

James McDonald, Mayor  
Connie Olker, Clerk  
Christine McKinley, Treasurer



Trustees:  
Allena Barbato  
Scott Bartlett  
Jake Cramond  
Glenn McCollum  
Jeff Nielsen  
Doug Savell

**VILLAGE OF LAKE VILLA**  
**PLAN COMMISSION / ZONING BOARD OF APPEALS – AGENDA**  
**Thursday, August 7, 2025**  
**Village Hall, 65 Cedar Avenue**  
**7:00 P.M.**

1. Call to Order and Roll Call
2. Pledge of Allegiance
3. **Approval:** Minutes of the May 1, 2025 Plan Commission Meeting
4. **Public Hearing:** Petition for Rezoning of 304 E. Grand Avenue, 0 N. Milwaukee Avenue, 0 Villa Avenue, 108 N. Milwaukee Avenue, and a position of Villa Avenue extending westerly from Milwaukee Avenue to the westerly lot line from the R2 (Residential 2) Zoning District to the Village's CBD (Commercial Business) Zoning District
5. **Public Hearing:** Conditional Use Permit Application and front-yard setback variation for 406 Monaville Road for the use of a Personal Storage Facility
6. Public Comment
7. Adjournment

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities, are required to contact Village Hall at (847) 356-6100 promptly to allow the Village to make reasonable accommodations for those persons.

The Village of Lake Villa  
Plan Commission Meeting  
***DRAFT Minutes of the May 1, 2025***  
Village Hall  
65 Cedar Avenue, Lake Villa, IL 60046

**1. CALL TO ORDER AND ROLL CALL**

A Meeting of the Plan Commission of the Village of Lake Villa was held on May 1, 2025, at the Village Hall, 65 Cedar Ave., and was called to order at 7:00 pm by Chairman Kressner.

<b>Present:</b>	Commissioners: Jake Cramond, Tracy Lucas, Lee Filas, Steve Smart, Craig Kressner
<b>Absent:</b>	Jerry Coia
<b>Also Present:</b>	Village Administrator Mike Strong; Assistant to the Village Administrator Jake Litz; Village Planner Scott Goldstein, Village Attorney Rebecca Alexopoulos

**2. PLEDGE OF ALLEGIENCE**

**3. REVIEW OF THE MINUTES**

Chairman Kressner asked for a motion to approve the April 3, 2025 Plan Commission meeting minutes. Commissioner Filas made a motion to approve the minutes as presented. The motion was seconded by Commissioner Lucas. The motion carried (4-0-1).

**4. Approval: Request of a Subdivision at 37112 N. Milwaukee Avenue (PIN 06-03-300-005)**

Village Administrator Mike Strong gave an overview of the proposal for the proposed subdivision for the parcel at 37112 N. Milwaukee Avenue. He stated that Agriculture zoning would remain. He stated that the new lots would conform to the zoning code. One lot would be subdivided into three. Village Attorney Rebecca Alexopoulos stated that there would be one landlocked lot. However, the Township has agreed to provide access to that from a Township road.

Commissioner Smart made a motion to recommend approval as presented. Commissioner Filas seconded the motion. The motion carried (5-0).

**5. Public Hearing: Preliminary approval of a new Conditional Use Permit for a Residential Planned Development – Cedar Lake Estates**

Chairman Kressner called to open a public hearing. A motion was made by Commissioner Lucas to open the public hearing, the motion was seconded by Commissioner Filas. The motion carried (5-0).

Village Administrator Mike Strong provided a presentation regarding the proposed development. He introduced the petitioners. Lisa Waggoner from the Waggoner Law Firm started the presentations by stating the project location and other procedural matter relative to the application. Rick Murphy from Lennar presented a brief background on Lennar and the company's background. Rich Olsen presented the land plan for the proposed development. He stated the proposal included 42% open space, a large park with preserved oak trees, a multi-use trail connecting to the forest preserve, a mix of lots of 8,000-12,000 square feet, open space overlooking the lake, naturalized detentions buffering wetland, and large buffering along road adjacent lots. He then overviewed the 2 parks included in the proposed development and mentioned the various lots that were proposed and typical home standards by lot coverage. Deviations from the UR3A Zoning Classification were highlighted. House types, anti-monotony, building materials were overviewed by Mr. Murphy.

Village Administrator gave a brief presentation of the staff memorandum. He stated that the proposed development was denser than the UR3A zoning. However, he highlighted several considerations such as open space and landscaping buffers. Village Planner Scott Goldstein provided further context on the zoning elements of the proposed development.

Commissioner Lucas stated that two of the largest home models shouldn't be located next to each other. Commissioners Smart and Filas concurred. Commissioner Cramond stated he was pleased with the trail and sidewalk connectivity. Chairman Kressner asked about a possible road through to the Public Works facility. Mr. Olsen stated that the geometry won't make the public road feasible. Further discussion on the access point continued.

Public Comment was opened to the public. Karen Milinski asked a question to the main entrance to the proposed development. Marta Grody asked in the development would have access to the lake across the street. Susan Schmidt provided a comment regarding her concern relative to the pesticides relative to those elements getting into Cedar Lake. Helmut Peter stated that the tunnel would be closed. Kristin Grody asked if she would see new houses from her house. Mark Belinski asked if any stormwater runoff study has been done relative to Cedar Lake. Additionally, he raised concerns about traffic at Cedar Lake Road and Grand Avenue. Nancy Kirk provided a concern about 130 homes on the site. Erik Frankie reiterated a concern about the traffic at the corner of Cedar Laked Road and Grand Avenue. Public Comment was closed.

Commissioner Smart made a motion to close the public hearing, the motion was seconded by Commissioner Cramond. The motion carried (5-0).

Commissioner Lucas reiterated that a greater side yard setback be required.

A motion was made by Plan Commissioner Cramond and seconded by Plan Commissioner Smart that the Lake Villa Plan Commission recommend to the Mayor and Board of Trustees of the Village of Lake Villa granting preliminary approval relative to the request of the Petitioner, CalAtlantic Group, LLC, a subsidiary of Lennar Chicago,

LLC, who is the contract purchaser of the Subject Property, for preliminary approval of a Conditional Use Permit for a Residential Planned Development consisting of approximately 130 single-family lots, and approval of several variations from the Village's Zoning Regulations to permit the construction of the Cedar Lake Estates Residential Planned Development (hereinafter sometimes referred to as the "Residential Development") with certain conditions and based upon certain findings of fact, as set forth in the attached written motion. The motion carried (4-1).

AYES: Cramond, Smart, Filas, Lucas

NAYS: Kressner

## **6. PUBLIC COMMENT**

None.

## **7. ADJOURNMENT**

With there being no further business Chairman Kressner asked for a motion to adjourn. Commissioner Cramond made a motion to adjourn, seconded by Commissioner Lucas. The motion was approved unanimously by voice vote at 9:11 p.m.

Respectfully submitted,  
Jacob Litz, Assistant to the Village Administrator



VILLAGE OF LAKE VILLA PLAN COMMISSION  
MEETING OF MAY 1, 2025

RE: PETITION OF CalATLANTIC GROUP, LLC, A SUBSIDIARY OF  
LENNAR CHICAGO, LLC, RELATIVE TO THE PROPOSED  
CEDAR LAKE ESTATES DEVELOPMENT

Motion by Plan Commission Member Cramond, seconded by Plan Commission Member Smart, that the Lake Villa Plan Commission recommend to the Mayor and Board of Trustees of the Village of Lake Villa [granting preliminary approval] [denying approval] [continuing the subject hearing] relative to the request of the Petitioner, CalAtlantic Group, LLC, a subsidiary of Lennar Chicago, LLC, who is the contract purchaser of the Subject Property, for preliminary approval of a Conditional Use Permit for a Residential Planned Development consisting of approximately 130 single-family lots, and approval of several variations from the Village's Zoning Regulations to permit the construction of the Cedar Lake Estates Residential Planned Development (hereinafter sometimes referred to as the "Residential Development") based upon the following findings of fact.

I. FINDINGS OF FACT:

1. The Subject Property consists of approximately 65 acres in area, more or less, is located within the corporate limits of the Village of Lake Villa, is commonly known as 0 W. Grand Avenue and 0 N. Cedar Lake Road, Lake Villa, IL (Permanent Index Numbers 06-05-200-005, 06-05-200-015, 06-05-200-020, and 06-05-200-021) and is located on the south side of Grand Avenue (Route 132) generally on the Southeast corner of the intersection of Grand Avenue and Cedar Lake Road in the Village of Lake Villa and is legally described as follows:

PARCEL 1:

THAT PART OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN AND DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID QUARTER QUARTER SECTION AND THENCE NORTH ALONG THE WEST LINE THEREOF TO THE NORTHWEST CORNER THEREOF; THENCE EAST ALONG THE NORTH LINE OF SAID QUARTER QUARTER 495 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID QUARTER QUARTER SECTION TO A POINT 940 FEET NORTH OF THE SOUTH LINE OF SAID QUARTER QUARTER SECTION; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 495 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID QUARTER QUARTER SECTION 940 FEET TO SAID SOUTH LINE; THENCE WEST ALONG SAID SOUTH LINE 990.0 FEET TO THE POINT OF BEGINNING, IN LAKE COUNTY, ILLINOIS (EXCEPTING ALL THAT PART LYING NORTH OF THE SOUTH RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 132 (GRAND AVENUE).

PARCEL 2:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5,  
TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL  
MERIDIAN, IN LAKE COUNTY, ILLINOIS

(collectively, the "Subject Property")

2. PROPOSED USE: The Petitioner, Lennar Chicago, LLC, is requesting the Village's preliminary approval of a Conditional Use Permit which would authorize the establishment, operation, and maintenance on the Subject Property of a Residential Planned Development for not more than 130 detached single-family dwelling units, each lot being not less than 8,000 square feet in area, related parking, lighting, landscaping, storm water management facilities, and other amenities, which proposed use is compatible with other uses permitted in the UR3A Zoning District.

Paragraph G of Section 10-3A-3, "Statement of Purpose and Intent of Zoning Districts", identifies the purpose of the Urban Residential 3A (UR3A) Zoning District as "an urban residential district of intermediate density intended for new developed areas of Lake Villa, which are part of a transit oriented development where a substantial portion of the site is within one mile of the Lake Villa Metra Station, and where all the facilities, including village sewer and water facilities are or can be made available. UR3A permits single-family dwelling units only with a mix of the lots which comply with lot area, yard and bulk regulations as specified in Section 10-3C-2, Table 2, Column 2 of this Chapter, but not more than fifty percent (50%) of the lot mix may consist of the smallest size lots permitted, and the lot mix shall also include at least fifteen percent (15%) of each of the other permitted lot sizes. In the UR3A zone, the lot mix sizes shall be distributed throughout the subdivision on a substantially consistent basis."

3. PRELIMINARY PLAN: In its present form, the preliminary plan for the requested Conditional Use Permit for the proposed Residential Development for the Subject Property subject to the conditions set forth herein:
  - (a) is consistent with the particular physical surroundings of the Subject Property and the granting of certain relief from the Zoning Regulations of the Village will not be detrimental to the public welfare or injurious to other property owners in the vicinity of the Subject Property;
  - (b) is consistent with the general purpose and intent of the Lake Villa Zoning Regulations;
  - (c) is consistent with the Village's Comprehensive Plan;
  - (d) is designed, constructed, and maintained so as to be harmonious and appropriate in appearance with the existing character of the general vicinity;

- (e) will not significantly diminish the safety, use and enjoyment of surrounding property;
- (f) will be adequately served by essential public facilities and services such as streets, police and fire service, drainage, refuse disposal, and schools, or such services will be provided by the Petitioner at the Petitioner's sole expense;
- (g) will not create excessive additional requirements at public expense for public facilities and service and will not be detrimental to the economic welfare of the community;
- (h) will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors;
- (i) will provide vehicular access to the Subject Property designed so that such use does not create any interference with traffic on surrounding public thoroughfares;
- (j) will not result in the destruction, loss, or damage of a natural, scenic, or historic feature of major importance;
- (k) will comply with all additional regulations specific to the Conditional Use Permit requested.
- (l) will be generally consistent with the existing zoning of and with the existing uses of nearby properties;
- (m) will not diminish property values by approving the proposed Development, and there will be no hardship imposed upon the Petitioner;
- (n) will not diminish any property values and will promote the general health, safety, and welfare;
- (o) will provide a gain to the public as a result of the establishment of the proposed Development, which will offer another housing option for the community and will satisfy a community need;
- (p) will be generally consistent with the intent and purpose of the Lake Villa Zoning Regulations;
- (q) will be generally compatible with the character of the UR3A Zoning District;

- (er) will be compatible with the neighborhood in which it will be located;
  - (s) will preserve the value of the surrounding residential areas and will be compatible with surrounding land uses;
  - (t) The Subject Property is suitable for the Development;
  - (u) The Village has undertaken its planning and land use regulations with great care;
  - (v) The Subject Property contains no historical features which require preservation, but the proposed Conditional Use will preserve environmentally sensitive floodway, floodplain, and wetlands which are bisected by the Subject Property as part of the Eagle Creek watershed;
4. The proposed preliminary plan for the Residential Development is consistent with the stated purpose of the Village's planned development regulations set forth in the Zoning Regulations of the Village and the proposed preliminary plan meets the requirements and standards for planned developments located within the UR3A Zoning District of the Village subject to the variations specifically approved herein
  5. The proposed preliminary plan for the Residential Development will produce a public benefit meeting the planning objectives and standards of the Village.
  6. The design of the proposed preliminary plan for the Residential Development makes adequate provision for public services, provides adequate control over vehicular traffic, provides for and protects areas for common open space and other amenities.
  7. The proposed Residential Development will be compatible with and beneficial to the adjacent properties and to the neighborhood, and the proposed Residential Development is a desirable addition to the Village's available housing options, tax base and economic well being.
  8. In reviewing requests for Conditional Uses, the following standards shall be reviewed and considered pursuant to the Village's Zoning Code:
    - (a) Location: The site will be so situated that the proposed use is compatible with the existing or planned future development in the area.

The Plan Commission finds that the proposed Residential Development is located along major arterials and compatible with adjacent residential developments.

    - (b) Zoning District Requirements: All regulations of the UR3A Zoning District in which the Development will be located shall apply to such uses, except where specifically amended and varied by the conditions under which the Conditional Use Permit is granted.

Zoning variances may be provided through the adoption of a Conditional Use for a Residential Planned Development as proposed here.

- (c) Lot Area: A conditional use shall be located on a lot or a zoning lot which conforms to the applicable zone regulations unless the lot area requirement is otherwise specified in the Zoning Code.

The Plan Commission finds that the proposed Residential Development is in compliance with minimum requirements of the UR3A Zoning District subject to the variations approved herein.

- 9. In evaluating a planned development, the Plan Commission considers the degree to which that development varies from underlying zoning standards of the district in which it will be located, and also considers benefits of the development such as the following:
  - (a) The proposed plan for the subject Residential Development has provided for a 30-foot landscape buffer and an 8-foot wide multi-use path along Cedar Lake Road south of the entrance to the Residential Development that continues through the community, along with a 5-foot wide sidewalk which continues alongside Cedar Lake Road;
  - (b) Two (2) park areas (entry gateway and turf near the north end and a playground/open space near the entrance to the Residential Development);
  - (c) Approximately 13.9 acres of detention and wetlands, including a 7.4 acre basin along the eastern edge;
  - (d) A central open space corridor that will include a pedestrian path within a 40-foot utility easement.
- 10. The Plan Commission also considers: (a) the degree to which the Development exhibits extra care and attention to details in excess of Village requirements which enhance the character of the development, (b) the degree to which any requested increase in density reflects an investment in better design, landscaping, or facilities, and (c) the degree to which the developer has gone to better preserve critical natural environments, restore or mitigate degraded or distressed environments, alleviated off-site problems, and/or provided other improvements.
  - (a) The Plan Commission finds that the proposed Residential Development will provide a mix of single-family detached dwelling units ranging in size from approximately 1,866 square feet to 2,907 square feet, which will meet a housing need in the community.
  - (b) A 30-foot-wide landscaped buffer zone, two (2) additional areas for use as a park and/or open space, an 8-foot-wide multi-use path along Cedar Lake Road, as well as a 5-foot-wide sidewalk along Cedar Lake Road.
  - (c) The proposed Residential Development is located at the intersection of easily accessible arterials and will serve as a buffer to the existing adjacent residential developments.

- (d) Approximately 13.9 acres of detention and wetlands, including a 7.4-acre basin along the eastern edge.
11. In addition to, and as part of the Conditional Use Permit requested by the Petitioner, the Petitioner is seeking approval of the following variations for the subject Planned Development:
- (a) Variations from Table 2, “Lot Areas, Yard and Bulk Regulations”, of Section 10-3C-2 of the Village’s Zoning Regulations relative to the UR3A Zoning District to permit the following:

- (i) LOT AREA AND LOT MIX: The Subject Property is presently zoned and classified as part of the Village’s UR3A Zoning District (Urban Residential 3A), and the Petitioner is not requesting rezoning of the Subject Property.

Table 2, “Lot Area, Yard and Bulk Regulations” of Section 10-3C-2 of the Village’s Zoning Regulations requires the following minimum lot sizes for a residential development in the UR3A Zoning District: (1) At least 15% of the lot mix to be 10,200 square feet in area; (2) At least 15% of the lot mix to be 9,300 square feet in area, and (3) Not more than 50% of the lot mix to be 8,000 square feet in area.

In its present form, the plans for the proposed Residential Development do not presently comply with these requirements, and the Petitioner is requesting the Village’s approval of variations which would allow the proposed Residential Development to have the following non-compliant mix of lot sizes:

- (1) Approximately 21.5% (28 lots) with a lot size of between 10,280 square feet in area to 13,167 square feet in area, which lot mix percentage exceeds the minimum required;
    - (2) Approximately 10.8% (14 lots) with a lot size of approximately 9,300 square feet in area to 10,199 square feet in area, which lot mix percentage does not comply with the minimum requirements of the Village’s Zoning Regulations; and
    - (3) Approximately 67.7% (88 lots) with a lot size of 8,000 square feet in area to 9,299 square feet in area, which exceeds the 50% maximum percentage of lots of this size otherwise permitted by the Village’s Zoning Regulations.
  - (ii) FRONT YARD SETBACK: For all lots within the Development, a variation of 5 feet is being requested to permit each lot to have a front yard setback of 25 feet, notwithstanding the fact that a front yard setback of 30 feet is otherwise required;

(iii) SIDE YARD SETBACK:

- (a) For lots with an area of 10,200 square feet or more: A variation of 3 feet is being requested to permit lots with an area of 10,200 square feet or more to have a side yard setback of 6 feet, notwithstanding the fact that a side yard setback of 9 feet is otherwise required;
- (b) For lots with an area of 9,300 square feet: A variation of 2 feet is being requested to permit lots with an area of 9,300 square feet to have a side yard setback of 6 feet, notwithstanding the fact that a side yard setback of 8 feet is otherwise required;
- (c) For lots with an area of 8,000 square feet: A side yard setback of 6 feet is proposed, which is in compliance with the provisions of the Village's Zoning Regulations, and therefore, no variation for such lots is being requested.

(iv) TOTAL SIDE YARD:

- (a) For lots with an area of 10,200 square feet or more: A variation of 6 feet is being requested to permit lots with an area of 10,200 square feet or more to have a total side yard of 12 feet, notwithstanding the fact that a total side yard of 18 feet is otherwise required;
- (b) For lots with an area of 9,300 square feet: A variation of 4 feet is being requested to permit lots with an area of 9,300 square feet to have a total side yard of 12 feet, notwithstanding the fact that a total side yard of 16 feet is otherwise required;
- (c) For lots with an area of 8,000 square feet: A total side yard of 12 feet is proposed, which is in compliance with the provisions of the Village's Zoning Regulations, and therefore, no variation for such lots is being requested.

(v) SETBACK ABUTTING A STREET: A variation of 5 feet is being requested to permit each lot to have a setback abutting a street of 25 feet, notwithstanding the fact that a 30-foot setback is otherwise required by the Village's Zoning Regulations.

(vi) LOT COVERAGE AND LOT MIX: The Petitioner is requesting variations with respect to lot coverage and lot mix as follows:

- (a) For lots with an area of 10,200 square feet: a variation is being requested to permit each lot to have 35% coverage notwithstanding the fact that 30% coverage is permitted and no variation is being requested with regard to lot mix which requires at least a 15% lot mix;

(b) For lots with an area of 9,300 square feet: a variation is being requested to permit each lot to have 60% coverage notwithstanding the fact that 35% coverage is permitted and no variation is being requested with regard to lot mix which requires at least a 15% lot mix; and

(c) For lots with an area of 8,000 square feet: variation is being requested to permit each lot to have 60% coverage notwithstanding the fact that 40% coverage is permitted and a variation is being requested so that Petitioner may exceed 50% of this lot mix notwithstanding the fact that the Village's standards provide that such lot mix shall be not more than 50% of the lot mix.

(vii) FLOOR AREA RATIO ("FAR"): The Petitioner is proposing to construct single-family detached residential dwelling units ranging in size from approximately 1,866 square feet to 2,907 square feet on each of the 130 lots in the Residential Development. Approximately 101 lots out of 130 lots, will have a lot size of between approximately 8,000 square feet and 10,070 square. Therefore, the proposed planned development will have a 75% lot mix with a FAR of 45% notwithstanding the fact that the Village's Zoning Regulations provide that not more than 50% of the lot mix shall have a maximum FAR of 45%. Therefore, the Petitioner is seeking a variation from this maximum FAR standard and lot mix percentage standard.

(b) IMPERVIOUS SURFACE RATIO: Variations from Section 10-8-1, "Site Capacity Calculation", of the Village's Zoning Regulations relative to the maximum impervious surface ratio are being requested to permit more impervious surface per lot than otherwise permitted by Section 10-8-1, as follows:

(i) For lots with an area of 10,200 square feet or more: No variations from permitted maximum impervious surface ratio are being requested.

(ii) For lots with an area of 9,300 square feet: A variation of 15% from the permitted maximum impervious surface ratio is being requested to permit lots with an area of 9,300 square feet or more to allow a maximum impervious surface ratio of 60%, notwithstanding the fact that 45% is otherwise permitted; and

(iii) For lots with an area of 8,000 square feet: A variation of 10% from the required maximum impervious surface ratio is being requested to permit lots with an area of 8,000 square feet or more to allow a maximum impervious surface ratio of 60%, notwithstanding the fact that 50% is otherwise permitted.

12. The requested variations for the requested Conditional Use Permit for the proposed



Residential Development for the Subject Property enhance the quality of the planned development and are compatible with the primary residential uses of the property; and are not of a nature so as to create a detrimental influence on the surrounding properties.

## II. VARIATIONS RECOMMENDED FOR APPROVAL:

The Plan Commission of the Village recommends that the following requested variations be approved as part of the requested Conditional Use Permit for the proposed Residential Development for the Subject Property, subject to the conditions set forth herein

- (a) Variations from Table 2, “Lot Areas, Yard and Bulk Regulations”, of Section 10-3C-2 of the Village’s Zoning Regulations relative to the UR3A Zoning District to permit the following:
  - (i) LOT AREA AND LOT MIX: The Subject Property is presently zoned and classified as part of the Village’s UR3A Zoning District (Urban Residential 3A), and the Petitioner is not requesting rezoning of the Subject Property.

Table 2, “Lot Area, Yard and Bulk Regulations” of Section 10-3C-2 of the Village’s Zoning Regulations requires the following minimum lot sizes for a residential development in the UR3A Zoning District: (1) At least 15% of the lot mix to be 10,200 square feet in area; (2) At least 15% of the lot mix to be 9,300 square feet in area, and (3) Not more than 50% of the lot mix to be 8,000 square feet in area.

In its present form, the plans for the proposed Residential Development do not presently comply with these requirements, and the Petitioner is requesting the Village’s approval of variations which would allow the proposed Residential Development to have the following non-compliant mix of lot sizes:

- (1) Approximately 21.5% (28 lots) with a lot size of between 10,280 square feet in area to 13,167 square feet in area, which lot mix percentage exceeds the minimum required;
- (2) Approximately 10.8% (14 lots) with a lot size of approximately 9,300 square feet in area to 10,199 square feet in area, which lot mix percentage does not comply with the minimum requirements of the Village’s Zoning Regulations; and
- (3) Approximately 67.7% (88 lots) with a lot size of 8,000 square feet in area to 9,299 square feet in area, which exceeds the 50% maximum percentage of lots of this size otherwise permitted by the Village’s Zoning Regulations.

- (ii) **FRONT YARD SETBACK:** For all lots within the Development, a variation of 5 feet is being requested to permit each lot to have a front yard setback of 25 feet, notwithstanding the fact that a front yard setback of 30 feet is otherwise required;
- (iii) **SIDE YARD SETBACK:**
  - (a) For lots with an area of 10,200 square feet or more: A variation of 3 feet is being requested to permit lots with an area of 10,200 square feet or more to have a side yard setback of 6 feet, notwithstanding the fact that a side yard setback of 9 feet is otherwise required;
  - (b) For lots with an area of 9,300 square feet: A variation of 2 feet is being requested to permit lots with an area of 9,300 square feet to have a side yard setback of 6 feet, notwithstanding the fact that a side yard setback of 8 feet is otherwise required;
  - (c) For lots with an area of 8,000 square feet: A side yard setback of 6 feet is proposed, which is in compliance with the provisions of the Village's Zoning Regulations, and therefore, no variation for such lots is being requested.
- (iv) **TOTAL SIDE YARD:**
  - (a) For lots with an area of 10,200 square feet or more: A variation of 6 feet is being requested to permit lots with an area of 10,200 square feet or more to have a total side yard of 12 feet, notwithstanding the fact that a total side yard of 18 feet is otherwise required;
  - (b) For lots with an area of 9,300 square feet: A variation of 4 feet is being requested to permit lots with an area of 9,300 square feet to have a total side yard of 12 feet, notwithstanding the fact that a total side yard of 16 feet is otherwise required;
  - (c) For lots with an area of 8,000 square feet: A total side yard of 12 feet is proposed, which is in compliance with the provisions of the Village's Zoning Regulations, and therefore, no variation for such lots is being requested.
- (v) **SETBACK ABUTTING A STREET:** A variation of 5 feet is being requested to permit each lot to have a setback abutting a street of 25 feet, notwithstanding the fact that a 30-foot setback is otherwise required by the Village's Zoning Regulations.
- (vi) **LOT COVERAGE AND LOT MIX:** The Petitioner is requesting variations with respect to lot coverage and lot mix as follows:

- (a) For lots with an area of 10,200 square feet: a variation is being requested to permit each lot to have 35% coverage notwithstanding the fact that 30% coverage is permitted and no variation is being requested with regard to lot mix, the Village's standards for which require at least a 15% lot mix;
  - (b) For lots with an area of 9,300 square feet: a variation is being requested to permit each lot to have 60% coverage notwithstanding the fact that 35% coverage is permitted and a variation is being requested with regard to lot mix notwithstanding the fact that the Village's standards require at least a 15% lot mix; and
  - (c) For lots with an area of 8,000 square feet: a variation is being requested to permit each lot to have 60% coverage notwithstanding the fact that 40% coverage is permitted and a variation is being requested so that Petitioner may exceed 50% of this lot mix notwithstanding the fact that the Village's standards provide that such lot mix shall be not more than 50% of the lot mix.
- (vii) FLOOR AREA RATIO ("FAR"): The Petitioner is proposing to construct single-family detached residential dwelling units ranging in size from approximately 1,866 square feet to 2,907 square feet on each of the 130 lots in the Residential Development. Approximately 101 lots out of 130 lots, will have a lot size of between approximately 8,000 square feet and 10,070 square. Therefore, the proposed planned development will have a 75% lot mix with a FAR of 45% notwithstanding the fact that the Village's Zoning Regulations provide that not more than 50% of the lot mix shall have a maximum FAR of 45%. Therefore, the Petitioner is seeking a variation from this maximum FAR standard and lot mix percentage standard.
- (b) IMPERVIOUS SURFACE RATIO: Variations from Section 10-8-1, "Site Capacity Calculation", of the Village's Zoning Regulations relative to the maximum impervious surface ratio are being requested to permit more impervious surface per lot than otherwise permitted by Section 10-8-1, as follows:
- (i) For lots with an area of 10,200 square feet or more: No variations from permitted maximum impervious surface ratio are being requested.
  - (ii) For lots with an area of 9,300 square feet: A variation of 15% from the permitted maximum impervious surface ratio is being requested to permit lots with an area of 9,300 square feet or more to allow a maximum impervious surface ratio of 60%, notwithstanding the fact that 45% is otherwise permitted; and

- (iii) For lots with an area of 8,000 square feet: A variation of 10% from the required maximum impervious surface ratio is being requested to permit lots with an area of 8,000 square feet or more to allow a maximum impervious surface ratio of 60%, notwithstanding the fact that 50% is otherwise permitted.

### III. CONDITIONS OF PRELIMINARY APPROVAL:

The Plan Commission of the Village recommends that the Petitioner be granted preliminary approval for a Conditional Use Permit for a Residential Planned Development subject to the following conditions which all must be met before Petitioner applies for and receives final PUD approval unless otherwise specified herein:

#### 1. COMPLIANCE WITH COMMENTS AND CONDITIONS RECEIVED FROM THE VILLAGE'S CONSULTING ENGINEER JON TACK, P.E. IN HIS MEMORANDUM DATED MARCH 22, 2024 REQUIRED:

##### (a) GENERAL COMMENTS:

- (i) AS-BUILT DRAWINGS: Prior to final approval of the stormwater improvements, as-built/record drawings for all stormwater facilities improvements per the Village's Watershed Development Ordinance shall be provided by the Petitioner to the Village for the review and approval by the Village Engineer.
- (ii) DETENTION BASIN/PLAT OF SURVEY: The detention basins and overland flow routes shall be placed in a plat restricted area per the Village's Watershed Development Ordinance requirements. The Petitioner shall provide a Plat of Survey for recording that includes all stormwater facilities (basin, storm sewer, bio-swales, overland routes, etc.).
- (iii) FINAL ENGINEERING: Final engineering shall provide contact information for the required designated erosion control inspector (DECI). Weekly reports from the DECI will need to be emailed to the Village Administrator for review and approval by the Village Engineer.
- (iv) STORMWATER PLAN ("SWPPP"): The Petitioner shall provide to the Village for review and approval by the Village Engineer a copy of the proposed Stormwater Pollution Prevention Plan.
- (v) PERMITS: Prior to issuing any site development permit, the Petitioner shall obtain and provide to the Village copies of all applicable permits, including but not limited to a copy of the NPDES NOI approval letter.

- (vi) MAINTENANCE PLAN, STORMWATER FACILITIES: The Petitioner shall provide to the Village, for the review and approval of the Village Engineer, or his or her designee, a maintenance plan for the stormwater facilities, in a format which shall provide for its recording with the Plat for stormwater facilities.
- (vii) APPROVAL LETTERS: The Petitioner shall provide to the Village, for review and approval by the Village Engineer, or his or her designee, all wetland, boundary approval, jurisdictional determination (JD) and letter of no impact as applicable for the proposed Development. All wetland impacts will need mitigation.
- (viii) MAINTENANCE PLAN, PLANTINGS; SURETY: The emergent plantings and the wet meadow seed mix areas proposed in the detention basins will require a 3-year maintenance and monitoring program with bi-annual reports to the Village on the quality and establishment of the plantings. A maintenance surety shall be on deposit during the monitoring program. Please have the landscape architect prepare a maintenance plan and cost estimate for surety.
- (ix) All submittals of plans and calculations shall be signed and sealed by an Illinois Registered Professional Engineer.
- (x) STORMWATER REPORT:
  - (1) The Petitioner shall provide to the Village the Lake County Stormwater Management Commission's approval for the depressional areas greater than 20 acres.
  - (2) The Petitioner shall provide to the Village the Final Stormwater and Floodplain Design Report, which needs to include all supporting data, such as but not limited to, exhibits for sub-drainage areas and disturbed area versus area tributary to detention basins, storm sewer design calculations, inlet capacity, spillway, Tc, rainfall, etc.
  - (3) All homes shall have a designated sump pump discharge pipe that is connected to the storm sewer system.
  - (4) The Petitioner shall provide detailed water quality and runoff volume reduction (RVR) calculations.

- (5) Include in the discussion and calculations: The equalizer pipe for basin 2A and 2B needs to show that the pipe will convey drainage so that the basins act as one. The runoff area to each basin should be determined and compared to the volume of the basin, the tributary area to each basin versus the volume of each basin.
- (6) Cross-sections for the floodplain fill and compensatory storage area with calculations are required. As-built cross-sections and calculations are required.

(b) SHEET COMMENTS

(i) PRELIMINARY ENGINEERING:

- (1) The grading sheets need T/F's, garage slab elevations, driveway location and slope, complete site grading with proposed contours and spot grades, overland and emergency overland routes, etc.
- (2) All details shall be included; restrictor structures, CB, MH, riprap, pump, erosion and sediment control, etc.
- (3) The Landscape Plan should provide a cross-section clearly indicating the seeding zones.

(ii) PRELIMINARY PLAT:

- (1) Stormwater Management Easements 1, 2, and 3 need to be defined. The maintenance of the stormwater management facility and the outfall system needs to clearly define the HOA as the responsible party.
- (2) *The right-of-way dedication needs to define "For Public Street Purposes"; sidewalks, utilities, etc.*
- (3) Outlots need to be defined.

2. COMPLIANCE WITH COMMENTS AND CONDITIONS RECEIVED FROM THE VILLAGE'S CONSULTING ENGINEER APPLIED TECHNOLOGIES IN THEIR MEMORANDUM DATED MARCH 21, 2025 REQUIRED:

(a) PRELIMINARY PLAT:

(i) Easements:

- (1) Provide Sanitary Sewer and Watermain Easement Document No. 3083816 to the Village.
- (2) *Development proposes to dedicate an additional 10 feet to the Cedar Lake Road east right-of-way. This area includes an existing Village easement. The Development must dedicate an additional 10 feet of easement for Sanitary Sewer and Watermain Easement outside of the existing easement of Document No. 3083816.*

(b) PRELIMINARY ENGINEERING PLANS:

(i) Right-of-Way:

- (1) *Maple Drive, from Cedar Lake Road to Walnut Way (approximately 200 feet) is considered a Secondary Thoroughfare and should have a 66-foot right-of-way.*

(ii) Grading:

- (1) Outlot F is a flat bottom detention basin for over 1,200 feet. This will result in localized ponding. Detention basin design should follow best practices. Inlets of the detention basin should be located/designed in a manner to prevent short-circuiting of flow to outlet.
- (2) Grading plans shall include all proposed grading, including proposed lot grading and road grading. Spot elevations shall be provided per Village Ordinance.

(c) WATER SYSTEM:

- (i) *Modify the water main connection from Oakwood Avenue to route north of Lot 34 and connect to end of Walnut Way water main to remove proposed dead end. Provide provisions, including appropriate valving and tee, for property to the north to connect at the end of Walnut Way.*
- (ii) *Provide provisions for water main extension across Cedar Lake Road at Maple Drive, including appropriate valving and tee.*

- (iii) Adjust the location of isolation valves and hydrants. To simplify this process, schedule a meeting with the Village to discuss placement of water structures.

(d) STORMWATER SEWER SYSTEM:

- (i) The storm sewer system shall have extension so all lots can connect subsoil drain systems. Sump pump service stubs extending from the public storm sewer system shall be installed to receive subsoil drain pump discharge from each lot fronting on a street having curbs and gutters, connecting to a storm sewer of the subdivision drainage system. Service stubs may be installed at the sideline of lots in residential subdivisions in such a manner that two (2) adjacent lots may be served by a single stub. All stubs shall extend one foot (1') inside of the lot line. Where a public storm sewer is installed in a rear or side yard easement on or adjoining a lot, the service stub may be extended from such storm sewer to any point on the lot within one foot (1') of the easement line.

3. COMPLIANCE WITH THE FOLLOWING COMMENTS AND CONDITIONS RECEIVED FROM THE LAKE FIRE PROTECTION DISTRICT IN THEIR LETTER OF MARCH 19, 2025 REQUIRED:

- (a) 2018 IFC 102.7 – Referenced Codes and Standards (District Adopted Code):

The codes and standards referenced in this code, listed in Chapter 80 and Appendixes B, C, D, E, F, G, and I, are hereby incorporated into the Lake Villa Fire Prevention Code and shall be considered part of the requirements of this Code to the prescribed extent of each such reference. Where differences occur between the provisions of this Code and referenced standards, the more restrictive standard shall apply.

- (b) 2018 IFC C105.1 – Hydrant Spacing:

The average spacing between fire hydrants shall not exceed that listed in Table C105.1. The average spacing between hydrants shall be 300 feet due to dead end conditions with the maximum distance from any point on street or road frontage to a hydrant being 175 feet. It appears both developments exceed these distances. Additional hydrants/repositioning is required to meet the code or as otherwise approved by the Village Administrator or his designee.



(c) 2018 IFC D103.1 – Access Road Width with Hydrants:

Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders. Vehicle weight shall also be taken into account with these requirements for road/emergency access specifications. GVWR of the fire district's ladder truck is 76,000 pounds.

(d) 2018 IFC D103.6 – Signs:

Where required by the fire code official, fire apparatus access roads shall be marked with a permanent "NO PARKING – FIRE LANE" signs complying with Figure D103.6. Signs shall have a dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

(e) TWO SEPARATE AND APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED: Petitioner shall design the secondary access road currently designated on the preliminary plat so that such access road's width, weight load capacity, signage and access (i.e. no emergency gate shall be installed) shall constitute a separate and approved fire apparatus access road.

(f) 2018 IFC 507.5.5 – Clear Space Around Hydrants:

A 3-foot clear space shall be maintained around the circumference of fire hydrants.

4. COMPLIANCE WITH THE FOLLOWING COMMENTS AND CONDITIONS RECEIVED FROM THE VILLAGE PLANNER TESKA AND ASSOCIATES IN THEIR MEMORANDUM DATED MARCH 24, 2025:

- (a) The preliminary landscape plan indicates the removal of a large number of existing mature and healthy trees. Some trees are indicated to be preserved, either on or off-site. Petitioner shall indicate what ratio of tree replacement is to occur in compliance with Table V-E6 in Section 10-8-3 of the Village's Zoning Code.

III. COMPLIANCE WITH THE FOLLOWING ADDITIONAL CONDITIONS:

- (1) SIGNAGE PLAN: A revised signage plan shall be submitted by Petitioner which corrects the title of the development to "Cedar Lake Estates", which complies with the all requirements for temporary signs as set forth in the Village's

Signage Regulations, i.e., Article D of Chapter 6, "Zoning Requirements", of Title 10, "Zoning Regulations" including but not limited to requirements as to square footage, height and number, and which provides all required placement, number and size information for all proposed permanent monument signs.

- (2) CONSTRUCTION ACTIVITIES PLAN: Petitioner shall submit a construction activities plan in accordance with Section 10-9-1.8 (A)(m) of the Lake Villa Village Code
- (3) DEVELOPMENT SCHEDULE: Petitioner shall submit a development schedule which is required for preliminary PUD approval pursuant to Section 10-9-1.8 (A)(r) of the Lake Villa Village Code.
- (4) PROPOSED COVENANTS TO BE SUBMITTED AND HOMEOWNERS' ASSOCIATION TO BE ESTABLISHED:
  - (i) *The Petitioner shall submit proposed covenants pursuant to Section 10-9-1.8 (A)(o) of the Lake Villa Village Code.*
  - (ii) Petitioner shall submit more detailed and specific property owners' association information, etc to the Village for final PUD approval pursuant to Section 10-9-1.8 of the Lake Villa Village Code.
- (5) CERTIFICATE OF NO DELINQUENT TAXES: Petitioner shall submit a Certificate of no delinquent taxes pursuant to 10-9-1.8 (A)(n) of the Lake Villa Village Code.
- (6) MARKET IMPACT STUDY: Petitioner shall submit a revised and corrected Market Impact Study utilizing a corrected population for the Village of Lake Villa of approximately 8,625 instead of the 36,363 population used in the study submitted.
- (7) SCHOOL IMPACT STUDY: The school impact study does not use the density formula set forth in the Village's Subdivision regulations which applies to all PUDS. Petitioner shall be required to comply with all school impact fees as calculated utilizing the density formula set forth in the Lake Villa Village Code in Section 11-2-4(H)(4) and not the density formula utilized in the school impact study submitted by Petitioner.
- (8) LIGHTING PLAN: The Petitioner shall submit a lighting plan to the Village that complies in full with all requirements and specifications in the Village's lighting regulations and street lighting regulations and Petitioner shall also comply with the IDNR letter dated November 8, 2024, which provides that any required night lighting should follow International Dark-Sky Association's Five Principles for Responsible Outdoor Lighting to minimize the effect of light pollution on wildlife.

- (9) TREE REMOVAL: Petitioner shall comply with the INDR November 8, 2024 letter that provides that "if tree clearing is necessary, the Department recommends removing trees between November 1st and March 31st to avoid impacts to birds and bats".
- (10) LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE PERMIT/U.S. ARMY CORPS OF ENGINEERS PERMIT OR NO PERMIT REQUIRED LETTER: Petitioner must obtain a Lake County Watershed Development Ordinance permit and shall be required to obtain and submit to the Village all necessary approval(s) or a "no permit required" letter from the Army Corps of Engineers.
- (11) Prior to commencement of construction:
- (a) The developer shall construct or pay for the construction of all landscaping, stormwater management, sanitary sewer, water system improvements required for the Development, all in accordance with the final engineering approved by the Village Administrator.
  - (b) The developer shall pay all required developer school and park impact fees prior to the commencement of construction.
  - (c) The developer shall secure in writing all permits and approvals from the Village, from CLCJAWA, from Fox Lake and Lake County Public Works, for sewer, water and storm sewer service for the Development.
  - (d) The developer shall secure in writing all permits and approvals from The Lake County Division of Transportation for all access, road improvements, or other transportation infrastructure required for the Development.
  - (e) The developer shall file with the Village Treasurer an irrevocable letter of credit in a form acceptable to the Village Attorney and in an amount approved by the Village Administrator.
- (12) Within six (6) months of the Petitioner's acquisition of the development site, the Village shall establish a back-up Special Service Area for the Development with a maximum SSA special tax rate not to exceed 10%. The Petitioner's maintenance obligations for the Development will be secured by the back-up Special Service Area and shall be subject to a 30-day notice and cure period for the following maintenance and other purposes:
- (a) Infrastructure, including but not limited to streets, water and sanitary sewer services, stormwater management improvements, sidewalks, trails, and landscaping. However, this does not include any water mains and sanitary sewer mains, if any, which will be dedicated to and maintained by the Village.

- (b) Maintenance of common areas and amenities.
- (c) Snow removal and ice control within the Development.
- (d) Payment of any unpaid water and sewer bills.

The Village will not levy any special taxes to fund said back-up Special Service Area so long as the Petitioner complies in a timely manner with all of its maintenance obligations for the Development.

- (13) Prior to the issuance of any temporary or final Certificate of Occupancy for the Development, the Petitioner shall provide to the Village “as built” final plans showing the precise location of all improvements to the Subject Property, including all buildings, utilities, streets, sidewalks, trails, detention or retention ponds and drainage swales.
- (14) The Final Plat for the Development shall include the dedication of a blanket easement over, under, across, and through the entire Subject Property for the purpose of maintenance by the Village of the public water and sewer mains at such times and in such circumstances as the Village deems expedient, but the Village shall have the right but not the obligations to do so. The Village shall also have such a blanket easement but not the obligation to perform such maintenance as it deems necessary through such a Special Service Area.
- (15) Approval of the requested variations does not imply and shall not be construed as approving or granting any other variation, waiver, or exception from any other provisions of the Village of Lake Villa Zoning Regulations, the Village of Lake Villa Village Code, or from the provisions of any other ordinances of the Village of Lake Villa.



**DATE:** August 7, 2025

**TO:** Chairman Craig Kressner and Members of the Plan Commission/Zoning Board of Appeals

**FROM:** Michael Strong, Village Administrator

**RE:** Public Hearing – Village-Initiated Rezoning and Zoning Map Amendment for Pleviak School  
Parcels (304 E. Grand Avenue and associated Parcels)

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<u>Property Owner</u>	<u>Property Location</u>	<u>Zoning District</u>
Lake Villa Community Consolidated School District No. 41 304 E. Grand Avenue, 0 N Milwaukee, 0 Villa Avenue and 108 N. Milwaukee Avenue Lake Villa, IL 60046	Northeast Corner of Grand Avenue (IL Route 132) and Milwaukee Avenue (IL Route 83)	R2—Residential - 2 CB—Community Business
Village of Lake Villa Villa Avenue Lake Villa, IL 60046	That portion of Villa avenue extending westerly from Milwaukee Avenue to the westerly lot line of P.I.N. 02-33- 306-032	N/A
<b>Petitioner and/or</b>	Village of Lake Villa 65 Cedar Avenue Lake Villa, IL 60046	
<b>Requested Action</b>	Approval of a Rezoning and Zoning Map Amendment of the Subject Properties to facilitate redevelopment of the Project Site.	

**Summary of Request**

The Village of Lake Villa is requesting a zoning map amendment to rezone multiple parcels that comprise the former Pleviak Elementary School site from R-2 Residential and CB Community Business to CBD Central Business District. This is a Village-initiated application in accordance with an Intergovernmental Agreement (IGA) executed between the Village and Lake Villa School District #41 on May 19, 2025.

This rezoning is intended to facilitate future redevelopment and marketing of the site, consistent with the long-term goals of the Village's Comprehensive Plan and the shared objectives outlined in the executed IGA.

**Background & Project Site Information**

The property is located at the northeast corner of Grand Avenue (IL Route 132) and Milwaukee Avenue (IL Route 83) and encompasses approximately 5.318 acres. The Project Site consists of two (2)

triangular tracts of land generally located along the west side of Milwaukee Avenue north of Grand Avenue and north of Villa Avenue and divided by Villa Avenue.

Tract 1 consists of approximately 3.993 acres and is located along Milwaukee Avenue north of Grand Avenue (Route 134) continuing north to Villa Avenue, and Tract 2 consists of approximately 1.325 acres and is located along the west side of Milwaukee Avenue north of Villa Avenue to its intersection with Milwaukee Avenue. The Subject Property consists of eleven (11) parcels which are commonly known as and are currently zoned and classified as follows in addition to a portion of Villa Avenue, a public Village street approximately 99 feet in width:

Address	Permanent Index Number(s)	Current Zoning
304 E. Grand Avenue, Lake Villa, IL	P.I.N.s 02-33-308-023, -025, -026, and -027	R2 (Residential 2)
0 N. Milwaukee Avenue, Lake Villa, IL	P.I.N.s 02-33-306-016, -017, and -018	R2 (Residential 2)
0 Villa Avenue, Lake Villa, IL	P.I.N.s 02-33-306-032, -033, and -034	CB (Community Business)
108 N. Milwaukee Avenue, Lake Villa, IL	P.I.N. 02-33-306-035	R2 (Residential 2)
Villa Avenue: That portion of Villa Avenue extending westerly from Milwaukee Avenue to the westerly lot line of P.I.N. 02-33-306-032	Not Applicable	Not Applicable

### **Procedural Review**

During the Public Hearing, the Plan Commission/Zoning Board of Appeals will hear the evidence presented by Village Staff, Applicant/Petitioner, and any individuals in the audience wishing to provide public comment, present evidence, and/or cross-examine witnesses relative to the proposed request. At the conclusion of the public hearing, the Plan Commission/Zoning Board of Appeals shall, with the aid and advice of Village Staff, transmit its findings and recommendations as to whether the Rezoning and Zoning Map Amendment should be approved, approved subject to modifications, or not approved.

### **General Standards for Zoning Map Amendments**

According to Section 10-7-6 D of the Village Code, map amendments are legislative in nature and are evaluated against the following discretionary considerations:

1. Whether the proposed amendment is ***consistent with the intent of the Zoning Ordinance*** and its provisions;
2. Whether the proposed amendment ***meets the challenge of changed conditions or changed village policy***;
3. Whether the proposed amendment is ***not detrimental to the development of the Village***; and
4. Whether the proposed amendment is ***consistent with the Village's Official Comprehensive Plan*** and Land Use Map, which is part thereof.

These standards serve as the evaluation framework for zoning map amendment requests.

### **Staff Review and Discussion**

#### **Consistency with Zoning Code Intent:**

- Central Business District (CBD) zoning is intended to promote mixed-use development, pedestrian-oriented design, and commercial vitality in core corridor and downtown areas. This aligns with the objectives behind CBD zoning as laid out in Title 10, Chapter 3.
- The current split zoning (R-2 + CB) across the Project Site hampers unified development potential. Rezoning to CBD consolidates and aligns the zoning with redevelopment aspirations.

#### **Consistency with Changing Conditions or Policy:**

- The site is officially owned by the School District and is vacant, following decommissioning of the elementary school.
- An Intergovernmental Agreement executed on May 19, 2025 anticipates rezoning the site for marketing and redevelopment purposes.
- The Village and School District have confirmed that changing land use expectations (from institutional/residential to commercial or mixed-use development) justify the rezoning initiative.

#### **Non-Detrimental to Village Development:**

- Rezoning supports reinvestment, avoids spot zoning risks (since it is Village-initiated and intends broader site benefit), and does not confer special individual privileges in isolation.
- CBD zoning offers greater flexibility for future site use, aligning with broader corridor development rather than destabilizing adjacent residential neighborhoods.
- There are no known negative impacts to surrounding development. No incompatible high-intensity industrial uses are proposed or allowed under CBD Zoning, and future redevelopment will be evaluated through standard site plan and design review processes, or public hearings, depending on the nature of the future proposed use of the site.

