2 - Very Good
3 – Good
4 – Below Average
5 - Poor
6 - Dead

Tree Form. A visual assessment and rating of the form of the tree, as follows:
1 – Excellent
2 - Very Good
3 – Good
4 – Below Average
5 - Poor
6 - Dead

Prepared by: David Coulter, Osage Inc.
ISA Certifed Arborist #IL-0094 (Exp. 12/31/25)

TREE REPLACEMENT SUMMARY

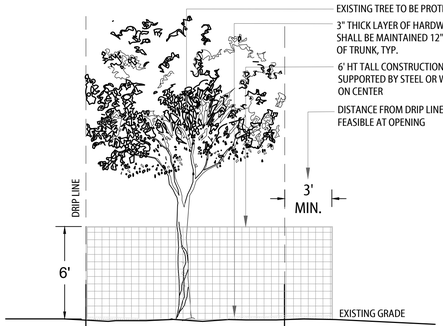
TOTAL NUMBER OF TREES TO BE REMOVED = 98
TOTAL NUMBER OF TREES TO BE PROTECTED = 1
REQUIRED NUMBER OF TREES TO BE REPLACED = 204
CREDIT FOR PROTECTED TREES = 3

TOTAL NUMBER OF TREES REQUIRED = 201
TOTAL NUMBER OF TREES PROVIDED = 201
(SEE SHEETS L-3 FOR PLANTING PLAN & SHEET L-5 FOR ORDINANCE SUMMARY)

TREE PRESERVATION NOTES:

1. PROTECT EXISTING TREES IN ACCORDANCE WITH VILLAGE OF LIBERTYVILLE TREE ORDINANCE.
2. CALL J.U.L.I.E. AT (800) 892-0123 FOR UTILITY LOCATIONS BEFORE DIGGING.
3. ALL WORK MUST BE PERFORMED ACCORDING TO THE APPROVED TREE PRESERVATION PLAN.
4. NO GRADING/FILLING IS ALLOWED WITHIN THE PROTECTED CRITICAL ROOT ZONE.
5. NO VEHICLES OR EQUIPMENT CAN BE DRIVEN OVER OR MATERIAL STORED ON THE CRITICAL ROOT ZONES OF PROTECTED TREES OR ON THE PUBLIC RIGHT-OF-WAY. TREE, SILT, AND PERIMETER FENCING MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION. TREE FENCE FOR UNPROTECTED TREES SHOULD REMAIN IN PLACE THROUGHOUT CONSTRUCTION EXCEPT WHEN DIRECT ACCESS IS NECESSARY. BEFORE ENTERING CRITICAL ROOT ZONE AREA, CHECK WITH FORESTRY CONSULTANT.
6. ALL REQUIRED TREE, SILT, AND PERIMETER FENCING MUST REMAIN IN PLACE UNTIL THE TIME OF FINAL GRADING AND LANDSCAPING AND CAN ONLY BE REMOVED UPON REVIEW AND APPROVAL BY THE FORESTRY CONSULTANT.
7. ATTACHMENTS (WIRES, FENCES, ETC.) OTHER THAN THOSE APPROVED FOR GUYING, BRACING OR WRAPPING MUST NOT BE ATTACHED TO PROTECTED TREES.

PLAN



SECTION

PLEASE NOTE:

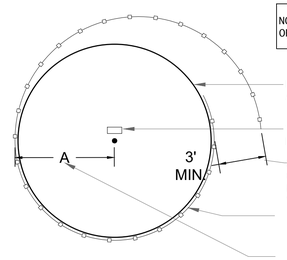
INSTALL & MAINTAIN 4'-0" TALL WOODEN SLAT SNOW OR CHAIN LINK FENCE SECURED TO METAL POSTS SPACED A MAXIMUM OF 6' APART.

FENCE TO BE LOCATED AT A DISTANCE FROM TRUNK EQUAL TO 1'-0" FOR EVERY INCH OF DIAMETER MEASUARED AT BREAST HEIGHT.

SNOW FENCE TO BE SECURED TO METAL STAKES WITH A MINIMUM OF 4 WIRE TIES.

CHAIN LINK FENCE TO HAVE POSTS SECURED AT EACH SECTION TO MAINTAIN UPRIGHT AND STATIONARY THROUGHOUT CONSTRUCTION.

NOTE : NO CONSTRUCTION STAGING, TRAFFIC OR OTHER ACTIVITIES WITHIN THIS AREA



2 TREE INVENTORY & PRESERVATION NOTES & DETAILS

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Hugh LIGHTING DESIGN

PROJECT NAME: MILWAUKEE & LAKE

PROJECT ADDRESS: 745-47 N MILWAUKEE AVENUE / 126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24-016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

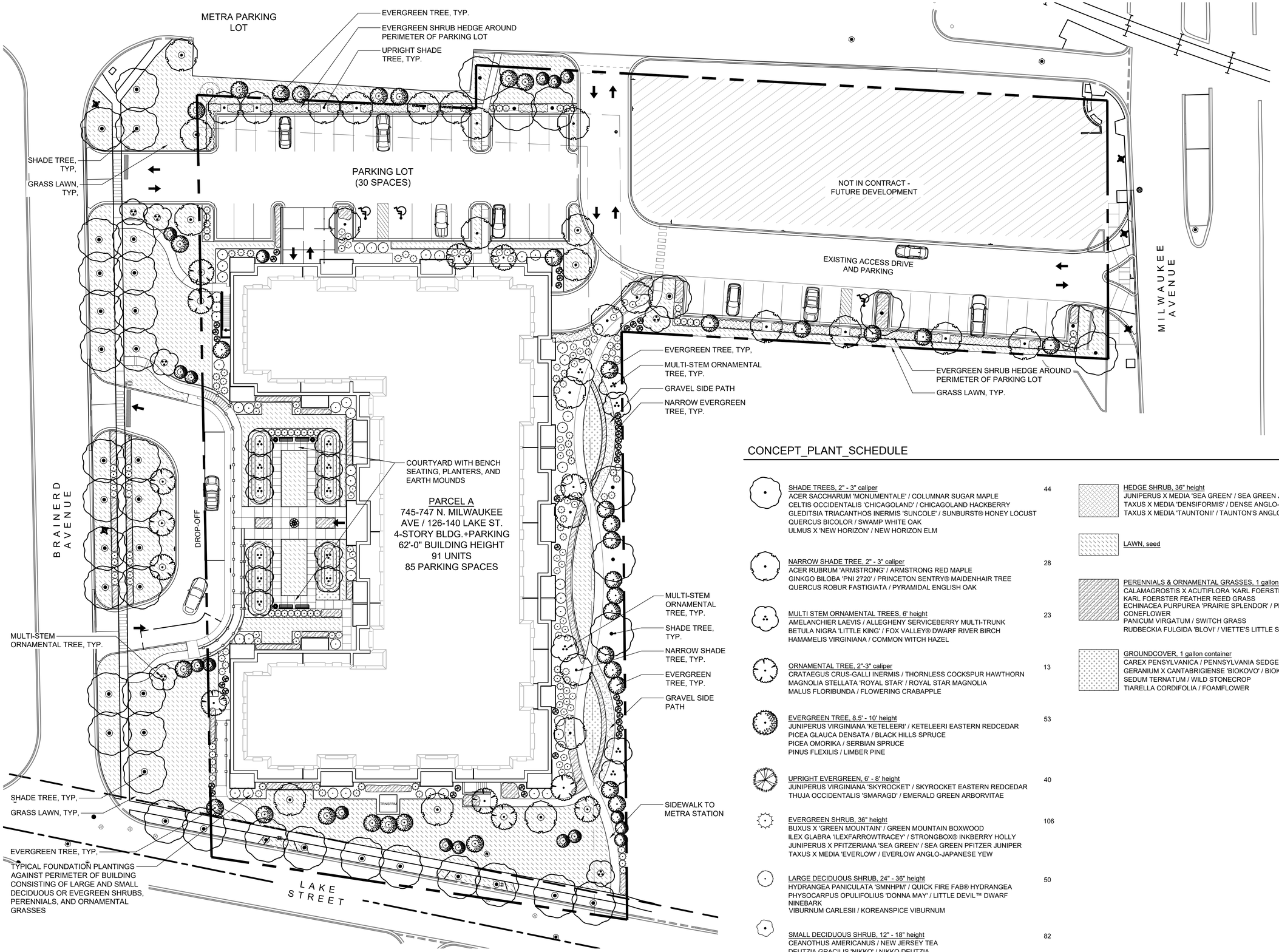
SHEET TITLE

TREE INVENTORY, NOTES, & DETAILS

SHEET #

L-2

February 25, 2025



3 PRELIMINARY LANDSCAPE PLAN
1" = 20'-0"

CONCEPT_PLANT_SCHEDULE

SHADE TREES, 2" - 3" caliper ACER SACCHARUM 'MONUMENTALE' / COLUMNAR SUGAR MAPLE CELTIS OCCIDENTALIS 'CHICAGOLAND' / CHICAGOLAND HACKBERRY GLEDITSIA TRIACANTHOS INERMIS 'SUNCOLE' / SUNBURST® HONEY LOCUST QUERCUS BICOLOR / SWAMP WHITE OAK ULMUS X 'NEW HORIZON' / NEW HORIZON ELM	44
NARROW SHADE TREE, 2" - 3" caliper ACER RUBRUM 'ARMSTRONG' / ARMSTRONG RED MAPLE GINKGO BILOBA 'PNI 2720' / PRINCETON SENTRY® MAIDENHAIR TREE QUERCUS ROBUR FASTIGIATA / PYRAMIDAL ENGLISH OAK	28
MULTI STEM ORNAMENTAL TREES, 6' height AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY MULTI-TRUNK BETULA NIGRA 'LITTLE KING' / FOX VALLEY® DWARF RIVER BIRCH HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL	23
ORNAMENTAL TREE, 2"-3" caliper CRATAEGUS CRUS-GALLI INERMIS / THORNLESS COCKSPUR HAWTHORN MAGNOLIA STELLATA 'ROYAL STAR' / ROYAL STAR MAGNOLIA MALUS FLORIBUNDA / FLOWERING CRABAPPLE	13
EVERGREEN TREE, 8.5' - 10' height JUNIPERUS VIRGINIANA 'KETELEERI' / KETELEERI EASTERN REDCEDAR PICEA GLAUCA DENSATA / BLACK HILLS SPRUCE PICEA OMORIKA / SERBIAN SPRUCE PINUS FLEXILIS / LIMBER PINE	53
UPRIGHT EVERGREEN, 6' - 8' height JUNIPERUS VIRGINIANA 'SKYROCKET' / SKYROCKET EASTERN REDCEDAR THUJA OCCIDENTALIS 'SMARAGD' / EMERALD GREEN ARBORVITAE	40
EVERGREEN SHRUB, 36" height BUXUS X 'GREEN MOUNTAIN' / GREEN MOUNTAIN BOXWOOD ILEX GLABRA 'ILEXFARROWTRACEY' / STRONGBOX® INKBERRY HOLLY JUNIPERUS X PFITZERIANA 'SEA GREEN' / SEA GREEN PFITZER JUNIPER TAXUS X MEDIA 'EVERLOW' / EVERLOW ANGLO-JAPANESE YEW	106
LARGE DECIDUOUS SHRUB, 24" - 36" height HYDRANGEA PANICULATA 'SMNHPM' / QUICK FIRE FAB® HYDRANGEA PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL™ DWARF NINEBARK VIBURNUM CARLESII / KOREANSPICE VIBURNUM	50
SMALL DECIDUOUS SHRUB, 12" - 18" height CEANOTHUS AMERICANUS / NEW JERSEY TEA DEUTZIA GRACILIS 'NIKKO' / NIKKO DEUTZIA SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA	82