#### **Comprehensive Plan Alignment:**

- The Lake Villa Comprehensive Plan (2011, amended 2017) designates the Grand Avenue corridor, including the Pleviak School site, as a priority redevelopment/infill area for mixed-use development.
- This site is identified as a key transitional node between Downtown Lake Villa and adjacent commercial areas, suitable for mixed-use or civic-oriented redevelopment.
- Rezoning to CBD directly implements Comprehensive Plan goals such as:
  - Promoting infill development and adaptive reuse of vacant or institutional sites.
  - Supporting economic development via expansion of commercial, service, and residential opportunities.

*Future Land Use Map from Village of Lake Villa Comprehensive Plan, 2022 shows property planned for Mixed-Use Development*



- Strengthening Downtown corridor character, walkability, and connectivity.



**Recommendation by Village Staff**

Village Staff have is recommending that the Plan Commission/Zoning Board of Appeals grant approval of the Rezoning and Zoning Map Amendment, as presented.

Should the Plan Commission/Zoning Board of Appeals recommend approval, this matter will be forwarded to the Village Board for consideration at its September 2, 2025 meeting.

**Attachments**

- Petitioner Application Materials
- Legal Notice of Public Hearing

INTERGOVERNMENTAL AGREEMENT BETWEEN  
LAKE VILLA COMMUNITY CONSOLIDATED SCHOOL DISTRICT NO. 41 AND  
THE VILLAGE OF LAKE VILLA REGARDING THE  
TRANSFER OF CERTAIN SCHOOL DISTRICT PROPERTIES TO THE VILLAGE

(RE: 0 N. Milwaukee Avenue, 0 Villa Avenue,  
108 N. Milwaukee Avenue, and 304 E. Grand Avenue)

THIS INTERGOVERNMENTAL AGREEMENT ("Agreement") is entered into as of the 19<sup>th</sup> day of May 2025, by and between the Board of Education of Lake Villa Community Consolidated School District No. 41, Lake County, Illinois ("Board of Education" or the "School District") and the Village of Lake Villa ("Village"). The School District and the Village are sometimes referred to herein individually as a "Party" and/or collectively referred to as the "Parties":

WITNESSETH:

WHEREAS, the School District owns certain properties located within the Village, including but not limited to the Pleviak Elementary School site located at 304 East Grand Avenue, Lake Villa, Illinois which is no longer needed or used by the Board of Education for educational purposes, as well as properties adjacent thereto, which properties collectively consist of the following:

- (1) 304 E. Grand Avenue, Lake Villa, IL (P.I.N.s 02-33-308-023, -025, -026, -027);
  - (2) 0 N. Milwaukee Avenue, Lake Villa, IL (P.I.N.s 02-33-306-016, -017, -018);
  - (3) 0 Villa Avenue, Lake Villa, IL (P.I.N.s 02-33-306-032, -033, -034); and
  - (4) 108 N. Milwaukee Avenue, Lake Villa, IL (P.I.N. 02-33-306-035);
- (all collectively referred to herein as the "School District Properties" (legally described on Group Exhibit A hereto)); and

WHEREAS, the School District and the Village desire to cooperate in the redevelopment of the School District Properties to benefit the Village, the School District, and the region; and

WHEREAS, Article VII, Section 10 of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1, et seq., authorize and encourage units of local government to enter into intergovernmental agreements with one another; and

WHEREAS, the School District lies partly within and partly outside of the boundaries of the Village; and

WHEREAS, the Local Government Property Transfer Act, 50 ILCS 605/0.01 et seq., authorizes certain units of local government to transfer land for any public purpose under such terms and conditions as they shall mutually agree upon; and

WHEREAS, the Illinois Municipal Code, 65 ILCS 5/11-61-1, et seq., including but not limited to 65 ILCS 5/11-76.1-1, et seq., authorize the Village to acquire real property for municipal purposes; and

WHEREAS, it is the mutual desire of the Parties hereto to cooperate with one another to achieve the economic development of the School District Properties, and to that end, the Parties wish to provide for the related transfers in ownership of the School District Properties to the Village, all in accordance with the terms and conditions set forth in this Agreement; and

WHEREAS, subject to the express conditions precedent as set forth in this Agreement, the properties to be conveyed by the School District by warranty deed to the Village in fee simple title shall be collectively sometimes referred to in this Agreement as the "School District Properties", are depicted and legally described on the ALTA Survey attached hereto as part of Group Exhibit A and thereby made a part hereof, and are intended for use by the Village and/or by one or more developers selected by the Village; and

NOW, THEREFORE, in consideration of the terms and conditions contained in this Agreement, and other good and valuable consideration, the receipt of which is hereby acknowledged, the School District and the Village agree as follows:

1. Recitals: The Parties hereto find that the recitals to this Agreement are true and correct and that each of the foregoing recitals is hereby incorporated herein by reference as their respective findings of fact the same as if each had been set forth in its entirety in the body of this Agreement.
2. Cooperation: The Parties hereto agree to and shall mutually cooperate in good faith in the implementation of this Agreement and the successful completion of the contemplated related transfers by the School District to the Village of the School District Properties which are the subject of this Agreement and to provide for the transfer of the School District Properties to the Village to facilitate the redevelopment of the School District Properties to enhance the respective tax bases of both the Village and the School District.
3. Marketing, Use and Proceeds:
  - A. The Village will endeavor to market and sell the School District Properties to one or more private parties for economic development purposes. The Village shall not approve any future educational use of any of the School District Properties. Within sixty (60) days following transfer any of the School District Properties to the Village, and before the sale and the transfer of any of the School District Properties to any third party purchaser(s), the Village agrees to apply for and seek a Zoning Map amendment to re-zone the applicable School District Properties from Community Business (CB) and Residential 2 (R2) to the Commercial Business District (CBD).
  - B. The Village shall endeavor to obtain one or more purchasers of the School District Properties on such other terms and conditions as are consistent with this Intergovernmental Agreement and mutually acceptable to the Parties. If the Village is able to secure one or more purchasers of the School District Properties, the

Village shall provide written notice thereof to the School District detailing the proposed terms and conditions of the sale. If the terms of such offers are mutually acceptable to the Parties, the Village and the School District shall close on the transfer of the School District Properties to the Village on a date to be mutually agreed upon, which must be no later than the date on which the Village is obligated to transfer the School District Properties to one or more third-party developers of such sites. If the Village fails to provide the notice in substantial compliance with this Intergovernmental Agreement, the School District shall have no obligation to transfer the School District Properties or to comply with any other terms and conditions of this Intergovernmental Agreement until the Village has provided such notice.

- C. The Village shall transfer eighty percent (80%) of the respective proceeds received from any sale of the School District Properties to one or more third party purchaser(s) to the School District within three (3) business days of receipt. The Village shall retain twenty percent (20%) of the proceeds of the sale, which the Village will use to pay for expenses reasonably related to the Village's purchase of the School District Properties and any subsequent sale(s) to third parties, including the reasonable costs incurred by the Village for marketing and transferring the School District Properties, the legal fees incurred by the Village for its purchase(s) and its subsequent sale(s), the cost of any environmental investigation(s), the cost of an updated ALTA survey, and the cost of an updated title commitment. The Village Treasurer shall prepare an accounting of all such expenses within ninety (90) days of the transfer of the sale of any of the School District Properties to one or more third-party purchaser(s). If the total expenses exceed the twenty percent (20%) of proceeds retained by the Village, the Village shall retain the full twenty percent (20%) of proceeds. If the total expenses are less than twenty percent (20%) of proceeds of the sale, the difference (20% less the total expenses) shall be transferred to the School District with the accounting. Village shall provide the School District with an estimate of costs incurred to date by the Village, upon periodic requests from the School District and prior to any transfer of any of the School District Properties to the Village. For avoidance of doubt, the following Village costs shall not be reimbursed from the proceeds: cost of maintaining or repairing the School District Properties or the cost of any real estate agent/broker fees or commissions. If the real estate transfer occurs in phases, the Village's accounting for the expenses related to each transfer shall be divided as follows: (i) 85% of expenses shall be accounted for after the closing on Phase I Properties (as defined below), and (ii) the remaining expenses shall be accounted for after the closing on Phase II Properties (as defined below).
- D. The Village agrees that pursuant to Section 65 ILCS 5/11-76-4.1 of the Illinois Municipal Code, the total purchase price of the School District Properties in the aggregate shall not be less than eighty percent (80%) of an MAI appraised value of the land AS-IS without considering the value of any existing improvements on the School District Properties given that such structures are expected to be demolished at a later date. The Parties agree that neither Party will be obligated to demolish the existing structures on the School District Properties prior to the sale or marketing of

those properties for sale to third parties, but that future development of the School District Properties will likely require demolition of such structures by the third-party purchaser(s) so the structures shall have no value for purposes of such appraisal(s).

4. Remediation:

- A. Subject to the terms and conditions contained in this Agreement, and in consideration for the School District's donation, i.e., transfer without compensation, to the Village of fee simple title to the School District Properties:
- (1) Prior to any transfer of the title of 108 N. Milwaukee (P.I.N. 02-33-306-035) of the School District Properties to the Village, the School District shall secure and record with the Lake County Recording Division of the County Clerk's Office "No Further Remediation" letter for 108 N. Milwaukee Avenue.
  - (2) The School District hereby agrees to hold harmless and indemnify the Village, its elected and appointed officers, officials, employees and agents, for any claims relative to any and all recognized environmental conditions on the School District Properties, which obligation by the School District shall survive the expiration of this Agreement.

5. Optional Phased Transfer:

- A. In the event that the School District has not received a "No Further Remediation" letter for 108 N. Milwaukee Avenue (P.I.N. 02-33-306-035) and Villa Avenue from the Illinois Environmental Protection Agency ("IEPA"), the Village may elect, in its sole discretion, to separate the transfer of the School District Properties into the following two (2) phases:

PHASE I: The transfer of those parcels in the School District Properties to the South of Villa Avenue, consisting of the following:

- (1) 304 E. Grand Avenue, Lake Villa, IL (P.I.N.s 02-33-308-023, -025, -026, and -027) ("Phase I Properties").

PHASE II: The transfer of those remaining parcels in the School District Properties to the North of Villa Avenue, consisting of the following:

- (1) 108 N. Milwaukee Avenue, Lake Villa, IL (P.I.N. 02-33-306-035);
  - (2) 0 N. Milwaukee Avenue, Lake Villa, IL (P.I.N.s 02-33-306-016, -017, -018); and
  - (3) 0 Villa Avenue, Lake Villa, IL (P.I.N.s 02-33-306-032, -033, -034) (Collectively, the "Phase II Properties").
- B. If the Village elects to proceed with a phased transfer of the School District Properties as described in Item (5)(A) above, all terms of this Agreement shall apply to both

Phase I and Phase II of such a phased transfer. For avoidance of doubt, the transfer of any of the School District Properties to a third party must be upon terms and conditions consistent with this Intergovernmental Agreement and mutually acceptable to the Parties.

- C. Notwithstanding Items (5)(A) and (B) above, should the School District not secure and record with the Lake County Recording Division of the County Clerk's Office a "No Further Remediation" letter for 108 N. Milwaukee Avenue, the Village, in its sole discretion, and at no penalty to the Village, may refuse to proceed with the Phase II transfer to the Village of 108 N. Milwaukee Avenue, Lake Villa, IL (P.I.N. 02-33-306-035).
  - D. For a period of five (5) years, following the expiration of the term of this Agreement, the Village shall retain a right of first refusal to purchase the Phase II Properties if the Parties proceeded with and completed the Phase I transfer. Pursuant to this right of first refusal, the School District shall provide the Village with not less than thirty (30) days to provide written notice that it will match, or exceed, any offer to the School District made by any third party to purchase the Phase II Properties. .
6. Shared Storm Water Detention Facilities: One or more storm water detention area(s) will be constructed as part of the redevelopment project consistent with the requirements of the Village of Lake Villa Watershed Development Ordinance, and Lake County Department of Transportation ("LDOT") and Illinois Department of Transportation ("IDOT") permit requirements in order to accommodate storm water runoff and related improvements, and the Village's need for portions of the School District Properties is, in part, for the purpose of accommodating such storm water detention area(s).
7. Surveys and Title Insurance:
- A. Prior to any transfer, the School District shall provide a corrected version of the ALTA survey of the School District Properties, dated 09/13/23. The expense for which corrected survey, if any, shall be paid by the Village out of the Village's 20% share of the proceeds from the sale of the School District Properties. A copy of the existing survey is attached hereto as part of Group Exhibit A and thereby made a part hereof.
  - B. The School District shall also provide to the Village an updated ALTA title commitment for each of the School District Properties issued by Chicago Title Insurance Company (the "Title Company") in a minimum amount of Ten Thousand Dollars (\$10,000.00) per parcel, which shall also be paid from the Village's 20% share of proceeds allocated for the Village's expenses (if paid by the Village). The School District shall cooperate with the Village in obtaining extended coverage over general exceptions, if any, raised on the title commitment. The cost of extended coverage shall be paid by the Village.
8. Closing(s):

- A. The School District shall transfer the School District Properties to the Village at no cost to the Village, all pursuant to the terms, required conditions, and requirements of the Local Government Property Transfer Act, 60 ILCS 605/0.01, et seq. and this Agreement.
- B. Closings shall occur at the Chicago Title office closest to Lake Villa and at times mutually agreeable to the Parties or their respective attorneys (the "Closing Date"). Possession of each of the respective School District Properties shall be delivered to the Village not later than at the closing for same, and full, unencumbered, complete and unrestricted possession, use, control, and quiet enjoyment of the respective School District Properties shall be delivered to the Village and then to the developer(s) purchasing the respective School District Properties from the Village at the respective closings for same, and each of such School District Properties shall be unoccupied and not subject to any written or oral lease as of closing.
- C. The closings of the conveyance of the respective School District Properties shall be closed through Chicago Title Insurance Company in a manner as mutually agreed upon by the Village and the School District. The closing expenses, including but not limited to Chicago Title escrow fees, the cost of any updated title insurance, the cost of any updated survey, and the cost of the Village's environmental investigation(s) into the School District Properties, shall be paid from the Village's 20% share of the proceeds (if paid by the Village). The parties shall cooperate in such closing and provide executed ALTA Statements, Affidavit(s) of Title, and such other closing documents as required by the Title Company in order to complete the contemplated transactions and convey unencumbered title for any and all parcels transferred to the Village.
- D. Additional Documents: In addition to all other documents herein required, each Party shall furnish to the other Party and to the title company and deposit into escrow a certified copy of such Party's respective Resolution(s) and/or Ordinance(s) approving this Agreement and the transfers of the real estate as herein authorized.
- E. At the Closing(s), the School District shall convey or cause to be conveyed to the Village or the Village's nominee by recordable special warranty deed (the "Deed") the School District Properties on an AS-IS basis, subject to the School District's obligation to indemnify the Village for any and all recognized environmental conditions, subject to (a) general real estate taxes not due and payable as of the date of the Closing; (b) acts of Village; and (c) covenants, conditions and restrictions of record; all easements; special governmental taxes or assessments for improvements not yet completed; unconfirmed special governmental taxes or assessments, and (d) those items listed on Exhibit B hereto ("**Permitted Exceptions**"). Items which are not permitted exceptions specifically detailed herein shall be considered unpermitted exceptions. The School District makes no representations as to the condition, permissible uses or otherwise relating to the School District Properties unless specifically provided for in this Intergovernmental Agreement. The Village assumes all risks associated with the School District Properties upon their transfer to the Village, except as provided in Section 4(A)(2) of this Agreement. The Deed shall contain the following covenant:

“Grantor grants all the above-described real property to Grantee on the condition that at no time during the next twenty (20) years from the date of recording of this deed shall the above-described real property be used as a public, private, nonpublic and/or charter school institution serving any grades between kindergarten through grade twelve (12). Grantor may recover its reasonable attorneys’ fees and costs of litigation from a future titleholder of the above-described real property if such future titleholder is found by a court of competent jurisdiction to have violated this restriction.”

- F. Such Closing shall not occur until Village has entered into an agreement with a third party to purchase any portion of the School District Properties and after all contingencies have expired. If, after transfer of a School District Property to the Village, the Village fails to transfer that School District Property to the third party, Village shall promptly transfer title back to the School District, at the Village’s cost unless the School District agrees otherwise.

9. General Terms, Miscellaneous:

- A. Term and Termination; Extension or Renewal: The term of this Agreement shall commence the day and year on which the Agreement is signed by all Parties and shall remain in full force and effect for a period of five (5) years or until and unless terminated by written notice of either Party. This Agreement may be terminated at any time upon thirty (30) days’ advance written notice by either Party. The Agreement may be extended or renewed by mutual written agreement of the Parties.
- B. Effective Date: This Agreement shall become effective as of the date the last Party hereto executes this Agreement.
- C. Assignment: Neither party may assign, transfer or otherwise convey its rights or obligations under this Agreement without the prior written consent of the other party.
- D. Indemnification:
- (1) To the fullest extent permitted by law, each Party to this Agreement agrees to indemnify, defend and hold harmless the other Party and their respective appointed and elected officials, officers, employees, representatives and agents, from and against any and all injuries, damages, liabilities, losses, costs, expenses, claims, demands, judgments, causes of action or attorneys’ fees and litigation expenses, arising out of this Agreement between the Parties, but only to the extent such losses arise from the negligence or willful conduct of the indemnifying Party.
  - (2) Nothing contained herein shall be construed as prohibiting any of the Parties from defending, through the selection and use of their own agents, attorneys, and experts and claims, actions or suits brought against them.



- (3) Nothing contained in this section or in any other provision of this Agreement is intended to constitute nor shall it constitute a waiver of the defenses available to the Parties by statute, common law or otherwise, including those provided by the Local Governmental and Governmental Employees Tort Immunity Act (745 ILCS 10/1-101, *et seq.*).
- E. **No Personal Liability:** No covenant or agreement contained in this Agreement shall be deemed to be the agreement of any official, officer, member, manager, director, agent, employee, consultant or attorney of the Village or the School District in his or her individual capacity and no official, officer, member, manager, director, agent, employee, consultant, or attorney of the Village or the School District shall be personally liable under this Agreement or be subject to any personal liability or accountability by reason for or in connection with or arising out of the execution, delivery, and performance of this Agreement, or any failure in connection therewith.
- F. **Policies:** Each Party shall follow its own policies and protocols with regard to this Agreement.
- G. **Illinois Freedom of Information Act ("FOIA"):** The Parties agree to comply with all state and federal laws and regulations governing the release of records relating to this Agreement including, but not limited to, the Freedom of Information Act (5 ILCS 140/1, *et seq.*). The Parties will cooperate with each other with any request for public records made pursuant to FOIA by providing full access to and copying of all relevant records within a time period which allows the other party to timely comply with the time limits imposed by FOIA. The obligations imposed by this Section shall survive the termination of the other obligations imposed by this Agreement.
- H. **Compliance with Law:** The Village and School District shall observe and comply with the laws, ordinances, regulations, and codes of Federal, State (Illinois), and County agencies that may in any manner affect the performance of this Agreement.
- I. Time shall be of the essence in this Agreement.
- J. This Agreement and the exhibits attached hereto and thereby made a part hereof constitute the entire agreement of the Parties in these matters and shall supersede and nullify all prior drafts and agreements concerning such matters.
- K. Paragraph titles are descriptive only and do not define or in any other way limit the contents of each paragraph. Words of the masculine gender shall be read to include the feminine and neuter genders, and the singular shall include the plural.
- L. If any provision of this Agreement shall be declared invalid for any reason, such invalidation shall not affect any other provision of this Agreement which can be given effect without the invalid provision and to that extent, the provisions of this Agreement are severable.

- M. This Agreement shall be governed, interpreted, and construed in accordance with the applicable laws of the State of Illinois. Both the School District and the Village and their respective counsel have fully participated in the drafting of this entire Agreement and all of the provisions hereof, and neither Party shall be considered the drafter of this Agreement or any particular provision thereof for the purposes of the interpretation hereof. Any reference to laws, ordinances, rules, or regulations of any kind shall include such laws, ordinances, rules, or regulations of any kind as they may be amended or modified from time to time hereafter.
- N. Each Party represents and warrants to the other Party that the person whose name appears on the signature page below is or has been delegated the lawful and corporate authority to enter into this Agreement on behalf of that Party and that such Party has full authority to execute this Agreement and fulfill the terms, conditions, provisions, and obligations herein provided.
- O. This Agreement is entered into solely for the benefit of the Parties, and nothing in this Agreement is intended, either expressly or impliedly, to provide any right or benefit of any kind whatsoever to any person or entity, who is not a party to this Agreement, or to acknowledge, establish or impose any legal duty to any third party. This Agreement shall be binding upon and shall inure to the benefit of the respective successors and assigns of the Parties. In the event either Party should breach this Agreement, either prior to or subsequent to closing, the other Party may pursue any and all remedies provided at law or in equity. Only the respective Parties to this Agreement, the Village and the School District, and no third party, shall have the right to enforce this Agreement.
- P. Nothing contained in this Agreement, nor any act of the Village or the School District, respectively, shall be deemed or construed by the Parties or by third persons to create any relationship of a third-party beneficiary, principal, agent, limited or general partnership, joint venture, or any association or relationship involving the Village or the School District respectively or to render either of said Parties liable for the debts or obligations of the other Party, except as expressly provided in this Agreement. The Village and the School District shall each be responsible for their own legal expenses incurred with respect to the preparation and review of this Agreement and with respect to the real estate transactions as contemplated herein.
- Q. Whenever in this Agreement the Village or the School District are required to perform any act or obligation, and either party, as the case may be, is unable to perform or complete such act or obligation because of a Force Majeure (i.e., an event that is the result of the force(s) of nature), or because of another occurrence beyond that Party's control, including but not limited to litigation initiated by any third party, then upon the occurrence of any such Force Majeure or of such other occurrence as described above, the time period for the performance and completion of such act or obligations shall be extended for a reasonable time to accommodate the delay caused by the Force Majeure or by such other occurrence as described above.

- R. No delay or omission by any of the Parties in exercising any right or power accruing upon the non-compliance or failure of performance under this Agreement shall impair any such right or power or be construed to be a waiver thereof. A waiver by any of the Parties of any of the covenants, conditions or agreements contained in this Agreement or to be performed under the terms of this Agreement shall not be construed to be a waiver of any subsequent breach thereof or of any other covenant, condition or agreement contained in this Agreement.
- S. Any alteration, change or modification of this Agreement, in order to become effective, shall be made by written instrument or endorsed on this Agreement and, in each such instance, executed on behalf of each Party to this Agreement as aforesaid.
- T. This Agreement may be executed in one or more identical counterparts, which when affixed together, will constitute the entire Agreement.
- U. If a third party files suit in any court challenging the validity of this Agreement or any transactions contemplated herein, the parties shall cooperate in the defense.
- V. Every notice, demand or consent, including but not limited to notice of termination of this Agreement, or other document or instrument required or desired to be given to the parties to this Agreement shall be in writing and shall be deemed to have been given by email upon transmission to the email addresses set forth below, if delivered by overnight courier (with evidence of receipt), or mailed by certified United States mail, postage prepaid, return receipt requested, or by facsimile transmission with proof of transmission sent by U.S. mail within twenty-four (24) hours of such transmission addressed as to the respective parties at the addresses stated below:

If to the School District: Lake Villa Community Consolidated  
School District No. 41  
131 McKinley Avenue  
Lake Villa, IL 60046  
Attention: Superintendent  
Email: skeim@district41.org

With a copy to the attorney  
for the School District: Kerry B. Pipal, Attorney at Law  
Hodges, Loizzi, Eisenhammer, Rodick & Kohn  
500 Park Boulevard, Suite 1000  
Itasca, IL 60143  
Email: Kpipal@hlerk.com

If to the Village of Lake Villa: Village of Lake Villa  
65 Cedar Avenue  
Lake Villa, IL 60046  
Attention: Village Administrator  
Email: MStrong@lake-villa.org

With a copy to the attorney  
for the Village:

Rebecca Bateman Alexopoulos,  
Attorney at Law  
Bateman Law Offices, Ltd.  
1000 Hart Road, Suite 170  
Barrington, IL 60010  
Email: [rbateman@batemanlawltd.com](mailto:rbateman@batemanlawltd.com)

Any party may change the place or person for the giving of notices upon it by giving not less than ten (10) days prior written notice informing the other party of the change in the address or persons to which notices shall be sent. A notice given by mail shall be deemed given three (3) business days following the day on which such notice is deposited in the United States mail as aforesaid.

IN WITNESS WHEREOF, the parties hereto, pursuant to the authority of their respective Corporate Authorities, have caused this Agreement to be executed, attested, and delivered by its duly authorized officers as of the day and date written above.

BOARD OF EDUCATION OF LAKE  
VILLA COMMUNITY CONSOLIDATED  
SCHOOL DISTRICT NO. 41

By: [Signature]  
Board President

Attest: [Signature]  
Secretary

Dated: 05-19-2025

VILLAGE OF LAKE VILLA

By: [Signature]  
James McDonald, Mayor

Attest: [Signature]  
Connie Olker, Village Clerk

Dated: 19 MAY 25

**GROUP EXHIBIT A**

**LEGAL DESCRIPTION OF THE SCHOOL DISTRICT PROPERTIES  
AND ALTA SURVEY**

**TRACT 1:**

**PARCEL 1:**

LOTS 1, 2, 3, 4, 27 AND 28 IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

AND

THAT PART OF SAID BLOCK DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE NORTHEAST CORNER OF LOT 2 IN SAID BLOCK, AND RUNNING THENCE EAST 30 FEET TO THE NORTHWEST CORNER OF LOT 1 IN SAID BLOCK; THENCE SOUTHERLY ON THE WEST LINE OF SAID LOT 1 TO THE SOUTHWESTERLY CORNER THEREOF; THENCE WEST PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF LOT "A" TO THE NORTH LINE OF GRAND AVENUE (FORMERLY KNOWN AS FOX LAKE ROAD); THENCE WEST 15 FEET TO THE SOUTHEAST CORNER OF LOT 28 IN SAID BLOCK; THENCE NORTH TO THE NORTHEAST CORNER OF SAID LOT 28; THENCE WESTERLY TO THE NORTHEAST CORNER OF LOT 26, IN SAID BLOCK; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 26 EXTENDED, 15 FEET; THENCE WEST, PARALLEL TO THE NORTH LINE OF SAID LOT 26, 30.07 FEET; THENCE NORTH 15 FEET TO THE SOUTH LINE OF LOT 4 IN SAID BLOCK AT A POINT 30 FEET EAST OF THE SOUTHWEST CORNER THEREOF; THENCE EAST TO THE SOUTHEAST CORNER OF LOT 2 IN SAID BLOCK AND THENCE NORTH TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

AND

LOT A IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

EXCEPT THAT PART THEREOF DEDICATED TO THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS FOR RIGHT OF WAY BY DOCUMENT NO. 6598039, DESCRIBED AS FOLLOWS, TO WIT:

THAT PART OF LOTS 1 AND A IN BLOCK 3 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE

PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35 SECONDS EAST, ON THE EAST LINE OF SAID LOTS, 371.10 FEET TO A POINT OF CURVATURE; THENCE SOUTHWESTERLY ON A 30.00 FOOT RADIUS CURVE CONCAVE NORTHWESTERLY, 66.11 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 26 DEGREES 52 MINUTES 27 SECONDS WEST, 53.52 FEET TO THE SOUTH LINE OF SAID LOT A; THENCE NORTH 89 DEGREES 59 MINUTES 30 SECONDS WEST, ON SAID SOUTH LINE, 74.13 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 85 DEGREES 01 MINUTE 53 SECONDS EAST, 34.58 FEET TO A POINT 3.00 FEET NORMALLY DISTANT NORTH OF SAID SOUTH LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 65 DEGREES 01 MINUTE 33 SECONDS EAST, 56.83 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 00 DEGREES 27 MINUTES 02 SECONDS EAST, 22.98 FEET TO A POINT 8.50 FEET NORMALLY DISTANT WEST OF SAID EAST LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH SAID EAST LINE, 369.73 FEET TO THE NORTH LINE OF SAID LOT 1 AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE SOUTH 84 DEGREES 20 MINUTES 56 SECONDS EAST, ON SAID NORTH LINE, 11.42 FEET TO THE POINT OF BEGINNING.

**PARCEL 2:**

LOT 5 (EXCEPT THE WEST 20 FEET THEREOF DEDICATED TO THE VILLAGE OF LAKE VILLA BY DOCUMENT NO. 2064560) IN BLOCK 3 IN THE FOWLER SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY, NOW LAKE VILLA, IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920, AS DOCUMENT NO. 192902, IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

**PARCEL 3:**

LOT 26 IN BLOCK 3 IN FOWLER'S SUBDIVISION, A SUBDIVISION IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, TOGETHER WITH THAT PORTION OF THE ALLEY LYING NORTH AND ADJOINING THE EAST 30 FEET OF LOT 26, VACATED BY ORDINANCE RECORDED FEBRUARY 16, 1927, AS DOCUMENT NO. 294303.

**PARCEL 4:**

PART OF A VACATED ALLEY IN BLOCK 3 LYING WESTERLY OF THE WEST LINE OF LOT "A" IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF LOT 1 IN BLOCK 3 IN SAID FOWLER'S SUBDIVISION; THENCE NORTH 87 DEGREES 10 MINUTES 39 SECONDS WEST, ALONG A LINE PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15.00 FEET; THENCE SOUTH 01 DEGREES 00 MINUTES 20 SECONDS EAST PARALLEL WITH THE WEST LINE OF LOT "A", 205.25 FEET TO THE NORTH LINE OF GRAND AVENUE (FORMERLY KNOWN AS FOX LAKE ROAD); THENCE NORTH 89 DEGREES 59 MINUTES 42 SECONDS EAST, ALONG SAID NORTH LINE; 15.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT "A"; THENCE NORTH 01 DEGREES 00 MINUTES 54 SECONDS WEST ALONG SAID WEST LINE, 204.50 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

Address: 108 N. Milwaukee Avenue, Lake Villa, Illinois 60046

**Lake County Permanent Index Numbers:**

02-33-306-016  
02-33-306-017  
02-33-306-018  
02-33-306-032  
02-33-306-033  
02-33-306-034  
02-33-306-035

**TRACT 2**

**PARCEL 1:**

LOTS 30, 31 AND 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT NO. 6612158, DESCRIBED AS FOLLOWS, TO WIT:

THAT PART OF LOT 31 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHERNMOST CORNER OF SAID LOT 31; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35

SECONDS EAST, ON THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 147.97 FEET TO A POINT OF CURVATURE ON THE EAST LINE OF SAID LOT 31; THENCE SOUTH ON A 20.00 FOOT RADIUS CURVE, CONCAVE WESTERLY, ON THE EAST LINE OF SAID LOT 31, AN ARC DISTANCE OF 17.26 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 11 DEGREES 31 MINUTES 50 SECONDS EAST, 16.73 FEET TO A POINT 7.00 FEET NORMALLY DISTANT WEST OF THE NORTHEAST LINE OF SAID LOT 31; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 163.12 FEET TO THE NORTHWEST LINE OF SAID LOT 31; THENCE NORTH 53 DEGREES 18 MINUTES 12 SECONDS EAST, ON SAID NORTHWEST LINE, 7.00 FEET TO THE POINT OF BEGINNING.

AND

EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT NO. 6596339, DESCRIBED AS FOLLOWS, TO WIT:

THE NORTHEAST 7.00 FEET OF LOT 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

LOTS 33 AND 34 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

PARCEL 3:

LOTS 28 AND 29 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

Address: 304 East Grand Avenue, Lake Villa, Illinois 60046

Lake County Permanent Index Numbers:

02-33-308-023

02-33-308-025

02-33-308-026

02-33-308-027



**EXHIBIT B**  
**PERMITTED EXCEPTIONS**

1. Grant of Easement for sanitary sewer lines dated May 22, 1980 and recorded June 16, 1980 as document 2064559 made by and between the Regional Board of School Trustees of lake County for the use and benefit of Lake Villa Community Consolidated School District #41 and the Village of Lake Villa, an Illinois municipal corporation and the terms, provisions and conditions therein contained.
2. Grant of Easement for sanitary sewer lines dated March 3, 1958 and recorded March 26, 1958 as document 984905 made by and between the Regional Board of School Trustees of Lake County for the use and benefit of Lake Villa Community Consolidated School District #41 and the Village of Lake Villa, an Illinois municipal corporation and the terms, provisions and conditions therein contained. (Affects the West 10 feet of Lot 28)
3. Ordinance 13-1260 by the Lake County, establishing Special Service Area Number 16, recorded November 20, 2013 as document number 7056656.  
  
Special Service Area Certificate recorded December 4, 2013 as document 7059959.  
  
Parcel Valuation Certificate recorded December 4, 2013 as document 7059960.
4. Building setback lines, Easements, Covenants, conditions and restrictions as contained in the plat of Fowler's Subdivision recorded as document number 192902.
5. Terms, provisions and conditions of Ordinance No. 137 entitled An Ordinance Vacating Certain Alleys and Portions of Alleys in the Village of Lake Villa recorded February 16, 1927 as document 294303.
6. Rights of public or quasi-public utilities, if any, in the vacated street or alley.
7. Rights of the Municipality, the State of Illinois, the Public and adjoining owners, in the vacated street and alleys.
8. Rights of the public, the municipality and the State of Illinois in and to that part of the land, if any, taken and used for roads and highways.
9. Rights of way for drainage ditches, tile, feeders and laterals, and other drainage easements, if any.

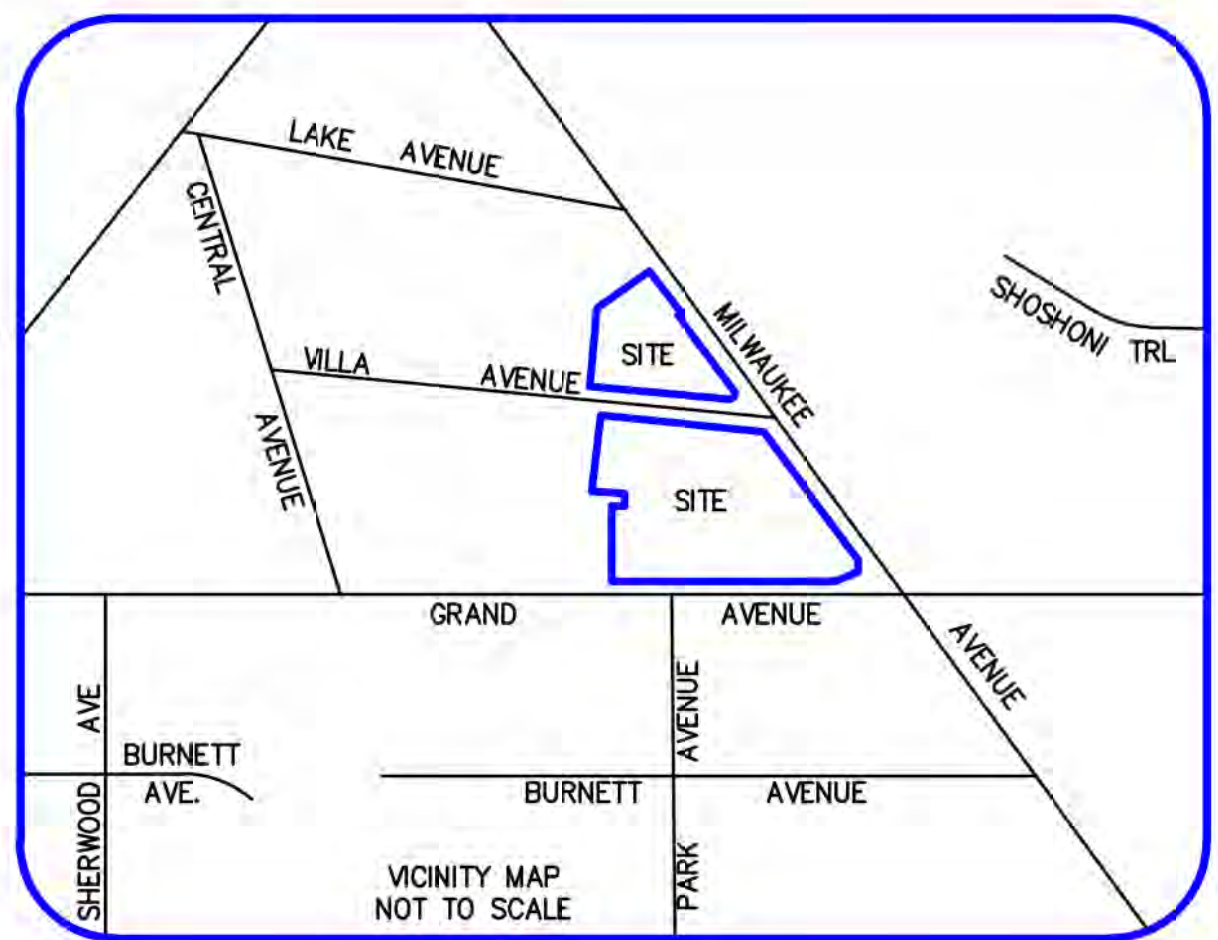
1341739.3



# ALTA/NSPS LAND TITLE SURVEY AND TOPOGRAPHIC SURVEY

## SURVEYOR'S NOTES

- The legal description and utility easements shown hereon have been provided by Old Republic National Title Insurance Company, Commitment policy #N0220212276 dated November 18, 2022, Revision Number 11-14-2023. The title information shown hereon is exclusively that provided to the Surveyor by the Title Insurer or the client. The Surveyor does not warrant the exact location of the Utility Easements shown hereon, but does state that they are located as accurately as possible from the information provided.
- Based on Flood Insurance Rate Map, Panel No. 17087C0037K, dated September 18, 2013, the subject property lies within Zone "X", areas determined to be outside the 0.2% annual chance floodplain.
- Distances are marked in feet and decimal places thereof, no dimension shall be assumed by scale measurement hereon. Distances and/or bearings shown with a "D" in parenthesis (D) are record or deed values, not field measured.
- Compare this plat, legal description and all survey monuments before building, and immediately report any discrepancies to the surveyor.
- The location of the property lines shown on the face of this plat are based on the legal description contained in the title commitment and shown hereon. This information has been furnished by the client and compared to record deeds to check for gaps and/or overlaps. However, this survey may not reflect historical matters of title and ownership that have not been disclosed by the title commitment.
- Only the improvements which were visible from above ground at time of survey and through a normal search and walk through of the site are shown on the face of this plat. Lawn sprinkler systems, if any, are not shown on this survey.
- Manholes, inlets and other utility risers or grates shown hereon are from field location of such, and only represent such utility improvements which are visible from above ground survey at the time of survey, through a normal search and walk through of the site. The labeling of these manholes (sanitary, water, etc) are based solely on the "stamped" markings on the rim. No underground observations have been made to verify the actual use or existence of underground utilities.
- Surface indications of utilities on the surveyed parcel have been shown. Underground and affixed observations have not been made to determine the extent of utilities serving or existing on the property and/or private records have not been searched to provide additional information. Overhead wires and poles (if any) have been shown, however their function and dimensions have not been shown.
- This survey may not reflect all utilities or improvements, if such items are hidden by landscaping, or are covered by such items as dumpsters or trailers or when the site was covered with snow. At the time of survey, the site was not covered by snow.
- This survey makes no statement regarding the actual presence or absence of any service or utility line. Controlled underground exploratory effort together with "JULIE" markings is recommended to determine the full extent of underground service and utility lines. Contact J.U.L.I.E. at 1-800-892-0123.
- Restrictions that may be found in local buildings and/or zoning codes have not been shown. Height and bulk restrictions (if any) have not been shown. Only those setback restrictions shown on the recorded subdivision plat or in the title commitment have been shown.
- Site address: 304 E. Grand Avenue & 108 N. Milwaukee Avenue, Lake Villa Illinois (Pertains to Table A, Item 2).
- There is a total of 52 striped parking spaces for cars, including 1 of which are marked handicapped and 0 of which are for motorcycles. (Pertains to Table A, Item 9).
- The property is located at the corner of Milwaukee Road & Grand Avenue (Pertains to Table A, Item 14).
- There was no observable evidence of earth moving work, building construction or building additions at time of fieldwork. (Pertains to Table A, Item 16).
- The Village of Lake Villa was contacted and there are no proposed changes in the street Right of Way or recent evidence of street or sidewalk construction in the process of conducting the fieldwork (Pertains to Table A, Item 17).
- Exceptions 1, 2, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18 and 20 are not survey related.
- Exceptions 3, 4, 23 & 24 are blanket in nature.
- Exception 11, 19 & 22 are shown hereon.
- Exception 21 Building setback lines & Easements not shown or noted on Plat of Subdivision



## TRACT 1

**PARCEL 1:**  
Lots 1, 2, 3, 4, 27 and 28 in Block 3 in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof, recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois. And that part of said Block described as follows, to-wit: Commencing at the Northeast corner of Lot 2 in said Block, and running thence East 30.0 feet to the Southwest corner thereof; thence East to the Southwest corner of Lot 2 in said Block and thence North to the Place of Beginning, in Lake County, Illinois.

Except that part thereof dedicated to the Department of Transportation, State of Illinois for right-of-way by Document No. 6596339, described as follows, to-wit: That part of Lots 1 and 2 in Block 3 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

Except that part thereof dedicated to the Department of Transportation, State of Illinois for right-of-way by Document No. 6596339, described as follows, to-wit: That part of Lots 1 and 2 in Block 3 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

And that part of said Block described as follows, to-wit: Commencing at the Northeast corner of Lot 2 in said Block, and running thence East 30.0 feet to the Southwest corner thereof; thence East to the Southwest corner of Lot 2 in said Block and thence North to the Place of Beginning, in Lake County, Illinois.

Except that part thereof dedicated to the Department of Transportation, State of Illinois for right-of-way by Document No. 6596339, described as follows, to-wit: That part of Lots 1 and 2 in Block 3 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

And that part of said Block described as follows, to-wit: Commencing at the Northeast corner of Lot 2 in said Block, and running thence East 30.0 feet to the Southwest corner thereof; thence East to the Southwest corner of Lot 2 in said Block and thence North to the Place of Beginning, in Lake County, Illinois.

Except that part thereof dedicated to the Department of Transportation, State of Illinois for right-of-way by Document No. 6596339, described as follows, to-wit: That part of Lots 1 and 2 in Block 3 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

**PARCEL 2:**  
Lot 26 in Block 3 in Fowler's Subdivision, a Subdivision in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois, together with that portion of the alley lying North and adjoining the East 30.0 feet of Lot 26, vacated by ordinance recorded February 16, 1927, as Document No. 294305.

**PARCEL 3:**  
Part of a vacated alley in Block 3 lying Westerly of the West line of Lot "A" in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois, described as follows: Beginning at the Southwest corner of Lot 1 in Block 3 in Fowler's Subdivision; thence North 87 degrees 10 minutes 39 seconds West, along a line parallel with the North line of the East and West alley in said Block, 15.00 feet; thence South 01 degrees 00 minutes 00 seconds East parallel with the West line of Lot "A", 205.25 feet to the North line of Grand Avenue (formerly known as Fox Lake Road); thence North 89 degrees 59 minutes 42 seconds East, along said North line, 15.00 feet to the Southwest corner of said Lot "A"; thence North 01 degrees 00 minutes 44 seconds West along said West line, 204.50 feet to the Place of Beginning, in Lake County, Illinois.

## TRACT 2

**PARCEL 1:**  
Lots 30, 31, and 32 in Block 2 in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois. Excepting that part thereof for right-of-way dedicated to the State of Illinois Department of Transportation by Document No. 6512158, described as follows, to-wit: That part of Lot 31 in Block 2 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902, in Lake County, Illinois, described as follows: Beginning at the Northeast corner of said Lot 31; thence on an assumed bearing of South 36 degrees 15 minutes 35 seconds East, on the Northeast line of said Lot 31, a distance of 147.87 feet to a point of curvature on the East line of said Lot 31; thence South on a 20.0 foot radius curve, concave Westerly, on the East line of said Lot 31, on an arc distance of 17.26 feet, the chord of said curve bears South 11 degrees 31 minutes 50 seconds East, 16.73 feet to a point 7.0 feet normally distant West of the Northeast line of said Lot 31; thence North 36 degrees 15 minutes 35 seconds West, parallel with the Northeast line of said Lot 31, a distance of 163.12 feet to the Northwest line of said Lot 31; thence North 53 degrees 18 minutes 12 seconds East, on said Northwest line, 7.0 feet to the Place of Beginning. And except that part thereof for right-of-way dedicated to the State of Illinois Department of Transportation by Document No. 6596339, described as follows, to-wit: That part of Lot 32 in Block 2 in Fowler's Subdivision, being a Subdivision of part of the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902, in Lake County, Illinois.

**PARCEL 2:**  
Lots 33 and 34 in Block 2 in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

**PARCEL 3:**  
Lots 28 and 29 in Block 2 in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the Southwest Quarter of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the Plat thereof recorded May 21, 1920 as Document No. 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

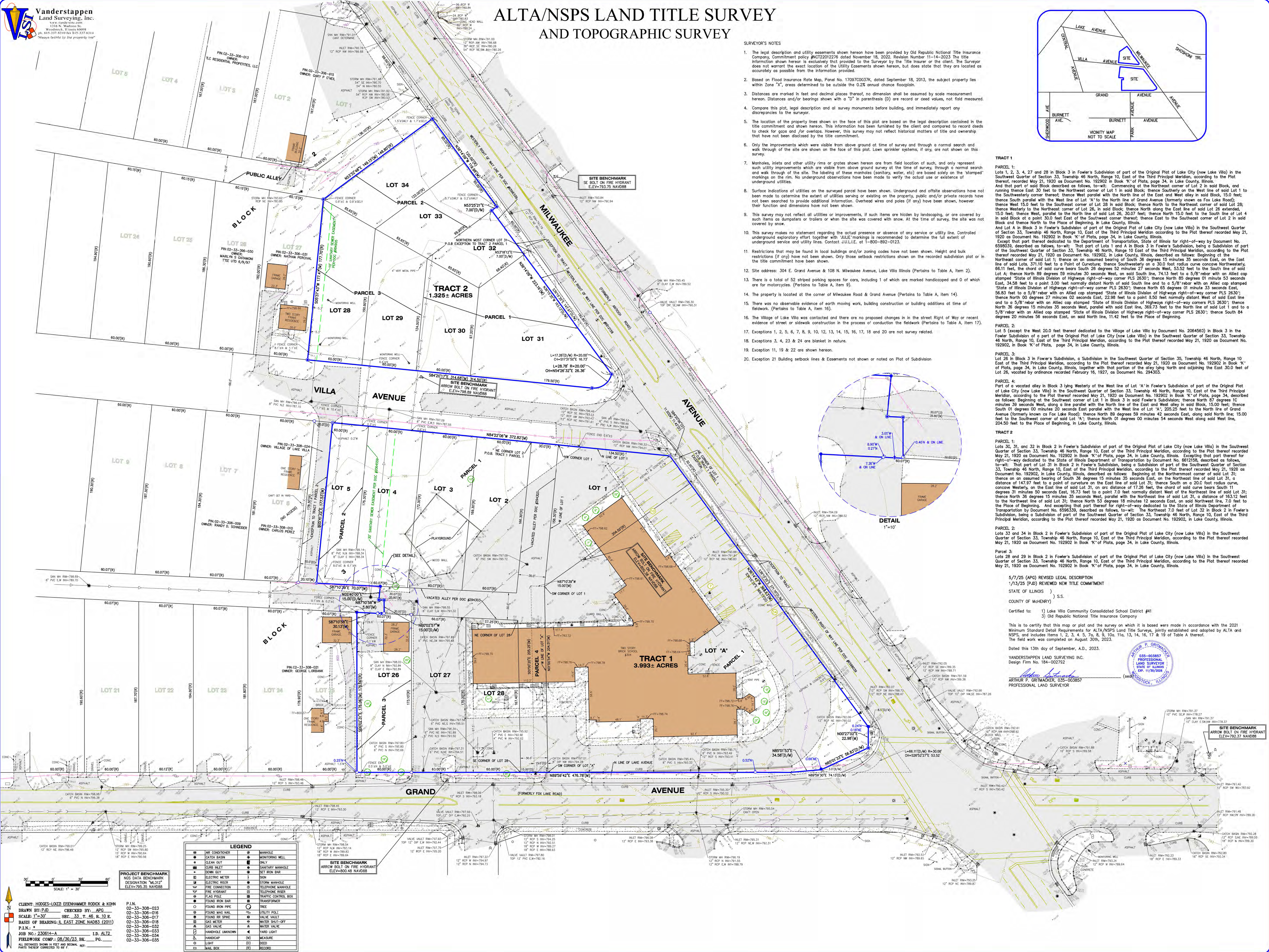
5/7/25 (APG) REVISED LEGAL DESCRIPTION  
1/13/25 (PJD) REVIEWED NEW TITLE COMMITMENT  
STATE OF ILLINOIS ) S.S.  
COUNTY OF McHENRY )  
Certified to: 1) Lake Villa Community Consolidated School District #41  
2) Old Republic National Title Insurance Company

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, 8, 9, 10a, 11a, 13, 14, 16, 17 & 19 of Table A thereof. The field work was completed on August 30th, 2023.

Dated this 13th day of September, A.D., 2023.

VANDERSTAPPEN LAND SURVEYING, INC.  
Design Firm No. 184-002752

ARTHUR P. GRIMMACKER, 035-003857  
PROFESSIONAL LAND SURVEYOR



PROJECT BENCHMARK  
NCS DATA BENCHMARK  
DESIGNATION "MLJ12"  
ELEV=793.35 NAVD83

LEGEND	
● AIR CONDITIONER	● MANHOLE
● CATCH BASIN	● MONITORING WELL
● CLEAN OUT	● ONLY
● CURB INLET	● SANITARY MANHOLE
● DOWN SPUT	● SET IRON BAR
● ELECTRIC METER	● SIGN
● ELECTRIC RISER	● STORM MANHOLE
● FIRE CONNECTION	● TELEPHONE MANHOLE
● FIRE HYDRANT	● TELEPHONE RISER
● FLAG POLE	● TRAFFIC CONTROL BOX
● FOUND IRON BAR	● TRANSFORMER
● FOUND IRON PIPE	● TREE
● FOUND MAG NAIL	● UTILITY POLE
● FOUND RR SPIKE	● VALVE WALK
● GAS METER	● WATER SHUT-OFF
● GAS VALVE	● WATER VALVE
● HANDHOLE UNKNOWN	● YARD LIGHT
● LIGHT	● MEASURE
● MAIL BOX	● RECORD





## COMMITMENT

Issued by  
**OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY**

## NOTICE

**IMPORTANT—READ CAREFULLY:** THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.


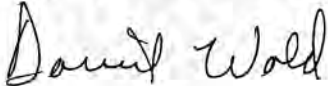
THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

## COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Florida Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

**OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY**  
A Stock Company  
400 Second Avenue South, Minneapolis, Minnesota 55401  
(612) 371-1111

By  President  
Attest  Secretary

## COMMITMENT CONDITIONS

### 1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I—Requirements;
- (f) Schedule B, Part II—Exceptions; and
- (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

### 4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

### 5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  - (i) comply with the Schedule B, Part I—Requirements;
  - (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
  - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.

*This page is only a part of a 2016 ALTA Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I – Requirements; and Schedule B, Part II – Exceptions.*

- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

**6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

**7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

**8. PRO-FORMA POLICY**

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

**9. ARBITRATION**

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <http://www.alta.org/arbitration>.

**SCHEDULE A**

1. Commitment Date: **November 18, 2022**
2. Policy to be issued:
  - (a) 2006 ALTA Owner's Policy  
Proposed Insured: **Bluestone Single Tenant Properties, LLC**  
Proposed Policy Amount: **TBD**
  - (b) 2006 ALTA Loan Policy  
Proposed Insured: **TBD**  
Proposed Policy Amount: **TBD**
3. The estate or interest in the Land described or referred to in this Commitment is **FEE SIMPLE**.
4. The Title is, at the Commitment Date, vested in:  
  
[Lake Villa Community Consolidated School District #41](#)
5. The Land is described as follows:  
  
**See 'Exhibit A' attached hereto.**

EXHIBIT A

TRACT 1:

PARCEL 1:

LOTS 1, 2, 3, 4, 27 AND 28 IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

AND

THAT PART OF SAID BLOCK DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE NORTHEAST CORNER OF LOT 2 IN SAID BLOCK, AND RUNNING THENCE EAST FEET TO THE NORTHWEST CORNER OF LOT 1 IN SAID BLOCK; THENCE SOUTHERLY ON THE WEST LINE OF SAID LOT 1 TO THE SOUTHWESTERLY CORNER THEREOF; THENCE WEST PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF LOT "A" TO THE NORTH LINE OF LAKE AVENUE; THENCE WEST 15 FEET TO THE SOUTHEAST CORNER OF LOT 28 IN SAID BLOCK; THENCE NORTH TO THE NORTHEAST CORNER OF SAID LOT 28; THENCE WESTERLY TO THE NORTHEAST CORNER OF LOT 26, IN SAID BLOCK; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 26 EXTENDED, 15 FEET; THENCE WEST, PARALLEL TO THE NORTH LINE OF SAID LOT 26, 30.07 FEET; THENCE NORTH 15 FEET TO THE SOUTH LINE OF LOT 4 IN SAID BLOCK AT A POINT 30 FEET EAST OF THE SOUTHWEST CORNER THEREOF; THENCE EAST TO THE SOUTHEAST CORNER OF LOT 2 IN SAID BLOCK AND THENCE NORTH TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

AND

LOT A IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

EXCEPT THAT PART THEREOF DEDICATED TO THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS FOR RIGHT OF WAY BY DOCUMENT [6598039](#), DESCRIBED AS FOLLOWS, TO-WIT:

THAT PART OF LOTS 1 AND A IN BLOCK 3 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. [192902](#), IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35 SECONDS EAST, ON THE EAST LINE OF SAID LOTS, 371.10 FEET TO A POINT OF CURVATURE; THENCE SOUTHWESTERLY ON A 30.00 FOOT RADIUS CURVE CONCAVE NORTHWESTERLY, 66.11 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 26 DEGREES 52 MINUTES 27 SECONDS WEST, 53.52 FEET TO THE SOUTH LINE OF SAID LOT A; THENCE NORTH 89 DEGREES 59 MINUTES 30 SECONDS WEST, ON SAID SOUTH LINE, 74.13 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 85 DEGREES 01 MINUTE 53 SECONDS EAST, 34.58 FEET TO A POINT 3.00 FEET NORMALLY DISTANT NORTH OF SAID SOUTH LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 65 DEGREES 01 MINUTE 33 SECONDS EAST, 56.83 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED

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"STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 00 DEGREES 27 MINUTES 02 SECONDS EAST, 22.98 FEET TO A POINT 8.50 FEET NORMALLY DISTANT WEST OF SAID EAST LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH SAID EAST LINE, 369.73 FEET TO THE NORTH LINE OF SAID LOT 1 AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE SOUTH 84 DEGREES 20 MINUTES 56 SECONDS EAST, ON SAID NORTH LINE, 11 .42 FEET TO THE POINT OF BEGINNING.

**PARCEL 2:**

LOT 5 (EXCEPT THE WEST 20 FEET THEREOF DEDICATED TO THE VILLAGE OF LAKE VILLA BY DOCUMENT [2064560](#)) IN BLOCK 3 IN THE FOWLER SUBDIVISION OF A PART OF THE ORIGINAL FLAT OF LAKE CITY, NOW LAKE VILLA, IN THE SOUTH WEST QUARTER OF SECTION 33. TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920, AS DOCUMENT [192902](#), IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

**PARCEL 3:**

LOT 26 IN BLOCK 3 IN FOWLER'S SUBDIVISION, A SUBDIVISION IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, TOGETHER WITH THAT PORTION OF THE ALLEY LYING NORTH AND ADJOINING THE EAST 30 FEET OF LOT 26, VACATED BY ORDINANCE RECORDED FEBRUARY 16, 1927, AS DOCUMENT [294303](#).

**PARCEL 4:**

PART OF A VACATED ALLEY IN BLOCK 3 LYING WESTERLY OF THE WEST LINE OF LOT "A" IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF LOT 1 IN BLOCK 3 IN SAID FOWLER'S SUBDIVISION; THENCE NORTH 87 DEGREES 10 MINUTES 39 SECONDS WEST, ALONG A LINE PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15.00 FEET; THENCE SOUTH 01 DEGREES 00 MINUTES 20 SECONDS EAST PARALLEL WITH THE WEST LINE OF LOT "A", 205.25 FEET TO THE NORTH LINE OF LAKE AVENUE; THENCE NORTH 89 DEGREES 59 MINUTES 42 SECONDS EAST, ALONG SAID NORTH LINE; 15.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT "A"; THENCE NORTH 01 DEGREES 00 MINUTES 54 SECONDS WEST ALONG SAID WEST LINE, 204.50 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

**TRACT 2:**

**PARCEL 1:**

LOTS 30, 31 AND 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS,



EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT [6612158](#), DESCRIBED AS FOLLOWS, TO-WIT:

THAT PART OF LOT 31 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. [192902](#), IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHERNMOST CORNER OF SAID LOT 31; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35 SECONDS EAST, ON THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 147.97 FEET TO A POINT OF CURVATURE ON THE EAST LINE OF SAID LOT 31; THENCE SOUTH ON A 20.00 FOOT RADIUS CURVE, CONCAVE WESTERLY, ON THE EAST LINE OF SAID LOT 31, AN ARC DISTANCE OF 17.26 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 11 DEGREES 31 MINUTES 50 SECONDS EAST, 16.73 FEET TO A POINT 7.00 FEET NORMALLY DISTANT WEST OF THE NORTHEAST LINE OF SAID LOT 31; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 163.12 FEET TO THE NORTHWEST LINE OF SAID LOT 31; THENCE NORTH 53 DEGREES 18 MINUTES 12 SECONDS EAST, ON SAID NORTHWEST LINE, 7.00 FEET TO THE POINT OF BEGINNING.

AND

EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT [6596339](#), DESCRIBED AS FOLLOWS, TO-WIT:

THE NORTHEAST 7.00 FEET OF LOT 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. [192902](#), IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

LOTS 33 AND 34 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

PARCEL 3:

LOTS 28 AND 29 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT [192902](#) IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

## **SCHEDULE B-I**

### **Requirements**

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.  
Note: If the seller or mortgagor are individuals, the deed and/or mortgage must show marital status, and if married, be joined by spouse.
5. Pay all taxes, charges, assessments levied and assessed against the subject premises, which are due and payable.
6. Satisfactory evidence shall be produced that all improvements and/or repairs or alterations thereto are completed; that contractor, subcontractor, labor and material men are all paid in full, if applicable.
7. We have been asked to waive the Gap in Recording General Exception and other General Exceptions of Schedule B-Section 2 of this Commitment on the Final Owner's and Loan Policies. Said exceptions can be waived upon the following conditions:
  - a) The Standard Exception for Gap in Recording. This exception can be waived at closing only if this transaction is closed by Old Republic National Title Insurance Company.
  - b) Exceptions of Schedule B-Section 2 relating to matter generally disclosed by a survey (Survey Exception). We must be supplied with an acceptable survey certified to ALTA standards, Old Republic National Title Insurance Company and the proposed insureds. Upon receipt and review of said survey, the Final Owner's and Loan Policies will be subject to our findings but free and clear of the Survey Exceptions.
  - c) Exception(s) of Schedule B-Section 2 relating to interest parties in the Land (Parties in Possession Exception). We must be supplied with an affidavit executed by the owner dated the day of closing which sets forth the status of any unrecorded leases, options to purchase, rights of first refusal, easements, construction/rehab work, etc. The Final Owner's and Loan Policies will be subject to the disclosures of said Affidavit but free and clear of the Parties in Possession Exception.
  - d) Exception(s) of Schedule B-Section 2 relating to mechanic's liens/construction (Mechanic's Lien Exception). We must be advised of the status of improvements on premises before a determination can be made in regard to waiving said exception.
  - e) Exception of Schedule B-Section 2 relating to unrecorded rights (Unrecorded Rights and Interests Exception). This exception can be waived upon receipt of the items required at paragraphs (b) and (c) above. The Final Owner's and Loan Policies will be subject to the disclosures in the items required in said paragraphs, but free and clear of the Unrecorded Rights and Interests Exception.
  - f) Exceptions of Schedule B-Section 2 for unrecorded liens (Unrecorded Liens and Encumbrances Exceptions). This exception can be waived upon receipt of the item required at paragraph (c) above. The Final Owner's and Loan Policies will be subject to the disclosures in the items required in said paragraphs, but free and clear of the General Exception for Unrecorded Liens and Encumbrances Exceptions.
8. The State of Illinois has enacted legislation that amends the Title Insurance Act (215 ILCS 155/ et al) to require that all parties of residential transactions, and non-residential real estate transactions of

under \$2,000,000.00, to receive Closing Protection Letters.

The legislation also comes with an amendment that establishes minimum charges for the issuance of the Closing Protection Letters.

For all refinance transaction these charges will apply:

Lender(s) - \$25.00; and Borrowers - \$50.00.

For all purchase transactions these charges will apply:

Lender(s) - \$25.00; Buyers - \$25.00; Sellers - \$50.00.

This legislation is effective January 1, 2011, for all transactions closed after December 31, 2010

9. NOTE: An amendment to the Title Insurance Act, 215 ILCS 155/26, took effect on January 1, 2010 requiring title companies to only accept good funds when closing on a transaction within the state. Please note the limitation on the funds we are allowed to disburse on;
  1. For amounts of \$50,000 or greater the funds must be either a wire, or a check issued by the United States or any political subdivision or a title insurance company check or collected funds.
  2. For amounts less than \$50,000 any of the above are acceptable in addition to cash, cashiers checks, certified checks, bank money orders, official bank checks, teller checks or a check drawn on the trust account of any licensed lawyer or real estate broker.
  3. Personal check or checks in the aggregate amount that do not exceed \$5,000 provided that the title company has reasonable grounds to believe that sufficient funds are available for withdrawal in the account upon which the check is drawn at the time of disbursement. (NOTE: For any personal check(s), please contact your local ORTIC office for approval)
  4. Collected funds are funds that are deposited, finally settled, and credited to the title companies trust account.This is only a summary of the act. Please review the law or contact your closer for any additional question or concerns.
10. Note: Your attention is directed to Illinois Statute 765 ILCS 77/70 (SB1167), which requires either a Certificate of Exemption or a Certificate of Compliance in order for mortgages to be recorded in the following Counties: Cook, Kane, Will and Peoria. The County Recorders will not record any mortgage unless the same has a Certificate of Compliance or Exemption attached thereto.  
-Old Republic Title Insurance Company will charge a \$100.00 SB1167 certificate Processing Fee
11. NOTE: If the property is within a municipality that has an ordinance for transfer tax being imposed up the sale or conveyance of real property within the municipality, then all deeds presented to the Company for recording must have the appropriate Transfer Tax Stamps affixed thereof, or be marked "Exempt" by the municipality.
12. NOTICE: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the company is not able to close or insure any transaction involving land that is associated with these activities.
13. NOTICE TO PURCHASERS:  
Old Republic National Title Insurance Company ("The Company") and its policy issuing agents ("Agents") are required by Federal law to collect certain additional information from the purchasers of real property. United States Code Title 31, Section 5326 authorizes the U.S. Department of Treasury to collect information about certain transactions in specified geographic areas in order to carry out the purposes or prevent evasions of the Bank Secrecy Act. This statute, as implemented by the Treasury orders, also prohibits The Company or its Agents from disclosing the specific terms of said orders.  
  
AFFECTS ALL TRACTS:
  14. In order for the Company to insure title coming through the sale or transfer of land from the body politic and corporate in title, we should be furnished a certified copy of the ordinance or resolution authorizing the conveyance, together with the number of ayes and nays for its passage, and evidence of any required publication.
  15. Limitations and conditions imposed by law upon bodies politic and corporate.
  16. Note: We must be furnished the contract sales price and names of the buyers prior to closing so the title documents may be properly completed and this commitment is subject to such further exceptions, if any, as may then be deemed necessary.

17. We should be advised whether any recent improvements have been placed on the subject property within the last six months.
18. Any lien or right to a lien in favor of the property manager employed to manage the land.  
Note: We should be furnished either (a) an Affidavit from the owner indicating that there is no property manager employed to manage the land, or, (b) a Final Lien waiver from the property manager acting on behalf of the owner.
19. Any lien or right to a lien as established pursuant to the Commercial Broker Lien Act.  
Note: We should be furnished either (a) an Affidavit from the owner indicating that there is no broker employed to sell the land, or, (b) a Final Lien waiver from the broker acting on behalf of the owner.
20. Standard exceptions numbers 2 through 6 shown in Schedule B will be waived from the policy upon review and acceptance of the following:  
A) A current Survey or an "Affidavit of no new improvements" with an old survey and  
B) A properly executed ALTA Extended Coverage Statement.
21. NOTE: All endorsement requests should be made prior to closing to allow ample time for the Company to examine required documentation.
22. Our application for title states this is a refinance transaction, however we find no open mortgage of record. We must be advised of any unrecorded mortgage(s) and/or liens, and this commitment is subject to such further exceptions, if any, as may then be deemed necessary.
23. With respect to the proposed purchaser shown in Schedule A, a Limited Liability Company, the Company must be A provided with the following:  
a) A certification from the Illinois Secretary of State that the L.L.C. has properly filed its articles of organization;  
b) A copy of the Articles of Organization, together with any amendments thereto;  
c) A Certificate of Good Standing from the Illinois Secretary of State;  
d) A copy of the Operating agreement and all amendments thereto; and,  
e) A Roster of members or incumbent managers.  
f) A certification that no event of dissolution has occurred.  
NOTE: In the event of a sale or all or substantially all of the assets of the L.L.C. or a sale of L.L.C. assets to a member or manager, we must also be furnished a copy of a resolution authorizing the transaction adopted by the members of the L.L.C.  
  
AFFECTS TRACT 2:
24. Note: The legal description shown in Schedule A describes either unsubdivided land or a portion of subdivided land. If any conveyance of the land is exempt from the operation of the provisions of the plat act (765 ILCS 205/1 (A) ET SEQ.), such deed may need to be accompanied by a plat act affidavit. If any proposed deed is not exempt, compliance should be had with the provisions of the plat act.

## SCHEDULE B-II

### Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are not met.
2. Rights or claims of parties in possession not shown by the public records
3. Easements, or claims of easements, not shown by the public records
4. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by an accurate survey and inspection of the premises
5. Any lien, or right to a lien, for services, labor, or material heretofore and hereafter furnished, imposed by law and not shown by the public records
6. Taxes or special assessments which are not shown as existing liens by the public records.

#### AFFECTS TRACT 1:

7. General real estate taxes for the year(s) 2022 and subsequent years.  
Permanent Index Number: 02-33-308-023  
Note: The first installment of the 2021 taxes is NOT BILLED  
Note: The second installment of the 2021 taxes is NOT BILLED  
Note: The taxes for the year 2022 are not yet due or payable.  
The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.  
Satisfactory evidence should be furnished showing that the land is entitled to said exemption
8. General real estate taxes for the year(s) 2022 and subsequent years.  
Permanent Index Number: 02-33-308-025  
Note: The first installment of the 2021 taxes is NOT BILLED  
Note: The second installment of the 2021 taxes is NOT BILLED  
Note: The taxes for the year 2022 are not yet due or payable.  
The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.  
Satisfactory evidence should be furnished showing that the land is entitled to said exemption
9. General real estate taxes for the year(s) 2022 and subsequent years.  
Permanent Index Number: 02-33-308-026  
Note: The first installment of the 2021 taxes is NOT BILLED  
Note: The second installment of the 2021 taxes is NOT BILLED  
Note: The taxes for the year 2022 are not yet due or payable.  
The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.  
Satisfactory evidence should be furnished showing that the land is entitled to said exemption
10. General real estate taxes for the year(s) 2022 and subsequent years.  
Permanent Index Number: 02-33-308-027  
Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

11. Grant of Easement for sanitary sewer lines dated May 22, 1980 and recorded June 16, 1980 as document [2064559](#) made by and between the Regional Board of School Trustees of lake County for the use and benefit of Lake Villa Community Consolidated School District #41 and the Village of Lake Villa, an Illinois municipal corporation and the terms, provisions and conditions therein contained.

AFFECTS TRACT 2:

12. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-016

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

13. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-017

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

14. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-018

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

15. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-032

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

16. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-033

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants.

Satisfactory evidence should be furnished showing that the land is entitled to said exemption

17. General real estate taxes for the year(s) 2022 and subsequent years.

Permanent Index Number: 02-33-306-034

Note: The first installment of the 2021 taxes is NOT BILLED

Note: The second installment of the 2021 taxes is NOT BILLED

Note: The taxes for the year 2022 are not yet due or payable.

The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants. Satisfactory evidence should be furnished showing that the land is entitled to said exemption

18. General real estate taxes for the year(s) 2022 and subsequent years.  
Permanent Index Number: 02-33-306-035  
Note: The first installment of the 2021 taxes is NOT BILLED  
Note: The second installment of the 2021 taxes is NOT BILLED  
Note: The taxes for the year 2022 are not yet due or payable.  
The taxes for the year 2021 and prior years are marked exempt on the Collectors Warrants. Satisfactory evidence should be furnished showing that the land is entitled to said exemption
19. Grant of Easement for sanitary sewer lines dated March 3, 1958 and recorded March 26, 1958 as document [984905](#) made by and between the Regional Board of School Trustees of Lake County for the use and benefit of Lake Villa Community Consolidated School District #41 and the Village of Lake Villa, an Illinois municipal corporation and the terms, provisions and conditions therein contained. (Affects the West 10 feet of Lot 28)  
  
AFFECTS ALL TRACTS:
20. Ordinance 13-1260 by the Lake County, establishing Special Service Area Number 16, recorded November 20, 2013 as document number [7056656](#).  
Special Service Area Certificate recorded December 4, 2013 as document [7059959](#).  
Parcel Valuation Certificate recorded December 4, 2013 as document [7059960](#).
21. Building setback lines, Easements, Covenants, conditions and restrictions as contained in the plat of Fowler's Subdivision recorded as document number [192902](#). (See plat for particulars)
22. Terms, provisions and conditions of Ordinance No. 137 entitled An Ordinance Vacating Certain Alleys and Portions of Alleys in the Village of Lake Villa recorded February 16, 1927 as document [294303](#).  
Rights of public or quasi-public utilities, if any, in the vacated street or alley described in Schedule A.  
Rights of the Municipality, the State of Illinois, the Public and adjoining owners, in the vacated street and alleys described in Schedule A.
23. Rights of the public, the municipality and the State of Illinois in and to that part of the land, if any, taken and used for roads and highways.
24. Rights of way for drainage ditches, tile, feeders and laterals, and other drainage easements, if any.



## FACTS

### WHAT DOES OLD REPUBLIC TITLE DO WITH YOUR PERSONAL INFORMATION?

<b>Why?</b>	Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.
<b>What?</b>	<p>The types of personal information we collect and share depend on the product or service you have with us. This information can include:</p> <ul style="list-style-type: none"><li>• Social Security number and employment information</li><li>• Mortgage rates and payments and account balances</li><li>• Checking account information and wire transfer instructions</li></ul> <p>When you are <i>no longer</i> our customer, we continue to share your information as described in this notice.</p>
<b>How?</b>	All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons Old Republic Title chooses to share; and whether you can limit this sharing.

Reasons we can share your personal information	Does Old Republic Title share?	Can you limit this sharing?
<b>For our everyday business purposes</b> — such as to process your transactions, maintain your account(s), or respond to court orders and legal investigations, or report to credit bureaus	<b>Yes</b>	<b>No</b>
<b>For our marketing purposes</b> — to offer our products and services to you	<b>No</b>	<b>We don't share</b>
<b>For joint marketing with other financial companies</b>	<b>No</b>	<b>We don't share</b>
<b>For our affiliates' everyday business purposes</b> — information about your transactions and experiences	<b>Yes</b>	<b>No</b>
<b>For our affiliates' everyday business purposes</b> — information about your creditworthiness	<b>No</b>	<b>We don't share</b>
<b>For our affiliates to market to you</b>	<b>No</b>	<b>We don't share</b>
<b>For non-affiliates to market to you</b>	<b>No</b>	<b>We don't share</b>

Go to [www.oldrepublictitle.com](http://www.oldrepublictitle.com) (*Contact Us*)



Who we are	
Who is providing this notice?	Companies with an Old Republic Title name and other affiliates. Please see below for a list of affiliates.

What we do	
How does Old Republic Title protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. For more information, visit <a href="https://www.oldrepublictitle.com/privacy-policy">https://www.oldrepublictitle.com/privacy-policy</a>
How does Old Republic Title collect my personal information?	<p>We collect your personal information, for example, when you:</p> <ul style="list-style-type: none"> <li>• Give us your contact information or show your driver's license</li> <li>• Show your government-issued ID or provide your mortgage information</li> <li>• Make a wire transfer</li> </ul> <p>We also collect your personal information from others, such as credit bureaus, affiliates, or other companies.</p>
Why can't I limit all sharing?	<p>Federal law gives you the right to limit only:</p> <ul style="list-style-type: none"> <li>• Sharing for affiliates' everyday business purposes - information about your creditworthiness</li> <li>• Affiliates from using your information to market to you</li> <li>• Sharing for non-affiliates to market to you</li> </ul> <p>State laws and individual companies may give you additional rights to limit sharing. See the State Privacy Rights section location at <a href="https://www.oldrepublictitle.com/privacy-policy">https://www.oldrepublictitle.com/privacy-policy</a> for your rights under state law.</p>

Definitions	
Affiliates	<p>Companies related by common ownership or control. They can be financial and nonfinancial companies.</p> <ul style="list-style-type: none"> <li>• <i>Our affiliates include companies with an Old Republic Title name, and financial companies such as Attorneys' Title Fund Services, LLC, Lex Terrae National Title Services, Inc., Mississippi Valley Title Services Company, and The Title Company of North Carolina.</i></li> </ul>
Non-affiliates	<p>Companies not related by common ownership or control. They can be financial and non-financial companies.</p> <ul style="list-style-type: none"> <li>• <i>Old Republic Title does not share with non-affiliates so they can market to you</i></li> </ul>
Joint marketing	<p>A formal agreement between non-affiliated financial companies that together market financial products or services to you.</p> <ul style="list-style-type: none"> <li>• <i>Old Republic Title doesn't jointly market.</i></li> </ul>

Affiliates Who May be Delivering This Notice				
American First Title & Trust Company	American Guaranty Title Insurance Company	Attorneys' Title Fund Services, LLC	Compass Abstract, Inc.	eRecording Partners Network, LLC
Genesis Abstract, LLC	Guardian Consumer Services, Inc.	iMarc, Inc.	Kansas City Management Group, LLC	L.T. Service Corp.
Lenders Inspection Company	Lex Terrae National Title Services, Inc.	Lex Terrae, Ltd.	Mississippi Valley Title Services Company	National Title Agent's Services Company
Old Republic Branch Information Services, Inc.	Old Republic Diversified Services, Inc.	Old Republic Escrow of Vancouver, Inc.	Old Republic Exchange Company	Old Republic National Ancillary Services, Inc.
Old Republic National Commercial Title Services, Inc.	Old Republic Title and Escrow of Hawaii, Ltd.	Old Republic National Title Insurance Company	Old Republic Title Company	Old Republic Title Companies, Inc.
Old Republic Title Company of Conroe	Old Republic Title Company of Indiana	Old Republic Title Company of Nevada	Old Republic Title Company of Oklahoma	Old Republic Title Company of Oregon
Old Republic Title Company of St. Louis	Old Republic Title Company of Tennessee	Old Republic Title Information Concepts	Old Republic Title Insurance Agency, Inc.	Old Republic Title, Ltd.
RamQuest Software, Inc.	Republic Abstract & Settlement, LLC	Sentry Abstract Company	Surety Title Agency, Inc.	The Title Company of North Carolina
Trident Land Transfer Company, LLC				

The above space for recorders use only

THIS INDENTURE, made this 17th day of August, 1984, between AMERICAN NATIONAL BANK AND TRUST COMPANY OF WAUKEGAN, ILLINOIS, a National Banking Association duly organized and existing under the National Banking Laws, as Trustee under the provisions of a deed or deeds in trust, duly recorded or registered and delivered to said Bank in pursuance of a trust agreement dated the 17th day of June, 1974, and known as Trust No. 591, party of the first part, and Regional Board of School Trustees of Lake County, Illinois for the use and benefit of Lake Villa Community Consolidated School District #41, parties of the second part. WITNESSETH, that said party of the first part, in consideration of the sum of --10.00-- TEN AND NO/100----- dollars, and other good and valuable considerations in hand paid, does hereby grant, sell and convey unto said parties of the second part, the following described real estate, situated in Lake County, Illinois, to-wit:

LOTS 33 AND 34 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY, (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE 3RD P.M., ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT 192902, IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

Together with the tenements and appurtenances thereunto belonging. TO HAVE AND TO HOLD the same unto said parties of the second part,

and to the proper use, benefit and behoof forever of said party of the second part.

THIS INSTRUMENT PREPARED BY  
AMERICAN NATIONAL BANK AND  
TRUST COMPANY OF WAUKEGAN,  
ILLINOIS, 2323 GRAND AVENUE,  
WAUKEGAN, ILLINOIS.

Per: Sandra L. Shinsky

This deed is executed by the party of the first part, as Trustee, as aforesaid, pursuant to and in the exercise of the power and authority granted to any vested in it by the terms of said Deed or Deeds in Trust and the provisions of said Trust Agreement above mentioned, and of every other power and authority thereunto enabling, SUBJECT, HOWEVER, to: the liens of all trust deeds and/or mortgages upon said real estate, if any; of record in said county; all unpaid general taxes and special assessments and other liens and claims of any kind; pending litigation, if any, affecting the said real estate; building lines; building, liquor and other restrictions of record, if any; party walls, party wall rights and party wall agreements, if any; Zoning and Building Laws and Ordinances; mechanic's lien claims, if any; easements of record, if any; and rights and claims of parties in possession.

IN WITNESS WHEREOF, said party of the first part has caused its corporate seal to be hereon affixed and has caused its name to be signed to these presents by its Trust Officer and attested by its Assistant Vice President the day and year first above written.

AMERICAN NATIONAL BANK AND TRUST CO., as Trustee as aforesaid

By: Sandra L. Shinsky Assistant  
TRUST OFFICER  
A.V.P.  
Attest: James V. McIntyre SECRETARY

STATE OF ILLINOIS }  
COUNTY OF LAKE } SS.

I, the undersigned  
Sandra L. Shinsky and James V. McIntyre A.V.P.,  
Asst. Trust Officer of AMERICAN NATIONAL BANK AND TRUST CO. and SECRETARY of said Bank,

personally known to me to be the same persons whose names are subscribed to the foregoing instrument as Assistant Trust Officer and Secretary, respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act, and as the free and voluntary act of said Bank, for the uses and purposes therein set forth; and the Assistant Trust Officer did also then and there acknowledge that said Secretary, as custodian of the corporate seal of said Bank, did affix the said corporate seal of said Bank to said instrument as said Secretary's own free and voluntary act, and as the free and voluntary act of said Bank, for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this 17th day of August, 1984

FOR THE PROTECTION OF THE OWNER,  
THIS TRUSTEE'S DEED SHOULD BE FILED

WITH THE RECORDER OF DEEDS IN WHOSE  
OFFICE THE ORIGINAL WARRANTY DEED IN  
TRUST WAS FILED.

DE  
L  
I  
V  
E  
R  
Y  
  
NAME Ellis E. Fuqua  
STREET Attorney at Law  
CITY 9 North County Street  
Waukegan, Illinois 60085

T  
O: OR: RECORDER'S OFFICE BOX NUMBER

FOR INFORMATION ONLY  
INSERT STREET ADDRESS OF ABOVE  
DESCRIBED PROPERTY HERE

116-120 N. Milwaukee Ave.

Lake Villa, IL 60046

This space for utilizing ridors and revenue stamps

Document Number

2304826

RECORDER  
LAKE COUNTY, ILLINOIS

1984 AUG 21 PM 1:19

*Frank J. Nuetra*



IN THE CIRCUIT COURT OF THE NINETEENTH JUDICIAL CIRCUIT  
LAKE COUNTY, ILLINOIS

BOARD OF EDUCATION OF LAKE VILLA  
COMMUNITY CONSOLIDATED SCHOOL  
DISTRICT NO. 41

Plaintiff,

v.

WILLIAM J. SULLIVAN, JR.,  
PEOPLE OF THE STATE OF ILLINOIS  
ex rel. LISA MADIGAN, Attorney General  
of the State of Illinois, ARI BASS, dba/ALPINE  
INVESTMENTS, and BENJAMIN BASS,  
/dba LAND GROUP and UNKNOWN OWNERS

Defendants.



Image# 044524960002 Type: CTO  
Recorded: 03/31/2009 at 09:49:23 AM  
Receipt#: 2009-00015094  
Total Amt: \$29.00 Page 1 of 2  
Lake County IL Recorder  
Mary Ellen Vanderventer Recorder

File **6454434**

Case No. 08 ED 6

The Honorable

Raymond J. McKoski

**FILED**

MAR 26 2009

*Suzanne A. Coffey*  
CIRCUIT CLERK

**ORDER VESTING TITLE TO PROPERTY**

This matter coming to be heard on Plaintiff's Motion for an Order Vesting Title to Property, all parties have due notice of this matter, and the Court being fully advised in the premises, the Court finds as follows:

1. The Court ordered final judgment in favor of Plaintiff in this matter on March 26, 2009, finding the total amount of compensation for the property that is the subject of this condemnation action to be \$47,500.00 and ordering Plaintiff to deposit such compensation with the Lake County Treasurer by March 31, 2009.

2. Plaintiff has exhibited to the Court a receipt for the deposit of total compensation to the Lake County Treasurer dated March 26, 2009.

Accordingly, IT IS HEREBY ORDERED that fee simple title be and is hereby vested in Plaintiff to the following legally described property, and that Plaintiff is authorized to take immediate possession of said property:

LOTS 30 AND 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST ¼ OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920, AS DOCUMENT 192902, IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY ILLINOIS

②  
10

The Sherriff of Lake County is hereby directed to turn over possession of the property to Plaintiff, the Board of Education of Lake Villa Community Consolidated School District No. 41, and to evict William J. Sullivan, Jr. and any and all occupants remaining on the property.


Dated: \_\_\_\_\_

Entered: RAYMOND T. MCKOSKI  
JUDGE

MAIL  
TO

Order Prepared By:  
Debra H. Kaplan  
Hodges, Loizzi, Eisenhammer, Rodick and Kohn  
3030 Salt Creek Lane, Suite 202  
Arlington Heights, Illinois 60005  
847-670-9000

165948\_1.DOC

CERTIFICATION	
I, Sally D. Coffelt, Clerk of the 19th Judicial Circuit Court, Lake County, Illinois, do hereby certify this to be a true and correct copy as it appears from the records and files in my office. IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Seal of the said Court.	
DATE <u>3/26/09</u>	<u>Sally D. Coffelt</u> Sally D. Coffelt, Clerk
	By <u>[Signature]</u> Deputy Clerk

# This Indenture Witnesseth, That the Grantor s,

ARTHUR F. MUELLER and INA MUELLER, his wife, and HARRIET A. RIFE,

divorced and not since remarried,

of the city of Chicago

in the County of Cook

and State of

Illinois

for and in consideration of the sum of

Four Hundred and no/100 ----- (\$400.00) Dollars.

in hand paid, CONVEY and WARRANT to Trustees of Lake Villa Township,  
County of Lake and State of Illinois, a body politic and cormorate  
and their successors in office, for the use and benefit of Lake  
Villa Community Consolidated School District No. 41,

of the

of

County of Lake

and State of Illinois

the following described Real Estate, to-wit:

Lots twenty-eight (28) and twenty-nine (29) in Block two (2) in  
The Fowler subdivision of part of the original plat of Lake City,  
now Lake Villa, in southwest quarter of section thirty-three (33)  
Township forty-six (46) North, Range ten (10) east of the Third  
Principal Meridian, according to the plat thereof recorded May 21,  
1920 as Document 192902 in Book "K" of Plats, page 34,

situate in the

County of Lake

in the State of

Illinois

hereby releasing and waiving all rights under and

by virtue of the Homestead Exemption Laws of the State of Illinois.

Subject to taxes for the year 1951 and subsequent years.

DATED this

First

day of

October

A. D. 19 51



Arthur F. Mueller Seal

Ina Mueller Seal

Harriet A. Rife Seal

Seal

1054 40

STATE OF Illinois  
COUNTY OF Cook

} ss.

I, *John Bonnaparte*

a Notary Public

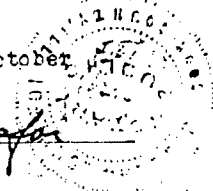
In and for the said County, in the State aforesaid

DO HEREBY CERTIFY that Arthur F. Mueller and Ina Mueller, his wife, and  
Harriet A. Rife, divorced and not since remarried, personally  
known to me to be the same persons whose names are subscribed to the foregoing instrument,  
appeared before me this day in person and acknowledged that they signed, sealed and delivered  
the said instrument as their free and voluntary act, for the uses and purposes therein set forth,  
including the release and waiver of the right of homestead.

Given under my hand and Notarial seal this 1st day of October

A. D. 1951

*John Bonnaparte*  
Notary Public



State of Illinois } ss. No. 741122  
(Lake County)  
Filed for Record OCT 16 A. D.  
1951 at 3:00 o'clock P. M. and  
duly recorded in Book 1073  
of RECORDS Page 75  
*Ernest V. Theilacker*  
RECORDER



**QUIT CLAIM DEED**  
ILLINOIS STATUTORY

*Taxpayer:*  
LAKE VILLA COMMUNITY CONSOL-  
IDATED SCHOOL DISTRICT NO. 41  
131 McKinley Ave.  
Lake Villa, IL 60046

*Mail To:*  
SCOTT A. PUMA  
415 W. Washington St., Suite 202  
Waukegan, IL 60085

5114218

FILED FOR RECORD BY:  
**MARY ELLEN VANDERVENTER**  
**LAKE COUNTY, IL RECORDER**  
02/03/2003 - 09:21:13 A.M.  
RECEIPT #: 62233  
DRAWER #: 18

RECORDER'S STAMP

The Grantor, IRA INVESTMENTS, of the City of Lake Forest, County of Lake, State of Illinois, for and in consideration of TEN DOLLARS and other good and valuable consideration in hand paid, CONVEYS and QUIT CLAIMS to **LAKE VILLA COMMUNITY CONSOLIDATED SCHOOL DISTRICT NO. 41**, a municipal corporation, 131 McKinley Ave., Lake Villa, IL 60046, the following described real estate, to wit:

Lot 31 in Block 2 in Fowler's Subdivision of part of the original plat of Lake City (now Lake Villa) in the southwest 1/4 of Section 33, Township 46 North, Range 10, East of the Third Principal Meridian, according to the plat thereof recorded May 21, 1920, as Document 192902, in Book "K" of Plats, Page 34, in Lake County, Illinois,

hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Permanent Index Number: 02-33-306-035  
Property Address: 108 N. Milwaukee Ave., Lake Villa, Illinois

Dated this 6<sup>th</sup> day of December, 2002.

IRA INVESTMENTS

By: Donna K. Bass  
Donna K. Bass, sole owner

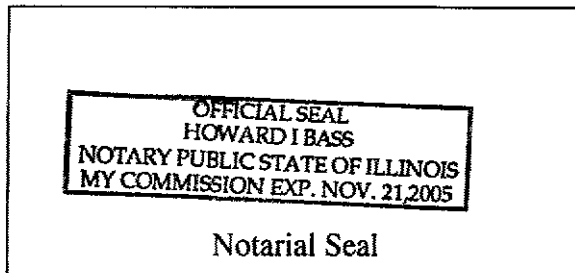
5114218

2

STATE OF ILLINOIS       )  
                                      )  
COUNTY OF LAKE       )       ss.

I, the undersigned, a Notary Public in and for the aforesaid County and State, CERTIFY THAT **Donna K. Bass**, personally known to me to be the same person whose name is subscribed to the above instrument, appeared before me this day in person, and acknowledged that she signed, sealed and delivered the instrument as her free and voluntary act for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and notarial seal, this 6<sup>th</sup> day of December, 2002.



  
Notary Public

My commission expires on  
11-21, 2005.

Name and Address of Preparer:  
Benjamin J. Bass, Esq.  
736 N. Western Ave. #323  
Lake Forest, IL 60045

Exempt under provisions of Paragraph **B**,  
Section 4, Real Estate Transfer Act

Date: 12-06-04

  
Signature of Buyer, Seller or Representative

QUIT CLAIM DEED ILLINOIS STATUTORY	from	IRA INVESTMENTS	to	LAKE VILLA COMMUNITY CONSOLIDATED SCHOOL DISTRICT NO. 41
---------------------------------------	------	-----------------	----	--

5114218

Document No. 711415

OCT 13 1950

Filed for Record in Recorder's Office of Lake County, Illinois,

9:30

o'clock

WARRANTY DEED

*Gustaf H. Fredlund*

Recorder of Deeds

THE GRANTOR S PAUL R. AVERY and GEORGIA AVERY, his wife,

of the Town of Lake Villa in the County of

Lake and State of Illinois for and in consideration of

TEN (\$10.00) DOLLARS and other good and valuable considerations DOLLARS

in hand paid CONVEY and WARRANT to TRUSTEES OF LAKE VILLA TOWNSHIP, COUNTY OF LAKE AND STATE OF ILLINOIS, A BODY POLITIC AND CORPORATE, AND THEIR SUCCESSORS IN OFFICE, FOR THE USE AND BENEFIT OF LAKE VILLA COMMUNITY CONSOLIDATED SCHOOL DISTRICT NO. 41,

of the Town of Lake Villa County of Lake

and State of Illinois, the following described Real Estate:-

PARCEL 1: Lots 1, 2, 3, 4, 27 and 28 in Block 3 in Fowler's Subdivision of part of the Original Plat of Lake City (now Lake Villa) in the South West quarter of Section 33, Township 46 North, Range 10, East of the 3rd P. M., according to the plat thereof, recorded May 21, 1920 as Document 192902 in Book "K" of Plats, page 34, in Lake County, Illinois.

PARCEL 2: That part of said Block described as follows, to-wit: Commencing at the North East corner of Lot 2 in said Block, and running thence East 30 feet to the North West corner of Lot 1 in said Block; thence Southerly on the West line of said Lot 1 to the South Westerly corner thereof; thence West parallel with the North line of the East and West alley in said Block, 15 feet; thence South parallel with the West line of Lot "A" to the North line of Lake Avenue; thence West 15 feet to the South East corner of Lot 28 in said Block; thence North to the North East corner of said Lot 28; thence Westerly to the North East corner of Lot 26, in said Block; thence North along the East line of said Lot 26 extended, 15 feet; thence West, parallel to the North line of said Lot 26, 30.07 feet; thence North 15 feet to the South line of Lot 4 in said Block at a point 30 feet East of the South West corner thereof; thence East to the South East corner of Lot 2 in said Block and thence North to the place of beginning, in Lake County, Illinois,

situated in the County of Lake, in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Subject to general taxes for the year 1950. Subject also to the rights of the Villagers of Lake Villa and the public to use the Westerly 30 feet of Lot 4 in Parcel 1 exclusively for the purpose of a public alley. Subject also to the rights of the public, the municipality and the adjoining owners in and to that part of premises in question falling in roads, streets and highways, if any.

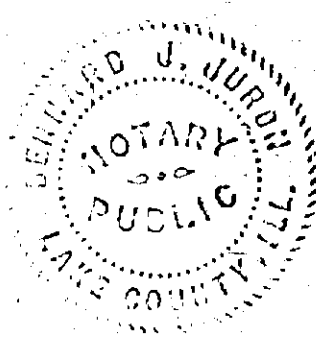
Dated this 9th day of October A. D. 19 50



*Georgia Avery*  
*Paul Avery*



STATE OF ILLINOIS, ss.  
Lake County.



I, the undersigned, a Notary Public in and for said County and State aforesaid, DO HEREBY CERTIFY, that PAUL R. AVERY and GEORGIA AVERY, his wife,

are personally known to me to be the same person, S. whose name, S. subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and Notarial Seal, this 9th day of October A. D. 19 50

*Edward J. Juron*

Notary Public

RS 8.70

2003368

## WARRANTY DEED

MAIL TO:

FUQUA, WINTER AND ASSOCIATES, LTD.

NAME

Nine North County Street

ADDRESS

Waukegan, IL 60085

CITY &amp; STATE

THE GRANTOR Anthony Nemetz, widower and not since remarried

of the City of Waukegan County of Lake State of Illinois  
 for and in consideration of Ten and No/100 (\$10.00) ----- DOLLARS  
 and other good and valuable considerations in hand paid.

CONVEY and WARRANT to Regional Board of School Trustees of Lake County for  
 the use and benefit of Lake Villa Community Consolidated School District 41  
 of the Village of Lake Villa County of Lake State of Illinois.  
 the following described Real Estate situated in the County of Lake, in the State of Illinois,  
 to-wit:

Lot 5 in Block 3 in the Fowler Subdivision of a part of the  
 Original Plat of Lake City, now Lake Villa, in the South  
 West quarter of Section 33, Township 46 North, Range 10,  
 East of the 3rd P.M., according to the plat thereof,  
 recorded May 21, 1920, as Document 192902, in Book "K" of  
 Plats, page 34, in Lake County, Illinois

Lake County Real Estate Transfer Tax  
 has been paid in the same amount as  
 the State of Illinois Real Estate Transfer  
 Tax

LAKE CO. REC.  
 6/2/79



STATE OF ILLINOIS  
 REAL ESTATE TRANSFER TAX  
 JUN 17 1979 DEPT. OF REVENUE  
 \$ 12.50

heroby releasing and waiving all rights under and by virtue of the Homestead Exemption  
 Laws of the State of Illinois.

DATED this 22nd day of June 19 79

(Seal)

Anthony Nemetz

(Seal)

(Seal)

(Seal)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES.

Regional Board of School Trustees of Lake County  
 for the use and benefit of Lake Villa Community  
 Consolidated School District 41

Name of Grantee

P.O. Box 188, Lake Villa, IL

Address

60046

Zip

same as above

Name of Taxpayer

Address

Zip

Douglas W. Stiles

Name of Person Preparing Deed

9 N. County Street, Waukegan, IL

Address

60085

Zip

This conveyance must contain the name and address of the grantee. (Ch.115: 12.1)  
 name and address for tax billing, (Ch.115: 9.2) and name and address of person  
 preparing instrument: (Ch.115: 9.3)

LAKE COUNTY - ILLINOIS TRANSFER STAMP

STATE OF ILLINOIS } ss.  
County of Lake

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that Anthony Nemetz, widower and not since remarried

personally known to me to be the same person, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and notarial seal this 22nd day of June, 1979



Linda J. Nemetz  
Notary Public

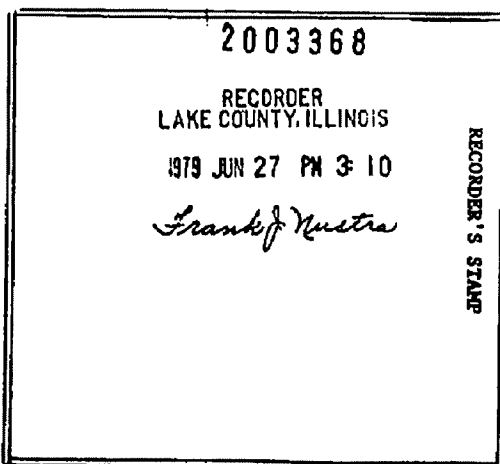
Commission Expires July 18, 1982

State of Illinois  
DEPARTMENT OF REVENUE  
STATEMENT OF EXEMPTION UNDER REAL ESTATE TRANSFER TAX ACT

I hereby declare that the attached deed represents a transaction exempt under provisions of Paragraph 2, Section 4, of the Real Estate Transfer Tax Act as set forth below.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Signature of Buyer-Seller or their Representative



Printed by Recorder for use in  
Lake County, Illinois  
**FRANK J. NUSTRA**  
Recorder of Deeds

**WARRANTY DEED**

TO

FROM

4998505

FILED FOR RECORD BY:  
MARY ELLEN VANDERVENTER  
LAKE COUNTY, IL RECORDER  
08/30/2002 - 10:58:42 A.M.  
RECEIPT #: 34654  
DRAWER #: 27

4998505 FIRST AMERICAN TITLE  
C-124962①

**Permanent Real Estate Index Number:** 02-33-308-027 and 02-33-308-026  
**Address of Real Estate:** 224 E. Grand Avenue, Lake Villa, IL 60046

**Legal Description:**

LOT 26 IN BLOCK 3 IN FOWLER'S SUBDIVISION, A SUBDIVISION IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT 192902 IN BOOK K OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, TOGETHER WITH THAT PORTION OF THE ALLEY LYING NORTH AND ADJOINING THE EAST 30 FEET OF LOT 26, VACATED BY ORDINANCE RECORDED FEBRUARY 16, 1927, AS DOCUMENT 294303.

4998505

2



# LAKE VILLA COMMUNITY CONSOLIDATED SCHOOL DISTRICT #41

131 McKinley Avenue  
Lake Villa, Illinois 60046  
Phone: 847/356-2385  
Fax: 847/356-2670  
[www.district41.org](http://www.district41.org)

July 3, 2025

Village of Lake Villa  
c/o Michael Strong, Village Administrator  
65 Cedar Avenue  
Lake Villa, IL 60046

RE: Concurrence with Village-Initiated Rezoning of School District-Owned Parcels

Dear Administrator Strong,

On behalf of the Board of Education of Lake Villa School District 41, this letter serves as formal concurrence with the Village of Lake Villa's proposed rezoning of the properties located at 304 E. Grand and 108 N. Milwaukee (commonly known as "Pleviak Elementary"). District 41 acknowledges that these properties are currently owned by the School District but authorized to be marketed by the Village of Lake Villa pursuant to the terms of an existing Intergovernmental Agreement ("IGA") between the School District and Village of Lake Villa dated May 19, 2025.

The parcels identified for rezoning are currently vacant and are no longer needed for educational purposes. The District understands that the purpose of the rezoning is to better position the properties for redevelopment and support the Village's efforts to attract qualified developers for future use of the site. We believe this action is consistent with the shared goals outlined in the IGA and serves the long-term interests of both the School District and the Village.

While the properties remain under the School District's ownership, we acknowledge and support the Village's role in initiating and advancing the rezoning process. This letter affirms the District's consent to the Village's application for zoning map amendments affecting the subject parcels and its inclusion of the properties in public hearings or planning processes related to zoning entitlements.

We appreciate the collaborative approach the Village has taken in pursuing redevelopment opportunities and look forward to continued partnership as the project advances.

If you require any additional documentation or clarification from the District, please do not hesitate to contact me at (847) 356-2385 or [skeim@district41.org](mailto:skeim@district41.org).