HEDGE SHRUB, 36" height JUNIPERUS X MEDIA 'SEA GREEN' / SEA GREEN JUNIPER TAXUS X MEDIA 'DENSIFORMIS' / DENSE ANGLO-JAPANESE YEW TAXUS X MEDIA 'TAUNTONII' / TAUNTON'S ANGLO-JAPANESE YEW	797 SF
LAWN, seed	22 075 SF
PERENNIALS & ORNAMENTAL GRASSES, 1 gallon container CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS ECHINACEA PURPUREA 'PRAIRIE SPLENDOR' / PRAIRIE SPLENDOR CONEFLOWER PANICUM VIRGATUM / SWITCH GRASS RUDBECKIA FULGIDA 'BLOVI' / VIETTE'S LITTLE SUZY CONEFLOWER	1 614 SF
GROUNDCOVER, 1 gallon container CAREX PENSYLVANICA / PENNSYLVANIA SEDGE GERANIUM X CANTABRIGIENSE 'BIOKOVO' / BIOKOVO CRANESBILL SEDUM TERNATUM / WILD STONECROP TIARELLA CORDIFOLIA / FOAMFLOWER	2 103 SF

0 20' 40' 60' 80' feet
1" = 20'

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Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
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2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

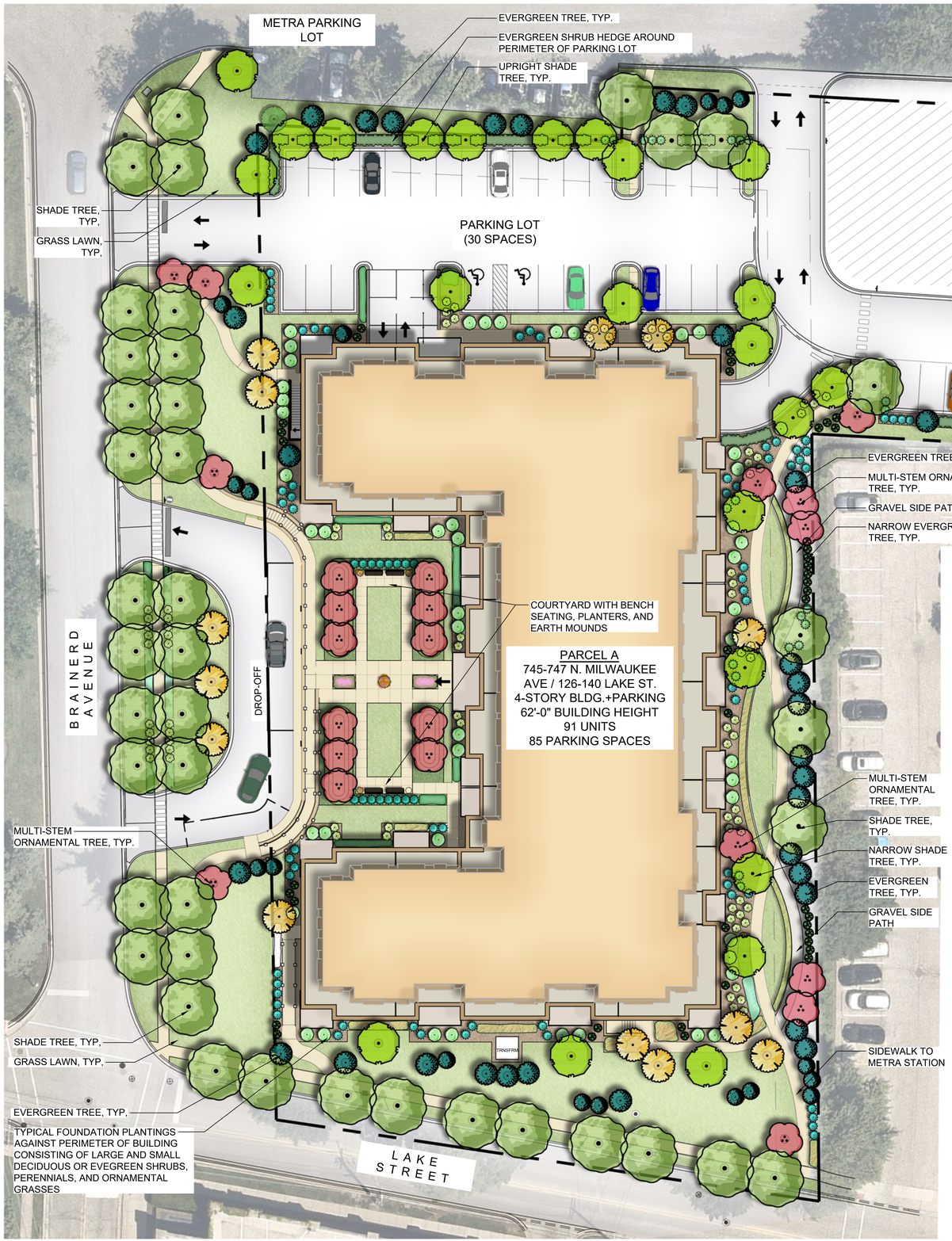
SHEET TITLE

PRELIMINARY LANDSCAPE PLAN

SHEET #

L-3

February 26, 2025



CONCEPT_PLANT_SCHEDULE

SHADE TREES, 2" - 3" caliper ACER SACCHARUM 'MONUMENTALE' / COLUMNAR SUGAR MAPLE CELTIS OCCIDENTALIS 'CHICAGOLAND' / CHICAGOLAND HACKBERRY GLEDITSIA TRIACANTHOS INERMIS 'SUNCOLE' / SUNBURST® HONEY LOCUST QUERCUS BICOLOR / SWAMP WHITE OAK ULMUS X 'NEW HORIZON' / NEW HORIZON ELM	44	
NARROW SHADE TREE, 2" - 3" caliper ACER RUBRUM 'ARMSTRONG' / ARMSTRONG RED MAPLE GINKGO BILOBA 'PNI 2720' / PRINCETON SENTRY® MAIDENHAIR TREE QUERCUS ROBUR FASTIGIATA / PYRAMIDAL ENGLISH OAK	28	
MULTI STEM ORNAMENTAL TREES, 6' height AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY MULTI-TRUNK BETULA NIGRA 'LITTLE KING' / FOX VALLEY® DWARF RIVER BIRCH HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL	23	
ORNAMENTAL TREE, 2"-3" caliper CRATAEGUS CRUS-GALLI INERMIS / THORNLESS COCKSPUR HAWTHORN MAGNOLIA STELLATA 'ROYAL STAR' / ROYAL STAR MAGNOLIA MALUS FLORIBUNDA / FLOWERING CRABAPPLE	13	
EVERGREEN TREE, 8.5' - 10' height JUNIPERUS VIRGINIANA 'KETELEERI' / KETELEERI EASTERN REDCEDAR PICEA GLAUCA DENSATA / BLACK HILLS SPRUCE PICEA OMORIKA / SERBIAN SPRUCE PINUS FLEXILIS / LIMBER PINE	53	
UPRIGHT EVERGREEN, 6' - 8' height JUNIPERUS VIRGINIANA 'SKYROCKET' / SKYROCKET EASTERN REDCEDAR THUJA OCCIDENTALIS 'SMARAGD' / EMERALD GREEN ARBORVITAE	40	
EVERGREEN SHRUB, 36" height BUXUS X 'GREEN MOUNTAIN' / GREEN MOUNTAIN BOXWOOD ILEX GLABRA 'ILEXFARROWTRACEY' / STRONGBOX® INKBERRY HOLLY JUNIPERUS X PFITZERIANA 'SEA GREEN' / SEA GREEN PFITZER JUNIPER TAXUS X MEDIA 'EVERLOW' / EVERLOW ANGLO-JAPANESE YEW	106	
LARGE DECIDUOUS SHRUB, 24" - 36" height HYDRANGEA PANICULATA 'SMNHPM' / QUICK FIRE FAB® HYDRANGEA PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL™ DWARF NINEBARK VIBURNUM CARLESII / KOREANSPICE VIBURNUM	50	
SMALL DECIDUOUS SHRUB, 12" - 18" height CEANOTHUS AMERICANUS / NEW JERSEY TEA DEUTZIA GRACILIS 'NIKKO' / NIKKO DEUTZIA SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA	82	
HEDGE SHRUB, 36" height JUNIPERUS X MEDIA 'SEA GREEN' / SEA GREEN JUNIPER TAXUS X MEDIA 'DENSIFORMIS' / DENSE ANGLO-JAPANESE YEW TAXUS X MEDIA 'TAUNTONII' / TAUNTON'S ANGLO-JAPANESE YEW		797 SF
LAWN, seed		22 075 SF
PERENNIALS & ORNAMENTAL GRASSES, 1 gallon container CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS ECHINACEA PURPUREA 'PRAIRIE SPLENDOR' / PRAIRIE SPLENDOR CONEFLOWER PANICUM VIRGATUM / SWITCH GRASS RUDBECKIA FULGIDA 'BLOVI' / VIETTE'S LITTLE SUZY CONEFLOWER		1 614 SF
GROUNDCOVER, 1 gallon container CAREX PENSYLVANICA / PENNSYLVANIA SEDGE GERANIUM X CANTABRIGIENSE 'BIOKOVO' / BIOKOVO CRANESBILL SEDUM TERNATUM / WILD STONECROP TIARELLA CORDIFOLIA / FOAMFLOWER		2 103 SF

0 20' 40' 60' 80' feet

1" = 20'

3.1 ILLUSTRATIVE LANDSCAPE PLAN
1" = 20'-0"

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Hugh LIGHTING DESIGN

PROJECT NAME: MILWAUKEE & LAKE

PROJECT ADDRESS: 745-47 N MILWAUKEE AVENUE / 126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

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PROJECT MANAGER - BB
ASSOCIATES - MB

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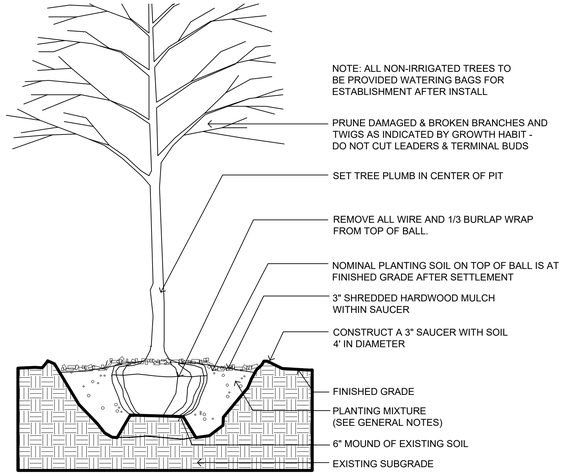
SHEET TITLE

ILLUSTRATIVE LANDSCAPE PLAN

SHEET #

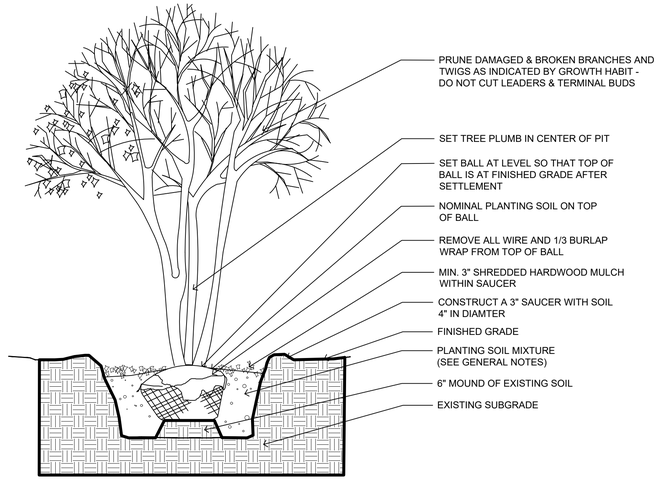
L-3.1

February 26, 2025



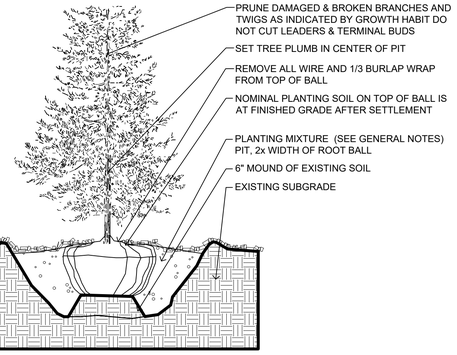
1 TYP. DECIDUOUS TREE PLANTING DETAIL

SCALE: NTS



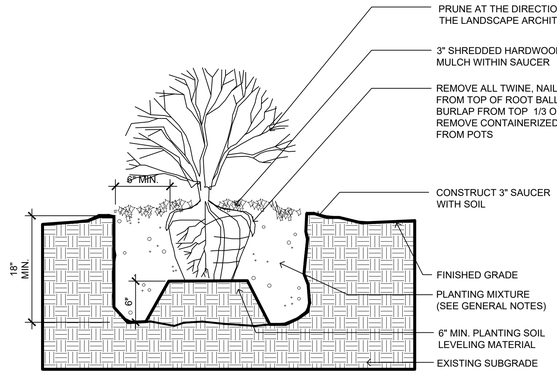
2 TYP. ORNAMENTAL TREE PLANTING DETAIL

SCALE: NTS



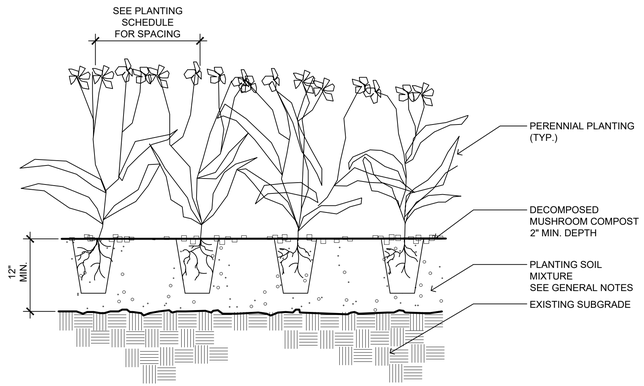
3 TYP. EVERGREEN TREE PLANTING DETAIL

SCALE: NTS



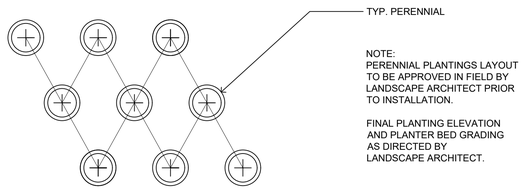
4 TYP. SHRUB PLANTING DETAIL

SCALE: NTS



5 TYP. PERENNIAL PLANTING DETAIL

SCALE: NTS



4 LANDSCAPE NOTES & DETAILS

LANDSCAPE GENERAL NOTES:

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL NOTIFY J.U.L.I.E. (811) OR (800) 892.0123 TO DETERMINE THE LOCATION OF ANY UNDERGROUND UTILITIES, WHICH MAY AFFECT PROPOSED SITE WORK. CONTRACTOR SHALL NOTIFY THE OWNER/LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES, OBSTACLES AND/OR PROBLEMS.
2. VERIFICATION OF DIMENSIONS AND GRADES, BOTH EXISTING AND PROPOSED, SHALL BE THE CONTRACTOR'S RESPONSIBILITY PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER/LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
3. ALL SURFACE DRAINAGE SHALL BE DIRECTED AWAY FROM STRUCTURES. SURFACE DRAINAGE SHALL BE DIRECTED TO EXISTING CATCH BASINS DESIGNATED FOR THE COLLECTION OF SURFACE RUN-OFF.
4. PLANT MATERIAL SIZES SHOWN ON PLANT SCHEDULE ARE MINIMUM ACCEPTABLE SIZES. ALL PLANT MATERIAL SHALL BE OF SPECIMEN QUALITY. NO 'PARK GRADE' MATERIAL WILL BE ACCEPTED.
5. ALL PLANT MATERIAL SHALL BE OBTAINED FROM AN APPROVED NORTHERN ILLINOIS NURSERY WITH HEAVY CLAY SOILS.
6. ALL PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI)
7. IF SPECIFIED SPECIES AND/ OR QUALITY OF PLANTS ARE NOT AVAILABLE AT THE TIME OF ORDERING, THE LANDSCAPE ARCHITECT, AT HIS/HER DISCRETION, MAY SUBSTITUTE SIMILAR PLANTS WITH THE SAME WHOLESALE VALUE.
8. ALL PLANTS TO BE BALLED IN BURLAP (B&B) OR CONTAINER GROWN (CG) AS SPECIFIED IN PLANT SCHEDULE. ALL NYLON/PLASTIC/BURLAP ROOT WRAPPING MATERIAL AND METAL WIRE BASKETS SHALL BE REMOVED.
9. SOIL TO BE USED FOR THE PLANTING MEDIUM FOR THE PROJECT SHALL BE FERTILE, WELL-DRAINED, OF UNIFORM QUALITY, FREE OF STONES OVER 1" IN DIAMETER, STICKS, OILS, CHEMICALS, PLASTER, CONCRETE AND OTHER DELETERIOUS MATERIAL.
10. ALL LANDSCAPE MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
11. ALL LANDSCAPE MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE ACCEPTED INDUSTRY'S STANDARD 'BEST MANAGEMENT PRACTICE' TECHNIQUES AS IDENTIFIED BY THE ILLINOIS LANDSCAPE CONTRACTORS ASSOCIATION (ILCA).
12. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL IN POOR CONDITION/FORM OR NOT INSTALLED ACCORDING TO 'BEST MANAGEMENT PRACTICE' TECHNIQUES.
13. THE LANDSCAPE CONTRACTOR SHALL PREPARE PLANTING BEDS BY ADDING SOIL AMENDMENTS TO TOPSOIL MIX IN THE FOLLOWING QUANTITIES: TOPSOIL MIX FOR TREES & SHRUBS SHALL BE THREE (3) PARTS TOPSOIL, ONE (1) PART PEAT, AND ONE (1) PART SAND. TOPSOIL MIX FOR PERENNIALS & GROUNDCOVER SHALL BE THREE (3) PARTS TOPSOIL, ONE (1) PART SAND, AND TWO (2) PARTS COMPOST.
14. ALL WOODY PLANTINGS TO RECEIVE 3" OF SHREDDED HARDWOOD MULCH. ALL HERBACEOUS PLANTINGS TO RECEIVE 2" OF LEAF COMPOST.
15. CONTRACTOR SHALL WATER PLANTS IMMEDIATELY AFTER PLANTING. FLOODING PLANTS TWICE DURING FIRST TWENTY-FOUR HOURS AFTER PLANTING.
16. ALL ROAD AND WALK SURFACES SHALL BE KEPT CLEAR OF MUD AND DEBRIS AT ALL TIMES.
17. CONTRACTOR SHALL REPAIR IN KIND ANY AREAS DAMAGED AS A RESULT OF LANDSCAPE OPERATIONS.
18. GUARANTEE SPECIFICATIONS ARE AS FOLLOWS: THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A BONDED WRITTEN ONE-YEAR WARRANTY AGREEMENT BEGINNING ON THE FIRST DAY OF THE OWNER'S POSSESSION. THIS AGREEMENT SHALL PROVIDE FOR THE REPLACEMENT OF DEAD OR DYING PLANT MATERIAL. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A TYPEWRITTEN LIST OF SPECIFIC MAINTENANCE INSTRUCTIONS FOR EACH TYPE OF PLANT INSTALLED WITH THE WRITTEN AGREEMENT AND BOND.
19. EROSION CONTROL BLANKETS REQUIRED ON ALL SLOPES GREATER THAN 3:1.

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PROJECT INFO

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ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

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CERTIFICATION

SHEET TITLE

LANDSCAPE NOTES & DETAILS

SHEET #

L-4

February 26, 2025

SUMMARY OF LANDSCAPE REQUIREMENTS

PERIMETER LANDSCAPED OPEN SPACE (SEC. 26-13-2)

REQUIREMENT

FOR ALL MULTIPLE-FAMILY STRUCTURES WITHIN THE R-8 MULTIPLE-FAMILY RESIDENTIAL DISTRICT, THERE SHALL BE PROVIDED A PERIMETER LANDSCAPED OPEN SPACE WITH A MINIMUM WIDTH OF NO LESS THAN TEN (10) FEET ALONG EVERY LOT LINE.

PROPOSED

CURRENT ZONING OF THE SITE IS C-1 AND HAS NO PERIMETER LANDSCAPE REQUIREMENTS. BECAUSE FUTURE USE OF THE SITE WILL BE MULTI-FAMILY RESIDENTIAL WE HAVE MET THE R-8 MULTI-FAMILY RESIDENTIAL DISTRICT REQUIREMENTS WHERE POSSIBLE. DISTANCE FROM BUILDING TO PROPERTY LINE MEETS 10' REQUIREMENT ALONG ALL LOT LINES EXCEPT FOR THE SOUTHWEST CORNER OF THE BUILDING WHERE THERE IS ONLY 9'-5". DISTANCE FROM BUILDING TO BACK OF CURB ALONG THE NORTHWEST PORTION IS APPROXIMATELY 64'-6" AND ON THE SOUTHWEST PORTION IS APPROXIMATELY 61'-0".

WE ARE SEEKING RELIEF OF THE APPROXIMATE 7" OF THE REQUIRED (10) FOOT DISTANCE IN THIS LOCATION AS THERE IS MORE THAN (50) FOOT DISTANCE BETWEEN THE BUILDING AND THE BACK OF THE BRAINERD AVENUE CURB.

PARKING LOTS AND STRUCTURES (SEC. 26-13-3)

26-13-3.1.PARKING LOT SCREENING

REQUIREMENT

EVERY PARKING LOT SHALL BE BUFFERED AND SCREENED WITH APPROPRIATE SCREENING DEVICES. THE LANDSCAPING AND SCREENING TREATMENT SHALL BE DESIGNED AND MAINTAINED TO A HEIGHT OF AT LEAST THREE (3) FEET ALONG EVERY LOT LINE.

PROPOSED

CONTINUOUS HEDGE ROW ALONG NORTH SIDE OF PARKING LOT (ADJACENT TO METRA PARKING LOT) MAINTAINED AT A HEIGHT OF 3 FEET

26-13-3.2.PARKING LOT INTERIOR LANDSCAPING.

(A) *REQUIRED INTERIOR LANDSCAPING* INTERIOR LANDSCAPING SHALL BE PROVIDED FOR ALL PARKING LOTS CONTAINING FIFTEEN (15) OR MORE SPACES.

PROPOSED SITE PLANS AND LANDSCAPE PLANS COMPLY.

(B) *AREA* INTERIOR LANDSCAPING SHALL CONSTITUTE AT LEAST TEN (10) PERCENT OF THE AREA OF THE PARKING LOT.

PROPOSED PARKING LOT APPROXIMATELY 9,498 SF., 10% OF 9,498 = 950 SF.
PROPOSED INTERIOR LANDSCAPE APPROXIMATELY 978 SF. (10.2%)

(C) *TREE PLANTING ISLANDS* INTERIOR LANDSCAPING SHALL CONSIST OF TREE PLANTING ISLANDS WITH A MINIMUM AREA OF ONE HUNDRED SEVENTY-ONE (171) SQUARE FEET AND A MINIMUM WIDTH OF NINE (9) FEET.

PROPOSED SITE PLANS AND LANDSCAPE PLANS SEEK RELIEF FROM REQUIREMENT C.

(D) *DISPERSAL* WHEN MORE THAN ONE (1) TREE PLANTING ISLAND IS PROVIDED, SUCH ISLANDS SHALL BE SPACED THROUGHOUT THE PARKING LOT.

PROPOSED SITE PLANS AND LANDSCAPE PLANS COMPLY.

TREE REPLACEMENT (SEC. 9-32)

REQUIREMENT

(1)THE FOLLOWING TABLE SPECIFIES THE NUMBER OF TREES REQUIRED FOR REPLACEMENT ACCORDING TO THE SPECIES OF TREE REMOVED:

PROTECTED TREE REMOVED	REPLACEMENT TREES RATE PER TREE REMOVED
ALL PUBLIC TREES (ALL)	4 TREES
GROUP A	3 TREES (GROUP A)
GROUP B	2 TREES (GROUP A OR B)
GROUP C	1 TREE (GROUP A OR B)
TREES SUBJECT TO APPROVED LANDSCAPE PLAN	1 TREE (MATCH EXISTING GROUP AND TYPE)

PROPOSED

TREE REPLACEMENT REQUIREMENT SUMMARY:

TOTAL NUMBER OF TREES TO BE REMOVED = 98
TOTAL NUMBER OF TREES TO BE PROTECTED = 1
REQUIRED NUMBER OF TREES TO BE REPLACED = 204
CREDIT FOR PROTECTED TREES = 3
TOTAL NUMBER OF TREES REQUIRED = 201
TOTAL NUMBER OF TREES PROVIDED = 201
(SEE SHEETS L-1 & L-2 FOR TREE PRESERVATION PLANS AND TREE INVENTORY LIST)

LANDSCAPE MATERIALS (SEC. 26-13-2.2)

REQUIREMENT

EVERY REQUIRED PERIMETER LANDSCAPED OPEN SPACE SHALL CONSIST OF A COMBINATION OF SHADE AND ORNAMENTAL TREES, EVERGREEN TREES AND SHRUBS (SEE FIGURE 26-13-1). AREAS NOT PLANTED WITH TREES OR SHRUBS SHALL BE MAINTAINED AS A COMBINATION OF GROUNDCOVER AND DECORATIVE PAVING MATERIAL.