Sincerely,

Dr. Sandra Keim-Bounds  
Superintendent  
Lake Villa School District 41





## APPENDIX I

# Reconnaissance Photographs



#1: View facing south along the east side of the school building.



#2: View facing west along the north side of the school building.



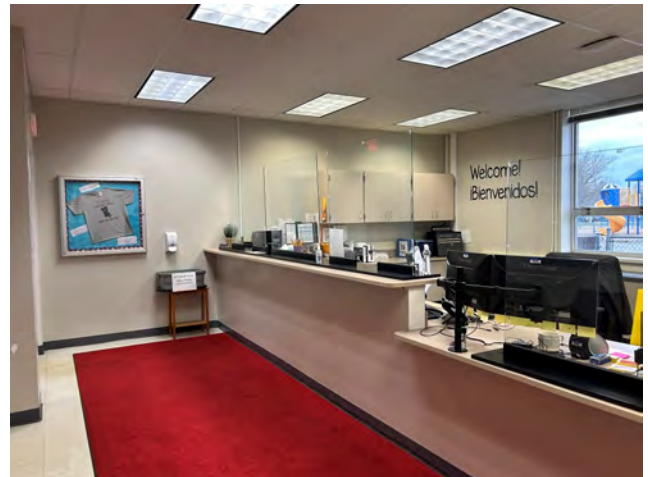
#3: View facing south of the western side of the school building.



#4: View facing east along the southern side of the school building.



#5: View of the playground on the west side of the Subject Property.



#6: View of the main lobby.





#7: View of a representative hallway.



#8: View of the basement.



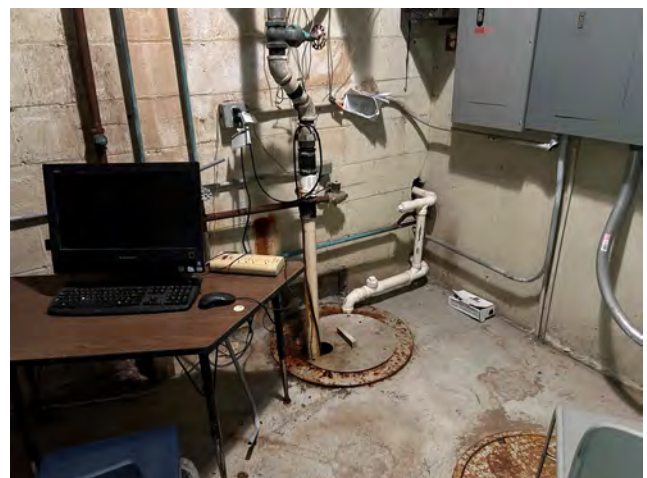
#9: View of the boiler room.



#10: View of the cafeteria kitchen.



#11: View of the cafeteria dining room.



#12: View of the sump pump.





#13: View of a representative classroom.



#14: View of a representative classroom.



#15: View of the original gymnasium.



#16: View of the new gymnasium.



#17: View of vacated Villa Avenue bisecting the Subject Property, facing east.



#18: View of the vacant land on the northern portion of the Subject Property.





#19: View of the vacant land on the northern portion of the Subject Property, facing south.



#20: View of the southeast adjoining Milwaukee Avenue/Grand Avenue intersection.



#21: View of south adjoining Walgreens (left) and residential properties (right).



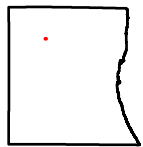
#22: View of the northeast adjoining apartment complex.



#23: View of the west adjoining Citgo gas station.



# Pleviak School Parcels, Lake Villa, Lake County, Illinois



Lake County, Illinois



Map Printed on 7/22/2025



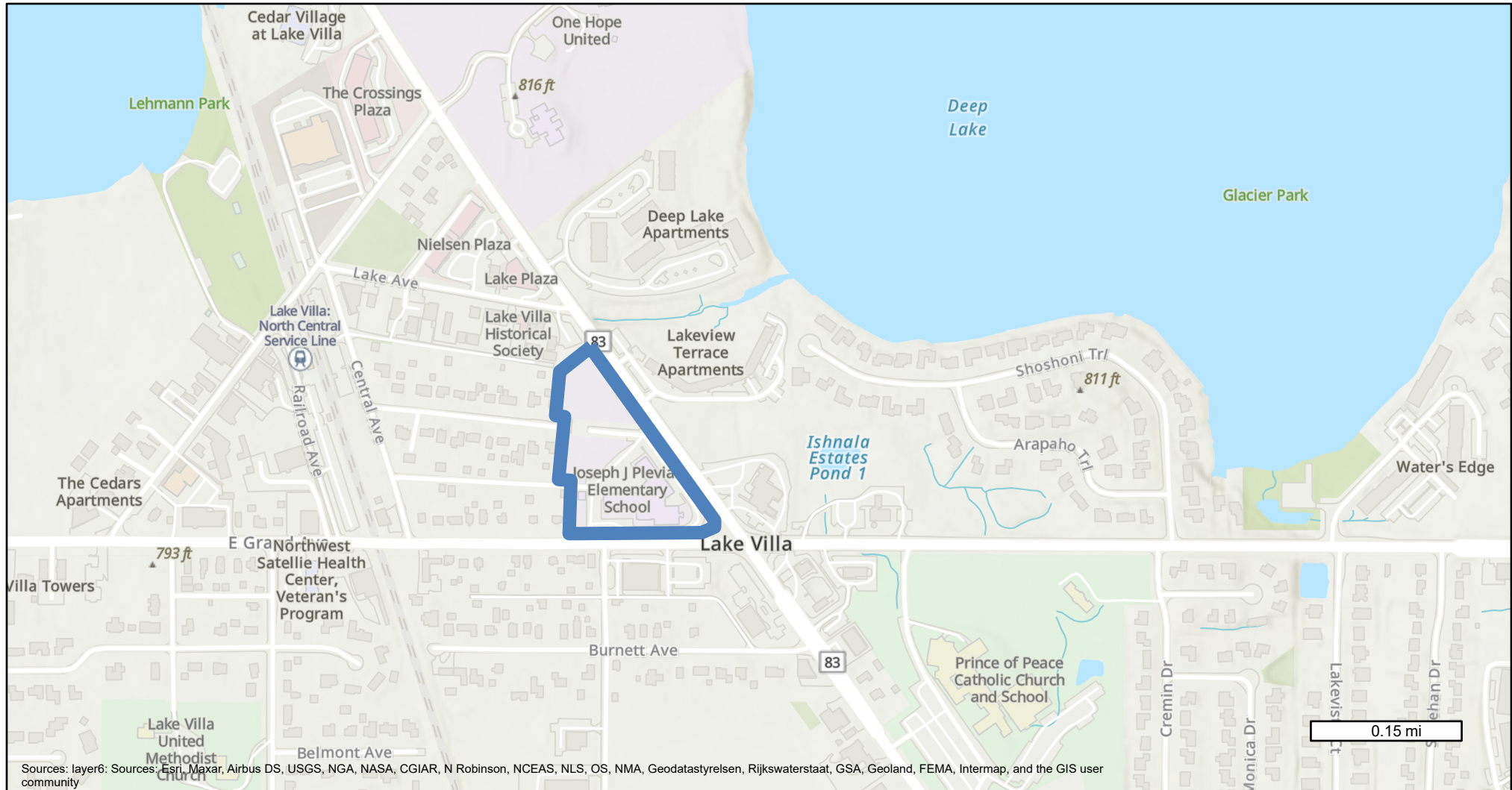
- Override 1
- PIN Labels
- Tax Parcel Lines
- Tax Parcel Information

## Disclaimer:

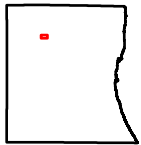
The selected feature may not occur anywhere in the current map extent. A Registered Land Surveyor should be consulted to determine the precise location of property boundaries on the ground. This map does not constitute a regulatory determination and is not a base for engineering design. This map is intended to be viewed and printed in color.



# Subject Property Location Map, Lake Villa, Lake County, Illinois



■ Override 1



Lake County, Illinois



Map Printed on 7/22/2025



## Disclaimer:

The selected feature may not occur anywhere in the current map extent. A Registered Land Surveyor should be consulted to determine the precise location of property boundaries on the ground. This map does not constitute a regulatory determination and is not a base for engineering design. This map is intended to be viewed and printed in color.

**JON M. TACK, P.E.**  
**PROFESSIONAL ENGINEERING SERVICES**

**MEMORANDUM**

TO: Mike Strong, Village of Lake Villa, Administrator

FROM: Jon M. Tack, P.E.

DATE: 7-22-2025

SUBJECT: Village of Lake Villa – Rezoning of the Pleviak Elementary School Parcels

---

Introduction

The Village of Lake Villa is starting the process for a Rezoning of the Pleviak Elementary School Parcels and has requested a review of parcels with regards to floodplain or wetland areas on the property.

Property Description

The property is located the NW corner of the intersection of E. Grand Avenue and N. Milwaukee Avenue, with two streets addresses of 304 E. Grand Avenue and 108 N. Milwaukee Avenue. The property is about 5.3 acres consisting of buildings, parking, playground areas, and green space. Drainage on the property is via storm drains and overland flow with the runoff from the property eventually flowing north into Lake Villa Creek. The property is located in the Sequoit Creek Watershed which is a subwatershed of the Fox River Watershed.

The mapped FEMA Floodplain for Lake Villa Creek is north of the school properties and the land elevation along the north limit of the school property is about 10' higher in elevation than the floodplain elevation. My review of the property indicates no depressional storage that would meet the definition of regulatory floodplain based on the Watershed Development Ordinance (WDO) definition.

The wetland mapping per Lake County GIS data indicates wetland area in the Lake Villa Creek alignment and has no impact on the school property. I also completed an inspection of the property and found no indication that a wetland delineation would be required for the property.

Summary

It is my opinion that the Pleviak Elementary School Parcels are not impacted by floodplain or wetland areas for future development.

It should be noted that a redevelopment of the property will require compliance with the WDO.



NOTICE OF PUBLIC HEARING BEFORE THE PLAN COMMISSION/  
ZONING BOARD OF APPEALS OF THE VILLAGE OF LAKE VILLA

**NOTICE IS HEREBY GIVEN** of a public hearing to be held by the Plan Commission/Zoning Board of Appeals of the Village of Lake Villa on Thursday, August 7, 2025, at 7:00 p.m., or as soon thereafter as the Plan Commission/Zoning Board's agenda permits, at the Village of Lake Villa Village Hall, 65 Cedar Avenue, Lake Villa, Illinois, 60046.

**OWNER OF RECORD AND PETITIONER:** The Owners of record of the Subject Property are the Lake Villa Community Consolidated School District No. 41, and the Village of Lake Villa, 65 Cedar Avenue, Lake Villa, IL 60046, but only as to Villa Avenue, a public Village street, and the Petitioner for rezoning of the Subject Property and a related zoning map amendment is the Village of Lake Villa.

**NATURE OF REQUEST(S):** The Petitioner is requesting the Village's consideration of a Petition for Rezoning of the Subject Property as a whole, and specifically, that the Subject Property be rezoned and re-classified respectively from the Village's CB (Community Business) Zoning District and from the R2 (Residential 2) Zoning District to the Village's CBD (Commercial Business) Zoning District.

**ADDRESS, LOCATION, AND CURRENT ZONING OF THE SUBJECT PROPERTY:**

Excluding that portion of the public Village street known as Villa Avenue, the Subject Property is approximately 5.318 acres in area, consists of two (2) triangular tracts of land generally located along the west side of Milwaukee Avenue north of Grand Avenue and north of Villa Avenue and divided by Villa Avenue. Tract 1 consists of approximately 3.993 acres and is located along Milwaukee Avenue north of Grand Avenue (Route 134) continuing north to Villa Avenue, and Tract 2 consists of approximately 1.325 acres and is located along the west side of Milwaukee Avenue north of Villa Avenue to its intersection with Milwaukee Avenue. The Subject Property consists of eleven (11) parcels which are commonly known as and are currently zoned and classified as follows in addition to a portion of Villa Avenue, a public Village street approximately 99 feet in width:

Address	Permanent Index Number(s)	Current Zoning
304 E. Grand Avenue, Lake Villa, IL	P.I.N.s 02-33-308-023, -025, -026, and -027	R2 (Residential 2)
0 N. Milwaukee Avenue, Lake Villa, IL	P.I.N.s 02-33-306-016, -017, and -018	R2 (Residential 2)
0 Villa Avenue, Lake Villa, IL	P.I.N.s 02-33-306-032, -033, and -034	CB (Community Business)
108 N. Milwaukee Avenue, Lake Villa, IL	P.I.N. 02-33-306-035	R2 (Residential 2)
Villa Avenue: That portion of Villa Avenue extending westerly from Milwaukee Avenue to the westerly lot line of P.I.N. 02-33-306-032	Not Applicable	Not Applicable

**LEGAL DESCRIPTION OF THE SUBJECT PROPERTY:**

**TRACT 1:**

**PARCEL 1:**

LOTS 1, 2, 3, 4, 27 AND 28 IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

AND

THAT PART OF SAID BLOCK DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE NORTHEAST CORNER OF LOT 2 IN SAID BLOCK, AND RUNNING THENCE EAST 30 FEET TO THE NORTHWEST CORNER OF LOT 1 IN SAID BLOCK; THENCE SOUTHERLY ON THE WEST LINE OF SAID LOT 1 TO THE SOUTHWESTERLY CORNER THEREOF; THENCE WEST PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF LOT "A" TO THE NORTH LINE OF GRAND AVENUE (FORMERLY KNOWN AS FOX LAKE ROAD); THENCE WEST 15 FEET TO THE SOUTHEAST CORNER OF LOT 28 IN SAID BLOCK; THENCE NORTH TO THE NORTHEAST CORNER OF SAID LOT 28; THENCE WESTERLY TO THE NORTHEAST CORNER OF LOT 26, IN SAID BLOCK; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 26 EXTENDED, 15 FEET; THENCE WEST, PARALLEL TO THE NORTH LINE OF SAID LOT 26, 30.07 FEET; THENCE NORTH 15 FEET TO THE SOUTH LINE OF LOT 4 IN SAID BLOCK AT A POINT 30 FEET EAST OF THE SOUTHWEST CORNER THEREOF; THENCE EAST TO THE SOUTHEAST CORNER OF LOT 2 IN SAID BLOCK AND THENCE NORTH TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

AND

LOT A IN BLOCK 3 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

EXCEPT THAT PART THEREOF DEDICATED TO THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS FOR RIGHT OF WAY BY DOCUMENT NO. 6598039, DESCRIBED AS FOLLOWS, TO WIT:

THAT PART OF LOTS 1 AND A IN BLOCK 3 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35 SECONDS EAST, ON THE EAST LINE OF SAID LOTS, 371.10 FEET TO A POINT OF CURVATURE; THENCE SOUTHWESTERLY ON A 30.00 FOOT RADIUS CURVE CONCAVE NORTHWESTERLY, 66.11 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 26 DEGREES 52 MINUTES 27 SECONDS WEST, 53.52 FEET TO THE SOUTH LINE OF SAID LOT A; THENCE NORTH 89 DEGREES 59 MINUTES 30 SECONDS WEST, ON SAID SOUTH LINE, 74.13 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 85 DEGREES 01 MINUTE 53 SECONDS EAST, 34.58 FEET TO A POINT 3.00 FEET NORMALLY DISTANT NORTH OF SAID SOUTH LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 65 DEGREES 01 MINUTE 33 SECONDS EAST, 56.83 FEET TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 00 DEGREES 27 MINUTES 02 SECONDS EAST, 22.98 FEET TO A POINT 8.50 FEET NORMALLY DISTANT WEST OF SAID EAST LINE AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH SAID EAST LINE, 369.73 FEET TO THE NORTH LINE OF SAID LOT 1 AND TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER PLS 2630"; THENCE SOUTH 84 DEGREES 20 MINUTES 56 SECONDS EAST, ON SAID NORTH LINE, 11.42 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

LOT 5 (EXCEPT THE WEST 20 FEET THEREOF DEDICATED TO THE VILLAGE OF LAKE VILLA BY DOCUMENT NO. 2064560) IN BLOCK 3 IN THE FOWLER SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY, NOW LAKE VILLA, IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920, AS DOCUMENT NO. 192902, IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

PARCEL 3:

LOT 26 IN BLOCK 3 IN FOWLER'S SUBDIVISION, A SUBDIVISION IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, TOGETHER WITH THAT PORTION OF THE ALLEY LYING NORTH AND ADJOINING THE EAST 30 FEET OF LOT 26, VACATED BY ORDINANCE RECORDED FEBRUARY 16, 1927, AS DOCUMENT NO. 294303.

PARCEL 4:

PART OF A VACATED ALLEY IN BLOCK 3 LYING WESTERLY OF THE WEST LINE OF LOT "A" IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF LOT 1 IN BLOCK 3 IN SAID FOWLER'S SUBDIVISION; THENCE NORTH 87 DEGREES 10 MINUTES 39 SECONDS WEST, ALONG A LINE PARALLEL WITH THE NORTH LINE OF THE EAST AND WEST ALLEY IN SAID BLOCK, 15.00 FEET; THENCE SOUTH 01 DEGREES 00 MINUTES 20 SECONDS EAST PARALLEL WITH THE WEST LINE OF LOT "A", 205.25 FEET TO THE NORTH LINE OF GRAND AVENUE (FORMERLY KNOWN AS FOX LAKE ROAD); THENCE NORTH 89 DEGREES 59 MINUTES 42 SECONDS EAST, ALONG SAID NORTH LINE; 15.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT "A"; THENCE NORTH 01 DEGREES 00 MINUTES 54 SECONDS WEST ALONG SAID WEST LINE, 204.50 FEET TO THE PLACE OF BEGINNING, IN LAKE COUNTY, ILLINOIS.

**TRACT 2**

PARCEL 1:

LOTS 30, 31 AND 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTH WEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS, EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT NO. 6612158, DESCRIBED AS FOLLOWS, TO WIT:

THAT PART OF LOT 31 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHERNMOST CORNER OF SAID LOT 31; THENCE ON AN ASSUMED BEARING OF SOUTH 36 DEGREES 15 MINUTES 35 SECONDS EAST, ON THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 147.97 FEET TO A POINT OF CURVATURE ON THE EAST LINE OF SAID LOT 31; THENCE SOUTH ON A 20.00 FOOT RADIUS CURVE, CONCAVE WESTERLY, ON THE EAST LINE OF SAID LOT 31, AN ARC DISTANCE OF 17.26 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 11 DEGREES 31 MINUTES 50 SECONDS EAST, 16.73 FEET TO A POINT 7.00 FEET NORMALLY DISTANT WEST OF THE NORTHEAST LINE OF SAID LOT 31; THENCE NORTH 36 DEGREES 15 MINUTES 35 SECONDS WEST, PARALLEL WITH THE NORTHEAST LINE OF SAID LOT 31, A DISTANCE OF 163.12 FEET TO THE NORTHWEST LINE OF SAID LOT 31; THENCE NORTH 53 DEGREES 18 MINUTES 12 SECONDS EAST, ON SAID NORTHWEST LINE, 7.00 FEET TO THE POINT OF BEGINNING.

AND

EXCEPTING THAT PART THEREOF FOR RIGHT OF WAY DEDICATED TO THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BY DOCUMENT NO. 6596339, DESCRIBED AS FOLLOWS, TO WIT: THE NORTHEAST 7.00 FEET OF LOT 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902, IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

LOTS 33 AND 34 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

PARCEL 3:

LOTS 28 AND 29 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED MAY 21, 1920 AS DOCUMENT NO. 192902 IN BOOK "K" OF PLATS, PAGE 34, IN LAKE COUNTY, ILLINOIS.

VILLA AVENUE: THAT PORTION OF VILLA AVENUE, AN APPROXIMATELY 99 FOOT WIDE PUBLIC VILLAGE STREET, EXTENDING WESTERLY FROM MILWAUKEE AVENUE TO THE WESTERLY LOT LINE OF P.I.N. 02-33-306-032.

Copies of the Petition are on file and available for inspection and/or copying at the office of the Village Clerk, 65 Cedar Avenue, Lake Villa, IL 60046 during the Village Clerk's normal business hours.

The Village of Lake Villa is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the Village's facilities, are requested to contact the Village's ADA Coordinator at (847) 356-6100 promptly to allow the Village to make reasonable accommodations for those persons.

ALL INTERESTED PERSONS ARE INVITED TO ATTEND THIS PUBLIC HEARING AND WILL BE GIVEN AN OPPORTUNITY TO BE HEARD, AND SUCH PERSONS, IF THEY SO REQUEST, WILL BE GIVEN THE OPPORTUNITY TO INQUIRE OF AND CROSS-EXAMINE WITNESSES FOR THE PETITIONER.

/s/ Craig Kressner  
Chairman, Plan Commission/Zoning Board of Appeals,  
Village of Lake Villa



**DATE:** August 7, 2025

**TO:** Chairman Craig Kressner and Members of the Plan Commission/Zoning Board of Appeals

**FROM:** Jacob Litz, Assistant to the Village Administrator

**RE:** Conditional Use Permit and Zoning Variations for 406 Monaville Rd (Easy Space Storage II, LLC)

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<b><u>Property Owner</u></b>	<b><u>Property Location</u></b>	<b><u>Zoning District</u></b>
Estate of Robert Grenus (c/o Sandra Johnson, Executor) 406 Monaville Rd. Lake Villa, IL 60046	Southwest corner of Monaville Road and Cedar Lake Road	SB—Suburban Business
<b>Petitioner and/or Contract Purchaser</b>	Easy Space Storage II, LLC 23366 Wall Street Lake Villa, IL 60046	
<b>Requested Action</b>	Approval of a Conditional Use Permit and Zoning Variations to facilitate development of a mini-warehouse/personal storage facility.	

**Summary of Request**

Easy Space Storage II, LLC, the contract purchaser of the subject property, is seeking a Conditional Use Permit and associated zoning variations to allow for the construction and operation of a self-storage facility consisting of four buildings. The site is zoned Suburban Business (SB) and is currently vacant.

The applicant is requesting:

- A Conditional Use Permit for a "Miniwarehouse; Personal Storage Facility" use, as permitted as a conditional use in the SB District.
- A variation from Section 10-3C-1 to allow a 30-foot front yard setback (50 feet required).
- A variation from Sections 10-4-6 (G)(2)(5) and 10-4-4(B)(13)(A) to allow a Type C landscaping buffer along the perimeter of the property in addition to a proposed six foot high retaining wall along a portion of the southern buffer yard, notwithstanding that a Type D landscaping buffer is otherwise required.

*Administrative Note: The Public hearing notice indicated a variation for parking; however, the petitioner has revised its plans to meet the parking standards requirement for the proposed use. Therefore, relief from the zoning code is no longer being requested at this time.*

**Background**

The property is located at the southwest corner of Monaville Road and Cedar Lake Road and encompasses approximately 3.067 acres. Though zoned SB and designated for commercial use in the

Village's Comprehensive Plan, the property has remained undeveloped, with occasional agricultural activity.

Numerous site-specific constraints have hindered past development, including:

- Environmental features such as wetlands and a creek on the southern boundary, triggering buffer and setback requirements.
- Right-of-way dedications along both Monaville and Cedar Lake Roads, significantly reducing usable land area.

The proposed self-storage use is low-intensity and well-suited given the parcel's physical property characteristics and limitations. The buildings are oriented inward, with unit doors facing away from public streets. The architecture is styled to reflect a farmhouse aesthetic that blends with the surrounding area. The petitioner notes that no homes are located within approximately 500 feet of the southern property line where landscape relief is requested.

#### **Procedural Review**

During the Public Hearing, the Plan Commission/Zoning Board of Appeals will hear the evidence presented by Village Staff, Applicant/Petitioner, and any individuals in the audience wishing to provide public comment, present evidence, and/or cross-examine witnesses relative to the proposed request. At the conclusion of the public hearing, the Plan Commission/Zoning Board of Appeals shall, with the aid and advice of Village Staff, transmit its findings and recommendations as to whether the Conditional Use Permit and the related variations sought should be approved, approved subject to conditions or modifications, or not approved.

#### **General Standards for Conditional Use Permits**

According to the standards for conditional uses outlined in Section 10-4-4 of the Lake Villa Zoning Code, the proposed use must meet the following criteria, among others. Staff comments are italicized below.

1. Compatibility with Adjacent Properties: *The proposed use is consistent with the character and development intent of the area. Its design minimizes visual impact and integrates complementary architecture.*
2. Traffic and Parking: *A traffic study by Haeger Engineering shows no adverse effects. Parking demand is low for this use, and the proposed plan meets the parking standards.*
3. Public Health, Safety, and Welfare: *No adverse impacts are anticipated. The development will not significantly increase demand on public infrastructure.*
4. Consistency with Comprehensive Plan: *The proposal supports the Village's goals of promoting commercial development within SB-zoned areas.*

#### **Staff Review**

##### **Engineering review**

The Village's engineers provided detailed review comments on July 11, 2025. In response, the petitioner submitted revised documentation on July 22, 2025, which confirmed:

- Public sewer connection will occur to the north of Monaville Road (no holding tank).

- If approved, a Lake County wetland delineation will be completed, and a Letter of No Impact (LONI) will be required prior to any development on the site.
- Permitting with LCDOT is in process for ingress/egress into the project site.
- The detention basin design and grading comply with preliminary stormwater standards; final plans will include all required documentation (e.g., DECI, structural wall design, maintenance plan).

#### Planning/Zoning

Teska Associates' review confirmed the CUP requires compliance with additional landscape, screening, and architectural standards under Section 10-4-4. Key items:

- The petitioner has oriented all unit doors away from public rights-of-way, satisfying visual screening requirements.
- Type D landscape buffering is required but cannot be met fully on the southern edge due to physical site constraints. A variation is requested to use a Type C buffer with retaining wall.
- The architectural style and building materials proposed for the buildings meet the Architectural Design Standards in the Zoning Code for non-residential buildings.

#### Comprehensive Plan



*Future Land Use Map from Village of Lake Villa Comprehensive Plan, 2022  
shows property planned for Agricultural Use*

The Village's Comprehensive Plan Future Land Use Map shows agricultural use for this site. However, the development aligns with the Village's long-range goal of supporting commercial infill along Monaville Road in the SB District.

While the future land use map contemplates agricultural, the property is zoned SB – Suburban Business.

#### **Conditions Recommended by Village Staff**

Village Staff have reviewed the application documents submitted by the Petitioner and is recommending that the following conditions be considered relative to the Petitioner's application:

1. All stormwater, wetland, and utility permits must be received prior to site development permit issuance.
2. A maintenance plan for the detention basin and retaining walls shall be submitted and recorded.
3. Petitioner shall be required to comply with the recommendations noted in the Lake County Natural Resources Opinion letter dated May 28, 2025.
4. Final engineering, which must be received by the Village prior to site development permit issuance, shall demonstrate compliance with Village Code Titles 5 and 11.

**Options for the Plan Commission/Zoning Board of Appeals to Consider**

Based on Section 10-7-6(D) of the Village of Lake Villa Zoning Code, the Plan Commission/ Zoning Board of Appeals (PC/ZBA) may consider a range of actions when evaluating a Conditional Use Permit petition and related requests for variations, including a motion to recommend approval, recommend approval with conditions, or recommend denial of the request.

The PC/ZBA must consider factors such as consistency with the Comprehensive Plan and Official Land Use Map, compatibility with surrounding zoning and land uses, the intent of the Zoning Ordinance, and whether the request addresses changing conditions or public policies. For Conditional Use Permits, the PC/ZBA must further evaluate whether the proposed use is in harmony with the general purpose and intent of the zoning ordinance, whether it will not be injurious to the surrounding neighborhood, and whether it is adequately served by public infrastructure.

Any recommendation adopted by the Plan Commission/Zoning Board of Appeals must be supported by findings of fact and will be forwarded to the Village Board for final consideration. If conditions are recommended for approval, they must be clearly stated in the motion and must directly relate to mitigating impacts or ensuring consistency with applicable zoning and land use goals.

Should the Plan Commission/Zoning Board of Appeals recommend approval, this matter will be forwarded to the Village Board for consideration at its September 2, 2025 meeting.

**Recommended Action**

Village Staff recommends that the PC/ZBA hold a public hearing to hear testimony provided by the Petitioner, members of the public, and Village Staff relative to the proposed Conditional Use Permit requested by the Petitioner. Upon closure of the Public Hearing, Staff recommends that the PC/ZBA deliberate and consider a motion to approve, approve with conditions, or recommend denial of the Petitioner's request.

**Attachments**

- Petitioner Application Materials, Preliminary Site and Engineering Plans, and Narrative
- Teska Associates and Village Engineer Review Memos
- Petitioner's Written Responses to Staff Comments
- Legal Notice of Public Hearing





## APPLICATION FOR ZONING REQUEST(S)

This application is required for these requests:

Zoning Change, Variation, Conditional Use Permit, Planned Unit Development and/or Subdivision

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**Property Address:****Application Date:**

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Applicant Name: Easy Space Storage II, LLC

Applicant Address: 23366 Wall St Lake Villa IL 60046

Applicant Email: mhaufe@comcast.net

Applicant Phone: 847-652-6196

Owner Name: Estate of Robert Grenus, c/o Sandra Johnson, executor

Owner Address: PO BOX 466 Lake Villa IL 60046

Owner Email: c/o Attorney: Ken Suskin: sphinx711@aol.com

Owner Phone: 847-680-1190

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*If petitioner is a corporation, at the public hearing, an attorney must represent the Petitioner.*

**CONTRACTOR INFORMATION:**

	Contact and Firm	Phone Number	Email
Attorney	Michael Durlacher Grogan Hesse & Uditsky	312-304-6453	mdurlacher@ghulaw.com
Civil Engineer - Transportation	Kim Lask Haeger Engineering	847-230-3176	kim-l@haegerengineering.com
Civil Engineer - Stormwater	Same as Above		
Architect	Russell Thiele Groundwork Ltd & Edificio Arch	847-541-4151	Russell@groundworkltd.com
Landscape Architecture	Sharon Dickson Dickson Design	847-8788-4019	sdickson@dicksondesignstudio.com
Other (Specify)			

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

**Application Request(s)** *(check all that apply)*

☐ Zoning Change

☒ Conditional Use Permit

☒ Zoning Variation

☐ Planned Unit Development

☐ Subdivision

**Existing Zoning of Property:** SB (Suburban BUiness)

**Reason for Request(s):**

See attached Narrative to Petition For Conditional Use Permit and Zoning Variation.

**Intended Use(s):**

Self Storage Facility ( 4 Buildings) as set forth on the Site Plan

**Permanent Index Number (PIN)** *(List all PINs relevant to the request)*

06-08-100-050-0000		

**Legal Description:** Attach legal description to this application and represent that they are the (owner) (contract purchaser) (lessee) of the following described real estate-to-wit.

**Physical Location of the Property** *(attach separate sheets if more space is required)*

Property is current vacant land and agriculture crops have been planted seasonally.

**Assessed Valuation for the last three tax years:**

YEAR	ASSESSED VALUATION
2024	\$2565
2023	\$2286
2022	\$2028

**Notes to Applicant / Petitioner:**

- Application requirements may be waived by the Village of Lake Villa depending on the scope of the request.
- All Planned Unit Developments (PUDs) are a Conditional Use.



## APPLICATION FOR ZONING REQUEST(S)

This application is required for these requests:

Zoning Change, Variation, Conditional Use Permit, Planned Unit Development and/or Subdivision

### REQUIRED APPLICATION MATERIALS

- Zoning Change (Map Amendment): Complete sections 1 - 2
- Zoning Variation: Complete sections 1 - 2
- Conditional Use Permit: Complete sections 1 - 4
- Planned Unit Development (PUD): Complete sections 1 – 5
- Land Subdivision: Complete Sections 1 – 3 and 6

### Section 1: Requirements for all Applications:

	Required	Submitted
Current evidence of title to property, purchase contract or lease agreement.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Letter of Concurrence from present property owners if different from petitioner(s). Letter from owner must show owner's name, address and present phone number.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Plat of Survey with square footage of property, all existing buildings and structures shown and specifically located.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Photographs of the area for which the change is requested.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Site Plan of subject property, scaled and dimensioned, illustrating proposed changes and all property and improvements within 300 feet of subject property (include north arrow and scale)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Indicate which portion, if any of subject property is flood plain or wetland – attach documentation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

**Section 2: RELIEF FROM ZONING CODE if applicable) (Section 10-3C-1)**

**In Conjunction with an application for a Zoning Change, Zoning Variation or Planned Unit Development (PUD)**

Provide the current and proposed requirements for all requested zoning relief. These may include requests for relief from use, lot area, yard, bulk or other exceptions. Indicate the requested relief and list the current zoning requirement and the proposed zoning requirement.

<b>Table 3: Zoning Regulations</b>	<b>Current Zoning Requirement</b>	<b>Proposed Zoning Requirement</b>	<b>Variance or Relief Requested</b>
Use	Miniwarehouse	Miniwarehouse	<input type="checkbox"/>
Lot Size Minimum Area	40,000 sf	133,613 sf	<input type="checkbox"/>
Lot Size Minimum Width	150'	238' (Cedar Lake) & 509.5 (Monaville)	<input type="checkbox"/>
Minimum Front Yard Setback	50'	30'	<input checked="" type="checkbox"/>
Minimum Rear Yard Setback	30'	30' min.	<input type="checkbox"/>
Total Side Yard Minimum Setback	30'	100' min.	<input type="checkbox"/>
Minimum Setback Abutting a Street	50'	30'	<input type="checkbox"/>
Minimum Setback Abutting a Residential or AG Zone	30'	30' min.	<input checked="" type="checkbox"/>
Maximum Lot Coverage	70% (93,529 sf)	52% (69,565 sf)	<input type="checkbox"/>
Maximum Floor Area Ratio	80% (106,890 sf)	34.2% (45,750 sf)	<input type="checkbox"/>
Maximum Height of Principal Use	40'	+/- 30'	<input type="checkbox"/>
Maximum Height of Accessory Use	NA	NA	<input type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

**Section 3: RELIEF FROM RESIDENTIAL DISTRICT STANDARDS (Section 10-3C-4 and 10-3C-5)**

**Residential District Standards for Prior Zones (R1, R2, SR1, SR2, SR3, SR4) (if applicable)**

<b>Table 4: Residential District Standards for Prior Zones</b>	<b>Current Zoning Requirement</b>	<b>Proposed Zoning Requirement</b>	<b>Exceptions Requested</b>
Maximum Open Space Ratio*			<input type="checkbox"/>
Maximum Gross Density			<input type="checkbox"/>
Maximum Net Density			<input type="checkbox"/>
Minimum Site Area (Sq Ft)			<input type="checkbox"/>
Maximum Floor Area Ratio			<input type="checkbox"/>
Maximum Impervious Surface Ratio			<input type="checkbox"/>

\*OPEN SPACE: Land which is required by this title to remain as undeveloped and used for recreation, resource protection, or amenity purposes. Open space lands shall be freely accessible to all residents of the development. Open space land shall not be occupied by nonrecreational buildings, roads, road rights of way, or parking areas for nonrecreational uses. Land located within the yards or lots of residential and/or nonresidential properties is not considered open space.

\*OPEN SPACE RATIO (OSR): The proportion of a site consisting of open space calculated using the base site area.

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

Section 4: **CONDITIONAL USE PERMIT REQUIREMENTS**

**§ 10-4-4**

	<b>Table 1: Conditional Use Permit Submission Requirements</b>	<b>Required</b>	<b>Submitted</b>
A	<p>Site Plan of the proposed site and of the surrounding area within three hundred feet (300') of the site.</p> <p><i>Show the location of and name of all streets, easements, and railroad or utility rights-of-way; the location of any subdivided lands; and the location of any parks, other public open spaces or uses, residences, or other permanent structures.</i></p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B	A drawing showing the proposed development of the site (site plan).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C	Narrative description of how the project conforms to the General Requirements in 10-4-4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

Section 4: **CONDITIONAL USE PERMIT REQUIREMENTS**

**§ 10-4-4**

	<b>Table 1: Conditional Use Permit Submission Requirements</b>	<b>Required</b>	<b>Submitted</b>
A	<p>Site Plan of the proposed site and of the surrounding area within three hundred feet (300') of the site.</p> <p><i>Show the location of and name of all streets, easements, and railroad or utility rights-of-way; the location of any subdivided lands; and the location of any parks, other public open spaces or uses, residences, or other permanent structures.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
B	A drawing showing the proposed development of the site (site plan).	<input type="checkbox"/>	<input type="checkbox"/>
C	Narrative description of how the project conforms to the General Requirements in 10-4-4.	<input type="checkbox"/>	<input type="checkbox"/>

# VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

## Section 5: PLANNED UNIT DEVELOPMENT

### Preliminary Plan Submission Requirements (§10-9-1.8)

*Notes to Applicant / Petitioner:* The initial public hearing for a Planned Unit Development will not be scheduled until all requirements have been satisfactorily completed as determined by the Village Administrator.

	<b>Table 2: Preliminary PUD Plan Submission Requirements</b>	<b>Required</b>	<b>Submitted</b>
A	A written letter of intent from the applicant describing the applicant's intention for developing the site.	<input type="checkbox"/>	<input type="checkbox"/>
B	A topographic survey.	<input type="checkbox"/>	<input type="checkbox"/>
C	A location map.	<input type="checkbox"/>	<input type="checkbox"/>
D	General site information. Data regarding site conditions, land characteristics, general land use, zoning, available community facilities and utilities, existing covenants, and other related general information about land uses within one-fourth (1/4) mile of the proposed site perimeter.	<input type="checkbox"/>	<input type="checkbox"/>
E	Conceptual plan. A scaled drawing of the site, in simple sketch form, showing the proposed location and extent of the land uses, major streets, lots, and other features as they are related to the site. Drawings should be shown to scale and dimensioned for key features.	<input type="checkbox"/>	<input type="checkbox"/>
F	Conceptual structures. Sketches depicting the general architecture and massing of buildings and structures on the site, and information depicting the architecture and massing of buildings and structures adjacent to the site. Include the scale and measurements of buildings, setbacks, natural features, and right of way.	<input type="checkbox"/>	<input type="checkbox"/>
G	Legal description. A plat of survey and legal description (within 5 years) of the site proposed for development prepared by a land surveyor licensed by the state of Illinois.	<input type="checkbox"/>	<input type="checkbox"/>
H	Tentative plans for water supply, sewage disposal, surface drainage, open space, and other public facilities and improvements.	<input type="checkbox"/>	<input type="checkbox"/>
I	Fiscal impact study comparing the projected tax revenue generated by the project and the added costs for public services	<input type="checkbox"/>	<input type="checkbox"/>
J	School impact study indicating the number of new students generated by the project. This information will be used in the fiscal impact study.	<input type="checkbox"/>	<input type="checkbox"/>
K	Traffic impact study indicating the daily and peak traffic generation by the project.	<input type="checkbox"/>	<input type="checkbox"/>
L	Market study to evaluate the economic feasibility of the proposed development, including market acceptance of the proposed development products, comparative alignment and market absorption. The market study shall be prepared by a qualified, independent market research firm.	<input type="checkbox"/>	<input type="checkbox"/>



VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

	<b>Table 2: Preliminary PUD Plan Submission Requirements</b>	<b>Required</b>	<b>Submitted</b>
M	A construction activities plan	<input type="checkbox"/>	<input type="checkbox"/>
N	Financial information including a copy of lender's commitment; MAI appraisals on the existing site and after development completion, certificate of no delinquent taxes; and financial pro forma.	<input type="checkbox"/>	<input type="checkbox"/>
O	Proposed covenants to govern the use and maintenance of the development	<input type="checkbox"/>	<input type="checkbox"/>
P	A narrative description of the planned development describing: the intent and desired effect of the development; the manner in which the development has been planned to take advantage of the flexibility of the planned development regulations; the superior benefits that would accrue to the residents/users of the development; all relief sought from the standard application of district requirements in conjunction with project.	<input type="checkbox"/>	<input type="checkbox"/>
Q	Proof of ownership and evidence of unified control.	<input type="checkbox"/>	<input type="checkbox"/>
R	A development schedule indicating:	<input type="checkbox"/>	<input type="checkbox"/>
S	Submission and approval of all applicable plans and materials required in the village's watershed development regulations and tree preservation regulations.	<input type="checkbox"/>	<input type="checkbox"/>
T	A description of the materials to be used in the construction of buildings and structures.	<input type="checkbox"/>	<input type="checkbox"/>

# VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

## Section 6: PLAT OF SUBDIVISION

Subdivision Submission Requirements (§ 11-2-2) (if applicable)

*Notes to Applicant / Petitioner:* The initial public hearing for a Preliminary Plat of Subdivision will not be scheduled until all requirements have been satisfactorily completed as determined by the Village Administrator.

	Table 5: Subdivision Submission Requirements	Required	Submitted
<b>Stage 1: Concept Plan</b>			
	<p><b>Concept Plan</b>, submitted by the developer to the plan commission at a conference, is intended to familiarize the developer with requirements; eliminate, wherever possible, major revisions of the preliminary plat; and classify the subdivision as "major" or "minor".</p> <p>If the plan commission determines it appropriate, the concept plan shall also be reviewed and approved by the village planner. Those classified as "minor subdivisions" may proceed directly to the third or final plat stage.</p> <p><b>Concept Plan</b> shall show:</p>	<input type="checkbox"/>	<input type="checkbox"/>
1	Boundaries of the property to be subdivided;	<input type="checkbox"/>	<input type="checkbox"/>
2	Land characteristics such as natural drainage, swamp areas, wooded areas, and ridges;	<input type="checkbox"/>	<input type="checkbox"/>
3	Development characteristics such as surrounding streets, existing structures and available utilities;	<input type="checkbox"/>	<input type="checkbox"/>
4	Proposed layout of streets, blocks and lots	<input type="checkbox"/>	<input type="checkbox"/>
5	Proposed location of business, park and other nonresidential areas;	<input type="checkbox"/>	<input type="checkbox"/>
6	Existing easements and covenants affecting the property.	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Location Sketch</b> , shall show the relationship of the proposed subdivision to traffic arteries, public transportation, municipal utilities, schools and churches.	<input type="checkbox"/>	<input type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

Stage 2: Preliminary Plat or Plan		
	<b>Preliminary Plat or Plan</b> , shall show the lot and street configuration, as well as the proposed landscape improvements, and shall conform with the agreements reached in the concept plan conference.	<input type="checkbox"/>
	<b>Copies of the plat or plan</b> , and all other supporting documents, shall be submitted in ten (10) copies, and shall be drawn at a scale of one inch to one hundred feet (1" = 100'), unless a different scale is approved at the concept plan conference.	<input type="checkbox"/> Copies Req: _____ <input type="checkbox"/> Copies Provided: _____
	<b>Title And Certificate</b>	<input type="checkbox"/>
	<b>Description of Existing Conditions:</b>	
1	<b>Boundary Lines</b>	<input type="checkbox"/>
2	<b>Easements</b>	<input type="checkbox"/>
3	<b>Streets</b>	<input type="checkbox"/>
4	<b>Utilities</b>	<input type="checkbox"/>
5	<b>Elevations</b>	<input type="checkbox"/>
6	<b>Physical Conditions:</b> The water elevation at the date of survey of adjoining lakes, watercourses, marshes and bogs, and areas subject to inundation, and a graphic representation and notation of the high-water marks of such; wooded areas and isolated preservable trees one foot (1') or more in diameter.	<input type="checkbox"/>
7	<b>Manmade Features:</b> Houses, barns, and other structures; other constructed features.	<input type="checkbox"/>
8	<b>Conditions On Adjacent Land:</b> All of the requirements of plat preparation shall apply equally to the site being subdivided and to all land within three hundred feet (300') of its boundaries	<input type="checkbox"/>
9	<b>Location Map:</b> A drawing, one thousand feet (1,000') to five thousand feet (5,000') per inch showing the location of the subdivision, and indicating its relationship to traffic arteries, community facilities, railroads, and other nonresidential land uses or adverse influence within a radius of two (2) miles.	<input type="checkbox"/>
10	<b>Proposed Public Improvements:</b> Highways or other major improvements planned by public authorities for future construction on or near the tract	<input type="checkbox"/>
11	<b>Subsurface Conditions:</b> Depth of groundwater unless test pits are dry at a depth of eight feet (8'); location and results of any tests made to ascertain subsurface soil and rock conditions.	<input type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

12	<b>Percolation Tests:</b> Percolation tests data shall be submitted for all subdivisions to be served by individual sewage disposal systems.	<input type="checkbox"/>	<input type="checkbox"/>
13	<b>Application Form:</b> Preliminary plan application form.	<input type="checkbox"/>	<input type="checkbox"/>
14	<b>Site Capacity Calculations:</b> Site capacity calculations.	<input type="checkbox"/>	<input type="checkbox"/>
15	<b>Natural Resources:</b> Lake County natural resources opinion.	<input type="checkbox"/>	<input type="checkbox"/>
16	<b>Endangered Species Report:</b> Illinois Department of Natural Resources, Endangered Species Report (if required by another agency).	<input type="checkbox"/>	<input type="checkbox"/>
17	<b>Archaeological Survey:</b> Archaeological survey (if required by other agency).	<input type="checkbox"/>	<input type="checkbox"/>
18	<b>Phase One Environmental Audit:</b> Phase one environmental audit (if required or otherwise available).	<input type="checkbox"/>	<input type="checkbox"/>
19	<b>Wetland Reports:</b> All correspondence or reports relating to wetlands, such as U.S. Army Corps of Engineers and IDOT Division of Water Resources.	<input type="checkbox"/>	<input type="checkbox"/>
20	<b>Traffic Management Studies:</b> All correspondence and reports relating to traffic management such as traffic studies, or correspondence to or from IDOT or Lake County Division of Transportation.	<input type="checkbox"/>	<input type="checkbox"/>
21	<b>Stormwater Detention Calculations:</b> Stormwater detention calculations.	<input type="checkbox"/>	<input type="checkbox"/>
22	<b>Percolation Tests:</b> Percolation tests if on site sewage disposal systems are to be utilized.	<input type="checkbox"/>	<input type="checkbox"/>
23	<b>Preliminary Plat or Plan Requirements:</b> Preliminary plats or plans shall include the following: (A) Preliminary plat or plan. (B) Preliminary utility plan. (C) Existing natural resource plan. (D) Natural resources protection plan. (E) Preliminary landscaping plan.	<input type="checkbox"/>	<input type="checkbox"/>
24	<b>Water Study Report:</b> Water study report demonstrating adequate water supply.	<input type="checkbox"/>	<input type="checkbox"/>
25	<b>Sanitary Sewer Capacity Report</b> demonstrating adequate capacity for both transportation and treatment of sewage.		
26	<b>Fiscal Impact Study:</b> Fiscal impact study, if required by the plan commission.	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Proposals of The Subdivision:</b>		
1	<b>Name Of Subdivision:</b> The subdivision name shall be original and not duplicate, or be substantially similar to, any existing Lake County subdivision.	<input type="checkbox"/>	<input type="checkbox"/>
2	<b>Streets:</b> Unduplicated names, right of way and roadway widths, similar data for alleys, if any.	<input type="checkbox"/>	<input type="checkbox"/>
3	<b>Easements:</b> Location, width and purpose.	<input type="checkbox"/>	<input type="checkbox"/>
4	<b>Lot Lines:</b> Location and dimensions.	<input type="checkbox"/>	<input type="checkbox"/>

VILLAGE OF LAKE VILLA - APPLICATION FOR ZONING REQUEST(S)

5	<b>Sites:</b> Location and use of any site to be used for other than single-family residential.	<input type="checkbox"/>	<input type="checkbox"/>
6	<b>Setback:</b> Minimum building setback lines.	<input type="checkbox"/>	<input type="checkbox"/>
7	<b>Site Data:</b> A tabulation of gross area, street area, other dedicated area, net subdivided area, number of lots and linear feet of street.	<input type="checkbox"/>	<input type="checkbox"/>
8	<b>Elevations:</b> Proposed contours of the finished subdivision, where different from existing contours, in the same detail used for existing elevations.	<input type="checkbox"/>	<input type="checkbox"/>
9	<b>Engineering Plans and Drawings:</b> (1) Engineer: Whenever improvements covered by this subsection are required in the development of a subdivision, an engineer shall prepare all plans and specifications.	<input type="checkbox"/>	<input type="checkbox"/>
10	<b>Utilities:</b> Where the preliminary plat contains Village and/or utility easements, the plat shall be approved by an authorized employee of the Village or of the relevant utility companies attesting to the suitability of said easements for the purpose shown.	<input type="checkbox"/>	<input type="checkbox"/>
11	<b>Review Agencies:</b> Immediately upon the filing of a preliminary plat or plan, the plat officer shall forward one copy to each of the following: (1) Village zoning officer. (2) Village engineer. (3) Health officer (where applicable). (4) Village planner.	<input type="checkbox"/>	<input type="checkbox"/>

**Narrative to Petition For Conditional Use Permit and Zoning Variation and**  
**Description of How the Project Conforms to the General Requirements in 10-4-4:**

Property: 406 Monaville Road, Lake Villa IL (“the Property”)  
Applicant: Easy Space Storage II, LLC, c/o Mark Haufe  
Owner: Estate of Roberta Grenus c/o Sandra Johnson, Executor

The Applicant is the contract purchaser of the Property commonly known as 406 Monaville Road, Lake Villa located at the southwest corner of Monaville and North Cedar Lake Road. The Property is zoned “SB” for Suburban Business District. The Property is currently vacant, has not been improved and has been used for agriculture purposes from time to time.