(A) *QUANTITY.* THE MINIMUM NUMBER OF SHADE AND ORNAMENTAL TREES, EVERGREEN TREES AND SHRUBS REQUIRED IN A PERIMETER LANDSCAPED OPEN SPACE SHALL BE BASED ON THE TOTAL LINEAR LENGTH OF THE SUBJECT OPEN SPACE, AS MEASURED ALONG THE RELEVANT LOT LINE, AS SPECIFIED IN THE FOLLOWING TABLE:

QUANTITY OF TREES AND SHRUBS

TYPE OF TREE/SHRUB	NUMBER OF TREES/SHRUBS REQUIRED
SHADE OR ORNAMENTAL TREES	1 FOR EVERY 50 LINEAR FEET OR MAJOR FRACTION THEREOF (MEASURED AT THE LOT LINE)
EVERGREEN TREES	1 FOR EVERY 25 LINEAR FEET OR MAJOR FRACTION THEREOF (MEASURED AT THE LOT LINE)
EVERGREEN SHRUBS	1 FOR EVERY 25 LINEAR FEET OR MAJOR FRACTION THEREOF (MEASURED AT THE LOT LINE)

PROPOSED

NORTH PROPERTY LINE ADJACENT TO METRA PARKING LOT (215 LF):

SHADE TREE/ORNAMENTAL TREE REQUIREMENT (AT 1 TREE PER 50 LF)	= 4 SHADE TREES
EVERGREEN TREE REQUIREMENT (AT 1 TREE PER 25 LF)	= 8 TREES
EVERGREEN SHRUB REQUIREMENT (AT 1 PER 25 LF)	= 8 SHRUBS
PROPOSED SHADE/ ORNAMENTAL TREES	*= 9 SHADE TREES*
PROPOSED EVERGREEN TREES	*= 10 TREES*
PROPOSED EVERGREEN SHRUBS	*= 8 SHRUBS*

SOUTH PROPERTY LINE ADJACENT TO LAKE STREET (193.5 LF):

SHADE TREE/ORNAMENTAL TREE REQUIREMENT (AT 1 TREE PER 50 LF)	= 3 TREES
EVERGREEN TREE REQUIREMENT (AT 1 TREE PER 25 LF)	= 7 TREES
EVERGREEN SHRUB REQUIREMENT (AT 1 PER 25 LF)	= 7 SHRUBS
PROPOSED SHADE/ ORNAMENTAL TREES	*= 7 SHADE TREES*
PROPOSED EVERGREEN TREES	*= 11 TREES*
PROPOSED EVERGREEN SHRUBS	*= 8 SHRUBS*

EAST PROPERTY LINE WITH PATH TO METRA (272 LF):

SHADE TREE/ORNAMENTAL TREE REQUIREMENT (AT 1 TREE PER 50 LF)	= 5 TREES
EVERGREEN TREE REQUIREMENT (AT 1 TREE PER 25 LF)	= 10 TREES
EVERGREEN SHRUB REQUIREMENT (AT 1 PER 25 LF)	= 10 SHRUBS
PROPOSED SHADE/ ORNAMENTAL TREES	*= 3 SHADE TREES + 4 ORNAMENTAL TREES*
PROPOSED EVERGREEN TREES	*= 15 TREES*
PROPOSED EVERGREEN SHRUBS	*= 15 SHRUBS*

WEST PROPERTY LINE ADJACENT TO BRAINERD AVENUE (350 LF):

SHADE TREE/ORNAMENTAL TREE REQUIREMENT (AT 1 TREE PER 50 LF)	= 7 TREES
EVERGREEN TREE REQUIREMENT (AT 1 TREE PER 25 LF)	= 14 TREES
EVERGREEN SHRUB REQUIREMENT (AT 1 PER 25 LF)	= 14 SHRUBS
PROPOSED SHADE/ ORNAMENTAL TREES	*= 24 SHADE TREES*
PROPOSED EVERGREEN TREES	*= 15 TREES*
PROPOSED EVERGREEN SHRUBS	*= 10 SHRUBS*

PARCEL 3 - PROPOSED

SOUTH PROPERTY LINE ADJACENT TO NEIGHBORING PARCEL (225 LF):

SHADE TREE/ORNAMENTAL TREE REQUIREMENT (AT 1 TREE PER 50 LF)	= 4 TREES
EVERGREEN TREE REQUIREMENT (AT 1 TREE PER 25 LF)	= 9 TREES
EVERGREEN SHRUB REQUIREMENT (AT 1 PER 25 LF)	= 9 SHRUBS
PROPOSED SHADE/ ORNAMENTAL TREES	*= 5 SHADE TREES*
PROPOSED EVERGREEN TREES	*= 5 TREES*
PROPOSED EVERGREEN SHRUBS	*= 10 SHRUBS*

NOTE: NORTH, EAST, & WEST PROPERTY LINES FOR PARCEL 3 NOT INCLUDED

5 ORDINANCE SUMMARY

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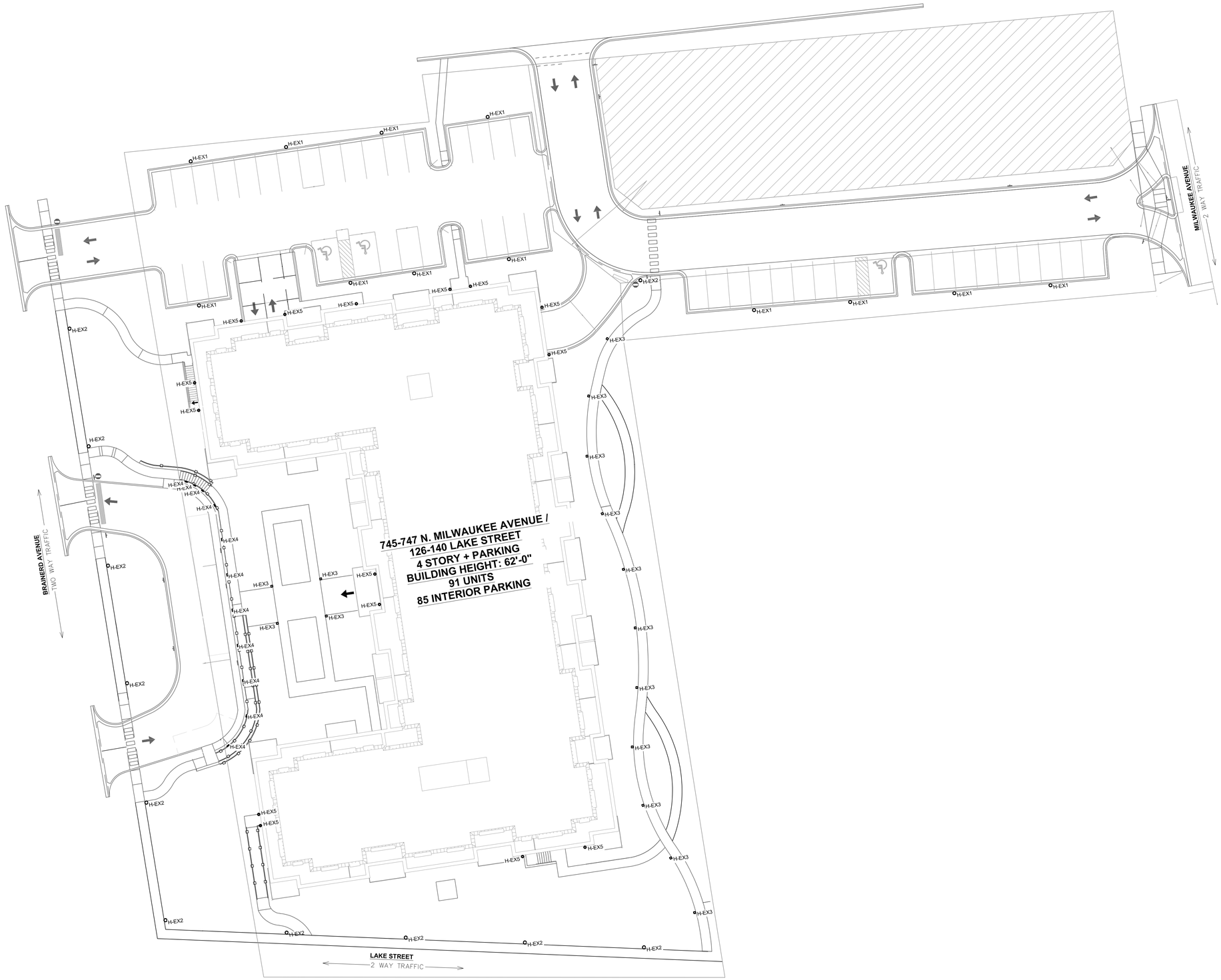
SHEET TITLE

ORDINANCE SUMMARY

SHEET #

L-5

February 26, 2025



1 EXTERIOR SITE LIGHTING PLAN

1" = 20'-0"

0 10' 20' 40'

0 1" = 20'-0" 2"

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PROJECT NO. - 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

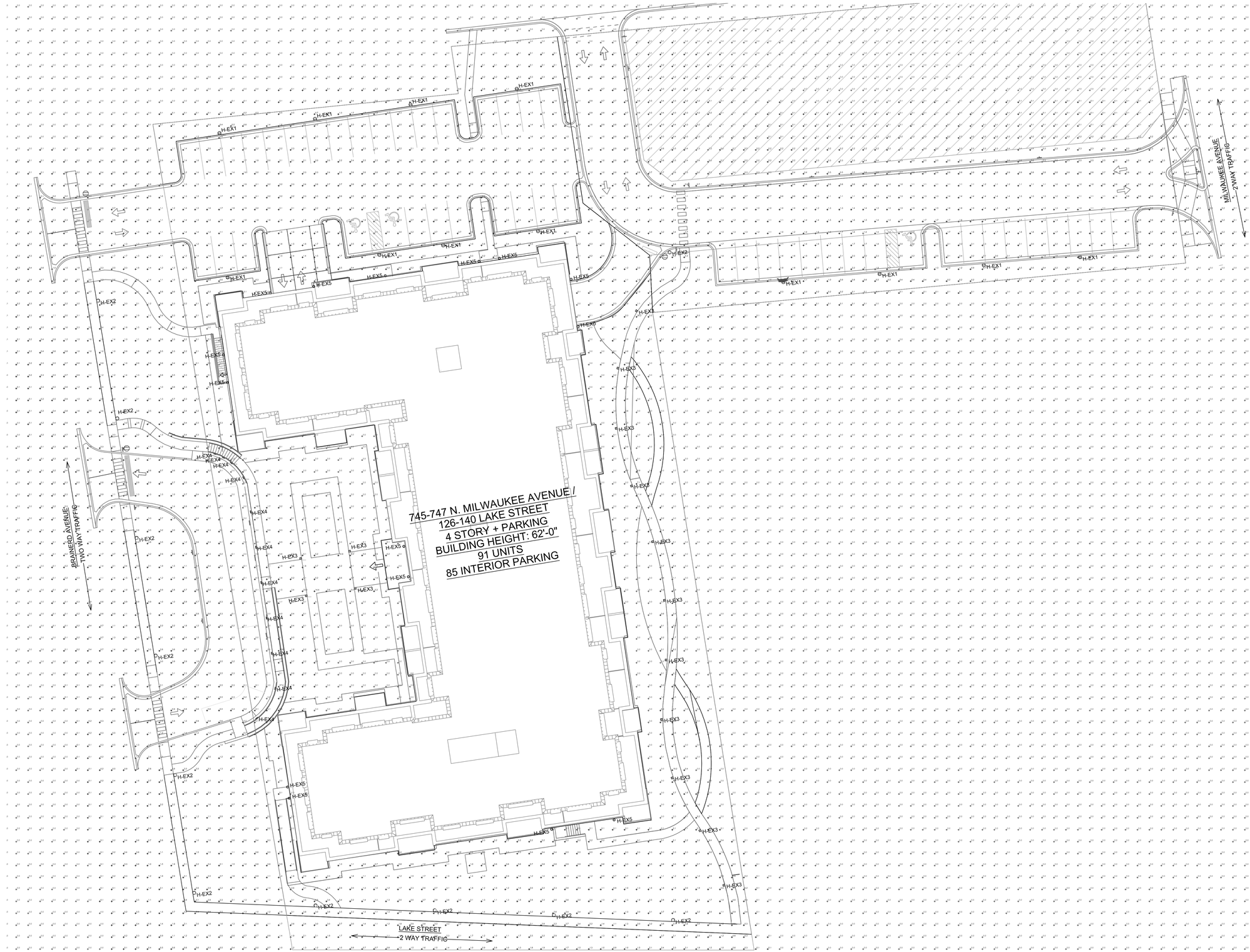
CERTIFICATION

SHEET TITLE

EXTERIOR SITE LIGHTING PLAN

SHEET #

LT-1



1 EXTERIOR SITE LIGHTING PHOTOMETRICS

PERMIT STAMP

SPACE

ARCHITECTS + PLANNERS

2149 N. TALMAN AVENUE
CHICAGO, IL 60647
312 829 6666
www.spacearchplan.com

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teska

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PARK RIDGE, IL 60068 FAX: (847) 803-0303
bbono@bonoconsulting.com

Hugh
LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO. - 24.016
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CERTIFICATION

SHEET TITLE

EXTERIOR SITE LIGHTING PHOTOMETRIC

SHEET #

LT-2

Catalog #: H-EX1
Prepared By: VALS-06L-3W-UNV-30K8-BLK-SA-IS / RTPC-T-16-N-BLK

V-Locity® Small (VALS)

Outdoor LED Area Light



OVERVIEW	
Lumen Package	6,000 - 27,000
Wattage Range	36 - 178
Efficacy Range (LPW)	96 - 171
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical units. Cast aluminum wiring access door located underneath.
- Self-contained optic, board and heat sink assembly can be rotated or replaced in the field.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: TBD lbs in carton.

Optical System

- State-of-the-Art acrylic optics delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary refractor optics provide exceptional coverage and uniformity in distribution types 2, 3M, 3W, 4M, 4W, 4F, FTH, 5QN, 5QM, 5Q, 5QW, AM, WF and LC/RC.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377 as well as phosphor converted amber.
- Minimum CRI of 80 (optional 70 CRI for 5000K and 4000K).
- Factory or field installable integral shielding available for enhanced spill light control.
- Zero Uplight (excludes adjustable arms).

Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard, must specify EXT option for dimming leads to be extended to fixture exterior.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >50k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- RED/Mount pole mount arm allows for a true one person installation.
- Side arm pole mount designed to mount to square or round poles.
- Pole mount arms can accommodate pole drill patterns from 2.4 to 5" on center and utilize LSI's reduced B3 or traditional B5 drill patterns.
- Additional mounting options are available including a mast arm or adjustable slip fitter that allow for luminaire attachment to a 2 3/8" tenon or mast arm.
- Adjustable arms allow for 65° of tilt (-5°below horizontal to +60° above horizontal) in 5° increments.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky approved with 3000K or warmer color temperature selection (side arm pole and mast arm mounting only).
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

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Catalog #: H-EX2
Prepared By: OPS-PT-05L-5Q-UNV-30K8-BLK / RTPC-T-12-N-BLK

Opulence Small Post Top (OPS)

Outdoor Decorative Post Top



OVERVIEW	
Lumen Package (lm)	3,000 - 14,000
Wattage Range (W)	20 - 100
Efficacy Range (LPW)	120 - 155
Weight lbs (kg)	25 (11.3)
Control Options	IMSBT, ALBCS, 7-Pin

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

Optical System

- High density LED optical system delivers industry leading optical performance and visual comfort.
- 7 distribution types 3W, 4F, 5Q, 5C, 5R, 5D & AD
- Diffused lens version provides maximum visual comfort with reduced brightness and LED pixelization
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 80
- External Shield available for field installation (see accessory ordering information and dimensions for details).

Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection (6kV surge standard).
- 0-10V dimming driver (optional extended leads).
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- Total harmonic distortion (THD): <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Integral passive infrared Bluetooth™ motion and photocell sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule. Updates and modifications to the control strategy are easily implemented via an intuitive iOS app.

Installation

- Designed to mount directly to a 2 3/8" - 3" outer diameter tenon (4" tall).
- Optional flush mount accessory slips inside the top of a 4" round pole for a virtually seamless transition from pole to luminaire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant, with 3000K and warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

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Catalog #: H-EX1
Prepared By: VALS-06L-3W-UNV-30K8-BLK-SA-IS / RTPC-T-16-N-BLK
H-EX2
OPS-PT-05L-5Q-UNV-30K8-BLK / RTPC-T-12-N-BLK

Aluminum Poles

Contemporary RTP



QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- The post shaft is spun from seamless 6000 series aluminum alloy.
- A post top plate and tenon can be provided for top mount luminaire and/or bracket.
- A removable finial is available for posts receiving drilling patterns for side-mount luminaire arm assemblies.

Structural Base

- The structural base is cast from 356 alloy aluminum and provided with an access door that is 4.25" wide at the top, 9.38" wide at the base, and 8" tall.
- The post shaft is inserted and welded into the structural base casting.
- The completed assembly is heattreated to a T6 temper.

Anchor Bolts

- Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers.
- Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.

Ground Lug

- Ground lug is standard.

Finishes

- The standard finish for the post assembly and components is polyester powder applied coating.
- Additional finish options available upon request.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information
- Select bracket configuration if required
- Determine EPA value from luminaire/bracket EPA chart
- Select pole height
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA
- Consult factory for special wind load requirements and banner brackets

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H-EX4
33055 K3 SLV
BEGA

Recessed wall luminaire · Directed light

Type:
BEGA Product:
Project:
Modified:

Application
Recessed wall luminaire with asymmetric light distribution that is ideal for the illumination of ground surfaces, building entrances, stairs and footpaths. Separate installation housing allows for seamless coordination into construction and easy maintenance.

Materials
BEGA Ticoat ®, a 3-layer finishing technology for increased corrosion protection
Composite installation housing
Pure anodized aluminum reflector

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65

Weight: 2.1 lbs.

Electrical

Operating voltage	120-277VAC
Ambient temperature	-30° C
LED module wattage	8.4 W
System wattage	11.0W
Controllability	0-10V, TRIAC, and ELV dimmable
Color rendering index	Ra > 80
Luminaire lumens	482lm
LED service life (L70)	60000 hrs

LED color temperature
☐ 4000K (K4)
☐ 3500K (K35)
☐ 3000K (K3)
☐ 2700K (K27)

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

Finish
The BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA UnduviR finish provides superior fade protection in Black, Bronze, and Silver. BEGA standard White is a super durable polyester powder. Optionally available RAL and custom color finishes provided in either polyester powder or liquid paint.

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

Available options
☐ AMB — Amber LED
☐ CUS — Custom finish
☐ FSC — Fusing
☐ MGU — Marine grade undercoat
☐ RAL — RAL finish

Included (available for pre-shipment)
☐ 88224065 — Installation housing





	LED	A	B	C
833055	8.4 W	12 1/2"	2 1/4"	9"

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

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

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Updated 06/07/24

H-EX3
LB6048.585-US-SLSB-700-830 HM1-H0.80 -FROSTED LENS

DRAGO Side

LB6048.585-US

IK08 IP65

heper USA



180 mm
7 3/32"
133 mm
5 5/16"
50 mm
1 31/32"
H
H
250 mm
9 27/32"
800 mm
31 1/2"



(SLSB)
Special Sheet, Side Screw - 145x45°

Configurations

Light distribution	[SLSB] 145x45°
Delivered lumens flux	360 - 994 lm
Rated input power	5 - 10 W
Color temperature	2200 K CRI 80, 2700 K CRI 80, 3000 K CRI 80, 4000 K CRI 80
BUG rating	B0-U0-G0, B1-U0-G1
Lifetime L96 (hour)	>42, 000
Lifetime L80 (hour)	>42, 000

Options

Control	On/Off, 0-10V *
Product colors	
Height	0.6', 2.6',

Extras

Consult the factory	Emergency kit, Motion sensor
Luminaire body options	Double powder coating

Technical information

Listings and Ratings	Product is NRTL listed suitable for wet locations in US and Canada in accordance with UL1598. Luminaire performance tests have been conducted in accordance with IES LM-79-08 standards., DarkSky Friendly
Mounting	Surface mountable
Housing	Corrosion resistant, extruded, marine grade aluminum housing
Finishing	Chromate conversion pretreatment followed by electrostatic powder coating
Fasteners	Stainless steel (AISI 304 / EN 1.4301 grade)
Gasket	Liquid silicone
Lens / Reflector	High reflectance aluminum coating, multifaceted micro reflector
Glass / Diffuser	Tempered safety glass
Impact protection	IK08
Ingress protection	IP65
Input voltage	120-277V 50/60Hz
Insulation class	Class I
Weights	7.76 lbs (3.8), 9.9 lbs (2.6')
LED module	High power LEDs on metal-core PCB
Driver	Integral LED driver
Driver surge protection	3/3 kV
Power factor	> 0.90
Through wiring	Single power cord entry
Operating temperature	-40...50°C
Power cord	20" of outdoor use rated flexible power cord
Notes	3000K CCT or warmer must be selected to be

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Milwaukee, WI - 53202
United States
+1 312 910 9740
info(US@hepergroup.com

We reserve the right to change specifications without prior written notice. Edition: 24.07.2024. For current version visit heperlighting.com. All flux (±%7 tolerance) and power values (±%10 tolerance) are derived following appropriate IES, CIE, and applicable standards.

1/5

AFX

H-EX5
EDDW0612LAJMVBK

LOCATION			
PREPARED BY		QUANTITY	
COMMENTS		FIXTURE TYPE	
CATALOG NUMBER			

3in1 CCT

TITLE 24 JA8 COMPLIANT

Edmund LED Outdoor Sconce
EDDW Series



Features

This outdoor LED light is ideal for security and general lighting. Up illumination (1-Light) or Up/down-light illumination (2-Light) for outdoor or indoor residential, commercial, and hospitality applications. Fixture mounts to a standard junction box (not included).

Construction

Die-cast aluminum construction. Standard mounting holes and hardware are included. Power supply connections must be made inside a junction box (not included).

Finish

Black powder coated finish.

Diffuser

Solid acrylic diffuser.

Electrical

Input 120-277 VAC / 60 Hz
Minimum starting temp -4° F/ -20°C.

LED

Integrated LED modules capable of producing:
1-LIGHT - 13W = 1200 source lumens, 1038 delivered lumens
2-LIGHT - 25W = 2400 source lumens, 2043 delivered lumens
Adjustable Chose 3000K, 3500K, 4000K (CCT).
Rated for 50,000 Hrs , 90 CRI.

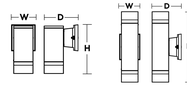
Certification

All fixtures are cETLus listed for wet locations.
Title 24 JA8 Compliant (outdoor only).

Warranty

Limited warranty: This fixture is free from defects in materials and workmanship for a period of 5 years from date of purchase.

Specifications and dimensions subject to change without notice.