The Petitioner is requesting a variation to reduce the front yard setbacks to 30' and a Conditional Use Permit (“CUP”). The Variance is requested because several conditions, unique to this site, reduce the amount of developable land. First, the right-of-way along Monaville Road is in the process of being expanded, and the right-of-way along North Cedar Lake Road has been previously expanded, both by the Lake County Department of Transportation. Additionally, there is a creek and wetlands adjacent to the subject Property along the southern property line that require buffers. Also, due to this particular watershed, the required storm water detention area for the proposed Use at the west of the Property is larger than what would be required for other watersheds. These elements all reduce the buildable area of the Property, making it less viable for development. The proposed configuration of the buildings on site, and the low intensity of the use make this application uniquely suited for this Property. Please note that the site conditions referenced above were not caused or create by the Petitioner and, other than the more recent Monaville Road Right of Way expansion, have historically existed on this Site, impeding prior development of this Property.

This proposed self-storage use would be categorized as a "Miniwarehouse; Personal Storage Facility" under Section 13 in 10-4-4 which is a conditional use listed and authorized in the zoning district as a conditional use. The perimeter of the property adjacent to land zoned Suburban Residential (SR), which is the west and south sides of the property, requires a "Type C" buffer. (See Table 3 below). The proposed Landscape Plan meets this requirement along the west property line, and along the south property directly south of Building A. However, relief from this requirement is requested along the portion of the property directly south of Building D, where floodplain, and buffers to existing conditions warrant a retaining wall, which inhibits our ability to provide the required plant material. Providing the required screening in this area is unnecessary, due to the fact that the property immediately to the south contains a vast open space for existing floodplain, wetlands, and detention. No homes are within approximately 500 feet of the subject site's south property line.

The layout of the storage buildings is designed so that no doors for storage units face a public way or street. Rather, all storage unit doors will be interior facing and the exterior perimeter of the facility has been designed with elements that evoke a farmhouse style, and are complementary to the surrounding residential developments. Because there are no other commercial uses in the immediate area, typical commercial design elements, such as storefront glazing, large signage elements and other commercial features have been minimized.

Self-storage is a use that generates little on-site activity. Hours of office operations would be limited, and the configuration of the site and building elements screen self-storage loading activities from the public right-of-way. Lighting is minimal around the perimeter of the facility, and the lighting that is used to illuminate drive lanes and storage units are dark-sky fixtures that are additionally shielded from the public right-of-way by the buildings themselves. Because of the low level of activity, necessary parking spaces are minimal.

The proposed conditional use permit is consistent with the objective of the Village's comprehensive plan of business development in the SB Zoned District. As referenced above, the proposed development is designed and will be constructed, operated and maintained to be harmonious and appropriate in appearance with the existing and intended character of the general vicinity and will not significantly diminish the safety, use and enjoyment of the surrounding properties. A recent Traffic Study prepared by Haeger Engineering does not show the proposed use will result in any significant impact to area traffic patterns or interfere with traffic on surrounding public thoroughfares. Further, the farmhouse style design elements and inward facing storage doors are intended to harmonize and be appropriate with the existing character of the area.

The proposed Developer will enhance area property values by turning vacant and undeveloped land into viable commercial property, offering affordable storage to local residents for their personal property and will significantly increase the tax base for the subject Property which is historically very minimal. Accordingly, the Petition respectfully requests the Village grants their Conditional Use Petition and request for variance, and relief from landscape buffer yard requirements for the west portion of the south buffer yard.

Table 3 - Supplementary Zoning Regulation.

Section 10-4-6.G.2-5.

“Buffer Yard – SB zoning (subject site) adjacent to SR zoning.

Current requirement – Type C bufferyard, Heavy Intensity.

Provided – West buffer yard meets code, South buffer yard meets code south of building A, relief requested for west half of south buffer yard (south of building D).

# ALTA COMMITMENT FOR TITLE INSURANCE

issued by:



CHICAGO TITLE INSURANCE COMPANY

Commitment Number:

**25ST00205VH**

## NOTICE

**IMPORTANT - READ CAREFULLY:** THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

## COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, Chicago Title Insurance Company, a Florida corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within one hundred eighty (180) days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

## Chicago Title Insurance Company

By:

Michael J. Nolan, President

Attest:

Marjorie Nemzura, Secretary

*This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

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**Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:**

ORIGINATING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Chicago Title Company, LLC 3 Hawthorn Parkway, Suite 150 Vernon Hills, IL 60061 Main Phone: (847)367-5820 Email: ctvernonhills@ctt.com	Chicago Title and Trust Company 3 Hawthorn Parkway, Suite 150 Vernon Hills, IL 60061 Main Phone: (847)367-5820 Main Fax: (847)367-5945

Issued By: Suskin, Menachof & Associates, Ltd.  
1590 S. Milwaukee Ave., Suite 207  
Libertyville, IL 60048

**Order Number: 25ST00205VH**

**Property Ref.:** 406 Monaville Road, Lake Villa, IL 60046

### SCHEDULE A

1. Commitment Date: February 26, 2025
2. Policy to be issued:
  - (a) ALTA Owner's Policy 2021  
Proposed Insured: Mark Haufe or Assigns  
Proposed Amount of Insurance: [REDACTED]  
The estate or interest to be insured: Fee Simple
3. The estate or interest in the Land at the Commitment Date is:  
Fee Simple
4. The Title is, at the Commitment Date, vested in:  
[The Estate of Roberta L. Grenus, deceased;](#)  
[Sandra Johnson and Carol Grenus, Co-Executors](#)
5. The Land is described as follows:  
SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

### END OF SCHEDULE A

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## EXHIBIT "A"

### Legal Description

The East half of the North West quarter of Section 8 and the East half of the South West quarter of Section 8, Township 45 North, Range 10, East of the 3rd P.M., except the East 265 feet of the North 1700 feet of the South 2166 feet of said East half of the South West quarter of said Section, and also except the South 400 feet of the East 930.6 feet of the East half of the South West quarter of said Section in Lake County, Illinois, Excepting Lots 1, 2, 3 and 4 of Fran-Ro Ranch Acres Fourth Addition being a Subdivision of part of the East half of the North West quarter of Section 8, Township 45 North, Range 10, East of the Third Principal Meridian, in the Village of Lake Villa, County of Lake, State of Illinois; and excepting Lots 1 and 2 in Fran-Ro Ranch Acres Third Addition, being a Subdivision of part of the East half of the Northwest quarter of Section 8, Township 45 North, Range 10, East of the Third Principal Meridian in the Village of Lake Villa, County of Lake, State of Illinois;

Except that part conveyed to the Lake County Department of Transportation by Deed recorded August 26, 1986 as Document 2475785 and by Deed recorded May 3, 2012 as Document 6848393.

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**SCHEDULE B, PART I - Requirements**

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
6. **The Proposed Policy Amount(s) must be increased to the full value of the estate or interest being insured, and any additional premium must be paid at that time. An Owner's Policy should reflect the purchase price or full value of the Land. A Loan Policy should reflect the loan amount or value of the property as collateral. Proposed Policy Amount(s) will be revised and premiums charged consistent therewith when the final amounts are approved.**
7. Be advised that the "good funds" of the title insurance act (215 ILCS 155/26) became effective 1-1-2010. This act places limitations upon the settlement agent's ability to accept certain types of deposits into escrow. Please contact your local Chicago Title office regarding the application of this new law to your transaction.
8. Effective June 1, 2009, pursuant to Public Act 95-988, satisfactory evidence of identification must be presented for the notarization of any and all documents notarized by an Illinois notary public. Satisfactory identification documents are documents that are valid at the time of the notarial act; are issued by a state or federal government agency; bear the photographic image of the individual's face; and bear the individual's signature.
9. The Company should be provided a statement from the borrower(s) relative to any mortgage identified in Schedule B disclosing whether the borrower(s) have entered into any forbearance or loan modification agreement with the lender relative to delayed or postponed payments or other restructuring of the debt secured by the mortgage.

**END OF SCHEDULE B, PART I**

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Sandra Johnson  
PO BOX 466  
Lake Villa IL 60046  
(847) 912-7737

June 12, 2025

Village of Lake Villa  
Village Administrator  
Attn: Jacob Litz, Assistant to the Village Administrator  
65 Cedar Ave  
Lake Villa IL 60046  
Via email: [jlitz@lake-villa.org](mailto:jlitz@lake-villa.org)

Re: Letter of Concurrence for 406 Monaville Rd Lake Villa  
Easy Space Storage II LLC c/o Mark Haufe  
Conditional Use and Variance request

Dear Mr. Litz

The undersigned is the current owner of the property located at and commonly known as 406 Monaville Lake Villa IL 60046 (the "Property"). We are under contract to sell the Property to Easy Space Storage LL, LLC, and Illinois limited liability company c/o Mark Haufe ("ESS"). It is our understanding that ESS is seeking a conditional use permit and zoning variance for the Property. We hereby consent to ESS and or Haufe's application to the Village of Lake Villa seeking a conditional use permit and zoning variance for the Property to fit ESS's proposed use.

Please find the enclosed title policy dated February 26, 2025, from Chicago Title Insurance Company referencing the ownership is held in the Estate of Roberta L Grenus c/o Sandra Johnson, the Executor. Please note that Carol Grenus, the co-executor has passed away and I, Sandra Johnson am the sole Executor of the Estate of Roberta L Grenus.

Thank you for the opportunity to be of assistance.

Sincerely,

  
Sandra Johnson















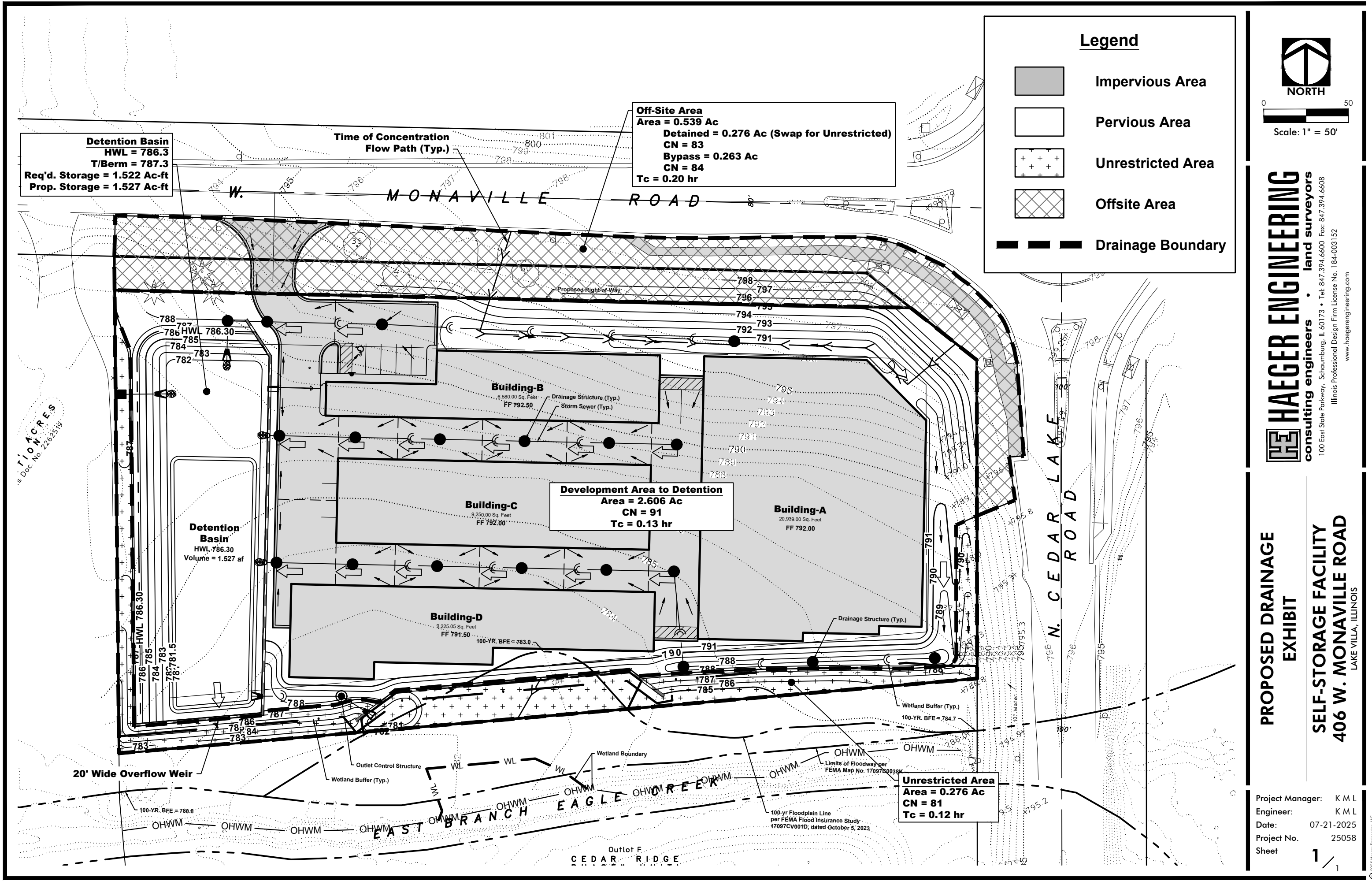












# PRELIMINARY STORMWATER REPORT



ENGINEERING | SURVEYING | CONSTRUCTION

## Contents:

- 1 Project Overview
- 2 Proposed Conditions
- 3 Stormwater Detention Design
- 4 Water Quality
- 5 Floodplain
- 6 Wetlands
- Appendix A Site Exhibits
- Appendix B Proposed Drainage Exhibit
- Appendix C Stormwater Management Calculations
- Appendix D Proposed PondPack Report (Detention Sizing)
- Appendix E Proposed PondPack Report (with Offsite Bypass Area)
- Appendix F Critical Duration PondPack Report (2-Year and 100-Year)

**Project:**  
Self-Storage Development

**Location:**  
406 W. Monaville Road  
Lake Villa, Illinois

**Prepared For:**  
Easy Space Storage II, LLC  
Lake Villa, IL 60046

**Date:**  
June 17, 2025  
Revised July 21, 2025

Prepared By:  
Kim Lask, P.E., PTOE, CFM  
Haeger Project No.: 25-058



## 1 PROJECT OVERVIEW

The property is located at 406 W. Monaville Road in Lake Villa, Illinois, within Section 45, Township 10 North, Range 8 East. The parcel area is 3.08 acres, and the P.I.N. is 06-08-100-050. The property is bounded by W. Monaville Road to the north, N. Cedar Lake Road to the east, single-family to the west, and East Branch Eagle Creek and Cedar Ridge single-family subdivision to the south.

The site is currently vacant with one driveway to W. Monaville Road at the midpoint of the property. A 20 ft strip of property will be dedicated as public right-of-way along W. Monaville Road. The net property area after dedication will be 2.857 ac.

## 2 PROPOSED CONDITIONS

The proposed development includes one climate-controlled self-storage building and three non-climate-controlled storage buildings. There will be a parking lot on the north side of the site and stormwater management basin on the west side of the site. Access to the site includes one full access driveway connecting to W. Monaville Road.

A summary of the existing and proposed land coverage breakdown for the development area is in *Table 1* below.

*Table 1 – Land Coverage*

Development Area	Area	Impervious Area		Pervious Area		VC Basin Area	
	(ac)	(ac)	(%)	(ac)	(%)	(ac)	(%)
Existing Conditions	2.857	0	0	2.857	100	0.000	0.0
Proposed Development	2.857	1.581	55.3	1.058	37.0	0.218	7.6

## 3 STORMWATER DESIGN

The property currently drains from the north to the East Branch of Eagle Creek to the south. The proposed development will maintain the same drainage pattern as existing, and stormwater management will be provided in accordance with Lake County Watershed Development Ordinance (WDO). Stormwater detention is proposed for the development area. Offsite areas from W. Monaville Road and N. Cedar Lake Road rights-of-way will be detained onsite as a swap for unrestricted areas at the south side of the property. Remaining offsite areas from the rights-of-way will bypass through the detention basin. The **Proposed Drainage Exhibit** in *Appendix B* illustrates the proposed drainage areas.

The site is located in the Manitou Creek sub-watershed, which is subject to stricter release rate requirements. In accordance with WDO regulations, the maximum allowable release rates are 0.02 cfs/acre for the 2-year, 24-hour storm event and 0.09 cfs/acre for the 100-year, 24-hour storm event. The release rate is controlled by





a two-stage outlet control structure. The 2-year orifice, 1.15 inches in diameter with an invert of 781.00, provides a discharge of 0.055 cfs. The 100-year orifice, 2 inches in diameter with an invert of 783.50, provides a total discharge of 0.257 cfs. As previously mentioned, offsite area will bypass through the detention basin. The restrictors will be adjusted to include the bypass flow from the 2-year and 100-year 24-hour storm events. The 2-year restrictor is 1.6-inches and the 100-year restrictor is 2.5-inches.

Stormwater detention requirements were determined using PondPack stormwater modeling software and Bulletin 75 rainfall data. It was determined that 0.486 acre-ft of detention volume is required for the 2-year storm event and 1.52 acre-ft is required for the 100-year storm event. See *Appendix C* for the calculations and *Appendix D* for the PondPack modeling results. *Appendix E* contains the PondPack modeling results for the entire site with the bypass area.

The proposed detention basin is designed to provide the required storage of 1.52 acre-ft at a high-water level of 786.3. The berm around the basin will have a crest elevation of 787.3. Stormwater runoff from the development will enter the basin via a storm sewer system. Outflow will be conveyed through the outlet control structure into an energy dissipator that overflows to the East Branch of Eagle Creek.

Critical duration analyses were performed for the 2-year and 100-year storm events. Based on the results of the critical duration analyses, the detention basin will not overtop during all 100-year storm events evaluated. Refer to *Appendix F* for the critical duration PondPack reports.

## 4 WATER QUALITY

According to the WDO, the water quality treatment standard requires that at least the first 0.01 inch of runoff for every 1% of new impervious surface be diverted and detained. The required water quality volume for the development is 0.077 acre-ft.

Runoff Volume Reduction (RVR) storage is located below the basin outlet. A total of 0.78 acre-ft of storage is proposed. The RVR storage will capture initial first flush discharges and encourage infiltration and evapotranspiration. The basin will be planted with native plantings that will aid in filtering potential pollutants such as metals, oils, nutrients, and organics prior to leaving the site. Runoff from the new impervious areas will flow into and be filtered in the system.

These measures will meet the County's stormwater quality RVR requirements. By implementing RVR storage and native plantings, the overall runoff volume will be reduced and treated as required.

## 5 FLOODPLAIN

The FEMA flood map for the area indicates a portion of the site's southern boundary lies within "Zone AE" Special Flood Hazard Area (SFHA). Grading within this floodplain is proposed to facilitate grading transitions between the building and the southern area. In compliance with WDO requirements, any fill placed within the floodplain must be compensated for with 1.2 times the volume of storage displaced. The necessary compensatory storage will be provided, and supporting calculations will be included in the final stormwater management report.



## **6 WETLANDS**

Lake County GIS application identifies wetlands along the East Branch of Eagle Creek. A wetland delineation was performed by Hey and Associates to evaluate and map the wetland boundary. It was determined that no wetlands exist on the property, and the wetland boundary for the East Branch of Eagle Creek is entirely offsite. No impacts are proposed to the wetland, and as such, a Letter of No Objection will be requested from Lake County Stormwater Management Commission.

In compliance with Section 505.01.B of the WDO, a 50-ft buffer will be maintained around any wetlands with a watershed greater than 20 acres but less than 1 square mile. Additionally, an energy dissipation level spreader is proposed at the basin outlet to manage stormwater flow.



## **APPENDIX A – Exhibits**

Aerial Exhibit

USGS Contour Exhibit

FEMA Exhibit

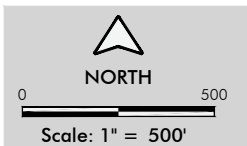
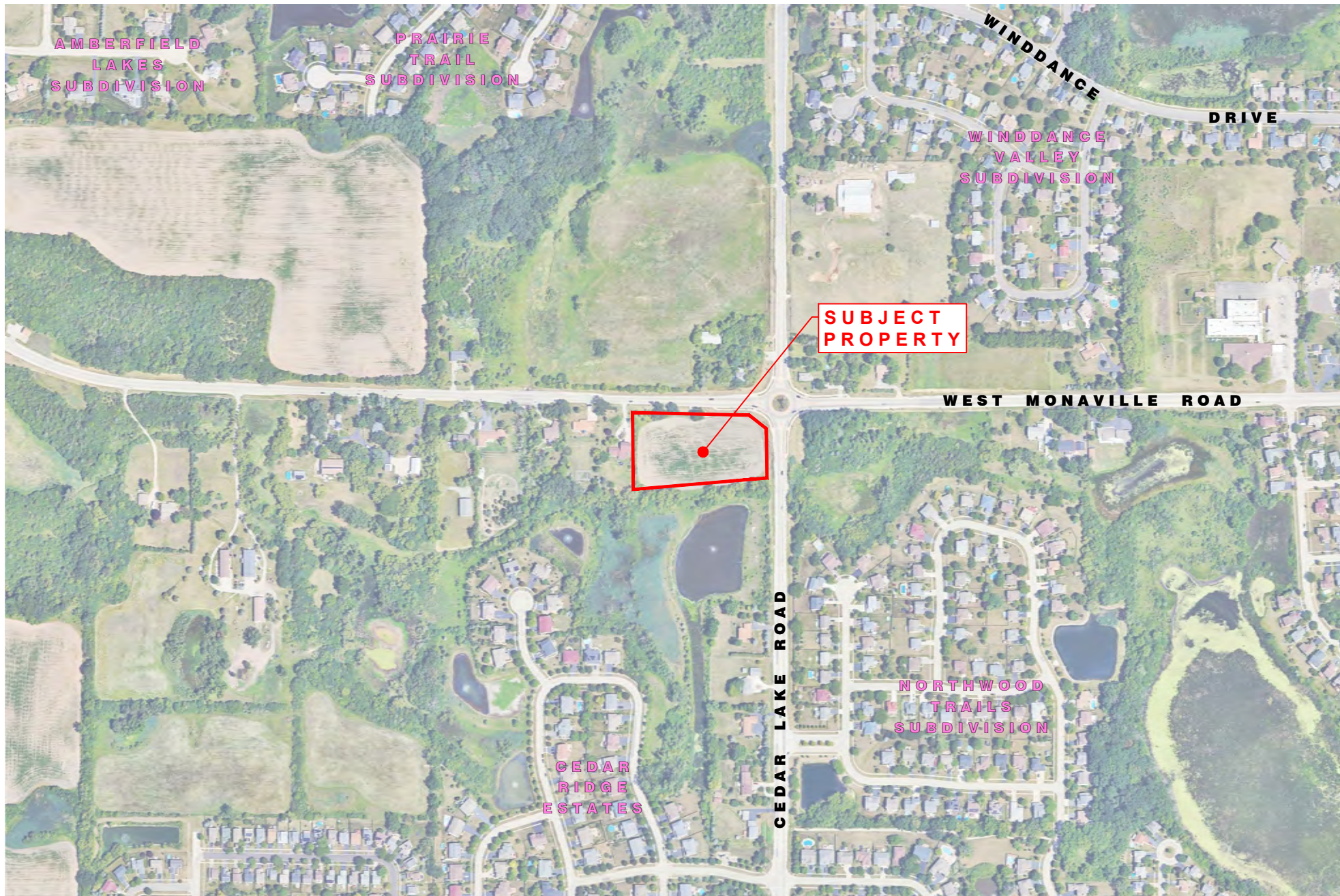
Wetland Exhibit

NRCS Soils Exhibit

HARGIS Exhibit

Hydrologic Atlas Exhibit





**AERIAL EXHIBIT**

**406 WEST MONAVILLE ROAD**

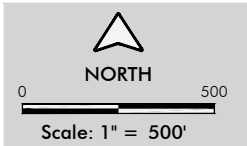
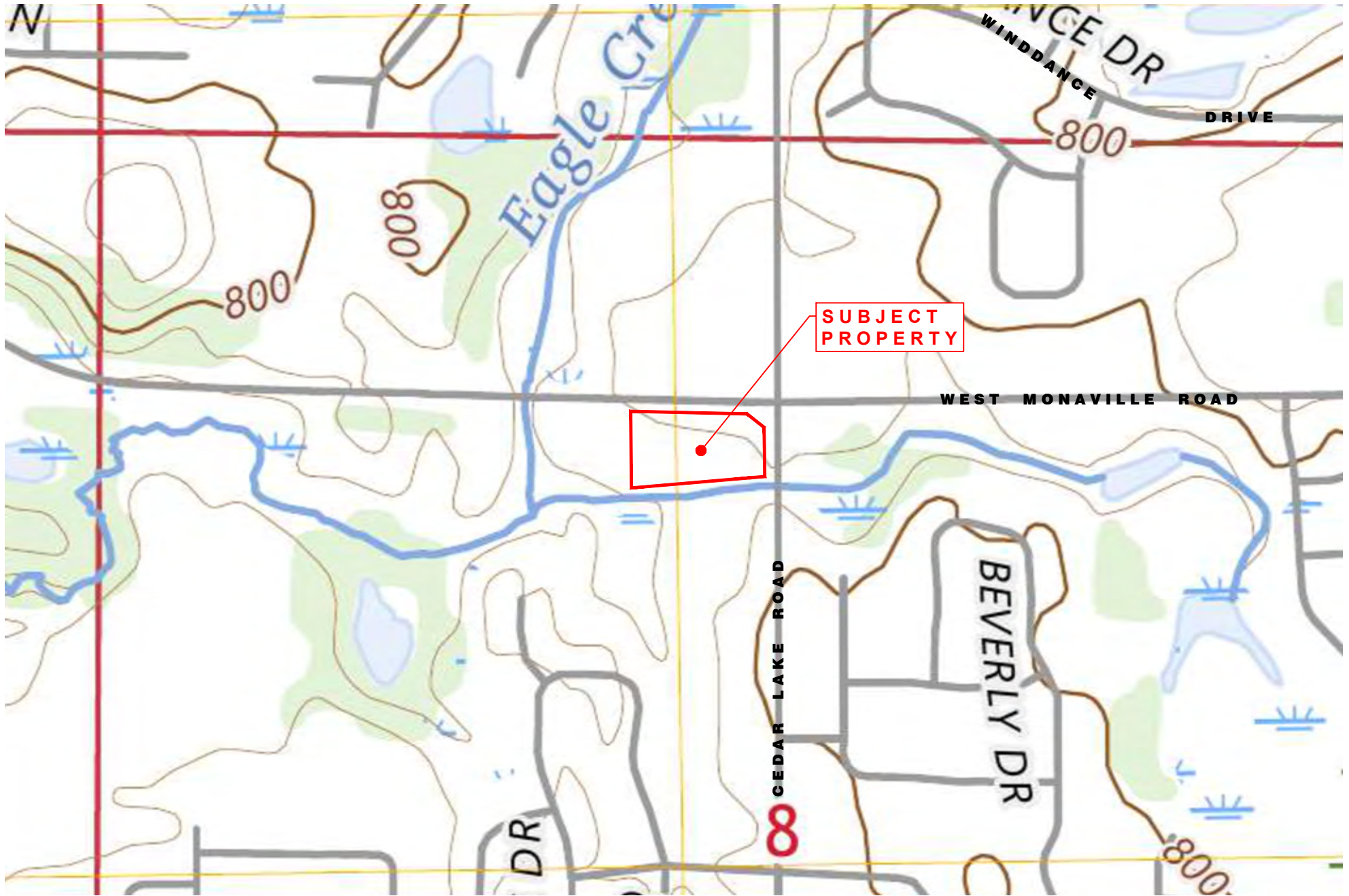
**SELF-STORAGE**

VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS

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 consulting engineers • land surveyors  
 100 East State Parkway, Schaumburg, IL 60173 Tel: 847.394.6600 Fax: 847.394.6608  
 Illinois Professional Design Firm License No. 184-003152 www.HaegerEngineering.com

Project Manager: LAK  
 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/1



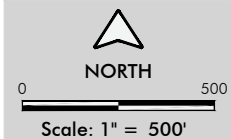
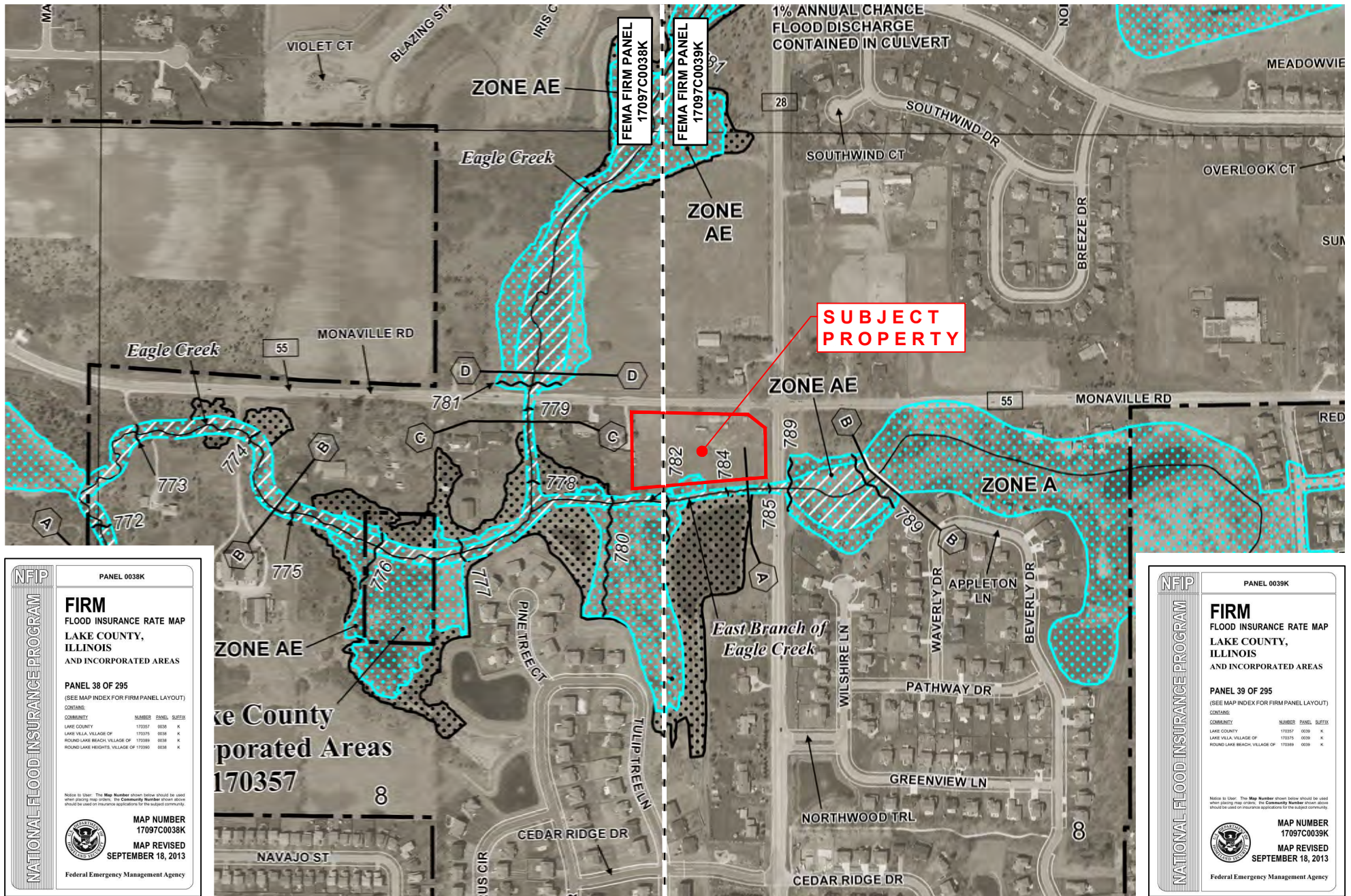


**USGS CONTOUR EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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Sheet 1/1

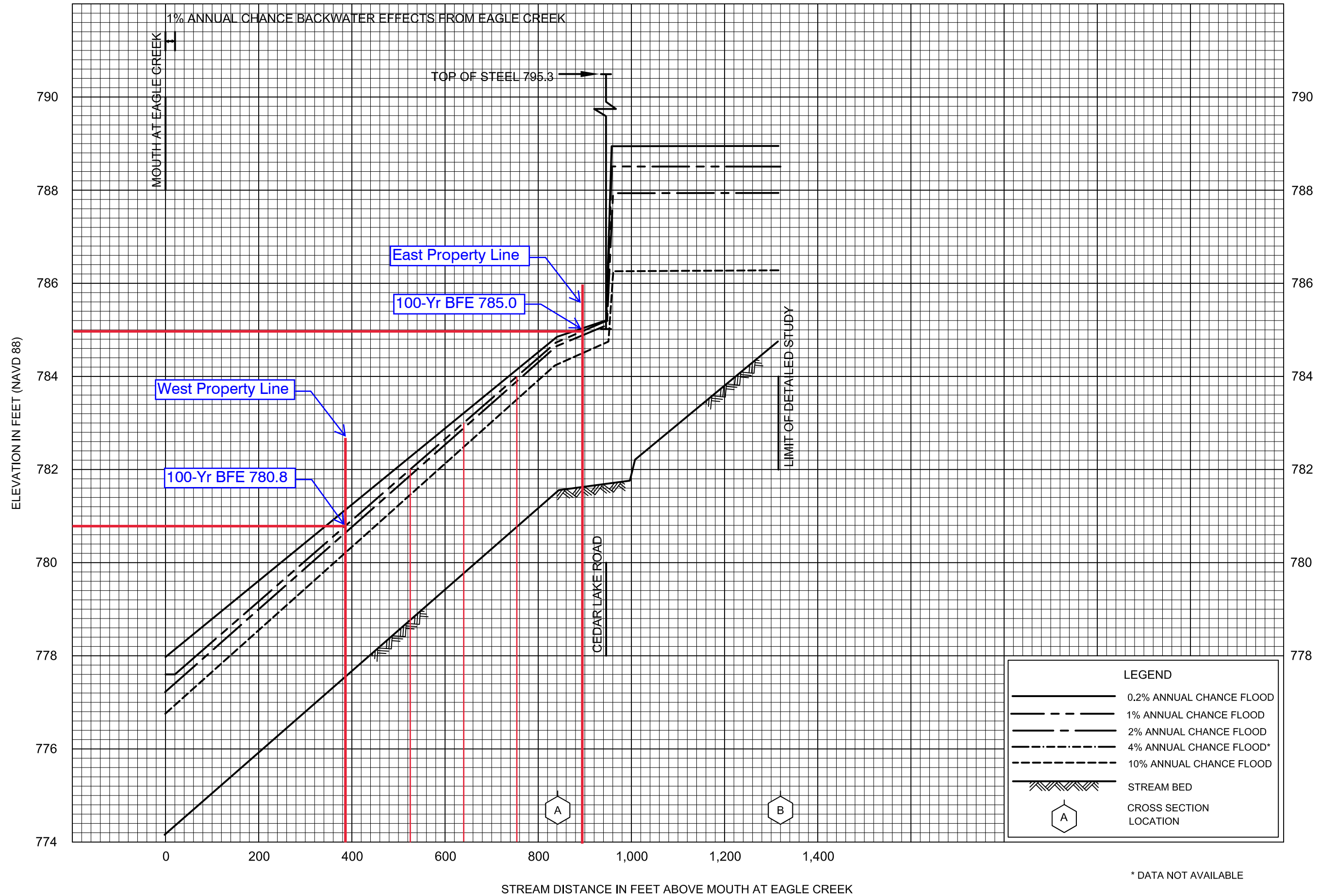




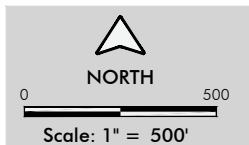
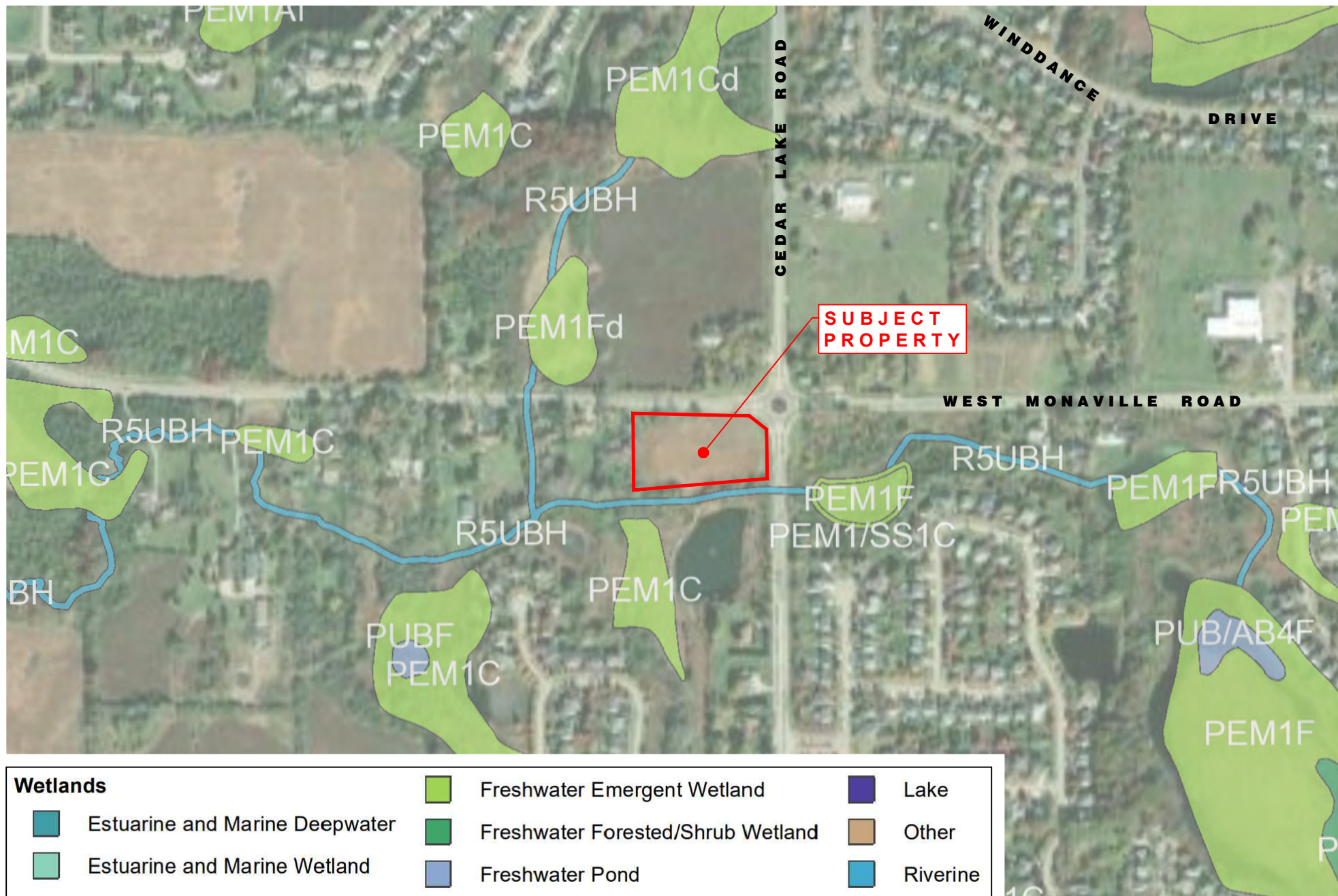
**FEMA FLOODPLAIN EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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Project Manager: LAK  
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 Sheet 1/1





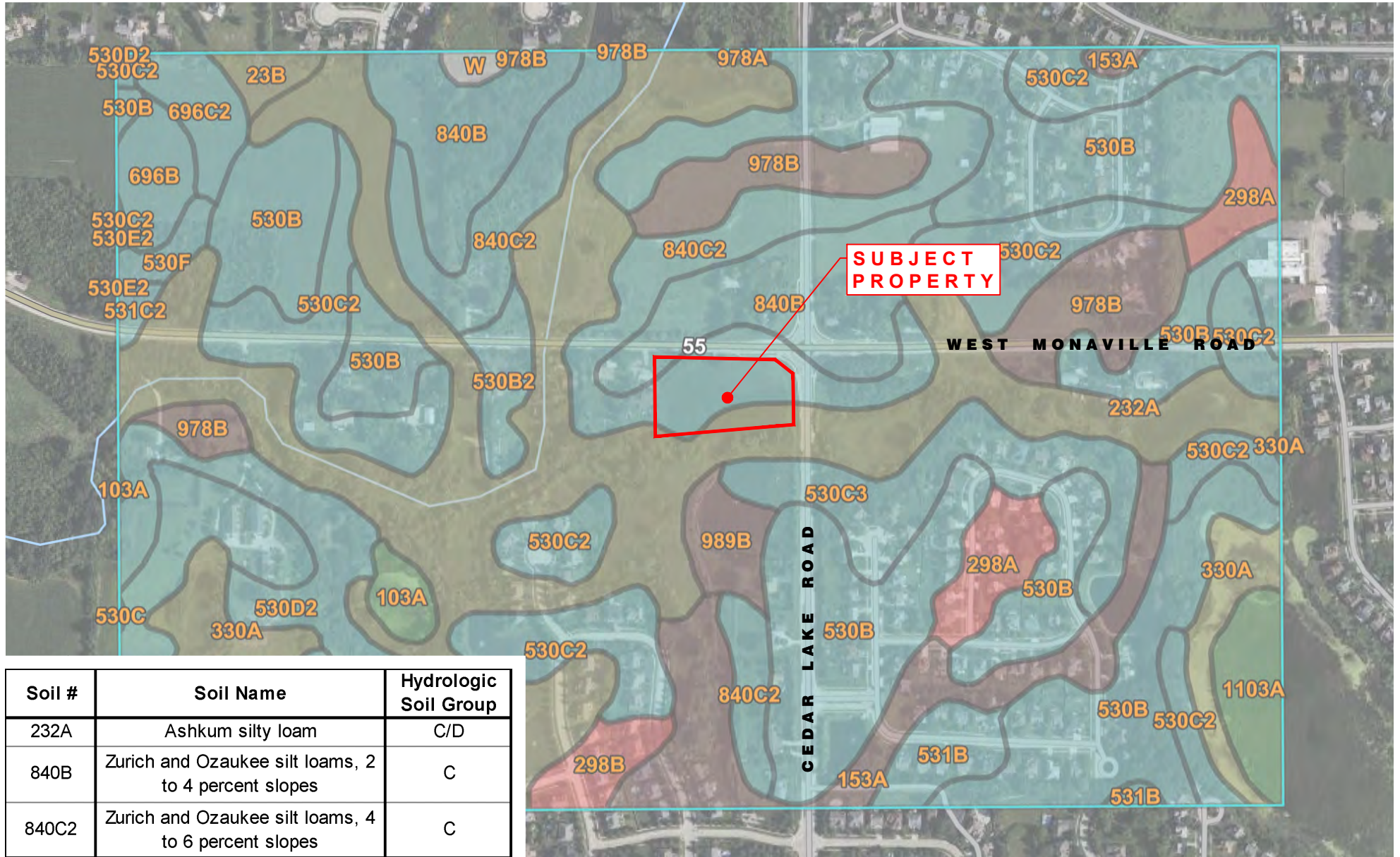


**USFW WETLAND EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
**SELF-STORAGE**  
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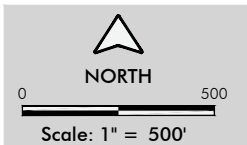
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 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
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Soil #	Soil Name	Hydrologic Soil Group
232A	Ashkum silty loam	C/D
840B	Zurich and Ozaukee silt loams, 2 to 4 percent slopes	C
840C2	Zurich and Ozaukee silt loams, 4 to 6 percent slopes	C

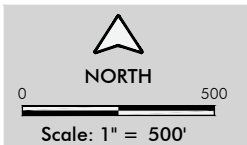
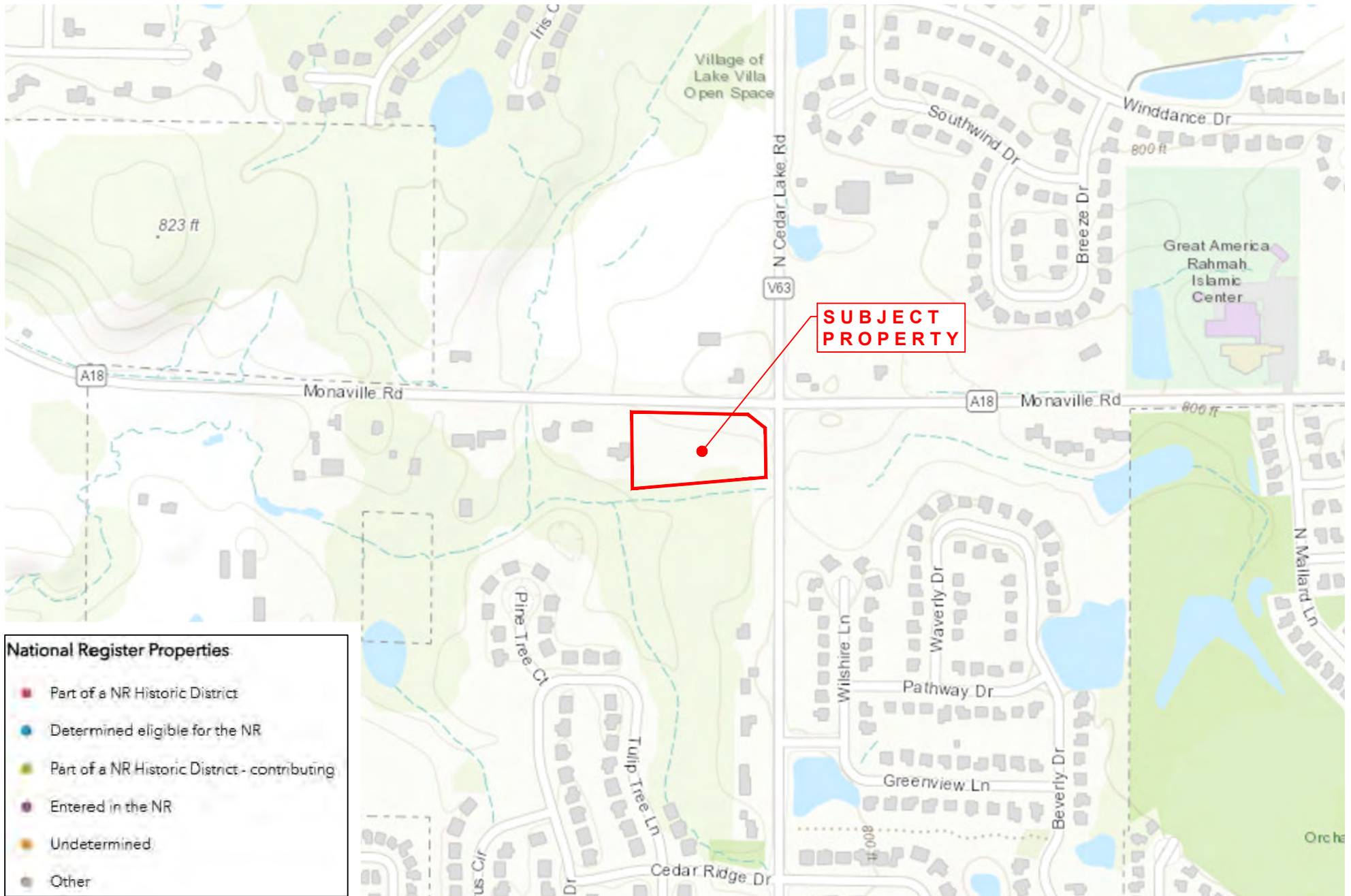