Ordering Information:

Black	LED	Source	Delivered	Adjustable CCT	H	W	D
EDDW0612LAJMVBK (1-LIGHT)	13W	1200	1038	3500K/3500K/4000K	8"	3-1/2"	6-1/4"
EDDW0612LAJMVBK (2-LIGHT)	25W	2400	2043	3000K/3500K/4000K	11-7/8"	3-1/2"	6-1/4"

1 LIGHTING FIXTURE CUTS

2 LIGHTING FIXTURE SCHEDULE

LIGHTING FIXTURE SCHEDULE

PROJECT: LIBERTYVILLE DEVELOPMENT
LOCATION: LIBERTYVILLE, IL
DATE: ORIGINAL
REVISED:

Hugh LIGHTING DESIGN

ARCHITECTURAL EXTERIOR LIGHTING

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LIGHT SOURCE	POWER SUPPLY	MOUNTING	FINISH	COMMENTS
H-EX1	PARKING AREA LIGHT	LSI LIGHTING	VALS-06L-3W-UNV-30K8-BLK-SA-IS / RTPC-T-16-N-BLK	36 WATT 3000K LED	0-10V DIMMING	16' POLE	BLACK	
H-EX2	PEDESTRIAN POLE	LSI LIGHTING	OPS-PT-05L-5Q-UNV-30K8-BLK / RTPC-T-12-N-BLK	34 WATT 3000K LED	0-10V DIMMING	12' POLE	BLACK	50'-0" SPACING
H-EX3	BOLLARD	HEPER LIGHTING	LB6048.585-US-SLSB-700-830 HM1-H0.80 -FROSTED LENS	10 WATT 3000K LED	0-10V DIMMING	SURFACE	BLACK	25'-0" SPACING
H-EX4	STEPLIGHT	BEGA	33055 K3 SLV	8.4 WATT 3000K LED	0-10V DIMMING	RECESSED WALL	SILVER	15'-0" SPACING AT 24" AFF
H-EX5	WALL SCONCE	AFX LIGHTING	EDDW0612LAJMVBK	25 WATT 3000KED	0-10V DIMMING	SURFACE WALL	BLACK	MOUNTED AT 7'-0" AFF

GENERAL NOTES

1.Electrical Engineer shall confirm exact voltage required for all fixture types
2.Contractor to provide remote compatible power supply for all low voltage fixture types unless provided with an integral one
3.Contractor to verify exact lengths required for all linear/continuous run length fixture types either by field measurement or template
4.Contractor to provide all necessary parts and accessories to ensure proper installation as shown on plans
5.Substitution of any fixture to a type or manufacturer other than that specified by the Lighting Designer shall be subject to review of a production sample by the Lighting Designer. The proposed substitution shall be provided with I.T.L photometrics dated no older than five years. Lighting Designer withholds the right to request a full-scale mockup of two (2) proposed substitution fixtures alongside two (2) specified fixtures for review. All mockup costs, including Lighting Designer's time and expenses, and Architect/Client's time and expenses shall be at the expense of the submitting contractor and/or manufacturer. Contractor shall also provide line-item pricing for specified fixture along with add/deduct for submitted fixture. Submitting Contractor/Manufacturer shall guarantee in writing that the proposed substitution shall meet all performance and quality parameters as stated with the specified fixture. In the event that the substitution fails to perform as guaranteed, all costs associated to remove the fixture and replace them with the specified fixture shall be at the Contractor/Manufacturer's expense.
6.Architect/Interior Designer to confirm fixture finishes.
7.Architect/Interior Designer to confirm exact ceiling condition and type for appropriate fixture mounting.
8.(*) AS SPECIFIED BY ARCHITECT / INTERIOR DESIGNER

HUGH LIGHTING DESIGN 212 SOUTH MARION STREET, SUITE 1 OAK PARK, IL 60302 T. 708.445.0995 E. ADMIN@HUGHLIGHTINGDESIGN.COM

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Hugh LIGHTING DESIGN

PROJECT NAME:
MILWAUKEE & LAKE

PROJECT ADDRESS:
745-47 N MILWAUKEE AVENUE /
126-40 LAKE STREET, LIBERTYVILLE, IL

PROJECT INFO

PROJECT NO.: 24.016
PROJECT TEAM:
ARCH OF RECORD - JK
PROJECT MANAGER - BB
ASSOCIATES - MB

NO.	DESCRIPTION	DATE
1	ISSUED FOR DEVELOPMENT REVIEW	10.11.24
2	SUPPLEMENTAL SUBMISSION	2.27.25

CERTIFICATION

SHEET TITLE

EXTERIOR SITE LIGHTING FIXTURE CUTS AND SCHEDULE

SHEET #

LT-3

ZAIIN & ASSOCIATES
LAND SURVEYORS
7514 BEVERLY WAY
SPRING GROVE, IL 60081
(815)675-2774
D.F.P.R. #184003386

ALTA/NSPS LAND TITLE SURVEY

AND TOPOGRAPHY

PARCEL 1

THAT PART OF LOT 4 OF SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO WIT, BEGINNING AT A POINT ON THE SOUTH LINE OF SAID LOT 4, 5 078 CHAINS WEST OF THE SOUTHEAST CORNER THEREOF, THENCE NORTH 8 5 DEGREES WEST, 4 CHAINS, THENCE NORTH 85 DEGREES EAST 1 01 CHAINS, THENCE SOUTHERLY TO A POINT 4 014 CHAINS WEST OF SAID SOUTHEAST CORNER OF LOT 4, THENCE WEST TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS

PARCEL 2

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS, TO WIT COMMENCING AT A POINT ON THE SOUTH LINE OF SAID LOT 4 LOCATED NORTH 89 5 DEGREES WEST 394 2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4, THENCE NORTH 8 5 DEGREES WEST 356 9 FEET, THENCE NORTH 95 DEGREES EAST 64 7 FEET, THENCE SOUTH 8 5 DEGREES EAST 99 FEET, THENCE SOUTHERLY 264 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 4, 59 052 FEET EASTERLY OF THE PLACE OF BEGINNING, THENCE NORTH 89 5 DEGREES WEST 59 052 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS

PARCEL 3

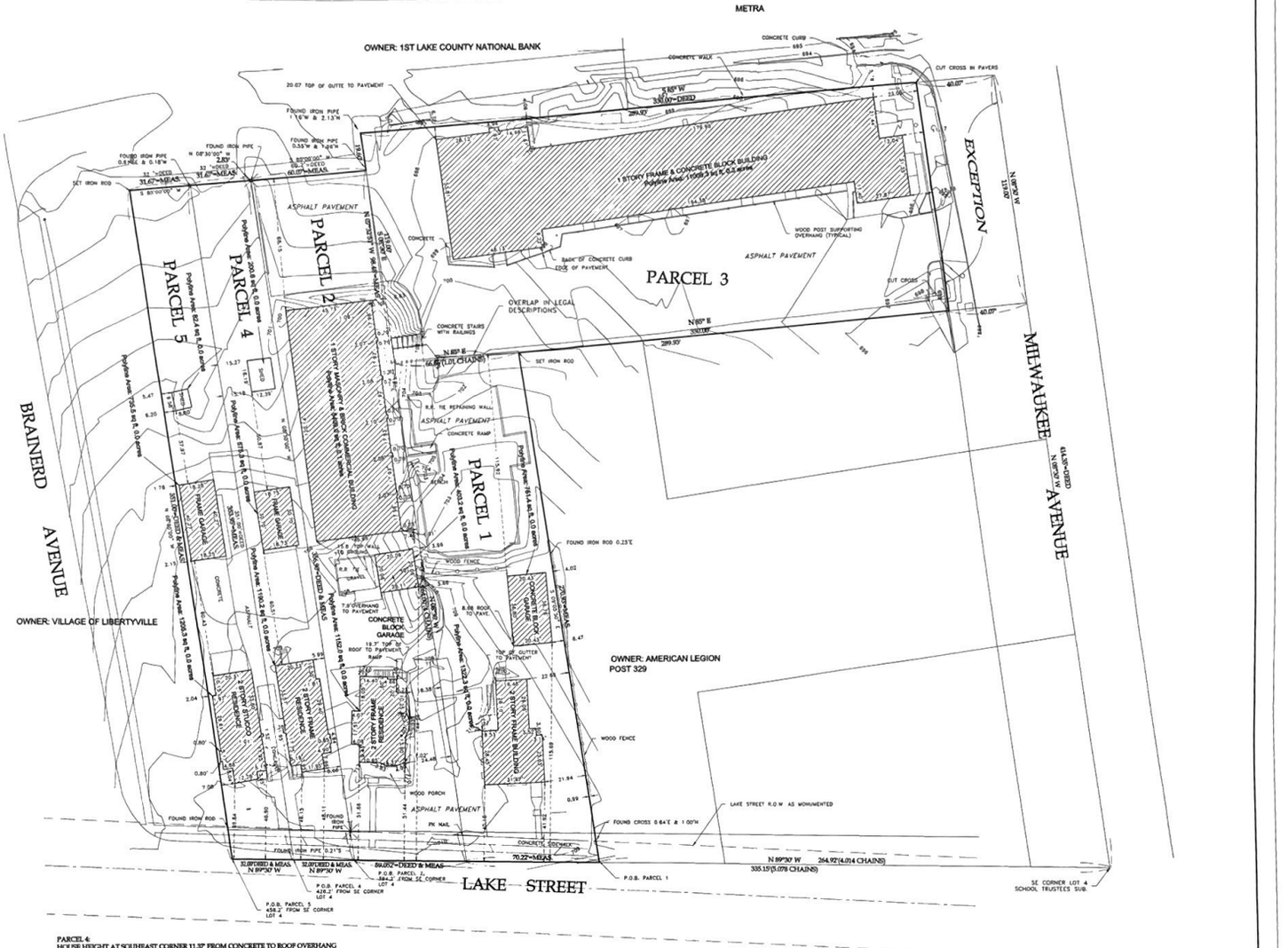
THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS COMMENCING IN THE CENTER OF MILWAUKEE AVENUE IN THE VILLAGE OF LIBERTYVILLE, AT A POINT NORTH 8 ½ DEGREES WEST 414 35 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4, AND RUNNING THENCE SOUTH 85 DEGREES WEST 330 FEET, THLNCE SOUTH 8 ½ DEGREES EAST 119 FEET; THENCE NORTH 85 DEGREES EAST 330 FEET TO THE CENTER OF SAID AVENUE AND THENCE NORTH 8 ½ DEGREES WEST 119 FEET TO THE PLACE OF BEGINNING (EXCEPT THAT PART THEREOF DESCRIBED AS FOLLOWS COMMENCING IN THE CENTER OF MILWAUKEE AVENUE AT A POINT NORTH 8 ½ DEGREES WEST 414 35 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4, THENCE SOUTH 85 DEGREES WEST TO A POINT 40 FEET WESTERLY OF THE CENTER OF SAID MILWAUKEE AVENUE, MEASURED AT RIGHT ANGLES TO SAID CENTER LINE, THENCE SOUTH 8 ½ DEGREES EAST PARALLEL WITH THE CENTER LINE OF SAID MILWAUKEE AVENUE, 119 FEET, THENCE NORTH 85 DEGREES EAST TO SAID CENTER LINE OF MILWAUKEE AVENUE AND THENCE NORTHERLY ALONG THE CENTER OF SAID MILWAUKEE AVENUE, 119 FEET TO THE PLACE OF BEGINNING), IN LAKE COUNTY, ILLINOIS

PARCEL 4

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS COMMENCING AT A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS NORTH 89 ½ DEGREES WEST 426 2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4, THENCE NORTH 8 ½ DEGREES WEST 351 FEET, THENCE NORTH 85 DEGREES EAST 32 FEET, THENCE SOUTH 8 ½ DEGREES EAST TO A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS 32 FEET EASTERLY FROM THE POINT OF BEGINNING, THENCE NORTH 89 ½ DEGREES WEST 32 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

PARCEL 5

THAT PART OF LOT 4 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS COMMENCING ON THE SOUTHERLY LINE OF SAID LOT 4, AT A POINT NORTH 89 ½ DEGREES WEST 458 2 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 4, THENCE NORTH 8 ½ DEGREES WEST, 351 FEET, THENCE NORTH 85 DEGREES EAST, 32 FEET, THENCE SOUTH 8-1/2 DEGREES EAST TO A POINT IN THE SOUTHERLY LINE OF SAID LOT 4 WHICH IS 32 FEET EASTERLY FROM THE POINT OF BEGINNING, THENCE 89 ½ DEGREES WEST 32 FEET TO THE POINT OF BEGINNING, IN LAKE COUNTY, ILLINOIS



PARCEL 4:
HOUSE HEIGHT AT SOUTHEAST CORNER 11.37' FROM CONCRETE TO ROOF OVERHANG
GARAGE HEIGHT AT SOUTHEAST CORNER 8.56 FROM CONCRETE TO ROOF OVERHANG
SHED HEIGHT AT NORTHEAST CORNER 5.50' FROM GROUND TO ROOF

PARCEL 5:
HOUSE HEIGHT AT SOUTHWEST CORNER 11.53 FROM CONCRETE TO ROOF OVERHANG
GARAGE HEIGHT AT SOUTHWEST CORNER 7.86' FROM PAVEMENT TO ROOF OVERHANG
SHED HEIGHT AT SOUTHEAST CORNER OF ROOF 5.12' FROM GROUND TO ROOF CORNER

BENCH MARK
LAKH 19- STATION IS LOCATED IN VERNON HILLS 3 85 MILES SOUTHEAST OF LIBERTYVILLE IN SECTION 3, T43N, R11E ON IL RTE 21, STATION LOCATED 97 FEET WEST OF THE BACK OF CURB OF IL RTE 21 & 218' S OF SANITARY MH MARKED WITH ORANGE FIBERGLASS WITNESS POST
ELEVATION 667 82

SURVEY NOTES:
ONLY THOSE BUILDING LINE RESTRICTIONS OR EASEMENTS SHOWN ON A RECORDED SUBDIVISION PLAT ARE SHOWN HEREON UNLESS THE DESCRIPTION ORDERED TO BE SURVEYED CONTAINS A PROPER DESCRIPTION OF THE REQUIRED BUILDING LINES OR EASEMENTS
*NO DISTANCE SHOULD BE ASSUMED BY SCALING.
*NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED UNLESS OTHERWISE NOTED
*COMPARE DESCRIPTION, MEASUREMENTS AND BOUNDARY CORNERS BEFORE BUILDING AND IMMEDIATELY REPORT ANY APPARENT DISCREPANCY TO THE SURVEYOR
*THIS SURVEY AND PLAT OF SURVEY ARE VOID WITHOUT EMBOSSED SEAL AND SIGNATURE
*LINEAR AND ANGULAR MEASUREMENTS WERE OBTAINED USING A LEICA TCP1203 ROBOTIC TOTAL STATION
*BASIS OF BEARINGS _____

LEGEND
R=RECORD
D=DEED
M=MEASURED
FIP=FOUND IRON PIPE
FIR=FOUND IRON ROD
SQ FT =SQUARE FEET
P.O.C.=POINT OF COMMENCEMENT
P.O.B.=POINT OF BEGINNING
BSL=BUILDING SETBACK LINE
SRL=SEPTIC RESTRICTION LINE
CL=CENTERLINE
P/M=PK NAIL/MAG NAIL
O =FOUND PIPE
● =IRON BAR FOUND
⊕ =IRON PIN SET

0 30 60 90

CLIENT: NEIL J. ANDERSON, P.C.
DRAWN BY: CAD CHECKED BY: FWZ
SCALE: 1" = 30'
JOB NUMBER 2022-073
PIN: 06-36-101-003, 06-36-101-004

PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
35-2823
EXPIRES 11-30-2022

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

SURVEYOR'S CERTIFICATE

To GLPE, LLC:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7a, 7b1, 7c, 8, 13, 16, 17, 18 AND 19, of Table A thereof. The fieldwork was completed on *AUGUST 31ST, 2022.*

Date of Plat or Map: SEPTEMBER 1, 2022

Frederick W Zaiin

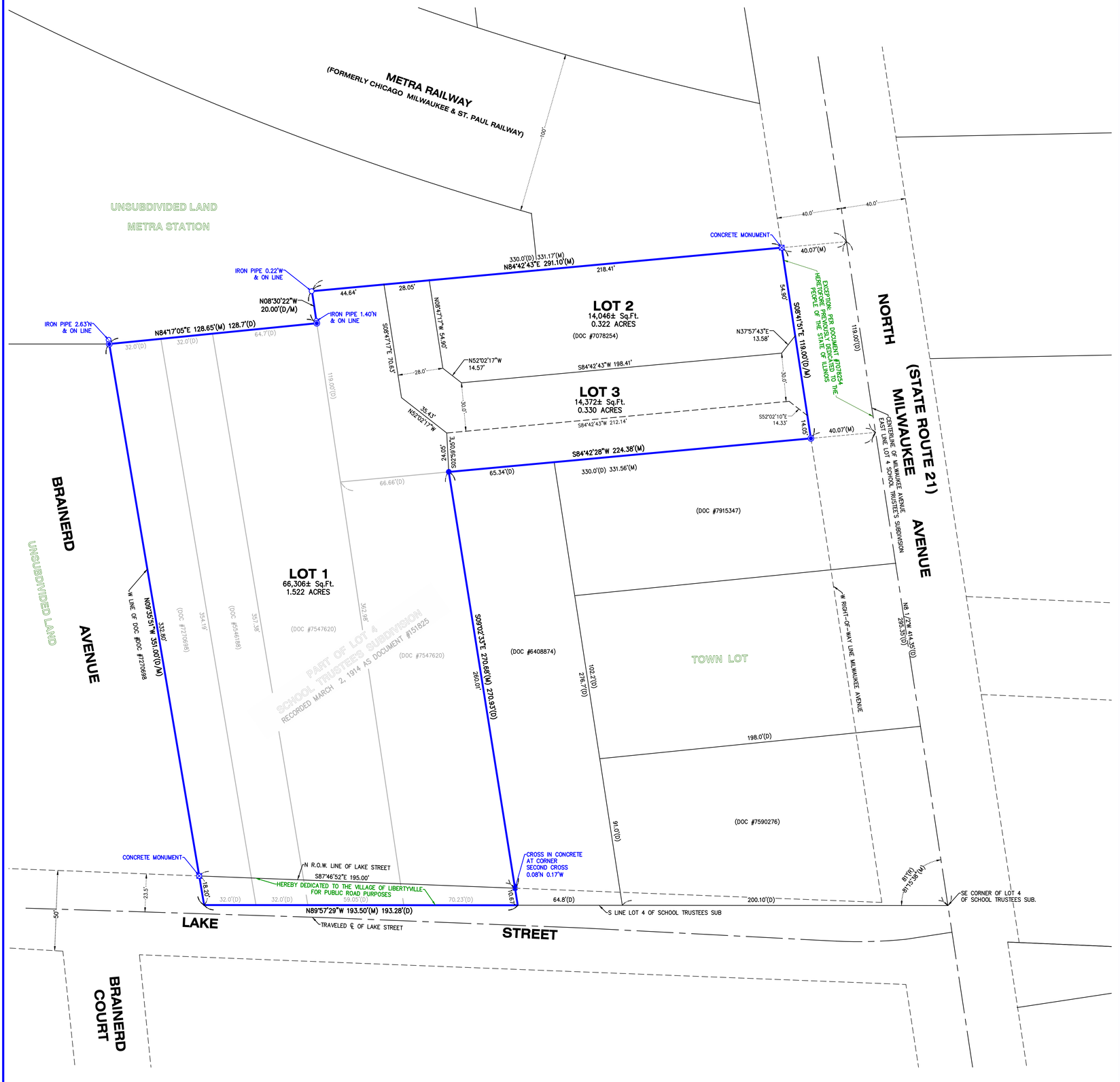
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2623

Vanderstappen
Land Surveying, Inc.
www.vandersinc.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"always faithful to the property line"

PRELIMINARY PLAT OF SUBDIVISION
LAKE -MILWAUKEE DEVELOPMENT

BEING A RE-SUBDIVISION OF LOT 3 OF SCHOOL TRUSTEE'S SUBDIVISION OF PART OF SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, VILLAGE OF LIBERTYVILLE, LAKE COUNTY, Illinois.

ZONED C-1 DOWNTOWN CORE COMMERCIAL



LEGEND	
□	FOUND BOLT
✖	FOUND CROSS
●	FOUND IRON BAR
○	FOUND IRON PIPE
⊘	FOUND MAG NAIL
⊠	SET MONUMENT
⊕	FOUND RR SPIKE
⊛	SANITARY MANHOLE
⊗	SET CROSS
◉	SET IRON BAR

30' 0' 30' 60'
SCALE: 1" = 30'

CLIENT: SPACE ARCHITECTS & PLANNERS
DRAWN BY: PJD CHECKED BY:
SCALE: 1"=30' SEC. 16 T. 44 R. 11 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 11-16-300-020, 021, 022, 023, 024
JOB NO.: 240551 I.D. FPS
FIELDWORK COMP.: 8/01/24 BK. PG.
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: 240114

POST OFFICE – LIBERTYVILLE, IL.

TAXING DISTRICTS:
LIBERTYVILLE TOWNSHIP
VILLAGE OF LIBERTYVILLE
COUNTY OF LAKE
LIBERTYVILLE FIRE PROTECTION DISTRICT
LIBERTYVILLE SCHOOL DISTRICT 70
COMMUNITY HIGH SCHOOL DISTRICT 128
COLLEGE OF LAKE COUNTY 532 (CLC)
COOK MEMORIAL PUBLIC LIBRARY DISTRICT
CENTRAL LAKE COUNTY JOINT ACTION WATER AGENCY
LAKE COUNTY FOREST PRESERVE DISTRICT

Developer & Owner:
Jay Keller
Space Architects & Planners
2149 N. Talman Avenue
Chicago, Illinois 60647
Phone: 312-829-6666

Mail To:
Jay Keller
Space Architects & Planners
2149 N. Talman Avenue
Chicago, Illinois 60647

REVISIONS

NO.	DATE	DESCRIPTION	BY
1.	2/17/25	FINAL REVISED TO PRELIMINARY	TVA

LAKE - MILWAUKEE DEVELOPMENT SHEET NO. 1 OF 2

Y:\PLATS\2024\0400-0599\240551_V-240551\240551-FPS-GRD.dwg-Layout1-2/17/2025 8:07 AM

Vanderstappen
Land Surveying, Inc.
www.vandersinc.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"Always faithful to the property line"

PRELIMINARY PLAT OF SUBDIVISION

LAKE -MILWAUKEE DEVELOPMENT

BEING A RE-SUBDIVISION OF LOT 3 OF SCHOOL TRUSTEE'S SUBDIVISION OF PART OF SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 44 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, VILLAGE OF LIBERTYVILLE, LAKE COUNTY, Illinois.

ZONED C-1 DOWNTOWN CORE COMMERCIAL

CORPORATE OWNER'S CERTIFICATE

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

This is to certify, that _____ is the owner of the lands described on this Plat of Subdivision as drawn and described hereon, and that they have caused said land to be surveyed and platted as shown hereon, for the purpose of having this plat recorded provided by law; that they hereby certify that to the best of our knowledge and belief that the drainage of surface waters will not be changed by any of the construction in aforesaid easement of any part thereof, or, if such changes occur, adequate provisions have been made for the collection and diversion of such surface waters into public areas or drains which the grantor has a right to use, and that such surface waters will not be deposited on adjoining land owners in such concentration as may cause damage to the adjoining property because of the platting of this consolidation as shown hereon.

Owners mailing address:

_____
_____
_____

In witness where I, (we) have hereunder set my (our) hand (s) of

Seal (s) this _____ day of _____, 20___ A.D.

_____ _____
President (print name)

_____ _____
Secretary (print name)

NOTARY CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF _____)

I, _____, a notary public in and for the county in the state aforesaid, do hereby certify that _____, President of _____ personally known to me to be the same person whose name is subscribed to the foregoing instrument as such Manager, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act and as the free and voluntary act of said limited liability company, pursuant to authority granted by the members of the limited liability company, for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this _____ day of _____, 20___ A.D.

_____ _____
Notary Public (print name)

SCHOOL DISTRICT CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)

This is to certify that _____ as owner , hereby certify that to the best of our knowledge that the above described property is located in Libertyville Elementary School District 70 and High School District 128:

Dated at _____, Illinois, this _____ day of _____, 20___ A.D.

By: _____

By: _____

DRAINAGE CERTIFICATE

STATE OF ILLINOIS)
) S.S.
COUNTY OF _____)

To the best of our knowledge and belief, reasonable provision has been made for collection and diversion of such surface waters will be planned for in accordance with general accepted Engineering practices so as to reduce the likelihood of damage to the adjoining property because of the Construction of the consolidation, further, as Engineer, I hereby certify that the property which is the subject of this consolidation or any part thereof is not located within a special flood hazard area as identified by the Federal Emergency Management Agency.

Dated this __ day of _____ 20___ A.D.

_____
Registered Professional Engineer of Illinois

Property Owner's Signature

_____ By: _____
Owner or Attorney Owner or Attorney

_____ _____
Print Name Print Name

VILLAGE PRESIDENT CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)

Approved and Accepted by the Village Board of Trustees of the Village of Libertyville, Lake County Illinois. at a meeting held this the _____ day of_____, 20___ A.D.

By: _____ Attest: _____
Village President Village Clerk

_____ _____
(print name) (print name)

VILLAGE ENGINEER'S CERTIFICATE

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

I, the undersigned, as Village Engineer of the Village of Libertyville, Lake County, Illinois, do hereby certify that this document is approved by my office this _____ day of _____, 20___ A.D.

_____ _____
Village Engineer (print name)

PUBLIC UTILITY EASEMENT PROVISION

An easement for serving the subdivision and other property with electric and communications services is hereby reserved for and granted to:
Commonwealth Edison Company,
Cable Television Company or Franchisee
and
AT&T, Grantees

their respective successors and assigns, jointly and severally, to install, operate, maintain, and remove, from time to time, facilities used in connection with overhead and underground transmission and distribution of electricity and sounds and signals in, over, under, across, along and upon the surface of the property shown within the dotted or dashed lines on the plat and marked "Easement" or "PUE", the property designated in the Declaration of Condominium and/or on this plat as "Common Elements", and the property designated on the plat as a "Common area or areas", and the property designated on the plat for streets and alleys, whether public or private, together with the right 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 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 grantees' facilities or in, upon or over the property within the dotted lines marked "Easement" or "PUE" 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 that meaning set forth for such term in Section 2(e) of "An act in relation to condominiums" (Illinois Revised Statutes, Ch. 30, par. 302(e)), 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 as an appurtenance to the separately owned lots, parcels or areas within the planned development, even though such areas may be otherwise designated on the plat by terms such as "outlots", "common elements", "open space", "open area", "common ground", "parking and common area". The terms "common area or areas" and "Common Elements" includes real property surfaced with interior driveways and walkways, but excludes real property physically occupied by a building, Service Business District or structures such as a pool or retention pond, or mechanical equipment.
Relocation of facilities will be done by Grantees at cost of Grantor/Lot Owner, upon written request.

An easement is hereby reserved for and granted to NICOR, its successors and assigns to install, operate, maintain, repair, replace and remove facilities used in connection with the transmission and distribution of natural gas in, over, under, across, along and upon the surface of the property shown within the dotted or dashed lines on the plat and marked "Easement", "Common Area or Areas", and streets and alleys, whether public or private, and the property designated in the Declaration of Condominium and/or on this plat as "Common Elements", together with the right 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 to serve other property, adjacent or otherwise, and the right to remove obstructions, including but not limited to, trees, bushes, roots and fences, as may be reasonably required incident to the rights herein given, and the right to enter upon the property for all such purposes. Obstructions shall not be placed over NICOR's facilities or in, upon or over the property identified on this plat for utility purposes without prior written consent of NICOR. After installation of any such facilities, the grade of the 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 that meaning set forth for such term in Section 605/2(e) of the "Condominium Property Act" (Illinois Compiled Statutes, Ch. 765, Sec. 605/2(e)), as amended from time to time.
The term "common area or areas" is defined as a lot, parcel, or area of real property, including real property surfaced with interior driveways and walkways, the beneficial use and enjoyment of which is reserved in whole as an appurtenance to the separately owned lots, parcels or areas within the property, even though such areas may be designated on this plat by other terms.

NICOR GAS EASEMENT PROVISION

An easement is hereby reserved for and granted to NORTHERN ILLINOIS GAS COMPANY, an Illinois Corporation, doing business as NICOR GAS COMPANY, its successors and assigns (hereafter "Nicor") to install, operate, maintain, repair, replace and remove, facilities used in connection with the transmission and distribution of nature gas in, over, across, along and upon the surface of the property shown on this plat marked "Easements", "Utility Easement", "Public Utility Easement" "P.U.E.", Public Utility & Drainage Easement", "P.U. & D.E.", "Common Areas or Areas" (or similar designations), street and alleys, whether public or private, and the property designated in the Declaration of Condominium and/or on this Plat as "Common Elements" together with the right 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 to serve other property, adjacent or otherwise, and the right to remove obstructions, including but not limited to, trees, bushes, roots and fences, as may be reasonably required incident to the right herein given, and the right to enter upon the property for all such purposes. Obstructions shall not be placed over Nicor facilities or in, upon or over the property identified on this plat for utility purposes without the prior written consent of Nicor. After installation of any such facilities, the grade of the 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 Section 605/2(e) of the Condominium Property Act" (Illinois Compiled Statutes, Ch. 765, Sec. 605/2(e)), as amended from time to time.

The term "Common Area or Areas" is defined as a lot, parcel or area of real property, including real property surfaced with interior driveways and walkways, the beneficial use and enjoyment of which is reserved in whole as an appurtenance to the separately owned lots, parcels or areas within the property, even though such areas may be designated on this plat by other terms.

COUNTY CLERKS CERTIFICATE

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

I, _____, County Clerk of Lake County, Illinois, do hereby certify that there are no delinquent general taxes, no unpaid current taxes or special assessments, no unpaid forfeited taxes, and no redeemable tax sales against any of the land included in the plat. I further certify that I have received all statutory fees in connection with this plat.

Given under my hand and seal at Waukegan, Illinois,

This _____ day of _____, 20___ A.D.

_____
Lake County Clerk

LAKE COUNTY RECORDERS CERTIFICATE

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

This instrument _____ was filed for record in the Recorder's Office of Lake County, Illinois, on the _____ day of _____, 20___ A.D., at _____ o'clock _____.m.

_____
Lake County Recorder of Deeds

PLAN COMMISSION CERTIFICATE

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

Approved and accepted by the Planning Commission of the Village of Libertyville, Lake County, Illinois, do hereby certify that this document has been approved by said Plan Commission this the _____ day of _____, 20___ A.D.

_____ _____
Chairperson (print name)

VILLAGE TREASURER CERTIFICATE

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

I, _____, Treasurer of the Village of Libertyville, Lake County Illinois, do hereby certify that I find no deferred installments of outstanding unpaid special Assessments against any of the Real Estate included in the Plat hereon drawn.

dated this _____ day of _____, 20___ A.D.

_____
Village Treasurer, Libertyville, IL.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

We, Vanderstappen Land Surveying, Inc., Illinois Professional Land Surveyors have surveyed and subdivided the following described property, as shown, platted and legally described as follows:

That part of Lot 4 in School Trustee's Subdivision of Section 16, Township 44 North, Range 11 East of the Third Principal Meridian, described as follows: Commencing on the Southerly line of said Lot 4 at a point North 89 ½ degrees West, 458.2 feet from the Southeast corner of said Lot 4; thence North 8 ½ degrees West, 351.0 feet; thence North 85 degrees East, 32.0 feet; thence South 8 ½ degrees East to a point in the Southerly line of said Lot 4 which is 32.0 feet Easterly from the Place of Beginning; thence North 89 ½ degrees West, 32.0 feet to the Place of Beginning, in Lake County, Illinois, and also;

That part of Lot 4 in School Trustee's Subdivision of Section 16, Township 44 North, Range 11 East of the Third Principal Meridian, described as follows: Commencing at a point in the Southerly line of said Lot 4 which is North 89 ½ degrees West, 426.2 feet from the Southeast corner of said Lot 4; thence North 8 ½ degrees West, 351.0 feet; thence North 85 degrees East, 32.0 feet; thence South 8 ½ degrees East to a point in the Southerly line of said Lot 4 which is 32.0 feet Easterly from the Place of Beginning; thence North 89 ½ degrees West, 32.0 feet to the Place of Beginning, in Lake County, Illinois, and also;

That part of Lot 4 of School Trustee's Subdivision of Section 16, Township 44 North, Range 11 East of the Third Principal Meridian, described as follows, to wit: Beginning at a point on the South line of said Lot 4, 5.078 chains West of the Southeast corner thereof; thence North 8.5 degrees West, 4 chains; thence North 85 degrees East, 1.01 chains; thence Southerly to a point 4.014 chains West of said Southeast corner of Lot 4; thence West to the Place of Beginning, in Lake County, Illinois, and also;

That part of Lot 4 in School Trustee's Subdivision of Section 16, Township 44 North, Range 11, East of the Third Principal Meridian, described as follows: Commencing in the center of Milwaukee Avenue in the Village of Libertyville, at a point North 8 ½ degrees West, 414.35 feet from the Southeast corner of said Lot 4; and running thence South 85 degrees West, 330.0 feet; thence South 8 ½ degrees East, 119.0 feet; thence North 85 degrees East, 330.0 feet to the center of said Avenue and thence North 8 ½ degrees West, 119.0 feet to the Place of Beginning (except that part thereof described as follows: Commencing in the center of Milwaukee Avenue at a point North 8 ½ degrees West, 414.35 feet from the Southeast corner of said Lot 4; thence South 85 degrees West to a point 40.0 feet Westerly of the center of said Milwaukee Avenue, measured at right angles to said centerline; thence South 8 ½ degrees East parallel with the centerline of said Milwaukee Avenue, 119.0 feet; thence North 85 degrees East to said centerline of Milwaukee Avenue and thence Northerly along the center of said Milwaukee Avenue, 119.0 feet to the Place of Beginning, in Lake County, Illinois.

We, further certify, that all regulations enacted by the Mayor and Board of Trustees of the Village of Libertyville relative to annexed parcels have been complied with in preparation of this Final Plat of Subdivision.

We, further certify, that the land is within the Village of Libertyville, which has adopted a Village Comprehensive Plan and Map, and is exercising the special powers authorized by Division 12 of Article 11 of the Illinois Municipal Code, as amended.

We, further certify, that based upon a review of the Flood Insurance Rate Map (F.I.R.M.) Community Panel Number 17097C0162K with effective date September 18, 2013 that subject property lies in Zone "X" an area determined to be outside the 0.2% chance of annual flooding, as identified by said F.I.R.M. prepared by the Federal Emergency Management Agency.

We, further certify, that the total area surveyed contains 2.238± Acres (97,480 Square Feet).

We, further certify, that iron stakes or appropriate monumentation, marks all lot corners and point of changes in alignment as required by the Plat Act (Illinois Revised Statutes 765ILCS 205/1).
All distances are shown in feet and decimals thereof.

Given under my hand and seal this 20th., day of September, 2024 A.D.

_____
Terry L. Van Alstine, PLS No. 35-3055
VANDERSTAPPEN LAND SURVEYING, INC.
DESIGN FIRM #184-002792
Expires April 30, 2025

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

This plat has been approved by the Illinois Department of Transportation with respect to roadway access pursuant to Paragraph 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.

This _____ day of _____, 20___ A.D.

_____
JOSE RIOS, P.E.,
REGION 1 ENGINEER

SURVEYOR'S PERMISSION TO RECORD:

Authorization to record this Plat of Consolidation is hereby granted to the Village of Libertyville, Illinois, through an appointed or designated Village official thereof,

Signed: _____ (Seal)

Name: _____

Address: _____

City & State_____

After recordation of this document please return to:

Mailing address:
Village of Libertyville
118 W. Cook Avenue
Libertyville, Illinois 60048
Phone #847-362-2430

CLIENT: SPACE ARCHITECTS & PLANNERS
DRAWN BY: PJD CHECKED BY:
SCALE: N/A SEC. 16 T. 44 R. 11 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 11-16-300-020, 021, 022, 023, 024
JOB NO.: 240551 I.D. FPS
FIELDWORK COMP.: 8/01/24 BK. ___ PG. ___
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: 240114

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1.	2/17/25	FINAL REVISED TO PRELIMINARY	TVA

LAKE - MILWAUKEE DEVELOPMENT | SHEET NO. 2 OF 2