**NRCS SOIL EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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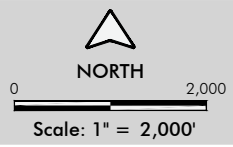
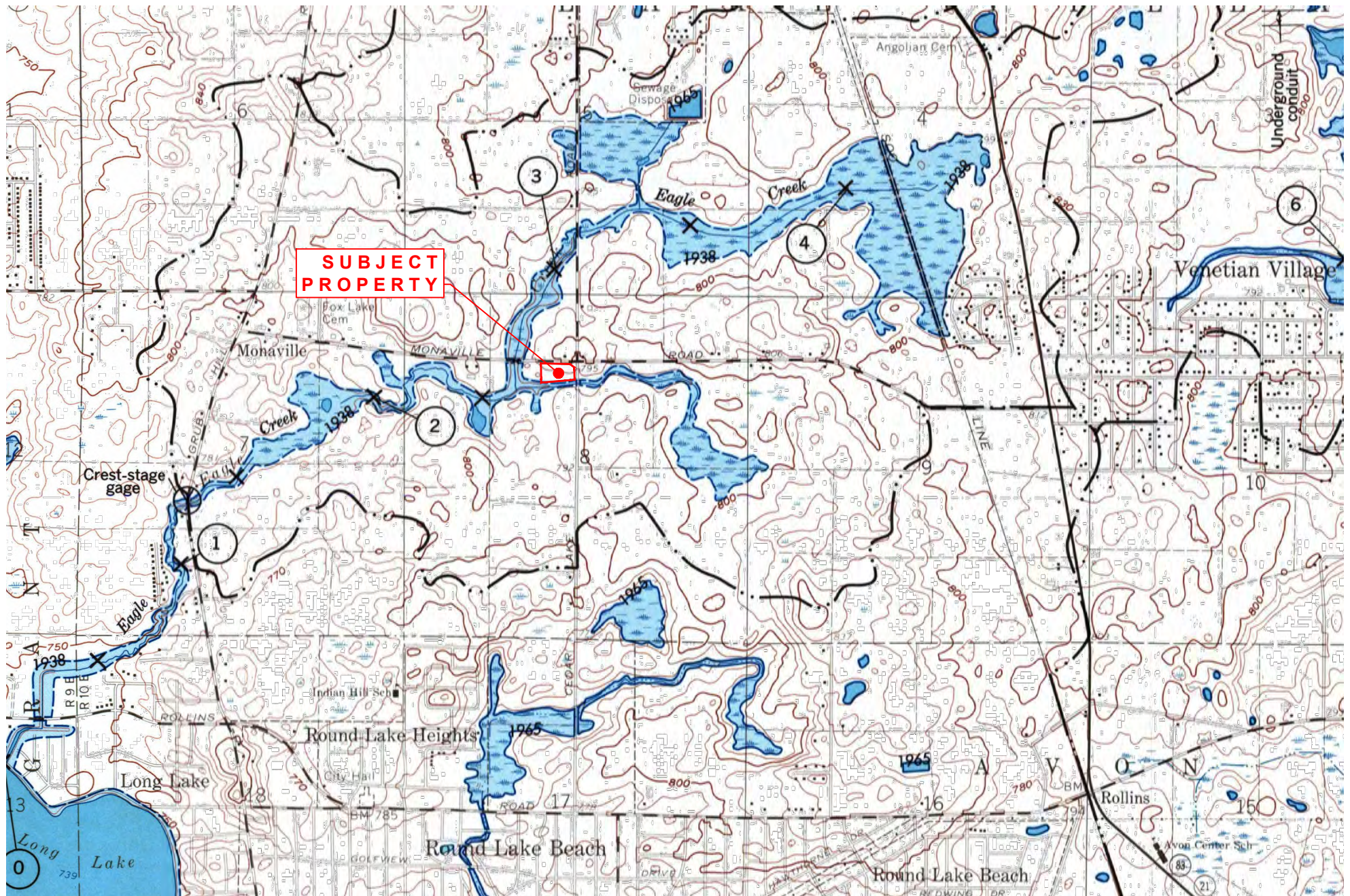


**IHPA HARGIS EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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Project Manager: LAK  
 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/ 1





**HYDROLOGIC ATLAS EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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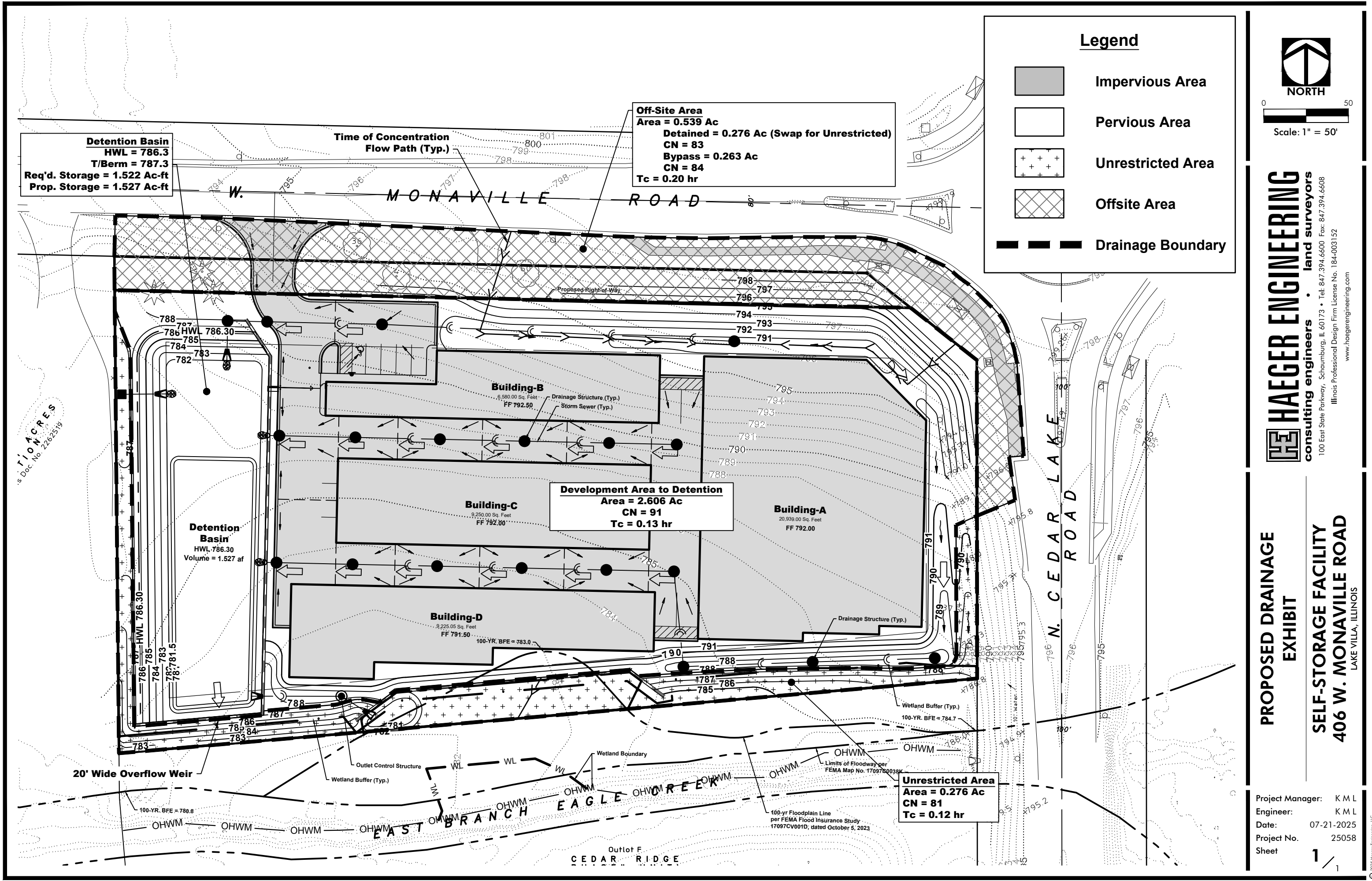
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Project Manager: LAK  
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 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/1





## **APPENDIX B – Proposed Drainage Exhibit**





## **APPENDIX C – Stormwater Management Calculations**

## Drainage Calculations

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KL

Date: 7/21/2025

### A. Land Coverage

#### Entire Site Area

Existing Conditions	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.95
Pervious Area =	124,464	2.857	100.00%	74.0	0.35
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>74.0</b>	<b>0.35</b>

Proposed Conditions	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	68,866	1.581	55.33%	98.0	0.95
Pervious Area =	46,087	1.058	37.03%	81.0	0.35
VC Area =	9,511	0.218	7.64%	63.0	0.70
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>89.0</b>	<b>0.71</b>

#### Existing Drainage Areas

Onsite to Creek	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.95
Pervious Area =	124,464	2.857	100.00%	74.0	0.35
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>74.0</b>	<b>0.35</b>

#### Proposed Drainage Areas

Development Area to Detention	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	69,065	1.586	61.42%	98.0	0.95
Pervious Area =	38,276	0.879	34.04%	81.0	0.35
Volume Control Area =	5,110	0.117	4.54%	81.0	0.70
<b>Total Area =</b>	<b>112,451</b>	<b>2.582</b>	<b>100.00%</b>	<b>91.4</b>	<b>0.73</b>

Unrestricted Area	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.95
Pervious Area =	12,013	0.276	100.00%	81.0	0.35
<b>Total Area =</b>	<b>12,013</b>	<b>0.276</b>	<b>100.00%</b>	<b>81.0</b>	<b>0.35</b>

### Offsite Area

Offsite Detained (Swap for Unrestricted)	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	1,530	0.035	12.74%	98.0	0.95
Pervious Area =	10,483	0.241	87.26%	81.0	0.35
<b>Total Area =</b>	<b>12,013</b>	<b>0.276</b>	<b>100.00%</b>	<b>83.2</b>	<b>0.43</b>

Offsite Bypass	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	2,264	0.052	19.75%	98.0	0.95
Pervious Area =	9,199	0.211	80.25%	81.0	0.35
<b>Total Area =</b>	<b>11,463</b>	<b>0.263</b>	<b>100.00%</b>	<b>84.4</b>	<b>0.47</b>

### B. Release Rate for Detention Basin Sizing

Detained Area (Development Area + Offsite Swap) 2.857 ac.

#### Release Rate

2-Year Release Rate =	0.02 cfs/ac	0.057 cfs
100-Year Release Rate =	0.09 cfs/ac	0.257 cfs

### C. Total Proposed Site Runoff

#### Offsite Bypass Area Runoff

2-Year Flow =	0.059 cfs (see PondPack report)
100-Year Flow =	0.188 cfs (see PondPack report)

#### Total Allowable Release Rate from Detention Basin

2-Year Flow =	0.116 cfs
100-Year Flow =	0.445 cfs



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100 East State Parkway  
Schaumburg, Illinois 60173-5300  
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## Detention Basin Volume (Stage - Storage - Discharge)

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KL

Date: 6/17/2025

### Detention Basin - with walls at east and south sides

Elevation (ft)	Area (sq.ft.)	Volume (cu.ft.)	Cummulative Volume (cu.ft.)	Cummulative Volume (ac.ft.)	Discharge (cfs)	
781.50	7,170.00	0	0	0	0	
782.00	11,053.00	4,555.75	4,555.75	0.105	0.034	
783.00	13,219.00	12,136.00	16,691.75	0.383	0.049	
783.50					0.055	2-Yr HWL
784.00	14,348.00	13,783.50	30,475.25	0.700	0.130	
785.00	15,493.00	14,920.50	45,395.75	1.042	0.197	
786.00	16,654.00	16,073.50	61,469.25	1.411	0.244	
786.30	17,026.00	5,052.00	66,521.25	1.527	0.257	100-Yr HWL
787.00	17,731.00	12,164.95	78,686.20	1.806	0.283	



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Schaumburg, Illinois 60173-5300  
Tel: 847.394.6600  
Fax: 847.394.6608

## RVR WATER QUALITY CALCULATIONS

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KML

Date: 6/17/2025

Total Detained Area = 2.857 Acres

Impervious Area = 1.621 Acres

% Impervious = 57%

Required Water Quality Storage Rate = 0.57 in/Acre

Required Water Quality Storage Volume = 0.077 Ac-ft

Retention Volume Below Basin NWL (Based on Contour Slice Method)				
Contour	Area (SF)	Incremental Volume (CF)	Incremental Volume (Ac-ft)	Accumulated Volume (Ac-ft)
781.00	6,410			0.000
		3,395	0.078	
781.50	7,170			0.078

(Pond Bottom)

(Pond NWL)

Provided Retention Storage Volume =	0.078 Ac-ft
RVR Credit (Water Quality Treatment) =	100%
RVR Quantity =	0.078 Ac-ft
RVR Quantity per Acre of Impervious Area =	2094.854 cu-ft/ac
Percent of Annual Rainfall Events =	84%

## Outlet Control Structure - For Detention Sizing

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KML  
Reviewed:  
Date: 6/17/2025

### Orifice Sizing - 2 Stage

#### A. Formula

$$Q = CA\sqrt{2gh}$$

Where:

Q = Allowable Discharge (cfs)

C = Orifice Discharge Coefficient

A = Area of Orifice (sq.ft.)

g = 32.17ft./sec<sup>2</sup>

h = Head (ft.)

#### B. Values

	2-Year	100-Year
Allowable Release Rate =	0.02 cfs/ac.	0.09 cfs/ac.
Q =	0.057 cfs	0.257 cfs
C =	0.61	0.61
Invert of Orifice =	781.00 ft.	783.50 ft.
HWL =	783.50 ft.	786.30 ft.
h =	2.45 ft.	2.72 ft.
Max. Orifice Dia. =	1.17 in.	2.00 in.
Actual Orifice Dia. =	1.15 in.	2.00 in.
2-Year Discharge =	0.055 cfs	0.000 cfs
100-Year Discharge =	0.081 cfs	0.176 cfs
Total 100-Year Discharge =	0.257 cfs	

#### C. Rating Table

WATER ELEVATION (ft.)	HEAD (ft.)	Q (cfs)
781.50	0.45	0.024
782.00	0.95	0.034
783.00	1.95	0.049
783.50	2.45	0.055
784.00	2.95	0.130
785.00	3.95	0.197
786.00	4.95	0.244
786.30	5.25	0.257
787.00	5.95	0.283



## Outlet Control Structure - with Offsite Bypass

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KML  
Reviewed:  
Date: 7/21/2025

### Orifice Sizing - 2 Stage

#### A. Formula

$$Q = CA\sqrt{2gh}$$

Where:

Q = Allowable Discharge (cfs)

C = Orifice Discharge Coefficient

A = Area of Orifice (sq.ft.)

g = 32.17ft./sec<sup>2</sup>

h = Head (ft.)

#### B. Values

	2-Year	100-Year
Allowable Release Rate =		cfs/ac.
Q =	0.116 cfs	0.445 cfs
C =	0.61	0.61
Invert of Orifice =	781.00 ft.	783.50 ft.
HWL =	783.50 ft.	786.30 ft.
h =	2.43 ft.	2.69 ft.
Max. Orifice Dia. =	1.67 in.	2.57 in.
Actual Orifice Dia. =	1.60 in.	2.50 in.
2-Year Discharge =	0.107 cfs	0.000 cfs
100-Year Discharge =	0.156 cfs	0.274 cfs
Total 100-Year Discharge =	0.430 cfs	

#### C. Rating Table

WATER ELEVATION (ft.)	HEAD (ft.)	Q (cfs)
781.50	0.43	0.045
782.00	0.93	0.066
783.00	1.93	0.095
783.50	2.43	0.107
784.00	2.93	0.222
785.00	3.93	0.333
786.00	4.93	0.410
786.30	5.23	0.430
787.00	5.93	0.474

### Overflow Weir Sizing

#### A. Formula

$$Q = CL\sqrt{h^3}$$

Where:

Q = Overflow (cfs)

C = Weir Coefficient

L = Weir Length (ft.)

h = Head (ft.)

#### B. Values

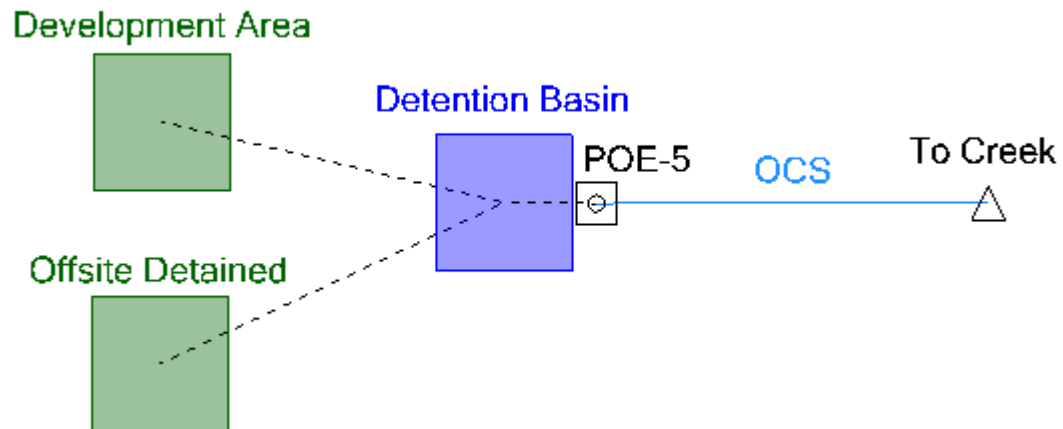
Overflow Rate =		cfs/ac.
Min. Q =	22.883 cfs	Critical 100-Year Peak
C =	3.30	
Weir Length =	20.00 ft.	
Weir Elevation =	786.30 ft.	
Water Level Above Weir =	786.79 ft.	

#### C. Rating Table

WATER ELEVATION (ft.)	HEAD (ft.)	Q (cfs)
786.50	0.20	5.90
786.70	0.40	16.70
787.00	0.70	38.65



## APPENDIX D – Proposed PondPack Report (Detention Sizing)



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Project Summary	
Title	25-058 Proposed Conditions PondPack Model
Engineer	KML
Company	Haeger Engineering LLC
Date	7/21/2025
Notes	
Proposed Conditions Model for Detention Sizing	

#### Subsection: User Notifications

User Notifications? No user notifications generated.

#### Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Development Area	2 yr 24 hr	2.00	0.513	15.80	0.689
Development Area	100 yr 24 hr	100.00	1.610	15.80	1.934
Offsite Detained	2 yr 24 hr	2.00	0.040	15.90	0.060
Offsite Detained	100 yr 24 hr	100.00	0.150	15.80	0.195

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	2 yr 24 hr	2.00	0.359	24.10	0.053
To Creek	100 yr 24 hr	100.00	1.236	24.10	0.256

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	2 yr 24 hr	2.00	0.553	15.80	0.748	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 24 hr	2.00	0.359	24.10	0.053	783.33	0.487
Detention Basin (IN)	100 yr 24 hr	100.00	1.760	15.80	2.129	(N/A)	(N/A)



Subsection: Master Network Summary

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (OUT)	100 yr 24 hr	100.00	1.236	24.10	0.256	786.29	1.522

Subsection: Time-Depth Curve

Label: B75 - 100 Year Critical Storm

Scenario: 100 yr 24 hr

Return Event: 100.00 years

Storm Event: 24 hr 100 yr

Time-Depth Curve: 24 hr 100 yr

Label	24 hr 100 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.24 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.13	0.17
1.20	0.21	0.26	0.31	0.35	0.40
2.40	0.45	0.50	0.55	0.60	0.65
3.60	0.70	0.75	0.80	0.85	0.91
4.80	0.96	1.01	1.07	1.12	1.18
6.00	1.23	1.28	1.34	1.39	1.44
7.20	1.50	1.55	1.61	1.66	1.73
8.40	1.79	1.86	1.92	1.99	2.06
9.60	2.13	2.21	2.29	2.38	2.48
10.80	2.57	2.67	2.78	2.89	3.00
12.00	3.12	3.27	3.43	3.58	3.74
13.20	3.90	4.07	4.24	4.41	4.59
14.40	4.77	4.95	5.14	5.32	5.50
15.60	5.69	5.87	6.05	6.22	6.39
16.80	6.56	6.72	6.86	7.00	7.14
18.00	7.28	7.38	7.48	7.58	7.67
19.20	7.75	7.82	7.89	7.96	8.01
20.40	8.06	8.10	8.15	8.19	8.22
21.60	8.26	8.29	8.33	8.36	8.39
22.80	8.42	8.45	8.48	8.51	8.54
24.00	8.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

---

Time-Depth Curve: 24 hr 2 yr

---

Label	24 hr 2 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	2.00 years

---

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.24 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.07
1.20	0.08	0.10	0.12	0.14	0.16
2.40	0.18	0.19	0.21	0.23	0.25
3.60	0.27	0.29	0.31	0.33	0.35
4.80	0.37	0.39	0.42	0.44	0.46
6.00	0.48	0.50	0.52	0.54	0.56
7.20	0.58	0.60	0.63	0.65	0.67
8.40	0.70	0.72	0.75	0.78	0.80
9.60	0.83	0.86	0.89	0.93	0.97
10.80	1.00	1.04	1.08	1.13	1.17
12.00	1.21	1.27	1.34	1.40	1.46
13.20	1.52	1.59	1.65	1.72	1.79
14.40	1.86	1.93	2.00	2.07	2.14
15.60	2.22	2.29	2.36	2.42	2.49
16.80	2.56	2.62	2.67	2.73	2.78
18.00	2.84	2.87	2.91	2.95	2.99
19.20	3.02	3.05	3.07	3.10	3.12
20.40	3.14	3.16	3.18	3.19	3.21
21.60	3.22	3.23	3.25	3.26	3.27
22.80	3.28	3.29	3.31	3.32	3.33
24.00	3.34	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time of Concentration Calculations  
 Label: Development Area  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Time of Concentration Results

---

Segment #1: TR-55 Sheet Flow

---

Hydraulic Length	40.00 ft
Manning's n	0.240
Slope	0.160 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.23 ft/s

Subsection: Time of Concentration Calculations  
 Label: Development Area  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

---

Segment #1: TR-55 Sheet Flow

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Segment Time of Concentration	0.05 hours
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Segment #2: TR-55 Channel Flow

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Flow Area	6.0 ft <sup>2</sup>
Hydraulic Length	110.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
Wetted Perimeter	9.32 ft
Average Velocity	0.46 ft/s
Segment Time of Concentration	0.07 hours

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Segment #3: TR-55 Channel Flow

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Flow Area	1.2 ft <sup>2</sup>
Hydraulic Length	320.00 ft
Manning's n	0.013
Slope	0.007 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	4.42 ft/s
Segment Time of Concentration	0.02 hours

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Time of Concentration (Composite)

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Time of Concentration (Composite)	0.13 hours
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**==== SCS Channel Flow**

Tc =  $R = Qa / Wp$   
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where:  $(Lf / V) / 3600$   
 R= Hydraulic radius  
 Aq= Flow area, square feet  
 Wp= Wetted perimeter, feet  
 V= Velocity, ft/sec  
 Sf= Slope, ft/ft  
 n= Manning's n  
 Tc= Time of concentration, hours  
 Lf= Flow length, feet

**==== SCS TR-55 Sheet Flow**

Tc =  $(0.007 * ((n * Lf)^{0.8})) / ((P^{0.5}) * (Sf^{0.4}))$

Subsection: Time of Concentration Calculations  
Label: Development Area  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

==== **SCS TR-55 Sheet Flow**

Where: Tc= Time of concentration, hours  
n= Manning's n  
Lf= Flow length, feet  
P= 2yr, 24hr Rain depth, inches  
Sf= Slope, %

Subsection: Time of Concentration Calculations  
Label: Offsite Detained  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

Time of Concentration Results

---

Segment #1: TR-55 Sheet Flow

---

Hydraulic Length	63.00 ft
Manning's n	0.240
Slope	0.098 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.09 hours

---

---

Segment #2: TR-55 Channel Flow

---

Flow Area	6.0 ft <sup>2</sup>
Hydraulic Length	150.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
Wetted Perimeter	9.32 ft
Average Velocity	0.46 ft/s
Segment Time of Concentration	0.09 hours

---

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Segment #3: TR-55 Channel Flow

---

Flow Area	1.2 ft <sup>2</sup>
Hydraulic Length	320.00 ft
Manning's n	0.013
Slope	0.007 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	4.42 ft/s
Segment Time of Concentration	0.02 hours

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Time of Concentration (Composite)

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Time of Concentration (Composite)	0.20 hours
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Subsection: Time of Concentration Calculations  
 Label: Offsite Detained  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### ==== SCS Channel Flow

Tc =  $R = Qa / Wp$   
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where:  
 $(Lf / V) / 3600$   
 R= Hydraulic radius  
 Aq= Flow area, square feet  
 Wp= Wetted perimeter, feet  
 V= Velocity, ft/sec  
 Sf= Slope, ft/ft  
 n= Manning's n  
 Tc= Time of concentration, hours  
 Lf= Flow length, feet

#### ==== SCS TR-55 Sheet Flow

Tc =  $(0.007 * ((n * Lf)^{0.8})) / ((P^{0.5}) * (Sf^{0.4}))$   
 Where:  
 Tc= Time of concentration, hours  
 n= Manning's n  
 Lf= Flow length, feet  
 P= 2yr, 24hr Rain depth, inches  
 Sf= Slope, %

Subsection: Elevation vs. Volume Curve  
 Label: Detention Basin  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
781.00	0.000
781.50	0.001
782.00	0.105
783.00	0.383
784.00	0.700
785.00	1.042
786.00	1.411
786.30	1.527
787.00	1.806
788.00	2.000

Subsection: Outlet Input Data  
 Label: OCS  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### Requested Pond Water Surface Elevations

Minimum (Headwater)	781.00 ft
Increment (Headwater)	0.10 ft

Subsection: Outlet Input Data

Label: OCS

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

---

Requested Pond Water Surface Elevations

---

Maximum (Headwater) 788.00 ft

---

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	2-Year Restrictor	Forward	TW	781.00	788.00
Orifice-Circular	100-Year Restrictor	Forward	TW	783.50	788.00
Rectangular Weir	Overflow Weir	Forward	TW	786.30	788.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

---

Structure ID: 2-Year Restrictor  
Structure Type: Orifice-Circular

---

Number of Openings	1
Elevation	781.00 ft
Orifice Diameter	1.15 in
Orifice Coefficient	0.610

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---

Structure ID: 100-Year Restrictor  
Structure Type: Orifice-Circular

---

Number of Openings	1
Elevation	783.50 ft
Orifice Diameter	2.00 in
Orifice Coefficient	0.610

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---

Structure ID: Overflow Weir  
Structure Type: Rectangular Weir

---

Number of Openings	1
Elevation	786.30 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s

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Structure ID: TW  
Structure Type: TW Setup, DS Channel

---

Tailwater Type	Free Outfall
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Convergence Tolerances

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Maximum Iterations	50
Tailwater Tolerance (Minimum)	0.01 ft

---

Subsection: Outlet Input Data

Label: OCS

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

Convergence Tolerances	
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)

Label: Detention Basin

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
781.00	0.000	0.000	0.000	0.000	0.000	0.000
781.10	0.008	0.000	0.000	0.000	0.008	0.056
781.20	0.014	0.000	0.000	0.000	0.014	0.111
781.30	0.018	0.001	0.000	0.000	0.018	0.163
781.40	0.021	0.001	0.000	0.000	0.021	0.215
781.50	0.024	0.001	0.000	0.000	0.024	0.266
781.60	0.026	0.022	0.000	0.000	0.026	5.302
781.70	0.029	0.043	0.000	0.000	0.029	10.338
781.80	0.031	0.063	0.000	0.000	0.031	15.373
781.90	0.033	0.084	0.000	0.000	0.033	20.409
782.00	0.034	0.105	0.000	0.000	0.034	25.444
782.10	0.036	0.133	0.000	0.000	0.036	32.174
782.20	0.038	0.161	0.000	0.000	0.038	38.903
782.30	0.039	0.188	0.000	0.000	0.039	45.632
782.40	0.041	0.216	0.000	0.000	0.041	52.361
782.50	0.043	0.244	0.000	0.000	0.043	59.091

Subsection: Elevation-Volume-Flow Table (Pond)  
Label: Detention Basin  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
782.60	0.044	0.272	0.000	0.000	0.044	65.820
782.70	0.045	0.300	0.000	0.000	0.045	72.549
782.80	0.047	0.327	0.000	0.000	0.047	79.278
782.90	0.048	0.355	0.000	0.000	0.048	86.006
783.00	0.049	0.383	0.000	0.000	0.049	92.735
783.10	0.051	0.415	0.000	0.000	0.051	100.408
783.20	0.052	0.446	0.000	0.000	0.052	108.081
783.30	0.053	0.478	0.000	0.000	0.053	115.753
783.40	0.054	0.510	0.000	0.000	0.054	123.426
783.50	0.055	0.542	0.000	0.000	0.055	131.098
783.60	0.068	0.573	0.000	0.000	0.068	138.783
783.70	0.094	0.605	0.000	0.000	0.094	146.480
783.80	0.108	0.637	0.000	0.000	0.108	154.165
783.90	0.120	0.668	0.000	0.000	0.120	161.848
784.00	0.130	0.700	0.000	0.000	0.130	169.530
784.10	0.138	0.734	0.000	0.000	0.138	177.815
784.20	0.146	0.768	0.000	0.000	0.146	186.099
784.30	0.154	0.803	0.000	0.000	0.154	194.383
784.40	0.161	0.837	0.000	0.000	0.161	202.667
784.50	0.168	0.871	0.000	0.000	0.168	210.950
784.60	0.174	0.905	0.000	0.000	0.174	219.233
784.70	0.180	0.939	0.000	0.000	0.180	227.515
784.80	0.186	0.974	0.000	0.000	0.186	235.797
784.90	0.192	1.008	0.000	0.000	0.192	244.079
785.00	0.197	1.042	0.000	0.000	0.197	252.361
785.10	0.203	1.079	0.000	0.000	0.203	261.296
785.20	0.208	1.116	0.000	0.000	0.208	270.231
785.30	0.213	1.153	0.000	0.000	0.213	279.166
785.40	0.218	1.190	0.000	0.000	0.218	288.101
785.50	0.222	1.226	0.000	0.000	0.222	297.035
785.60	0.227	1.263	0.000	0.000	0.227	305.970
785.70	0.231	1.300	0.000	0.000	0.231	314.904
785.80	0.236	1.337	0.000	0.000	0.236	323.838
785.90	0.240	1.374	0.000	0.000	0.240	332.772
786.00	0.245	1.411	0.000	0.000	0.245	341.707
786.10	0.249	1.450	0.000	0.000	0.249	351.068
786.20	0.253	1.488	0.000	0.000	0.253	360.429
786.30	0.257	1.527	0.000	0.000	0.257	369.791
786.40	0.735	1.567	0.000	0.000	0.735	379.915
786.50	1.606	1.607	0.000	0.000	1.606	390.431
786.60	2.733	1.647	0.000	0.000	2.733	401.204
786.70	4.067	1.686	0.000	0.000	4.067	412.183
786.80	5.579	1.726	0.000	0.000	5.579	423.341
786.90	7.251	1.766	0.000	0.000	7.251	434.658
787.00	9.068	1.806	0.000	0.000	9.068	446.120



Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
787.10	11.020	1.825	0.000	0.000	11.020	452.767
787.20	13.098	1.845	0.000	0.000	13.098	459.539
787.30	15.294	1.864	0.000	0.000	15.294	466.430
787.40	17.603	1.884	0.000	0.000	17.603	473.434
787.50	20.019	1.903	0.000	0.000	20.019	480.545
787.60	22.538	1.922	0.000	0.000	22.538	487.759
787.70	25.155	1.942	0.000	0.000	25.155	495.071
787.80	27.868	1.961	0.000	0.000	27.868	502.478
787.90	30.672	1.981	0.000	0.000	30.672	509.977
788.00	33.565	2.000	0.000	0.000	33.565	517.565

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
781.00	0.000	0.000	0.000	0.000	0.000	0.000
781.10	0.008	0.000	0.000	0.000	0.008	0.056
781.20	0.014	0.000	0.000	0.000	0.014	0.111
781.30	0.018	0.001	0.000	0.000	0.018	0.163
781.40	0.021	0.001	0.000	0.000	0.021	0.215
781.50	0.024	0.001	0.000	0.000	0.024	0.266
781.60	0.026	0.022	0.000	0.000	0.026	5.302
781.70	0.029	0.043	0.000	0.000	0.029	10.338
781.80	0.031	0.063	0.000	0.000	0.031	15.373
781.90	0.033	0.084	0.000	0.000	0.033	20.409
782.00	0.034	0.105	0.000	0.000	0.034	25.444
782.10	0.036	0.133	0.000	0.000	0.036	32.174

Subsection: Elevation-Volume-Flow Table (Pond)  
Label: Detention Basin  
Scenario: 100 yr 24 hr

Return Event: 100.00 years  
Storm Event: 24 hr 100 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
782.20	0.038	0.161	0.000	0.000	0.038	38.903
782.30	0.039	0.188	0.000	0.000	0.039	45.632
782.40	0.041	0.216	0.000	0.000	0.041	52.361
782.50	0.043	0.244	0.000	0.000	0.043	59.091
782.60	0.044	0.272	0.000	0.000	0.044	65.820
782.70	0.045	0.300	0.000	0.000	0.045	72.549
782.80	0.047	0.327	0.000	0.000	0.047	79.278
782.90	0.048	0.355	0.000	0.000	0.048	86.006
783.00	0.049	0.383	0.000	0.000	0.049	92.735
783.10	0.051	0.415	0.000	0.000	0.051	100.408
783.20	0.052	0.446	0.000	0.000	0.052	108.081
783.30	0.053	0.478	0.000	0.000	0.053	115.753
783.40	0.054	0.510	0.000	0.000	0.054	123.426
783.50	0.055	0.542	0.000	0.000	0.055	131.098
783.60	0.068	0.573	0.000	0.000	0.068	138.783
783.70	0.094	0.605	0.000	0.000	0.094	146.480
783.80	0.108	0.637	0.000	0.000	0.108	154.165
783.90	0.120	0.668	0.000	0.000	0.120	161.848
784.00	0.130	0.700	0.000	0.000	0.130	169.530
784.10	0.138	0.734	0.000	0.000	0.138	177.815
784.20	0.146	0.768	0.000	0.000	0.146	186.099
784.30	0.154	0.803	0.000	0.000	0.154	194.383
784.40	0.161	0.837	0.000	0.000	0.161	202.667
784.50	0.168	0.871	0.000	0.000	0.168	210.950
784.60	0.174	0.905	0.000	0.000	0.174	219.233
784.70	0.180	0.939	0.000	0.000	0.180	227.515
784.80	0.186	0.974	0.000	0.000	0.186	235.797
784.90	0.192	1.008	0.000	0.000	0.192	244.079
785.00	0.197	1.042	0.000	0.000	0.197	252.361
785.10	0.203	1.079	0.000	0.000	0.203	261.296
785.20	0.208	1.116	0.000	0.000	0.208	270.231
785.30	0.213	1.153	0.000	0.000	0.213	279.166
785.40	0.218	1.190	0.000	0.000	0.218	288.101
785.50	0.222	1.226	0.000	0.000	0.222	297.035
785.60	0.227	1.263	0.000	0.000	0.227	305.970
785.70	0.231	1.300	0.000	0.000	0.231	314.904
785.80	0.236	1.337	0.000	0.000	0.236	323.838
785.90	0.240	1.374	0.000	0.000	0.240	332.772
786.00	0.245	1.411	0.000	0.000	0.245	341.707
786.10	0.249	1.450	0.000	0.000	0.249	351.068
786.20	0.253	1.488	0.000	0.000	0.253	360.429
786.30	0.257	1.527	0.000	0.000	0.257	369.791
786.40	0.735	1.567	0.000	0.000	0.735	379.915
786.50	1.606	1.607	0.000	0.000	1.606	390.431
786.60	2.733	1.647	0.000	0.000	2.733	401.204

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
786.70	4.067	1.686	0.000	0.000	4.067	412.183
786.80	5.579	1.726	0.000	0.000	5.579	423.341
786.90	7.251	1.766	0.000	0.000	7.251	434.658
787.00	9.068	1.806	0.000	0.000	9.068	446.120
787.10	11.020	1.825	0.000	0.000	11.020	452.767
787.20	13.098	1.845	0.000	0.000	13.098	459.539
787.30	15.294	1.864	0.000	0.000	15.294	466.430
787.40	17.603	1.884	0.000	0.000	17.603	473.434
787.50	20.019	1.903	0.000	0.000	20.019	480.545
787.60	22.538	1.922	0.000	0.000	22.538	487.759
787.70	25.155	1.942	0.000	0.000	25.155	495.071
787.80	27.868	1.961	0.000	0.000	27.868	502.478
787.90	30.672	1.981	0.000	0.000	30.672	509.977
788.00	33.565	2.000	0.000	0.000	33.565	517.565

Subsection: Level Pool Pond Routing Summary  
 Label: Detention Basin (IN)  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Infiltration			
Infiltration Method (Computed)		No Infiltration	
Initial Conditions			
Elevation (Water Surface, Initial)	781.00 ft		
Volume (Initial)	0.000 ac-ft		
Flow (Initial Outlet)	0.000 ft³/s		
Flow (Initial Infiltration)	0.000 ft³/s		
Flow (Initial, Total)	0.000 ft³/s		
Time Increment	0.10 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.748 ft³/s	Time to Peak (Flow, In)	15.80 hours
Flow (Peak Outlet)	0.053 ft³/s	Time to Peak (Flow, Outlet)	24.10 hours
Peak Conditions			
Elevation (Water Surface, Peak)	783.33 ft		
Volume (Peak)	0.487 ac-ft		
Mass Balance (ac-ft)			
Volume (Initial)	0.000 ac-ft		

Subsection: Level Pool Pond Routing Summary  
Label: Detention Basin (IN)  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

Mass Balance (ac-ft)	
Volume (Total Inflow)	0.553 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.359 ac-ft
Volume (Retained)	0.194 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.1 %

Subsection: Level Pool Pond Routing Summary  
Label: Detention Basin (IN)  
Scenario: 100 yr 24 hr

Return Event: 100.00 years  
Storm Event: 24 hr 100 yr

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.129 ft <sup>3</sup> /s	Time to Peak (Flow, In)	15.80 hours
Flow (Peak Outlet)	0.256 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	24.10 hours

Elevation (Water Surface, Peak)	786.29 ft
Volume (Peak)	1.522 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	1.760 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	1.236 ac-ft
Volume (Retained)	0.524 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %



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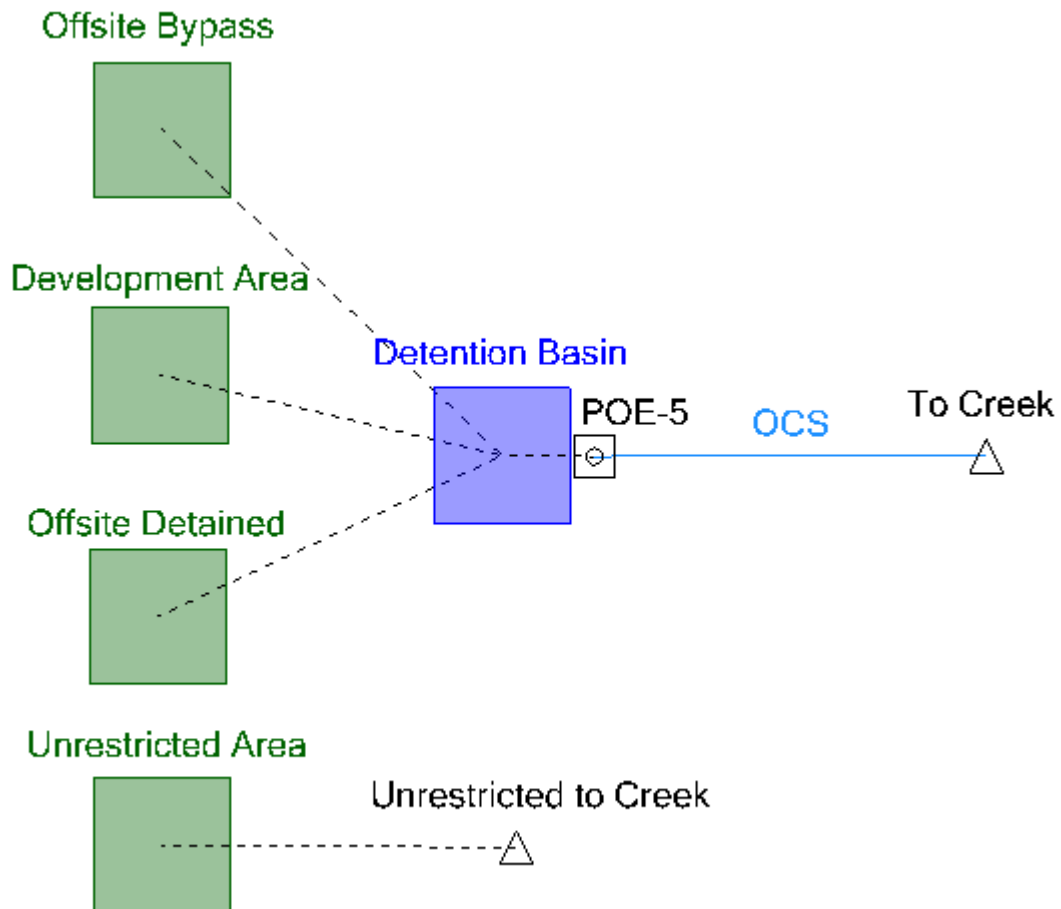
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Project Summary	
Title	25-058 Proposed Conditions PondPack Model
Engineer	KML
Company	Haeger Engineering LLC
Date	7/21/2025
Notes	
Proposed Conditions Model - with Offsite Bypass	

#### Subsection: User Notifications

User Notifications? No user notifications generated.

#### Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Development Area	2 yr 24 hr	2.00	0.513	15.80	0.689
Development Area	100 yr 24 hr	100.00	1.610	15.80	1.934
Unrestricted Area	2 yr 24 hr	2.00	0.026	16.80	0.044
Unrestricted Area	100 yr 24 hr	100.00	0.125	15.80	0.176
Offsite Detained	2 yr 24 hr	2.00	0.040	15.90	0.060
Offsite Detained	100 yr 24 hr	100.00	0.150	15.80	0.195
Offsite Bypass	2 yr 24 hr	2.00	0.040	15.90	0.059
Offsite Bypass	100 yr 24 hr	100.00	0.147	15.80	0.188

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	2 yr 24 hr	2.00	0.593	24.10	0.101
To Creek	100 yr 24 hr	100.00	1.638	22.10	0.426
Unrestricted to Creek	2 yr 24 hr	2.00	0.026	16.80	0.044
Unrestricted to Creek	100 yr 24 hr	100.00	0.125	15.80	0.176

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
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Subsection: Master Network Summary

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	2 yr 24 hr	2.00	0.593	15.80	0.807	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 24 hr	2.00	0.593	24.10	0.101	783.27	0.469
Detention Basin (IN)	100 yr 24 hr	100.00	1.907	15.80	2.317	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 24 hr	100.00	1.638	22.10	0.426	786.23	1.501

Subsection: Time-Depth Curve

Label: B75 - 100 Year Critical Storm

Scenario: 100 yr 24 hr

Return Event: 100.00 years

Storm Event: 24 hr 100 yr

Time-Depth Curve: 24 hr 100 yr

Label	24 hr 100 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.24 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.13	0.17
1.20	0.21	0.26	0.31	0.35	0.40
2.40	0.45	0.50	0.55	0.60	0.65
3.60	0.70	0.75	0.80	0.85	0.91
4.80	0.96	1.01	1.07	1.12	1.18
6.00	1.23	1.28	1.34	1.39	1.44
7.20	1.50	1.55	1.61	1.66	1.73
8.40	1.79	1.86	1.92	1.99	2.06
9.60	2.13	2.21	2.29	2.38	2.48
10.80	2.57	2.67	2.78	2.89	3.00
12.00	3.12	3.27	3.43	3.58	3.74
13.20	3.90	4.07	4.24	4.41	4.59
14.40	4.77	4.95	5.14	5.32	5.50
15.60	5.69	5.87	6.05	6.22	6.39
16.80	6.56	6.72	6.86	7.00	7.14
18.00	7.28	7.38	7.48	7.58	7.67
19.20	7.75	7.82	7.89	7.96	8.01

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.24 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
20.40	8.06	8.10	8.15	8.19	8.22
21.60	8.26	8.29	8.33	8.36	8.39
22.80	8.42	8.45	8.48	8.51	8.54
24.00	8.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Time-Depth Curve: 24 hr 2 yr

Label	24 hr 2 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.24 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.07
1.20	0.08	0.10	0.12	0.14	0.16
2.40	0.18	0.19	0.21	0.23	0.25
3.60	0.27	0.29	0.31	0.33	0.35
4.80	0.37	0.39	0.42	0.44	0.46
6.00	0.48	0.50	0.52	0.54	0.56
7.20	0.58	0.60	0.63	0.65	0.67
8.40	0.70	0.72	0.75	0.78	0.80
9.60	0.83	0.86	0.89	0.93	0.97
10.80	1.00	1.04	1.08	1.13	1.17
12.00	1.21	1.27	1.34	1.40	1.46
13.20	1.52	1.59	1.65	1.72	1.79
14.40	1.86	1.93	2.00	2.07	2.14
15.60	2.22	2.29	2.36	2.42	2.49
16.80	2.56	2.62	2.67	2.73	2.78
18.00	2.84	2.87	2.91	2.95	2.99
19.20	3.02	3.05	3.07	3.10	3.12
20.40	3.14	3.16	3.18	3.19	3.21
21.60	3.22	3.23	3.25	3.26	3.27
22.80	3.28	3.29	3.31	3.32	3.33
24.00	3.34	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time of Concentration Calculations  
 Label: Development Area  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	40.00 ft
Manning's n	0.240
Slope	0.160 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.23 ft/s
Segment Time of Concentration	0.05 hours
Segment #2: TR-55 Channel Flow	
Flow Area	6.0 ft <sup>2</sup>
Hydraulic Length	110.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
Wetted Perimeter	9.32 ft
Average Velocity	0.46 ft/s
Segment Time of Concentration	0.07 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft <sup>2</sup>
Hydraulic Length	320.00 ft
Manning's n	0.013
Slope	0.007 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	4.42 ft/s
Segment Time of Concentration	0.02 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.13 hours

#### ==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{*-0.5})) / n}$$

$$(L_f / V) / 3600$$

Subsection: Time of Concentration Calculations  
Label: Development Area  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

#### ==== SCS Channel Flow

Where: R= Hydraulic radius  
Aq= Flow area, square feet  
Wp= Wetted perimeter, feet  
V= Velocity, ft/sec  
Sf= Slope, ft/ft  
n= Manning's n  
Tc= Time of concentration, hours  
Lf= Flow length, feet

#### ==== SCS TR-55 Sheet Flow

Tc =  $(0.007 * ((n * Lf)^{0.8}) / ((P^{0.5}) * (Sf^{0.4})))$   
Where: Tc= Time of concentration, hours  
n= Manning's n  
Lf= Flow length, feet  
P= 2yr, 24hr Rain depth, inches  
Sf= Slope, %

Subsection: Time of Concentration Calculations  
Label: Offsite Bypass  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

#### Time of Concentration Results

##### Segment #1: TR-55 Sheet Flow

Hydraulic Length	63.00 ft
Manning's n	0.240
Slope	0.098 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.09 hours

##### Segment #2: TR-55 Channel Flow

Flow Area	6.0 ft <sup>2</sup>
Hydraulic Length	150.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
Wetted Perimeter	9.32 ft
Average Velocity	0.46 ft/s
Segment Time of Concentration	0.09 hours

##### Segment #3: TR-55 Channel Flow

Flow Area	1.2 ft <sup>2</sup>
Hydraulic Length	320.00 ft



Subsection: Time of Concentration Calculations  
Label: Offsite Bypass  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

Segment #3: TR-55 Channel Flow	
Manning's n	0.013
Slope	0.007 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	4.35 ft/s
Segment Time of Concentration	0.02 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.20 hours

#### ==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{0.5})) / n}$$

Where:  $(L_f / V) / 3600$   
R= Hydraulic radius  
Aq= Flow area, square feet  
Wp= Wetted perimeter, feet  
V= Velocity, ft/sec  
Sf= Slope, ft/ft  
n= Manning's n  
Tc= Time of concentration, hours  
Lf= Flow length, feet

#### ==== SCS TR-55 Sheet Flow

$$T_c = \frac{(0.007 * ((n * L_f)^{0.8}))}{((P^{0.5}) * (S_f^{0.4}))}$$

Where: Tc= Time of concentration, hours  
n= Manning's n  
Lf= Flow length, feet  
P= 2yr, 24hr Rain depth, inches  
Sf= Slope, %

Subsection: Time of Concentration Calculations  
Label: Offsite Detained  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

#### Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	63.00 ft
Manning's n	0.240
Slope	0.098 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.21 ft/s

Subsection: Time of Concentration Calculations  
 Label: Offsite Detained  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Segment #1: TR-55 Sheet Flow	
Segment Time of Concentration	0.09 hours
Segment #2: TR-55 Channel Flow	
Flow Area	6.0 ft <sup>2</sup>
Hydraulic Length	150.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
Wetted Perimeter	9.32 ft
Average Velocity	0.46 ft/s
Segment Time of Concentration	0.09 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft <sup>2</sup>
Hydraulic Length	320.00 ft
Manning's n	0.013
Slope	0.007 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	4.42 ft/s
Segment Time of Concentration	0.02 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.20 hours

#### ==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{0.5})) / n}$$

Where:

$$(L_f / V) / 3600$$

R= Hydraulic radius  
 Aq= Flow area, square feet  
 Wp= Wetted perimeter, feet  
 V= Velocity, ft/sec  
 Sf= Slope, ft/ft  
 n= Manning's n  
 Tc= Time of concentration, hours  
 Lf= Flow length, feet

#### ==== SCS TR-55 Sheet Flow

$$T_c = \frac{(0.007 * ((n * L_f)^{0.8}))}{((P^{0.5}) * (S_f^{0.4}))}$$

Subsection: Time of Concentration Calculations  
 Label: Offsite Detained  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### ==== SCS TR-55 Sheet Flow

Where: Tc= Time of concentration, hours  
 n= Manning's n  
 Lf= Flow length, feet  
 P= 2yr, 24hr Rain depth, inches  
 Sf= Slope, %

Subsection: Time of Concentration Calculations  
 Label: Unrestricted Area  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### Time of Concentration Results

##### Segment #1: TR-55 Sheet Flow

Hydraulic Length	30.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.34 in
Average Velocity	0.07 ft/s
Segment Time of Concentration	0.12 hours

##### Time of Concentration (Composite)

Time of Concentration (Composite)	0.12 hours
-----------------------------------	------------

#### ==== SCS Channel Flow

Tc =  $R = Qa / Wp$   
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

(Lf / V) / 3600  
 Where: R= Hydraulic radius  
 Aq= Flow area, square feet  
 Wp= Wetted perimeter, feet  
 V= Velocity, ft/sec  
 Sf= Slope, ft/ft  
 n= Manning's n  
 Tc= Time of concentration, hours  
 Lf= Flow length, feet

Subsection: Elevation vs. Volume Curve  
 Label: Detention Basin  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

#### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
------------------------	------------------------

Subsection: Elevation vs. Volume Curve  
 Label: Detention Basin  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

### Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
781.00	0.000
781.50	0.001
782.00	0.105
783.00	0.383
784.00	0.700
785.00	1.042
786.00	1.411
786.30	1.527
787.00	1.806
788.00	2.000

Subsection: Outlet Input Data  
 Label: OCS  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Requested Pond Water Surface Elevations	
Minimum (Headwater)	781.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	788.00 ft

### Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	2-Year Restrictor	Forward	TW	781.00	788.00
Orifice-Circular	100-Year Restrictor	Forward	TW	783.50	788.00
Rectangular Weir	Overflow Weir	Forward	TW	786.30	788.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Structure ID: 2-Year Restrictor  
 Structure Type: Orifice-Circular

Number of Openings	1
Elevation	781.00 ft
Orifice Diameter	1.60 in
Orifice Coefficient	0.610

Structure ID: 100-Year Restrictor  
 Structure Type: Orifice-Circular

Number of Openings	1
Elevation	783.50 ft

Subsection: Outlet Input Data

Label: OCS

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

Structure ID: 100-Year Restrictor	
Structure Type: Orifice-Circular	
Orifice Diameter	2.50 in
Orifice Coefficient	0.610
Structure ID: Overflow Weir	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	786.30 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	50
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

Subsection: Elevation-Volume-Flow Table (Pond)

Label: Detention Basin

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours



Subsection: Elevation-Volume-Flow Table (Pond)  
Label: Detention Basin  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
781.00	0.000	0.000	0.000	0.000	0.000	0.000
781.10	0.010	0.000	0.000	0.000	0.010	0.059
781.20	0.025	0.000	0.000	0.000	0.025	0.122
781.30	0.033	0.001	0.000	0.000	0.033	0.178
781.40	0.039	0.001	0.000	0.000	0.039	0.233
781.50	0.045	0.001	0.000	0.000	0.045	0.287
781.60	0.050	0.022	0.000	0.000	0.050	5.325
781.70	0.054	0.043	0.000	0.000	0.054	10.364
781.80	0.059	0.063	0.000	0.000	0.059	15.401
781.90	0.062	0.084	0.000	0.000	0.062	20.439
782.00	0.066	0.105	0.000	0.000	0.066	25.476
782.10	0.069	0.133	0.000	0.000	0.069	32.207
782.20	0.073	0.161	0.000	0.000	0.073	38.938
782.30	0.076	0.188	0.000	0.000	0.076	45.669
782.40	0.079	0.216	0.000	0.000	0.079	52.399
782.50	0.082	0.244	0.000	0.000	0.082	59.130
782.60	0.085	0.272	0.000	0.000	0.085	65.860
782.70	0.087	0.300	0.000	0.000	0.087	72.591
782.80	0.090	0.327	0.000	0.000	0.090	79.321
782.90	0.093	0.355	0.000	0.000	0.093	86.051
783.00	0.095	0.383	0.000	0.000	0.095	92.781
783.10	0.097	0.415	0.000	0.000	0.097	100.455
783.20	0.100	0.446	0.000	0.000	0.100	108.129
783.30	0.102	0.478	0.000	0.000	0.102	115.802
783.40	0.104	0.510	0.000	0.000	0.104	123.476
783.50	0.107	0.542	0.000	0.000	0.107	131.150
783.60	0.123	0.573	0.000	0.000	0.123	138.837
783.70	0.159	0.605	0.000	0.000	0.159	146.545
783.80	0.187	0.637	0.000	0.000	0.187	154.244
783.90	0.206	0.668	0.000	0.000	0.206	161.934
784.00	0.222	0.700	0.000	0.000	0.222	169.622
784.10	0.236	0.734	0.000	0.000	0.236	177.913
784.20	0.250	0.768	0.000	0.000	0.250	186.202
784.30	0.262	0.803	0.000	0.000	0.262	194.491
784.40	0.274	0.837	0.000	0.000	0.274	202.779
784.50	0.284	0.871	0.000	0.000	0.284	211.066
784.60	0.295	0.905	0.000	0.000	0.295	219.353
784.70	0.305	0.939	0.000	0.000	0.305	227.640
784.80	0.314	0.974	0.000	0.000	0.314	235.926
784.90	0.324	1.008	0.000	0.000	0.324	244.211
785.00	0.333	1.042	0.000	0.000	0.333	252.497
785.10	0.341	1.079	0.000	0.000	0.341	261.435
785.20	0.350	1.116	0.000	0.000	0.350	270.373
785.30	0.358	1.153	0.000	0.000	0.358	279.311
785.40	0.366	1.190	0.000	0.000	0.366	288.249

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
785.50	0.374	1.226	0.000	0.000	0.374	297.187
785.60	0.381	1.263	0.000	0.000	0.381	306.124
785.70	0.389	1.300	0.000	0.000	0.389	315.061
785.80	0.396	1.337	0.000	0.000	0.396	323.998
785.90	0.403	1.374	0.000	0.000	0.403	332.935
786.00	0.410	1.411	0.000	0.000	0.410	341.872
786.10	0.417	1.450	0.000	0.000	0.417	351.236
786.20	0.424	1.488	0.000	0.000	0.424	360.600
786.30	0.430	1.527	0.000	0.000	0.430	369.964
786.40	0.911	1.567	0.000	0.000	0.911	380.090
786.50	1.785	1.607	0.000	0.000	1.785	390.610
786.60	2.914	1.647	0.000	0.000	2.914	401.384
786.70	4.250	1.686	0.000	0.000	4.250	412.366
786.80	5.765	1.726	0.000	0.000	5.765	423.526
786.90	7.439	1.766	0.000	0.000	7.439	434.846
787.00	9.259	1.806	0.000	0.000	9.259	446.311
787.10	11.213	1.825	0.000	0.000	11.213	452.960
787.20	13.293	1.845	0.000	0.000	13.293	459.734
787.30	15.491	1.864	0.000	0.000	15.491	466.628
787.40	17.802	1.884	0.000	0.000	17.802	473.633
787.50	20.221	1.903	0.000	0.000	20.221	480.747
787.60	22.741	1.922	0.000	0.000	22.741	487.962
787.70	25.361	1.942	0.000	0.000	25.361	495.277
787.80	28.076	1.961	0.000	0.000	28.076	502.686
787.90	30.882	1.981	0.000	0.000	30.882	510.187
788.00	33.778	2.000	0.000	0.000	33.778	517.778

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

#### Infiltration

Infiltration Method (Computed)	No Infiltration
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#### Initial Conditions

Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

Subsection: Elevation-Volume-Flow Table (Pond)  
Label: Detention Basin  
Scenario: 100 yr 24 hr

Return Event: 100.00 years  
Storm Event: 24 hr 100 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
781.00	0.000	0.000	0.000	0.000	0.000	0.000
781.10	0.010	0.000	0.000	0.000	0.010	0.059
781.20	0.025	0.000	0.000	0.000	0.025	0.122
781.30	0.033	0.001	0.000	0.000	0.033	0.178
781.40	0.039	0.001	0.000	0.000	0.039	0.233
781.50	0.045	0.001	0.000	0.000	0.045	0.287
781.60	0.050	0.022	0.000	0.000	0.050	5.325
781.70	0.054	0.043	0.000	0.000	0.054	10.364
781.80	0.059	0.063	0.000	0.000	0.059	15.401
781.90	0.062	0.084	0.000	0.000	0.062	20.439
782.00	0.066	0.105	0.000	0.000	0.066	25.476
782.10	0.069	0.133	0.000	0.000	0.069	32.207
782.20	0.073	0.161	0.000	0.000	0.073	38.938
782.30	0.076	0.188	0.000	0.000	0.076	45.669
782.40	0.079	0.216	0.000	0.000	0.079	52.399
782.50	0.082	0.244	0.000	0.000	0.082	59.130
782.60	0.085	0.272	0.000	0.000	0.085	65.860
782.70	0.087	0.300	0.000	0.000	0.087	72.591
782.80	0.090	0.327	0.000	0.000	0.090	79.321
782.90	0.093	0.355	0.000	0.000	0.093	86.051
783.00	0.095	0.383	0.000	0.000	0.095	92.781
783.10	0.097	0.415	0.000	0.000	0.097	100.455
783.20	0.100	0.446	0.000	0.000	0.100	108.129
783.30	0.102	0.478	0.000	0.000	0.102	115.802
783.40	0.104	0.510	0.000	0.000	0.104	123.476
783.50	0.107	0.542	0.000	0.000	0.107	131.150
783.60	0.123	0.573	0.000	0.000	0.123	138.837
783.70	0.159	0.605	0.000	0.000	0.159	146.545
783.80	0.187	0.637	0.000	0.000	0.187	154.244
783.90	0.206	0.668	0.000	0.000	0.206	161.934
784.00	0.222	0.700	0.000	0.000	0.222	169.622
784.10	0.236	0.734	0.000	0.000	0.236	177.913
784.20	0.250	0.768	0.000	0.000	0.250	186.202
784.30	0.262	0.803	0.000	0.000	0.262	194.491
784.40	0.274	0.837	0.000	0.000	0.274	202.779
784.50	0.284	0.871	0.000	0.000	0.284	211.066
784.60	0.295	0.905	0.000	0.000	0.295	219.353
784.70	0.305	0.939	0.000	0.000	0.305	227.640
784.80	0.314	0.974	0.000	0.000	0.314	235.926
784.90	0.324	1.008	0.000	0.000	0.324	244.211
785.00	0.333	1.042	0.000	0.000	0.333	252.497
785.10	0.341	1.079	0.000	0.000	0.341	261.435
785.20	0.350	1.116	0.000	0.000	0.350	270.373
785.30	0.358	1.153	0.000	0.000	0.358	279.311
785.40	0.366	1.190	0.000	0.000	0.366	288.249

Subsection: Elevation-Volume-Flow Table (Pond)  
 Label: Detention Basin  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Elevation (ft)	Outflow (ft <sup>3</sup> /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft <sup>3</sup> /s)	Flow (Total) (ft <sup>3</sup> /s)	2S/t + O (ft <sup>3</sup> /s)
785.50	0.374	1.226	0.000	0.000	0.374	297.187
785.60	0.381	1.263	0.000	0.000	0.381	306.124
785.70	0.389	1.300	0.000	0.000	0.389	315.061
785.80	0.396	1.337	0.000	0.000	0.396	323.998
785.90	0.403	1.374	0.000	0.000	0.403	332.935
786.00	0.410	1.411	0.000	0.000	0.410	341.872
786.10	0.417	1.450	0.000	0.000	0.417	351.236
786.20	0.424	1.488	0.000	0.000	0.424	360.600
786.30	0.430	1.527	0.000	0.000	0.430	369.964
786.40	0.911	1.567	0.000	0.000	0.911	380.090
786.50	1.785	1.607	0.000	0.000	1.785	390.610
786.60	2.914	1.647	0.000	0.000	2.914	401.384
786.70	4.250	1.686	0.000	0.000	4.250	412.366
786.80	5.765	1.726	0.000	0.000	5.765	423.526
786.90	7.439	1.766	0.000	0.000	7.439	434.846
787.00	9.259	1.806	0.000	0.000	9.259	446.311
787.10	11.213	1.825	0.000	0.000	11.213	452.960
787.20	13.293	1.845	0.000	0.000	13.293	459.734
787.30	15.491	1.864	0.000	0.000	15.491	466.628
787.40	17.802	1.884	0.000	0.000	17.802	473.633
787.50	20.221	1.903	0.000	0.000	20.221	480.747
787.60	22.741	1.922	0.000	0.000	22.741	487.962
787.70	25.361	1.942	0.000	0.000	25.361	495.277
787.80	28.076	1.961	0.000	0.000	28.076	502.686
787.90	30.882	1.981	0.000	0.000	30.882	510.187
788.00	33.778	2.000	0.000	0.000	33.778	517.778

Subsection: Level Pool Pond Routing Summary  
 Label: Detention Basin (IN)  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

Subsection: Level Pool Pond Routing Summary  
Label: Detention Basin (IN)  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

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Inflow/Outflow Hydrograph Summary

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Flow (Peak In)	0.807 ft <sup>3</sup> /s	Time to Peak (Flow, In)	15.80 hours
Flow (Peak Outlet)	0.101 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	24.10 hours

---

Elevation (Water Surface, Peak)	783.27 ft
Volume (Peak)	0.469 ac-ft

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Mass Balance (ac-ft)

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Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.593 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.593 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

---

Subsection: Level Pool Pond Routing Summary  
Label: Detention Basin (IN)  
Scenario: 100 yr 24 hr

Return Event: 100.00 years  
Storm Event: 24 hr 100 yr

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Infiltration

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Infiltration Method (Computed)	No Infiltration
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Initial Conditions

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Elevation (Water Surface, Initial)	781.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.000 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.000 ft <sup>3</sup> /s
Flow (Initial, Total)	0.000 ft <sup>3</sup> /s
Time Increment	0.10 hours

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Inflow/Outflow Hydrograph Summary

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Flow (Peak In)	2.317 ft <sup>3</sup> /s	Time to Peak (Flow, In)	15.80 hours
Flow (Peak Outlet)	0.426 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	22.10 hours

---

Elevation (Water Surface, Peak)	786.23 ft
Volume (Peak)	1.501 ac-ft

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Mass Balance (ac-ft)

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Subsection: Level Pool Pond Routing Summary  
 Label: Detention Basin (IN)  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	1.907 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	1.638 ac-ft
Volume (Retained)	0.268 ac-ft
Volume (Unrouted)	-0.001 ac-ft
Error (Mass Balance)	0.0 %

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Offsite Detained (Time of Concentration Calculations, 2.00 years (2 yr 24 hr))...6, 7, 8

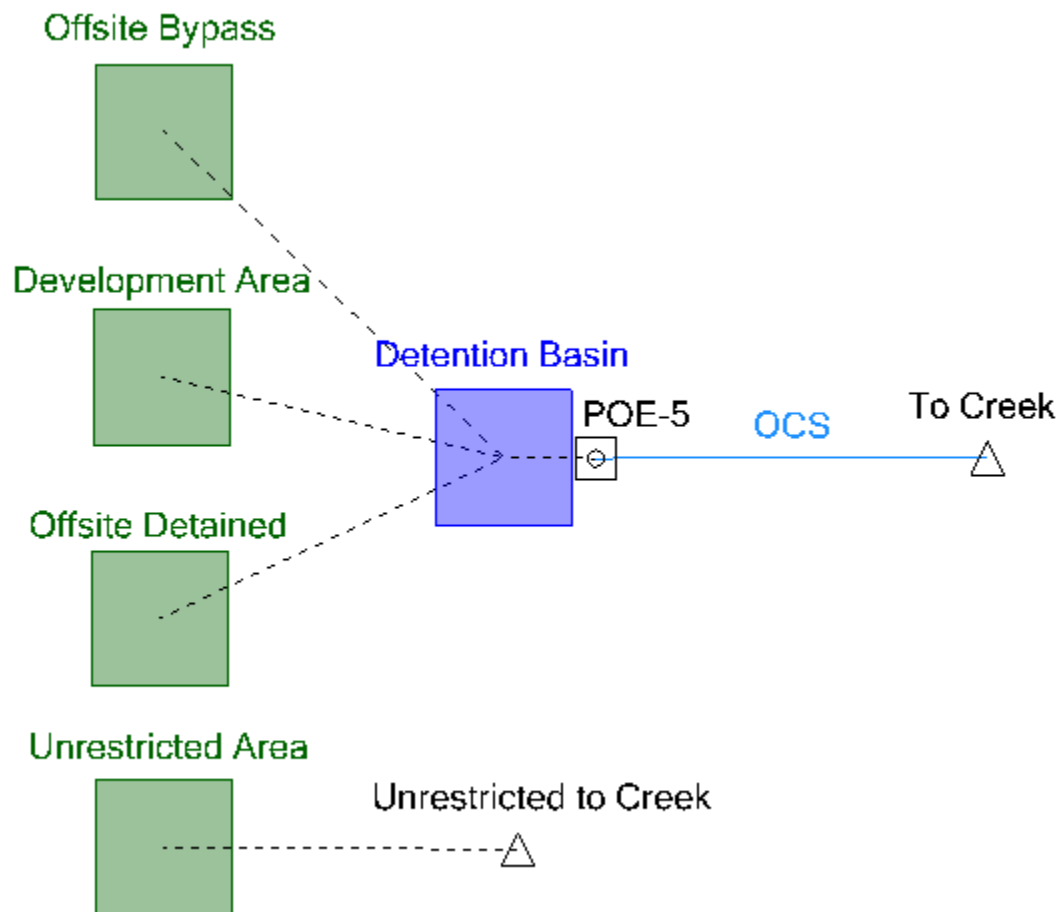
### U

Unrestricted Area (Time of Concentration Calculations, 2.00 years (2 yr 24 hr))...8

User Notifications...1



## APPENDIX E – Proposed Critical Duration PondPack Report (with Offsite Bypass Area)



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Project Summary	
Title	25-058 Proposed Conditions PondPack Model
Engineer	KML
Company	Haeger Engineering LLC
Date	7/21/2025
Notes	
Proposed Conditions Model - with Offsite Bypass Critical Duration Analysis	

#### Subsection: User Notifications

User Notifications? No user notifications generated.

#### Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Development Area	2 yr 18 hr	2.00	0.473	11.90	0.854
Development Area	2 yr 10 min	2.00	0.036	0.16	2.613
Development Area	2 yr 15 min	2.00	0.062	0.18	3.620
Development Area	2 yr 30 min	2.00	0.114	0.22	4.544
Development Area	2 yr 1 hr	2.00	0.171	0.32	4.363
Development Area	2 yr 2 hr	2.00	0.238	0.52	3.372
Development Area	2 yr 3 hr	2.00	0.276	0.67	2.676
Development Area	2 yr 6 hr	2.00	0.276	0.67	2.676
Development Area	2 yr 12 hr	2.00	0.427	4.95	1.112
Development Area	2 yr 24 hr	2.00	0.513	15.85	0.689
Development Area	2 yr 48 hr	2.00	0.578	41.70	0.479
Development Area	2 yr 72 hr	2.00	0.642	62.60	0.350
Development Area	2 yr 120 hr	2.00	0.735	104.40	0.236
Development Area	2 yr 240 hr	2.00	0.981	208.70	0.153
Unrestricted Area	2 yr 18 hr	2.00	0.023	12.60	0.052
Unrestricted Area	2 yr 10 min	2.00	0.000	0.00	0.000
Unrestricted Area	2 yr 15 min	2.00	0.000	0.28	0.020
Unrestricted Area	2 yr 30 min	2.00	0.002	0.36	0.064
Unrestricted Area	2 yr 1 hr	2.00	0.004	0.61	0.074
Unrestricted Area	2 yr 2 hr	2.00	0.007	0.63	0.087
Unrestricted Area	2 yr 3 hr	2.00	0.010	0.90	0.081
Unrestricted Area	2 yr 6 hr	2.00	0.010	0.90	0.081
Unrestricted Area	2 yr 12 hr	2.00	0.020	6.00	0.055
Unrestricted Area	2 yr 24 hr	2.00	0.026	16.80	0.044
Unrestricted Area	2 yr 48 hr	2.00	0.031	41.70	0.034
Unrestricted Area	2 yr 72 hr	2.00	0.036	62.60	0.026

## Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Unrestricted Area	2 yr 120 hr	2.00	0.044	104.40	0.018
Unrestricted Area	2 yr 240 hr	2.00	0.066	208.80	0.013
Offsite Detained	2 yr 18 hr	2.00	0.036	11.95	0.073
Offsite Detained	2 yr 10 min	2.00	0.001	0.23	0.053
Offsite Detained	2 yr 15 min	2.00	0.002	0.26	0.114
Offsite Detained	2 yr 30 min	2.00	0.006	0.34	0.178
Offsite Detained	2 yr 1 hr	2.00	0.010	0.41	0.201
Offsite Detained	2 yr 2 hr	2.00	0.015	0.63	0.194
Offsite Detained	2 yr 3 hr	2.00	0.018	0.86	0.165
Offsite Detained	2 yr 6 hr	2.00	0.018	0.86	0.165
Offsite Detained	2 yr 12 hr	2.00	0.032	5.05	0.084
Offsite Detained	2 yr 24 hr	2.00	0.040	15.90	0.060
Offsite Detained	2 yr 48 hr	2.00	0.046	41.70	0.044
Offsite Detained	2 yr 72 hr	2.00	0.052	62.60	0.033
Offsite Detained	2 yr 120 hr	2.00	0.061	104.40	0.022
Offsite Detained	2 yr 240 hr	2.00	0.086	208.80	0.015
Offsite Bypass	2 yr 18 hr	2.00	0.036	11.95	0.072
Offsite Bypass	2 yr 10 min	2.00	0.001	0.23	0.065
Offsite Bypass	2 yr 15 min	2.00	0.003	0.26	0.130
Offsite Bypass	2 yr 30 min	2.00	0.006	0.32	0.193
Offsite Bypass	2 yr 1 hr	2.00	0.010	0.39	0.216
Offsite Bypass	2 yr 2 hr	2.00	0.016	0.62	0.204
Offsite Bypass	2 yr 3 hr	2.00	0.019	0.83	0.172
Offsite Bypass	2 yr 6 hr	2.00	0.019	0.83	0.172
Offsite Bypass	2 yr 12 hr	2.00	0.032	5.05	0.085
Offsite Bypass	2 yr 24 hr	2.00	0.040	15.90	0.059
Offsite Bypass	2 yr 48 hr	2.00	0.046	41.70	0.043
Offsite Bypass	2 yr 72 hr	2.00	0.052	62.60	0.032
Offsite Bypass	2 yr 120 hr	2.00	0.061	104.40	0.022
Offsite Bypass	2 yr 240 hr	2.00	0.085	208.80	0.015

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	2 yr 18 hr	2.00	0.545	18.10	0.100
To Creek	2 yr 10 min	2.00	0.038	0.45	0.053
To Creek	2 yr 15 min	2.00	0.067	0.53	0.059
To Creek	2 yr 30 min	2.00	0.126	0.75	0.068
To Creek	2 yr 1 hr	2.00	0.191	1.22	0.075
To Creek	2 yr 2 hr	2.00	0.269	2.19	0.083
To Creek	2 yr 3 hr	2.00	0.289	3.17	0.087
To Creek	2 yr 6 hr	2.00	0.289	3.17	0.087
To Creek	2 yr 12 hr	2.00	0.491	12.10	0.098



## Subsection: Master Network Summary

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	2 yr 24 hr	2.00	0.593	24.05	0.101
To Creek	2 yr 48 hr	2.00	0.671	48.10	0.101
To Creek	2 yr 72 hr	2.00	0.746	72.10	0.099
To Creek	2 yr 120 hr	2.00	0.857	120.00	0.095
To Creek	2 yr 240 hr	2.00	1.152	230.50	0.091
Unrestricted to Creek	2 yr 18 hr	2.00	0.023	12.60	0.052
Unrestricted to Creek	2 yr 10 min	2.00	0.000	0.00	0.000
Unrestricted to Creek	2 yr 15 min	2.00	0.000	0.28	0.020
Unrestricted to Creek	2 yr 30 min	2.00	0.002	0.36	0.064
Unrestricted to Creek	2 yr 1 hr	2.00	0.004	0.61	0.074
Unrestricted to Creek	2 yr 2 hr	2.00	0.007	0.63	0.087
Unrestricted to Creek	2 yr 3 hr	2.00	0.010	0.90	0.081
Unrestricted to Creek	2 yr 6 hr	2.00	0.010	0.90	0.081
Unrestricted to Creek	2 yr 12 hr	2.00	0.020	6.00	0.055
Unrestricted to Creek	2 yr 24 hr	2.00	0.026	16.80	0.044
Unrestricted to Creek	2 yr 48 hr	2.00	0.031	41.70	0.034
Unrestricted to Creek	2 yr 72 hr	2.00	0.036	62.60	0.026
Unrestricted to Creek	2 yr 120 hr	2.00	0.044	104.40	0.018
Unrestricted to Creek	2 yr 240 hr	2.00	0.066	208.80	0.013

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	2 yr 18 hr	2.00	0.545	11.90	0.998	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 18 hr	2.00	0.545	18.10	0.100	783.22	0.453
Detention Basin (IN)	2 yr 10 min	2.00	0.038	0.16	2.687	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 10 min	2.00	0.038	0.45	0.053	781.67	0.036
Detention Basin (IN)	2 yr 15 min	2.00	0.067	0.18	3.776	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 15 min	2.00	0.067	0.53	0.059	781.81	0.065
Detention Basin (IN)	2 yr 30 min	2.00	0.126	0.22	4.794	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 30 min	2.00	0.126	0.75	0.068	782.06	0.122
Detention Basin (IN)	2 yr 1 hr	2.00	0.191	0.32	4.694	(N/A)	(N/A)

Subsection: Master Network Summary

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (OUT)	2 yr 1 hr	2.00	0.191	1.22	0.075	782.29	0.185
Detention Basin (IN)	2 yr 2 hr	2.00	0.269	0.53	3.723	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 2 hr	2.00	0.269	2.19	0.083	782.55	0.257
Detention Basin (IN)	2 yr 3 hr	2.00	0.313	0.68	2.971	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 3 hr	2.00	0.289	3.17	0.087	782.68	0.295
Detention Basin (IN)	2 yr 6 hr	2.00	0.313	0.68	2.971	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 6 hr	2.00	0.289	3.17	0.087	782.68	0.295
Detention Basin (IN)	2 yr 12 hr	2.00	0.491	4.95	1.280	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 12 hr	2.00	0.491	12.10	0.098	783.12	0.421
Detention Basin (IN)	2 yr 24 hr	2.00	0.593	15.85	0.808	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 24 hr	2.00	0.593	24.05	0.101	783.27	0.469
Detention Basin (IN)	2 yr 48 hr	2.00	0.671	41.70	0.566	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 48 hr	2.00	0.671	48.10	0.101	783.23	0.457
Detention Basin (IN)	2 yr 72 hr	2.00	0.746	62.60	0.414	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 72 hr	2.00	0.746	72.10	0.099	783.17	0.437
Detention Basin (IN)	2 yr 120 hr	2.00	0.857	104.40	0.281	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 120 hr	2.00	0.857	120.00	0.095	783.01	0.385
Detention Basin (IN)	2 yr 240 hr	2.00	1.152	208.70	0.182	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 240 hr	2.00	1.152	230.50	0.091	782.85	0.341

Subsection: Time-Depth Curve  
Label: B75 - 2 Year Critical Storm  
Scenario: 2 yr 1 hr

Return Event: 2.00 years  
Storm Event: 1 hr 2 yr

---

Time-Depth Curve: 1 hr 2 yr

---

Label

1 hr 2 yr

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 1 hr

Return Event: 2.00 years  
 Storm Event: 1 hr 2 yr

---

Time-Depth Curve: 1 hr 2 yr

---

Start Time	0.00 hours
Increment	0.01 hours
End Time	1.00 hours
Return Event	2.00 years

---

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.01 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.03	0.06	0.09	0.13
0.05	0.16	0.20	0.23	0.27	0.30
0.10	0.34	0.38	0.42	0.46	0.50
0.15	0.54	0.58	0.61	0.65	0.68
0.20	0.72	0.75	0.78	0.81	0.84
0.25	0.87	0.90	0.92	0.95	0.97
0.30	0.99	1.01	1.03	1.05	1.06
0.35	1.08	1.09	1.11	1.12	1.13
0.40	1.14	1.16	1.17	1.18	1.19
0.45	1.20	1.21	1.22	1.23	1.24
0.50	1.25	1.26	1.27	1.28	1.29
0.55	1.30	1.31	1.32	1.33	1.34
0.60	1.35	1.36	1.37	1.38	1.38
0.65	1.39	1.40	1.41	1.41	1.42
0.70	1.43	1.43	1.44	1.44	1.45
0.75	1.46	1.46	1.47	1.47	1.48
0.80	1.48	1.49	1.49	1.50	1.50
0.85	1.50	1.51	1.51	1.52	1.52
0.90	1.53	1.53	1.54	1.54	1.54
0.95	1.55	1.55	1.56	1.56	1.57
1.00	1.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 10 min

Return Event: 2.00 years  
 Storm Event: 10 min 2 yr

---

Time-Depth Curve: 10 min 2 yr

---

Label	10 min 2 yr
Start Time	0.00 hours
Increment	0.00 hours
End Time	0.17 hours
Return Event	2.00 years

---

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 10 min

Return Event: 2.00 years  
 Storm Event: 10 min 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.01	0.03	0.04	0.06
0.01	0.07	0.09	0.10	0.12	0.14
0.02	0.15	0.17	0.19	0.21	0.22
0.03	0.24	0.26	0.27	0.29	0.30
0.03	0.32	0.33	0.35	0.36	0.37
0.04	0.39	0.40	0.41	0.42	0.43
0.05	0.44	0.45	0.46	0.47	0.47
0.06	0.48	0.49	0.49	0.50	0.50
0.07	0.51	0.52	0.52	0.53	0.53
0.08	0.53	0.54	0.54	0.55	0.55
0.08	0.56	0.56	0.57	0.57	0.58
0.09	0.58	0.59	0.59	0.59	0.60
0.10	0.60	0.61	0.61	0.61	0.62
0.11	0.62	0.62	0.63	0.63	0.63
0.12	0.64	0.64	0.64	0.64	0.65
0.13	0.65	0.65	0.65	0.66	0.66
0.13	0.66	0.66	0.66	0.67	0.67
0.14	0.67	0.67	0.67	0.68	0.68
0.15	0.68	0.68	0.68	0.69	0.69
0.16	0.69	0.69	0.69	0.70	0.70
0.17	0.70	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 12 hr

Return Event: 2.00 years  
 Storm Event: 12 hr 2 yr

Time-Depth Curve: 12 hr 2 yr

Label	12 hr 2 yr
Start Time	0.00 hours
Increment	0.12 hours
End Time	12.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.12 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.06
0.60	0.08	0.10	0.12	0.13	0.15
1.20	0.17	0.20	0.22	0.24	0.26
1.80	0.29	0.31	0.34	0.37	0.40

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 12 hr

Return Event: 2.00 years  
 Storm Event: 12 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.12 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
2.40	0.43	0.47	0.51	0.54	0.58
3.00	0.62	0.67	0.72	0.77	0.82
3.60	0.87	0.93	0.99	1.04	1.10
4.20	1.16	1.23	1.29	1.35	1.41
4.80	1.48	1.54	1.60	1.66	1.71
5.40	1.77	1.82	1.88	1.93	1.98
6.00	2.03	2.07	2.11	2.15	2.19
6.60	2.22	2.26	2.29	2.33	2.36
7.20	2.39	2.42	2.45	2.48	2.50
7.80	2.52	2.54	2.56	2.58	2.59
8.40	2.61	2.63	2.64	2.65	2.67
9.00	2.68	2.69	2.71	2.72	2.73
9.60	2.74	2.75	2.76	2.77	2.78
10.20	2.79	2.80	2.81	2.81	2.82
10.80	2.83	2.84	2.85	2.85	2.86
11.40	2.87	2.88	2.89	2.89	2.90
12.00	2.91	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 120 hr

Return Event: 2.00 years  
 Storm Event: 120 hr 2 yr

Time-Depth Curve: 120 hr 2 yr

Label	120 hr 2 yr
Start Time	0.00 hours
Increment	1.20 hours
End Time	120.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 1.20 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.05	0.07	0.10
6.00	0.12	0.15	0.18	0.20	0.23
12.00	0.25	0.28	0.30	0.33	0.36
18.00	0.39	0.41	0.44	0.47	0.50
24.00	0.53	0.56	0.59	0.62	0.64
30.00	0.67	0.70	0.73	0.76	0.79
36.00	0.81	0.84	0.86	0.89	0.92
42.00	0.94	0.97	1.00	1.02	1.05



Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 120 hr

Return Event: 2.00 years  
 Storm Event: 120 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 1.20 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
48.00	1.08	1.10	1.13	1.16	1.20
54.00	1.23	1.26	1.29	1.32	1.35
60.00	1.38	1.41	1.44	1.47	1.49
66.00	1.52	1.55	1.57	1.60	1.62
72.00	1.65	1.67	1.69	1.72	1.75
78.00	1.78	1.80	1.84	1.88	1.92
84.00	1.96	2.00	2.07	2.14	2.20
90.00	2.27	2.35	2.44	2.52	2.61
96.00	2.71	2.81	2.92	3.02	3.14
102.00	3.25	3.37	3.48	3.59	3.69
108.00	3.79	3.90	3.99	4.05	4.12
114.00	4.19	4.25	4.29	4.34	4.38
120.00	4.42	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 15 min

Return Event: 2.00 years  
 Storm Event: 15 min 2 yr

Time-Depth Curve: 15 min 2 yr

Label	15 min 2 yr
Start Time	0.00 hours
Increment	0.00 hours
End Time	0.25 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.04	0.05	0.07
0.01	0.09	0.11	0.13	0.15	0.17
0.03	0.20	0.22	0.24	0.26	0.29
0.04	0.31	0.33	0.35	0.37	0.39
0.05	0.41	0.43	0.45	0.46	0.48
0.06	0.50	0.51	0.53	0.54	0.56
0.08	0.57	0.58	0.59	0.60	0.61
0.09	0.62	0.63	0.63	0.64	0.65
0.10	0.66	0.66	0.67	0.68	0.68
0.11	0.69	0.69	0.70	0.71	0.71
0.13	0.72	0.72	0.73	0.74	0.74
0.14	0.75	0.75	0.76	0.76	0.77

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 15 min

Return Event: 2.00 years  
 Storm Event: 15 min 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.15	0.77	0.78	0.78	0.79	0.79
0.16	0.80	0.80	0.81	0.81	0.81
0.18	0.82	0.82	0.82	0.83	0.83
0.19	0.83	0.84	0.84	0.84	0.85
0.20	0.85	0.85	0.85	0.86	0.86
0.21	0.86	0.87	0.87	0.87	0.87
0.23	0.88	0.88	0.88	0.88	0.89
0.24	0.89	0.89	0.89	0.90	0.90
0.25	0.90	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 18 hr

Return Event: 2.00 years  
 Storm Event: 18 hr 2 yr

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Time-Depth Curve: 18 hr 2 yr

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Label	18 hr 2 yr
Start Time	0.00 hours
Increment	0.18 hours
End Time	18.00 hours
Return Event	2.00 years

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**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.18 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.06
0.90	0.08	0.10	0.11	0.13	0.15
1.80	0.16	0.18	0.20	0.22	0.24
2.70	0.26	0.27	0.29	0.31	0.33
3.60	0.35	0.37	0.39	0.41	0.43
4.50	0.45	0.47	0.49	0.51	0.53
5.40	0.55	0.57	0.59	0.61	0.63
6.30	0.66	0.68	0.70	0.73	0.76
7.20	0.78	0.81	0.84	0.87	0.91
8.10	0.94	0.98	1.02	1.06	1.10
9.00	1.14	1.20	1.26	1.31	1.37
9.90	1.43	1.49	1.55	1.62	1.68
10.80	1.75	1.82	1.88	1.95	2.02
11.70	2.08	2.15	2.22	2.28	2.34
12.60	2.40	2.46	2.51	2.57	2.62
13.50	2.67	2.70	2.74	2.78	2.81

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 18 hr

Return Event: 2.00 years  
 Storm Event: 18 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.18 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
14.40	2.84	2.86	2.89	2.92	2.93
15.30	2.95	2.97	2.99	3.00	3.01
16.20	3.03	3.04	3.05	3.06	3.07
17.10	3.09	3.10	3.11	3.12	3.13
18.00	3.14	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 2 hr

Return Event: 2.00 years  
 Storm Event: 2 hr 2 yr

Time-Depth Curve: 2 hr 2 yr

Label	2 hr 2 yr
Start Time	0.00 hours
Increment	0.02 hours
End Time	2.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.02 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.12	0.16
0.10	0.20	0.24	0.29	0.33	0.38
0.20	0.42	0.47	0.52	0.57	0.62
0.30	0.66	0.71	0.76	0.80	0.84
0.40	0.89	0.93	0.96	1.00	1.04
0.50	1.08	1.11	1.14	1.17	1.20
0.60	1.23	1.25	1.27	1.30	1.32
0.70	1.33	1.35	1.37	1.38	1.40
0.80	1.41	1.43	1.44	1.46	1.47
0.90	1.48	1.50	1.51	1.52	1.54
1.00	1.55	1.56	1.57	1.59	1.60
1.10	1.61	1.62	1.64	1.65	1.66
1.20	1.67	1.68	1.69	1.70	1.71
1.30	1.72	1.73	1.74	1.75	1.75
1.40	1.76	1.77	1.78	1.78	1.79
1.50	1.80	1.80	1.81	1.82	1.82
1.60	1.83	1.84	1.84	1.85	1.85
1.70	1.86	1.86	1.87	1.88	1.88
1.80	1.89	1.89	1.90	1.90	1.91
1.90	1.91	1.92	1.92	1.93	1.93

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 2 hr

Return Event: 2.00 years  
 Storm Event: 2 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.02 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
2.00	1.94	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

Time-Depth Curve: 24 hr 2 yr

Label	24 hr 2 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.24 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.07
1.20	0.08	0.10	0.12	0.14	0.16
2.40	0.18	0.19	0.21	0.23	0.25
3.60	0.27	0.29	0.31	0.33	0.35
4.80	0.37	0.39	0.42	0.44	0.46
6.00	0.48	0.50	0.52	0.54	0.56
7.20	0.58	0.60	0.63	0.65	0.67
8.40	0.70	0.72	0.75	0.78	0.80
9.60	0.83	0.86	0.89	0.93	0.97
10.80	1.00	1.04	1.08	1.13	1.17
12.00	1.21	1.27	1.34	1.40	1.46
13.20	1.52	1.59	1.65	1.72	1.79
14.40	1.86	1.93	2.00	2.07	2.14
15.60	2.22	2.29	2.36	2.42	2.49
16.80	2.56	2.62	2.67	2.73	2.78
18.00	2.84	2.87	2.91	2.95	2.99
19.20	3.02	3.05	3.07	3.10	3.12
20.40	3.14	3.16	3.18	3.19	3.21
21.60	3.22	3.23	3.25	3.26	3.27
22.80	3.28	3.29	3.31	3.32	3.33
24.00	3.34	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 240 hr

Return Event: 2.00 years  
 Storm Event: 240 hr 2 yr

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Time-Depth Curve: 240 hr 2 yr

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Label	240 hr 2 yr
Start Time	0.00 hours
Increment	2.40 hours
End Time	240.00 hours
Return Event	2.00 years

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**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 2.40 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.03	0.06	0.09	0.12
12.00	0.16	0.19	0.22	0.26	0.29
24.00	0.32	0.35	0.38	0.42	0.45
36.00	0.49	0.52	0.56	0.60	0.63
48.00	0.67	0.71	0.74	0.78	0.82
60.00	0.85	0.89	0.92	0.96	1.00
72.00	1.03	1.06	1.10	1.13	1.16
84.00	1.19	1.23	1.26	1.30	1.33
96.00	1.37	1.40	1.44	1.48	1.52
108.00	1.55	1.59	1.63	1.67	1.71
120.00	1.75	1.79	1.82	1.86	1.89
132.00	1.93	1.96	1.99	2.02	2.05
144.00	2.09	2.12	2.15	2.18	2.22
156.00	2.25	2.29	2.33	2.38	2.43
168.00	2.48	2.54	2.62	2.71	2.79
180.00	2.87	2.98	3.09	3.20	3.30
192.00	3.43	3.56	3.70	3.83	3.97
204.00	4.12	4.26	4.41	4.55	4.68
216.00	4.81	4.94	5.05	5.14	5.22
228.00	5.31	5.39	5.44	5.49	5.55
240.00	5.60	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 3 hr

Return Event: 2.00 years  
 Storm Event: 3 hr 2 yr

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Time-Depth Curve: 3 hr 2 yr

---

Label	3 hr 2 yr
Start Time	0.00 hours
Increment	0.03 hours
End Time	3.00 hours
Return Event	2.00 years

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Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 3 hr

Return Event: 2.00 years  
 Storm Event: 3 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.03 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.09	0.13	0.17
0.15	0.22	0.27	0.32	0.36	0.41
0.30	0.47	0.52	0.57	0.63	0.68
0.45	0.73	0.79	0.84	0.88	0.93
0.60	0.98	1.02	1.06	1.11	1.15
0.75	1.19	1.22	1.26	1.29	1.33
0.90	1.35	1.38	1.40	1.43	1.45
1.05	1.47	1.49	1.51	1.52	1.54
1.20	1.56	1.58	1.59	1.61	1.62
1.35	1.64	1.65	1.66	1.68	1.69
1.50	1.71	1.72	1.74	1.75	1.76
1.65	1.78	1.79	1.80	1.82	1.83
1.80	1.84	1.85	1.86	1.88	1.89
1.95	1.90	1.91	1.92	1.93	1.94
2.10	1.94	1.95	1.96	1.97	1.98
2.25	1.98	1.99	2.00	2.00	2.01
2.40	2.02	2.02	2.03	2.04	2.04
2.55	2.05	2.06	2.06	2.07	2.08
2.70	2.08	2.09	2.09	2.10	2.10
2.85	2.11	2.12	2.12	2.13	2.13
3.00	2.14	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 6 hr

Return Event: 2.00 years  
 Storm Event: 3 hr 2 yr

Time-Depth Curve: 3 hr 2 yr

Label	3 hr 2 yr
Start Time	0.00 hours
Increment	0.03 hours
End Time	3.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.03 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.09	0.13	0.17
0.15	0.22	0.27	0.32	0.36	0.41
0.30	0.47	0.52	0.57	0.63	0.68
0.45	0.73	0.79	0.84	0.88	0.93

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 6 hr

Return Event: 2.00 years  
 Storm Event: 3 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.03 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.60	0.98	1.02	1.06	1.11	1.15
0.75	1.19	1.22	1.26	1.29	1.33
0.90	1.35	1.38	1.40	1.43	1.45
1.05	1.47	1.49	1.51	1.52	1.54
1.20	1.56	1.58	1.59	1.61	1.62
1.35	1.64	1.65	1.66	1.68	1.69
1.50	1.71	1.72	1.74	1.75	1.76
1.65	1.78	1.79	1.80	1.82	1.83
1.80	1.84	1.85	1.86	1.88	1.89
1.95	1.90	1.91	1.92	1.93	1.94
2.10	1.94	1.95	1.96	1.97	1.98
2.25	1.98	1.99	2.00	2.00	2.01
2.40	2.02	2.02	2.03	2.04	2.04
2.55	2.05	2.06	2.06	2.07	2.08
2.70	2.08	2.09	2.09	2.10	2.10
2.85	2.11	2.12	2.12	2.13	2.13
3.00	2.14	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 30 min

Return Event: 2.00 years  
 Storm Event: 30 min 2 yr

Time-Depth Curve: 30 min 2 yr

Label	30 min 2 yr
Start Time	0.00 hours
Increment	0.01 hours
End Time	0.50 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.01 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.05	0.07	0.10
0.03	0.13	0.15	0.18	0.21	0.24
0.05	0.27	0.30	0.33	0.36	0.39
0.08	0.42	0.46	0.48	0.51	0.54
0.10	0.57	0.59	0.62	0.64	0.66
0.13	0.69	0.71	0.73	0.75	0.77
0.15	0.78	0.80	0.81	0.83	0.84
0.18	0.85	0.86	0.87	0.88	0.89

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 30 min

Return Event: 2.00 years  
 Storm Event: 30 min 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.01 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.20	0.90	0.91	0.92	0.93	0.94
0.23	0.95	0.96	0.96	0.97	0.98
0.25	0.99	1.00	1.01	1.01	1.02
0.28	1.03	1.04	1.05	1.05	1.06
0.30	1.07	1.07	1.08	1.09	1.09
0.33	1.10	1.11	1.11	1.12	1.12
0.35	1.13	1.13	1.14	1.14	1.14
0.38	1.15	1.15	1.16	1.16	1.17
0.40	1.17	1.17	1.18	1.18	1.18
0.43	1.19	1.19	1.20	1.20	1.20
0.45	1.21	1.21	1.21	1.22	1.22
0.48	1.22	1.23	1.23	1.23	1.24
0.50	1.24	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 48 hr

Return Event: 2.00 years  
 Storm Event: 48 hr 2 yr

Time-Depth Curve: 48 hr 2 yr

Label	48 hr 2 yr
Start Time	0.00 hours
Increment	0.48 hours
End Time	48.00 hours
Return Event	2.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.48 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.04	0.06	0.08
2.40	0.10	0.12	0.15	0.17	0.19
4.80	0.21	0.23	0.25	0.27	0.30
7.20	0.32	0.34	0.37	0.39	0.41
9.60	0.44	0.46	0.49	0.51	0.53
12.00	0.56	0.58	0.60	0.63	0.65
14.40	0.67	0.69	0.72	0.74	0.76
16.80	0.78	0.80	0.82	0.85	0.87
19.20	0.89	0.91	0.94	0.96	0.99
21.60	1.02	1.04	1.07	1.09	1.12
24.00	1.14	1.17	1.19	1.21	1.24
26.40	1.26	1.28	1.30	1.32	1.34

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 48 hr

Return Event: 2.00 years  
 Storm Event: 48 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.48 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
28.80	1.36	1.38	1.40	1.42	1.45
31.20	1.47	1.49	1.52	1.55	1.59
33.60	1.62	1.66	1.71	1.77	1.82
36.00	1.88	1.95	2.02	2.09	2.16
38.40	2.24	2.33	2.42	2.50	2.60
40.80	2.69	2.79	2.88	2.97	3.06
43.20	3.14	3.23	3.30	3.36	3.41
45.60	3.47	3.52	3.56	3.59	3.63
48.00	3.66	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 72 hr

Return Event: 2.00 years  
 Storm Event: 72 hr 2 yr

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Time-Depth Curve: 72 hr 2 yr

---

Label	72 hr 2 yr
Start Time	0.00 hours
Increment	0.72 hours
End Time	72.00 hours
Return Event	2.00 years

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**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.72 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.04	0.07	0.09
3.60	0.11	0.14	0.16	0.18	0.20
7.20	0.23	0.25	0.27	0.30	0.32
10.80	0.35	0.37	0.40	0.42	0.45
14.40	0.48	0.50	0.53	0.55	0.58
18.00	0.60	0.63	0.66	0.68	0.71
21.60	0.73	0.75	0.78	0.80	0.82
25.20	0.85	0.87	0.89	0.92	0.94
28.80	0.97	0.99	1.02	1.05	1.07
32.40	1.10	1.13	1.16	1.19	1.21
36.00	1.24	1.27	1.29	1.32	1.34
39.60	1.37	1.39	1.41	1.43	1.46
43.20	1.48	1.50	1.52	1.55	1.57
46.80	1.60	1.62	1.65	1.69	1.72
50.40	1.76	1.80	1.86	1.92	1.98
54.00	2.04	2.11	2.19	2.27	2.34

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 72 hr

Return Event: 2.00 years  
 Storm Event: 72 hr 2 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.72 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
57.60	2.43	2.53	2.62	2.72	2.82
61.20	2.92	3.02	3.13	3.22	3.32
64.80	3.41	3.50	3.58	3.64	3.70
68.40	3.76	3.82	3.86	3.89	3.93
72.00	3.97	(N/A)	(N/A)	(N/A)	(N/A)

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Time-Depth Curve, 100.00 years (100 yr 24 hr)	11
Time-Depth Curve, 100.00 years (100 yr 240 hr)	12
Time-Depth Curve, 100.00 years (100 yr 3 hr)	12
Time-Depth Curve, 100.00 years (100 yr 30 min)	13
Time-Depth Curve, 100.00 years (100 yr 48 hr)	14
Time-Depth Curve, 100.00 years (100 yr 6 hr)	15
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Project Summary	
Title	25-058 Proposed Conditions PondPack Model
Engineer	KML
Company	Haeger Engineering LLC
Date	7/21/2025
Notes	
Proposed Conditions Model - with Offsite Bypass Critical Duration Analysis	

#### Subsection: User Notifications

User Notifications? No user notifications generated.

#### Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Development Area	100 yr 10 min	100.00	0.212	0.14	15.401
Development Area	100 yr 15 min	100.00	0.311	0.16	18.848
Development Area	100 yr 30 min	100.00	0.479	0.20	20.764
Development Area	100 yr 1 hr	100.00	0.654	0.28	17.682
Development Area	100 yr 2 hr	100.00	0.849	0.42	12.626
Development Area	100 yr 3 hr	100.00	0.958	0.54	9.797
Development Area	100 yr 6 hr	100.00	1.156	1.01	6.057
Development Area	100 yr 12 hr	100.00	1.374	4.90	3.351
Development Area	100 yr 18 hr	100.00	1.501	11.85	2.418
Development Area	100 yr 24 hr	100.00	1.610	15.85	1.934
Development Area	100 yr 48 hr	100.00	1.761	41.70	1.292
Development Area	100 yr 120 hr	100.00	2.055	104.30	0.596
Development Area	100 yr 72 hr	100.00	1.882	62.60	0.916
Development Area	100 yr 240 hr	100.00	2.481	208.70	0.355
Unrestricted Area	100 yr 10 min	100.00	0.006	0.16	0.472
Unrestricted Area	100 yr 15 min	100.00	0.012	0.18	0.705
Unrestricted Area	100 yr 30 min	100.00	0.023	0.21	0.930
Unrestricted Area	100 yr 1 hr	100.00	0.037	0.32	0.942
Unrestricted Area	100 yr 2 hr	100.00	0.054	0.53	0.753
Unrestricted Area	100 yr 3 hr	100.00	0.063	0.77	0.603
Unrestricted Area	100 yr 6 hr	100.00	0.082	1.28	0.401
Unrestricted Area	100 yr 12 hr	100.00	0.102	4.95	0.271
Unrestricted Area	100 yr 18 hr	100.00	0.115	11.90	0.217
Unrestricted Area	100 yr 24 hr	100.00	0.125	15.85	0.176
Unrestricted Area	100 yr 48 hr	100.00	0.140	41.70	0.123
Unrestricted Area	100 yr 120 hr	100.00	0.169	104.40	0.058

## Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Unrestricted Area	100 yr 72 hr	100.00	0.152	62.60	0.088
Unrestricted Area	100 yr 240 hr	100.00	0.212	208.80	0.035
Offsite Detained	100 yr 10 min	100.00	0.013	0.20	0.754
Offsite Detained	100 yr 15 min	100.00	0.021	0.21	1.048
Offsite Detained	100 yr 30 min	100.00	0.037	0.26	1.278
Offsite Detained	100 yr 1 hr	100.00	0.053	0.36	1.262
Offsite Detained	100 yr 2 hr	100.00	0.073	0.54	1.010
Offsite Detained	100 yr 3 hr	100.00	0.084	0.70	0.807
Offsite Detained	100 yr 6 hr	100.00	0.104	1.09	0.519
Offsite Detained	100 yr 12 hr	100.00	0.126	4.95	0.323
Offsite Detained	100 yr 18 hr	100.00	0.139	11.90	0.243
Offsite Detained	100 yr 24 hr	100.00	0.150	15.85	0.196
Offsite Detained	100 yr 48 hr	100.00	0.166	41.70	0.133
Offsite Detained	100 yr 120 hr	100.00	0.197	104.40	0.062
Offsite Detained	100 yr 72 hr	100.00	0.179	62.60	0.095
Offsite Detained	100 yr 240 hr	100.00	0.242	208.80	0.037
Offsite Bypass	100 yr 10 min	100.00	0.014	0.20	0.783
Offsite Bypass	100 yr 15 min	100.00	0.022	0.21	1.076
Offsite Bypass	100 yr 30 min	100.00	0.037	0.26	1.292
Offsite Bypass	100 yr 1 hr	100.00	0.053	0.34	1.267
Offsite Bypass	100 yr 2 hr	100.00	0.072	0.53	1.002
Offsite Bypass	100 yr 3 hr	100.00	0.082	0.68	0.799
Offsite Bypass	100 yr 6 hr	100.00	0.102	1.07	0.514
Offsite Bypass	100 yr 12 hr	100.00	0.123	4.95	0.313
Offsite Bypass	100 yr 18 hr	100.00	0.136	11.90	0.234
Offsite Bypass	100 yr 24 hr	100.00	0.147	15.85	0.188
Offsite Bypass	100 yr 48 hr	100.00	0.162	41.70	0.128
Offsite Bypass	100 yr 120 hr	100.00	0.191	104.40	0.059
Offsite Bypass	100 yr 72 hr	100.00	0.174	62.60	0.091
Offsite Bypass	100 yr 240 hr	100.00	0.234	208.70	0.035

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	100 yr 10 min	100.00	0.239	0.52	0.081
To Creek	100 yr 15 min	100.00	0.308	0.59	0.092
To Creek	100 yr 30 min	100.00	0.377	0.80	0.109
To Creek	100 yr 1 hr	100.00	0.491	1.22	0.241
To Creek	100 yr 2 hr	100.00	0.649	2.18	0.310
To Creek	100 yr 3 hr	100.00	0.741	3.15	0.338
To Creek	100 yr 6 hr	100.00	0.910	6.11	0.374
To Creek	100 yr 12 hr	100.00	1.455	12.05	0.404
To Creek	100 yr 18 hr	100.00	1.552	18.05	0.421

## Subsection: Master Network Summary

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	100 yr 24 hr	100.00	1.638	22.15	0.426
To Creek	100 yr 48 hr	100.00	2.089	48.10	0.425
To Creek	100 yr 120 hr	100.00	2.443	115.20	0.366
To Creek	100 yr 72 hr	100.00	2.235	69.60	0.404
To Creek	100 yr 240 hr	100.00	2.956	220.90	0.306
Unrestricted to Creek	100 yr 10 min	100.00	0.006	0.16	0.472
Unrestricted to Creek	100 yr 15 min	100.00	0.012	0.18	0.705
Unrestricted to Creek	100 yr 30 min	100.00	0.023	0.21	0.930
Unrestricted to Creek	100 yr 1 hr	100.00	0.037	0.32	0.942
Unrestricted to Creek	100 yr 2 hr	100.00	0.054	0.53	0.753
Unrestricted to Creek	100 yr 3 hr	100.00	0.063	0.77	0.603
Unrestricted to Creek	100 yr 6 hr	100.00	0.082	1.28	0.401
Unrestricted to Creek	100 yr 12 hr	100.00	0.102	4.95	0.271
Unrestricted to Creek	100 yr 18 hr	100.00	0.115	11.90	0.217
Unrestricted to Creek	100 yr 24 hr	100.00	0.125	15.85	0.176
Unrestricted to Creek	100 yr 48 hr	100.00	0.140	41.70	0.123
Unrestricted to Creek	100 yr 120 hr	100.00	0.169	104.40	0.058
Unrestricted to Creek	100 yr 72 hr	100.00	0.152	62.60	0.088
Unrestricted to Creek	100 yr 240 hr	100.00	0.212	208.80	0.035

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	100 yr 10 min	100.00	0.239	0.15	16.571	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 10 min	100.00	0.239	0.52	0.081	782.47	0.236
Detention Basin (IN)	100 yr 15 min	100.00	0.354	0.16	20.533	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 15 min	100.00	0.308	0.59	0.092	782.88	0.350
Detention Basin (IN)	100 yr 30 min	100.00	0.552	0.20	22.883	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 30 min	100.00	0.377	0.80	0.109	783.51	0.546
Detention Basin (IN)	100 yr 1 hr	100.00	0.761	0.29	19.935	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 1 hr	100.00	0.491	1.22	0.241	784.13	0.746
Detention Basin (IN)	100 yr 2 hr	100.00	0.994	0.44	14.459	(N/A)	(N/A)

Subsection: Master Network Summary

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (OUT)	100 yr 2 hr	100.00	0.649	2.18	0.310	784.75	0.957
Detention Basin (IN)	100 yr 3 hr	100.00	1.124	0.56	11.277	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 3 hr	100.00	0.741	3.15	0.338	785.06	1.065
Detention Basin (IN)	100 yr 6 hr	100.00	1.361	1.02	7.072	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 6 hr	100.00	0.910	6.11	0.374	785.50	1.227
Detention Basin (IN)	100 yr 12 hr	100.00	1.623	4.95	3.986	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 12 hr	100.00	1.455	12.05	0.404	785.91	1.378
Detention Basin (IN)	100 yr 18 hr	100.00	1.776	11.90	2.895	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 18 hr	100.00	1.552	18.05	0.421	786.17	1.476
Detention Basin (IN)	100 yr 24 hr	100.00	1.907	15.85	2.318	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 24 hr	100.00	1.638	22.15	0.426	786.23	1.501
Detention Basin (IN)	100 yr 48 hr	100.00	2.089	41.70	1.552	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 48 hr	100.00	2.089	48.10	0.425	786.22	1.495
Detention Basin (IN)	100 yr 120 hr	100.00	2.443	104.30	0.717	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 120 hr	100.00	2.443	115.20	0.366	785.40	1.190
Detention Basin (IN)	100 yr 72 hr	100.00	2.235	62.60	1.101	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 72 hr	100.00	2.235	69.60	0.404	785.92	1.381
Detention Basin (IN)	100 yr 240 hr	100.00	2.956	208.70	0.427	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 240 hr	100.00	2.956	220.90	0.306	784.71	0.942

Subsection: Time-Depth Curve

Label: B75 - 100 Year Critical Storm

Scenario: 100 yr 1 hr

Return Event: 100.00 years

Storm Event: 1 hr 100 yr

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Time-Depth Curve: 1 hr 100 yr

---

Label

1 hr 100 yr



Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 1 hr

Return Event: 100.00 years  
 Storm Event: 1 hr 100 yr

Time-Depth Curve: 1 hr 100 yr

Start Time	0.00 hours
Increment	0.01 hours
End Time	1.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.01 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.08	0.16	0.24	0.32
0.05	0.41	0.50	0.59	0.68	0.78
0.10	0.88	0.98	1.08	1.18	1.28
0.15	1.38	1.48	1.57	1.66	1.75
0.20	1.84	1.93	2.00	2.08	2.16
0.25	2.24	2.30	2.37	2.43	2.50
0.30	2.55	2.60	2.64	2.69	2.73
0.35	2.77	2.80	2.84	2.87	2.90
0.40	2.94	2.97	3.00	3.03	3.05
0.45	3.08	3.11	3.13	3.16	3.19
0.50	3.22	3.24	3.27	3.30	3.32
0.55	3.35	3.37	3.40	3.42	3.45
0.60	3.47	3.49	3.51	3.53	3.55
0.65	3.57	3.59	3.61	3.63	3.64
0.70	3.66	3.68	3.69	3.71	3.72
0.75	3.74	3.75	3.76	3.77	3.79
0.80	3.80	3.81	3.83	3.84	3.85
0.85	3.86	3.87	3.89	3.90	3.91
0.90	3.92	3.93	3.94	3.95	3.96
0.95	3.97	3.99	4.00	4.01	4.02
1.00	4.03	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 10 min

Return Event: 100.00 years  
 Storm Event: 10 min 100 yr

Time-Depth Curve: 10 min 100 yr

Label	10 min 100 yr
Start Time	0.00 hours
Increment	0.00 hours
End Time	0.17 hours
Return Event	100.00 years

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 10 min

Return Event: 100.00 years  
 Storm Event: 10 min 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.07	0.11	0.14
0.01	0.18	0.22	0.27	0.31	0.35
0.02	0.39	0.44	0.48	0.53	0.57
0.03	0.62	0.66	0.70	0.74	0.78
0.03	0.82	0.86	0.89	0.93	0.96
0.04	1.00	1.03	1.06	1.09	1.12
0.05	1.14	1.16	1.18	1.20	1.22
0.06	1.24	1.25	1.27	1.28	1.30
0.07	1.31	1.33	1.34	1.35	1.36
0.08	1.38	1.39	1.40	1.41	1.42
0.08	1.44	1.45	1.46	1.47	1.48
0.09	1.50	1.51	1.52	1.53	1.54
0.10	1.55	1.56	1.57	1.58	1.59
0.11	1.60	1.60	1.61	1.62	1.63
0.12	1.63	1.64	1.65	1.66	1.66
0.13	1.67	1.67	1.68	1.69	1.69
0.13	1.70	1.70	1.71	1.71	1.72
0.14	1.73	1.73	1.74	1.74	1.75
0.15	1.75	1.76	1.76	1.77	1.77
0.16	1.78	1.78	1.79	1.79	1.80
0.17	1.80	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 12 hr

Return Event: 100.00 years  
 Storm Event: 12 hr 100 yr

**Time-Depth Curve: 12 hr 100 yr**

Label	12 hr 100 yr
Start Time	0.00 hours
Increment	0.12 hours
End Time	12.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.12 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.12	0.16
0.60	0.21	0.25	0.30	0.34	0.39
1.20	0.45	0.50	0.55	0.61	0.68
1.80	0.74	0.80	0.87	0.95	1.03

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 12 hr

Return Event: 100.00 years  
 Storm Event: 12 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.12 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
2.40	1.11	1.19	1.29	1.40	1.50
3.00	1.60	1.72	1.85	1.97	2.10
3.60	2.24	2.38	2.53	2.67	2.82
4.20	2.98	3.14	3.30	3.46	3.62
4.80	3.78	3.95	4.10	4.25	4.39
5.40	4.53	4.68	4.81	4.94	5.07
6.00	5.20	5.31	5.41	5.51	5.61
6.60	5.70	5.79	5.88	5.97	6.05
7.20	6.13	6.20	6.28	6.35	6.40
7.80	6.46	6.51	6.57	6.61	6.65
8.40	6.69	6.74	6.77	6.81	6.84
9.00	6.88	6.91	6.93	6.96	6.99
9.60	7.02	7.05	7.07	7.10	7.12
10.20	7.15	7.17	7.19	7.21	7.24
10.80	7.26	7.28	7.30	7.32	7.34
11.40	7.36	7.38	7.40	7.42	7.44
12.00	7.46	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 120 hr

Return Event: 100.00 years  
 Storm Event: 120 hr 100 yr

Time-Depth Curve: 120 hr 100 yr

Label	120 hr 100 yr
Start Time	0.00 hours
Increment	1.20 hours
End Time	120.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 1.20 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.06	0.12	0.18	0.24
6.00	0.30	0.36	0.43	0.49	0.55
12.00	0.61	0.67	0.73	0.79	0.86
18.00	0.93	1.00	1.07	1.14	1.21
24.00	1.28	1.35	1.42	1.49	1.55
30.00	1.62	1.69	1.76	1.83	1.90
36.00	1.96	2.02	2.08	2.15	2.21
42.00	2.27	2.34	2.40	2.47	2.53

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 120 hr

Return Event: 100.00 years  
 Storm Event: 120 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 1.20 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
48.00	2.60	2.66	2.73	2.81	2.88
54.00	2.96	3.03	3.11	3.18	3.26
60.00	3.33	3.40	3.47	3.53	3.60
66.00	3.67	3.73	3.79	3.85	3.91
72.00	3.97	4.03	4.09	4.15	4.22
78.00	4.28	4.35	4.43	4.53	4.63
84.00	4.72	4.83	4.99	5.15	5.31
90.00	5.47	5.67	5.88	6.08	6.29
96.00	6.53	6.79	7.04	7.29	7.56
102.00	7.84	8.12	8.39	8.66	8.90
108.00	9.15	9.40	9.62	9.78	9.94
114.00	10.10	10.25	10.36	10.46	10.56
120.00	10.66	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 15 min

Return Event: 100.00 years  
 Storm Event: 15 min 100 yr

Time-Depth Curve: 15 min 100 yr

Label	15 min 100 yr
Start Time	0.00 hours
Increment	0.00 hours
End Time	0.25 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.05	0.09	0.14	0.19
0.01	0.24	0.29	0.34	0.39	0.45
0.03	0.51	0.57	0.62	0.68	0.74
0.04	0.79	0.85	0.91	0.96	1.01
0.05	1.06	1.11	1.15	1.20	1.24
0.06	1.29	1.33	1.36	1.40	1.44
0.08	1.47	1.49	1.52	1.55	1.57
0.09	1.59	1.61	1.63	1.65	1.67
0.10	1.69	1.71	1.73	1.74	1.76
0.11	1.77	1.79	1.80	1.82	1.84
0.13	1.85	1.87	1.88	1.90	1.91
0.14	1.93	1.94	1.96	1.97	1.98

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 15 min

Return Event: 100.00 years  
 Storm Event: 15 min 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.00 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.15	2.00	2.01	2.02	2.03	2.04
0.16	2.06	2.07	2.08	2.09	2.10
0.18	2.11	2.12	2.13	2.13	2.14
0.19	2.15	2.16	2.17	2.17	2.18
0.20	2.19	2.20	2.20	2.21	2.22
0.21	2.22	2.23	2.24	2.24	2.25
0.23	2.26	2.26	2.27	2.28	2.28
0.24	2.29	2.29	2.30	2.31	2.31
0.25	2.32	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 18 hr

Return Event: 100.00 years  
 Storm Event: 18 hr 100 yr

Time-Depth Curve: 18 hr 100 yr

Label	18 hr 100 yr
Start Time	0.00 hours
Increment	0.18 hours
End Time	18.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.18 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.12	0.16
0.90	0.20	0.25	0.29	0.33	0.38
1.80	0.42	0.47	0.51	0.56	0.61
2.70	0.66	0.70	0.75	0.80	0.85
3.60	0.90	0.95	1.00	1.05	1.11
4.50	1.16	1.21	1.26	1.31	1.35
5.40	1.41	1.46	1.51	1.57	1.62
6.30	1.68	1.74	1.81	1.87	1.94
7.20	2.01	2.08	2.15	2.24	2.33
8.10	2.42	2.51	2.62	2.72	2.82
9.00	2.93	3.08	3.22	3.37	3.52
9.90	3.67	3.83	3.99	4.15	4.32
10.80	4.49	4.66	4.83	5.00	5.18
11.70	5.35	5.52	5.69	5.85	6.01
12.60	6.17	6.32	6.45	6.58	6.71
13.50	6.84	6.94	7.03	7.12	7.22

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 18 hr

Return Event: 100.00 years  
 Storm Event: 18 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.18 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
14.40	7.29	7.35	7.42	7.48	7.53
15.30	7.58	7.62	7.66	7.70	7.73
16.20	7.77	7.80	7.83	7.86	7.89
17.10	7.92	7.95	7.98	8.00	8.03
18.00	8.06	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 2 hr

Return Event: 100.00 years  
 Storm Event: 2 hr 100 yr

Time-Depth Curve: 2 hr 100 yr

Label	2 hr 100 yr
Start Time	0.00 hours
Increment	0.02 hours
End Time	2.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.02 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.10	0.20	0.30	0.40
0.10	0.51	0.62	0.73	0.84	0.96
0.20	1.09	1.21	1.34	1.46	1.58
0.30	1.70	1.82	1.94	2.05	2.16
0.40	2.27	2.37	2.47	2.57	2.66
0.50	2.76	2.84	2.92	3.00	3.08
0.60	3.14	3.20	3.26	3.32	3.37
0.70	3.41	3.46	3.50	3.54	3.58
0.80	3.62	3.66	3.70	3.73	3.76
0.90	3.80	3.83	3.86	3.90	3.93
1.00	3.97	4.00	4.03	4.06	4.10
1.10	4.13	4.16	4.19	4.22	4.25
1.20	4.28	4.30	4.33	4.36	4.38
1.30	4.41	4.43	4.45	4.47	4.49
1.40	4.51	4.53	4.55	4.57	4.59
1.50	4.61	4.62	4.64	4.65	4.67
1.60	4.69	4.70	4.72	4.73	4.75
1.70	4.76	4.78	4.79	4.81	4.82
1.80	4.83	4.85	4.86	4.88	4.89
1.90	4.90	4.92	4.93	4.94	4.96



Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 2 hr

Return Event: 100.00 years  
 Storm Event: 2 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.02 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
2.00	4.97	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Time-Depth Curve: 24 hr 100 yr

Label	24 hr 100 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.24 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.13	0.17
1.20	0.21	0.26	0.31	0.35	0.40
2.40	0.45	0.50	0.55	0.60	0.65
3.60	0.70	0.75	0.80	0.85	0.91
4.80	0.96	1.01	1.07	1.12	1.18
6.00	1.23	1.28	1.34	1.39	1.44
7.20	1.50	1.55	1.61	1.66	1.73
8.40	1.79	1.86	1.92	1.99	2.06
9.60	2.13	2.21	2.29	2.38	2.48
10.80	2.57	2.67	2.78	2.89	3.00
12.00	3.12	3.27	3.43	3.58	3.74
13.20	3.90	4.07	4.24	4.41	4.59
14.40	4.77	4.95	5.14	5.32	5.50
15.60	5.69	5.87	6.05	6.22	6.39
16.80	6.56	6.72	6.86	7.00	7.14
18.00	7.28	7.38	7.48	7.58	7.67
19.20	7.75	7.82	7.89	7.96	8.01
20.40	8.06	8.10	8.15	8.19	8.22
21.60	8.26	8.29	8.33	8.36	8.39
22.80	8.42	8.45	8.48	8.51	8.54
24.00	8.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 240 hr

Return Event: 100.00 years  
 Storm Event: 240 hr 100 yr

Time-Depth Curve: 240 hr 100 yr

Label	240 hr 100 yr
Start Time	0.00 hours
Increment	2.40 hours
End Time	240.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 2.40 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.07	0.14	0.21	0.28
12.00	0.35	0.43	0.51	0.58	0.65
24.00	0.72	0.79	0.87	0.94	1.02
36.00	1.10	1.18	1.27	1.35	1.43
48.00	1.52	1.60	1.68	1.76	1.84
60.00	1.93	2.01	2.09	2.17	2.25
72.00	2.33	2.40	2.47	2.55	2.62
84.00	2.70	2.77	2.85	2.93	3.01
96.00	3.08	3.16	3.24	3.33	3.42
108.00	3.51	3.60	3.69	3.78	3.87
120.00	3.95	4.03	4.11	4.19	4.27
132.00	4.35	4.42	4.50	4.57	4.64
144.00	4.71	4.78	4.85	4.92	5.00
156.00	5.08	5.16	5.26	5.37	5.49
168.00	5.61	5.73	5.92	6.11	6.30
180.00	6.49	6.73	6.98	7.22	7.46
192.00	7.75	8.05	8.35	8.65	8.97
204.00	9.30	9.63	9.96	10.27	10.57
216.00	10.86	11.15	11.41	11.60	11.80
228.00	11.99	12.17	12.29	12.41	12.53
240.00	12.65	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 3 hr

Return Event: 100.00 years  
 Storm Event: 3 hr 100 yr

Time-Depth Curve: 3 hr 100 yr

Label	3 hr 100 yr
Start Time	0.00 hours
Increment	0.03 hours
End Time	3.00 hours
Return Event	100.00 years

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 3 hr

Return Event: 100.00 years  
 Storm Event: 3 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.03 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.11	0.22	0.33	0.44
0.15	0.56	0.69	0.81	0.93	1.06
0.30	1.20	1.34	1.47	1.61	1.75
0.45	1.88	2.01	2.14	2.26	2.38
0.60	2.50	2.62	2.73	2.83	2.94
0.75	3.05	3.14	3.22	3.31	3.40
0.90	3.47	3.54	3.60	3.67	3.72
1.05	3.77	3.82	3.86	3.91	3.95
1.20	4.00	4.04	4.08	4.12	4.16
1.35	4.19	4.23	4.27	4.31	4.34
1.50	4.38	4.42	4.45	4.49	4.53
1.65	4.56	4.60	4.63	4.66	4.70
1.80	4.73	4.75	4.78	4.81	4.84
1.95	4.87	4.89	4.92	4.94	4.96
2.10	4.99	5.01	5.03	5.05	5.07
2.25	5.09	5.11	5.12	5.14	5.16
2.40	5.18	5.19	5.21	5.23	5.25
2.55	5.26	5.28	5.29	5.31	5.32
2.70	5.34	5.36	5.37	5.39	5.40
2.85	5.41	5.43	5.44	5.46	5.47
3.00	5.49	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 30 min

Return Event: 100.00 years  
 Storm Event: 30 min 100 yr

**Time-Depth Curve: 30 min 100 yr**

Label	30 min 100 yr
Start Time	0.00 hours
Increment	0.01 hours
End Time	0.50 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.01 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.06	0.13	0.19	0.25
0.03	0.32	0.40	0.47	0.54	0.61
0.05	0.69	0.77	0.85	0.93	1.01
0.08	1.09	1.16	1.24	1.31	1.38

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 30 min

Return Event: 100.00 years  
 Storm Event: 30 min 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.01 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.10	1.45	1.51	1.58	1.64	1.70
0.13	1.76	1.81	1.86	1.91	1.96
0.15	2.00	2.04	2.08	2.12	2.15
0.18	2.18	2.20	2.23	2.26	2.28
0.20	2.31	2.33	2.36	2.38	2.40
0.23	2.42	2.44	2.47	2.49	2.51
0.25	2.53	2.55	2.57	2.59	2.61
0.28	2.63	2.65	2.67	2.69	2.71
0.30	2.73	2.75	2.76	2.78	2.79
0.33	2.81	2.83	2.84	2.85	2.87
0.35	2.88	2.89	2.90	2.92	2.93
0.38	2.94	2.95	2.96	2.97	2.98
0.40	2.99	3.00	3.01	3.02	3.03
0.43	3.04	3.05	3.06	3.07	3.07
0.45	3.08	3.09	3.10	3.11	3.12
0.48	3.13	3.14	3.14	3.15	3.16
0.50	3.17	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 48 hr

Return Event: 100.00 years  
 Storm Event: 48 hr 100 yr

Time-Depth Curve: 48 hr 100 yr

Label	48 hr 100 yr
Start Time	0.00 hours
Increment	0.48 hours
End Time	48.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.48 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.05	0.10	0.15	0.21
2.40	0.26	0.32	0.37	0.43	0.48
4.80	0.53	0.58	0.63	0.69	0.75
7.20	0.81	0.87	0.93	0.99	1.05
9.60	1.11	1.17	1.23	1.29	1.35
12.00	1.41	1.47	1.53	1.59	1.65
14.40	1.71	1.76	1.81	1.87	1.92
16.80	1.98	2.04	2.09	2.15	2.20

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 48 hr

Return Event: 100.00 years  
 Storm Event: 48 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.48 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
19.20	2.26	2.32	2.38	2.45	2.51
21.60	2.58	2.64	2.71	2.77	2.84
24.00	2.90	2.96	3.02	3.08	3.14
26.40	3.19	3.25	3.30	3.35	3.41
28.80	3.46	3.51	3.56	3.61	3.67
31.20	3.73	3.79	3.86	3.94	4.03
33.60	4.11	4.21	4.34	4.48	4.62
36.00	4.76	4.94	5.12	5.30	5.47
38.40	5.69	5.91	6.13	6.35	6.58
40.80	6.82	7.07	7.31	7.54	7.75
43.20	7.97	8.18	8.37	8.51	8.65
45.60	8.80	8.93	9.02	9.10	9.19
48.00	9.28	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 6 hr

Return Event: 100.00 years  
 Storm Event: 6 hr 100 yr

Time-Depth Curve: 6 hr 100 yr

Label	6 hr 100 yr
Start Time	0.00 hours
Increment	0.06 hours
End Time	6.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.06 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.13	0.26	0.39	0.52
0.30	0.66	0.80	0.95	1.09	1.25
0.60	1.41	1.57	1.73	1.89	2.04
0.90	2.20	2.36	2.51	2.65	2.79
1.20	2.93	3.07	3.20	3.32	3.44
1.50	3.57	3.67	3.78	3.88	3.99
1.80	4.07	4.14	4.22	4.30	4.36
2.10	4.41	4.47	4.53	4.58	4.63
2.40	4.68	4.73	4.78	4.83	4.87
2.70	4.91	4.96	5.00	5.04	5.09
3.00	5.13	5.17	5.22	5.26	5.30
3.30	5.34	5.38	5.42	5.46	5.50

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 6 hr

Return Event: 100.00 years  
 Storm Event: 6 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.06 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
3.60	5.53	5.57	5.60	5.64	5.67
3.90	5.70	5.73	5.76	5.79	5.81
4.20	5.84	5.87	5.89	5.91	5.94
4.50	5.96	5.98	6.00	6.02	6.04
4.80	6.06	6.08	6.10	6.12	6.14
5.10	6.16	6.18	6.20	6.22	6.24
5.40	6.25	6.27	6.29	6.31	6.32
5.70	6.34	6.36	6.38	6.39	6.41
6.00	6.43	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 72 hr

Return Event: 100.00 years  
 Storm Event: 72 hr 100 yr

Time-Depth Curve: 72 hr 100 yr

Label	72 hr 100 yr
Start Time	0.00 hours
Increment	0.72 hours
End Time	72.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.72 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.05	0.11	0.16	0.22
3.60	0.28	0.33	0.39	0.45	0.51
7.20	0.56	0.62	0.67	0.73	0.80
10.80	0.86	0.92	0.99	1.05	1.12
14.40	1.18	1.24	1.31	1.37	1.44
18.00	1.50	1.56	1.63	1.69	1.75
21.60	1.81	1.87	1.93	1.98	2.04
25.20	2.10	2.16	2.22	2.28	2.34
28.80	2.40	2.46	2.53	2.60	2.67
32.40	2.73	2.80	2.87	2.94	3.01
36.00	3.08	3.14	3.20	3.27	3.33
39.60	3.39	3.44	3.50	3.56	3.61
43.20	3.67	3.72	3.78	3.83	3.90
46.80	3.96	4.02	4.09	4.18	4.27
50.40	4.36	4.46	4.61	4.76	4.91
54.00	5.05	5.24	5.43	5.62	5.81



Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 72 hr

Return Event: 100.00 years  
 Storm Event: 72 hr 100 yr

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.72 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
57.60	6.04	6.27	6.50	6.74	6.99
61.20	7.24	7.50	7.76	8.00	8.23
64.80	8.46	8.68	8.89	9.04	9.19
68.40	9.34	9.48	9.57	9.66	9.76
72.00	9.85	(N/A)	(N/A)	(N/A)	(N/A)

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May 28, 2025

Filip Majewski  
100 E. State Parkway  
Schaumburg, IL 60173

**RE: Safe and Secure Self Storage  
Consultation Program  
EcoCAT Review #2513358  
Lake County**

Dear Mr. Majewski:

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

The proposed action consists of the construction of self-storage development in Lake County.

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

**Illinois Natural Areas Inventory**  
**Windance Acres Marsh**

**State Threatened or Endangered Species**  
**Blanding's Turtle (*Emydoidea blandingii*)**  
**Common Moorhen (*Gallinula galeata*)**  
**Least Bittern (*Ixobrychus exilis*)**  
**Osprey (*Pandion haliaetus*)**  
**Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)**

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

**Windance Acres Marsh**

The Department has determined adverse impacts to this site are unlikely.

**Blanding's Turtle**

EcoCAT has indicated records for the state-listed Blanding's Turtle in vicinity of the project area. The Department recommends:

- Install exclusionary silt fence by the end of March and maintain it through October (if needed) to prevent turtles from entering the construction area. Conduct daily inspections during construction to ensure that exclusionary fencing is properly installed (dug into the ground) and to check if turtles are present.
- Cover trenches at the end of each workday. Before starting each workday, trenches and excavations should be routinely inspected to ensure no turtles (or other amphibians and reptiles) have become trapped within them.
- A permanent exclusionary barrier between any wetlands and the project site should be incorporated into project plans to prevent turtles from entering areas where they may be adversely impacted by daily activity. The barrier should include turnarounds where needed and be trenched into the soil a minimum of 4 inches.
- If Blanding's turtles are encountered, crews should stop work immediately, allow the turtle to move out of the way and contact IDNR at (217) 785-5500.

**Common Moorhen, Least Bittern, Osprey, and Yellow-headed Blackbird**

The Department has determined adverse impacts to these species are unlikely.

Given the above recommendations are adopted, the Department has determined that impacts to these protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

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

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

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

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take

Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

The Department also offers the following conservation measures be considered to help protect native wildlife and enhance natural areas in the project area:

- Woven wire or a suitable habitat wildlife friendly fence should be used. Barbed wire should be avoided.
- If tree clearing is necessary, the Department recommends removing trees between November 1st and March 31<sup>st</sup> to avoid impacts to the state-listed bats and birds.
- Any required night lighting should follow International Dark-Sky Association's (IDA) Five Principles for Responsible Outdoor Lighting to minimize the effect of light pollution on wildlife: [Five Principles for Responsible Outdoor Lighting | DarkSky International](#)

Please contact Isabella Newingham (Isabella.newingham@illinois.gov) with any questions about this review.

Sincerely,



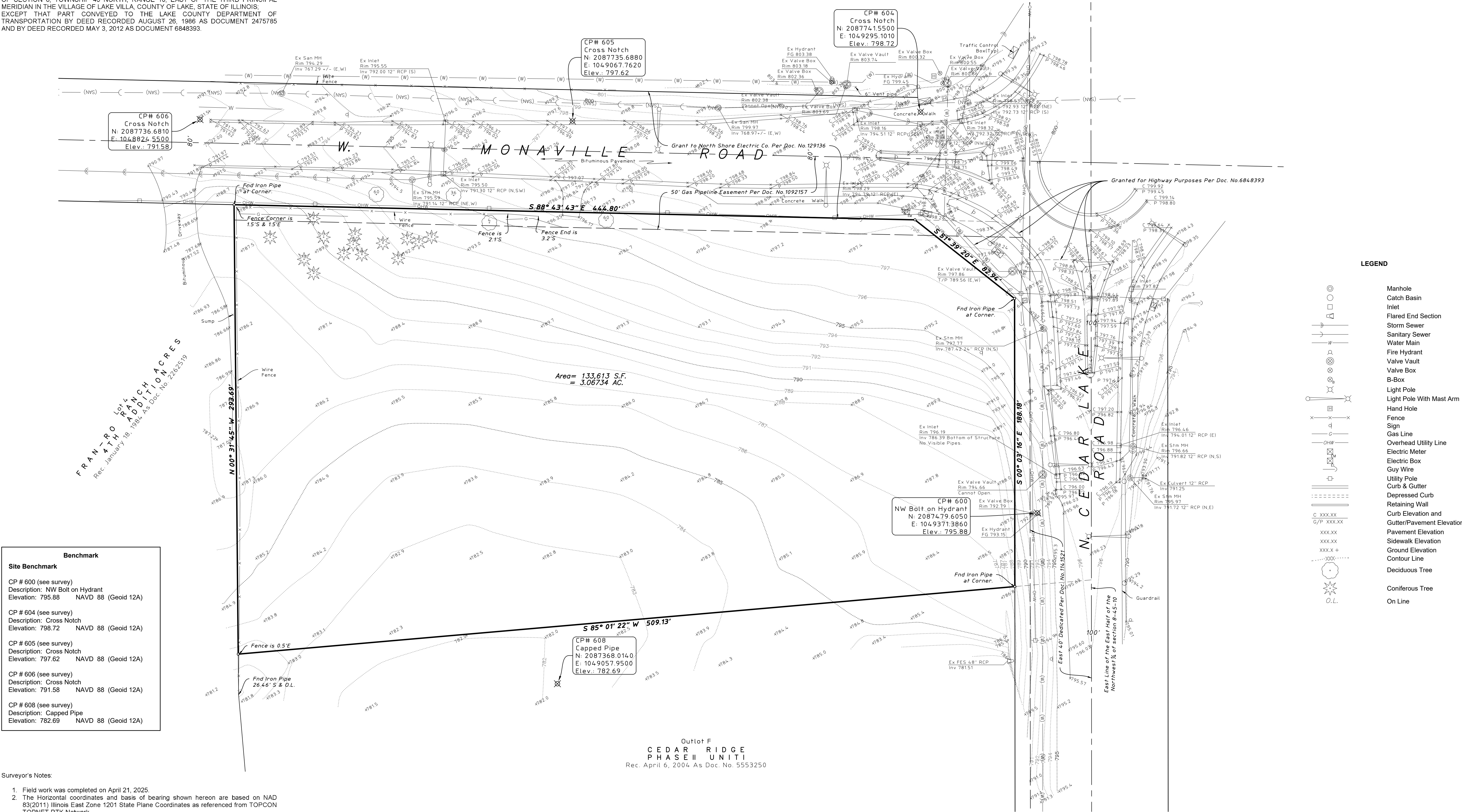
Bradley Hayes  
Manager, Impact Assessment Section  
Division of Real Estate Services and Consultation  
Office of Realty & Capital Planning  
Illinois Department of Natural Resources  
One Natural Resources Way  
Springfield, IL 62702  
Bradley.Hayes@Illinois.gov  
Phone: (217) 782-0031

LEGAL DESCRIPTION

THE EAST HALF OF THE NORTH WEST QUARTER OF SECTION 8 AND THE EAST HALF OF THE SOUTH WEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE 3RD P.M., EXCEPT THE EAST 285 FEET OF THE NORTH 700 FEET OF THE SOUTH 2166 FEET OF SAID EAST HALF OF THE SOUTH WEST QUARTER OF SAID SECTION, AND ALSO EXCEPT THE SOUTH 400 FEET OF THE EAST 930.6 FEET OF THE EAST HALF OF THE SOUTH WEST QUARTER OF SAID SECTION IN LAKE COUNTY, ILLINOIS, EXCEPTING LOTS 1, 2, 3 AND 4 OF FRAN-RO RANCH ACRES FOURTH ADDITION BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTH WEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF LAKE VILLA, COUNTY OF LAKE, STATE OF ILLINOIS, AND EXCEPTING LOTS 1 AND 2 IN FRAN-RO RANCH ACRES THIRD ADDITION, BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN IN THE VILLAGE OF LAKE VILLA, COUNTY OF LAKE, STATE OF ILLINOIS, EXCEPT THAT PART CONVEYED TO THE LAKE COUNTY DEPARTMENT OF TRANSPORTATION BY DEED RECORDED AUGUST 26, 1986 AS DOCUMENT 2475785 AND BY DEED RECORDED MAY 3, 2012 AS DOCUMENT 6848393.



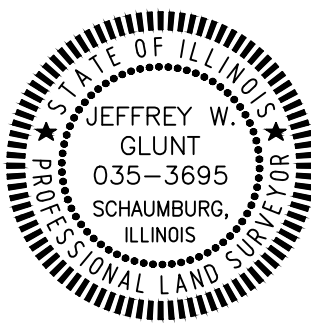
Scale: 1" = 30'



Benchmark
<b>Site Benchmark</b>
CP # 600 (see survey)
Description: NW Bolt on Hydrant
Elevation: 795.88 NAVD 88 (Geoid 12A)
CP # 604 (see survey)
Description: Cross Notch
Elevation: 798.72 NAVD 88 (Geoid 12A)
CP # 605 (see survey)
Description: Cross Notch
Elevation: 797.62 NAVD 88 (Geoid 12A)
CP # 606 (see survey)
Description: Cross Notch
Elevation: 791.58 NAVD 88 (Geoid 12A)
CP # 608 (see survey)
Description: Capped Pipe
Elevation: 782.69 NAVD 88 (Geoid 12A)

Surveyor's Notes:

- Field work was completed on April 21, 2025.
- The Horizontal coordinates and basis of bearing shown hereon are based on NAD 83(2011) Illinois East Zone 1201 State Plane Coordinates as referenced from TOPCON TOPNET RTK Network.
- The Vertical Datum referenced hereon is based on NAVD 88 (Geoid 12A) as referenced from TOPCON TOPNET RTK Network.
- In the preparation of this survey, reference was made to Chicago Title Insurance Company Commitment for Title Insurance Order No. 25ST00205VH with a Commitment Date of February 26, 2025.
- Utility information shown hereon is based upon field measurements, available records, information from field data is limited to that which is visible and can be measured. This survey does not exclude the possibility of the existence of other underground utilities and or structures. Record information is based upon data collected from both public and private sources. The completeness and/or accuracy of these records cannot be guaranteed, except for those items that can be verified by field measurement. Prior to any excavation contact J.U.L.I.E (1-800-892-0123).



State of Illinois )  
County of Cook ) SS:  
This professional service conforms to the current Illinois minimum standards for a boundary and topographic survey.  
Schaumburg, Illinois May 7, 2025  
By: \_\_\_\_\_ Illinois Professional Land Surveyor No. 3695

EXPIRES 11-30-26

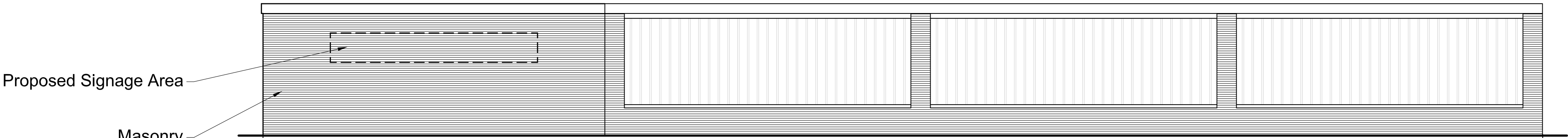
**HAEGER ENGINEERING**  
consulting engineers • land surveyors  
100 East State Parkway, Schaumburg, IL 60173 • Tel: 847.394.6600 Fax: 847.394.6608  
Illinois Professional Design Firm License No. 184-003152  
www.haegerengineering.com

**BOUNDARY & TOPOGRAPHIC SURVEY**  
**406 MONAVILLE ROAD**  
**LAKE VILLA, ILLINOIS**  
COOK COUNTY

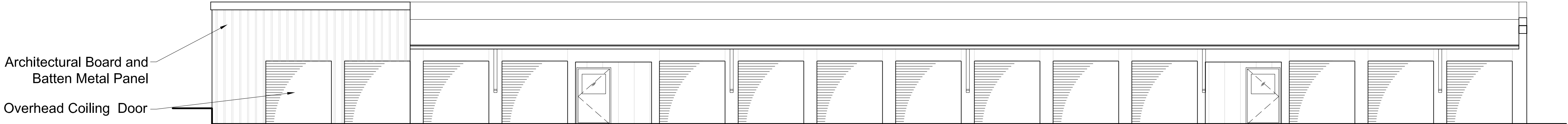
Project Manager: K M L  
Drafter: J C H  
Date: 2025-05-07  
Project No. 25-058  
Sheet 1

BUILDING ELEVATIONS

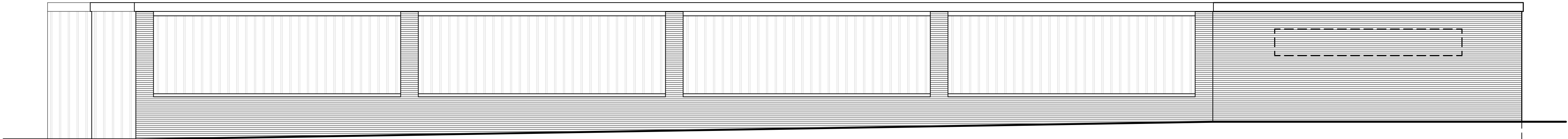
SELF-STORAGE FACILITY  
406 W. MONAVILLE ROAD  
LAKE VILLA, IL  
JUNE 16, 2025



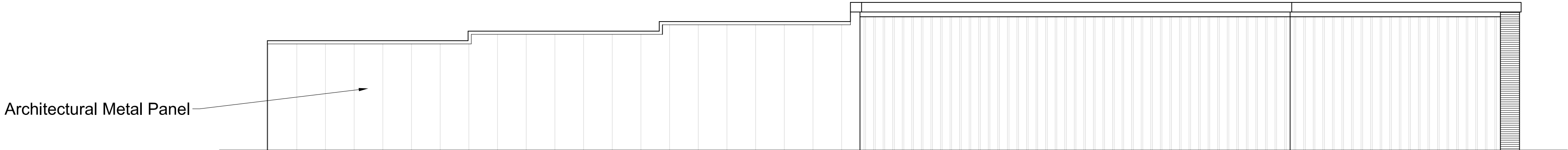
BUILDING A (NORTH ELEVATION)



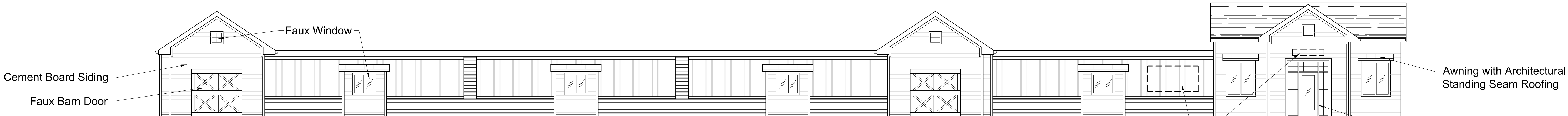
BUILDING A (WEST ELEVATION)



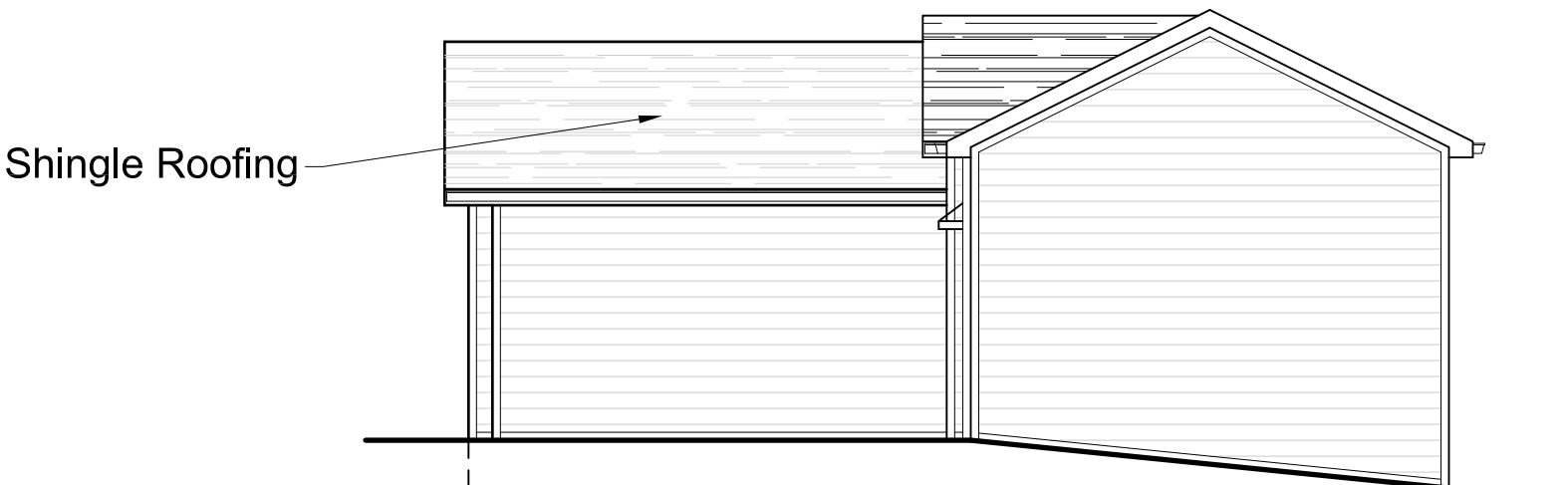
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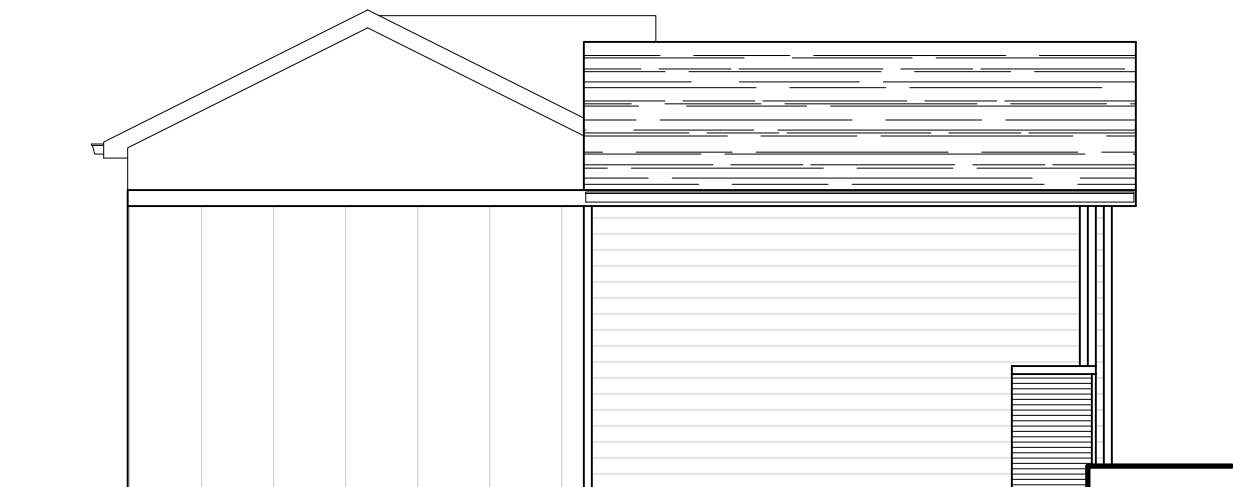
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BUILDING B (NORTH ELEVATION)



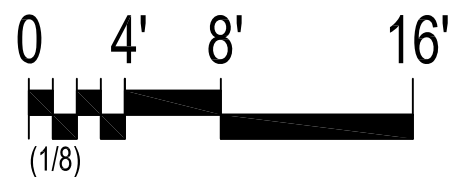
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BUILDING B (EAST ELEVATION)



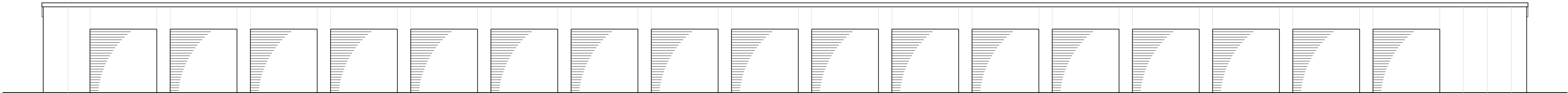
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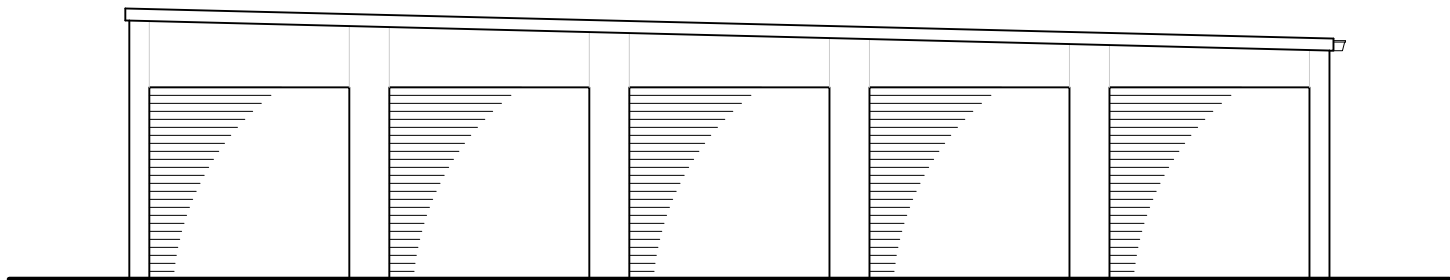


BUILDING ELEVATIONS

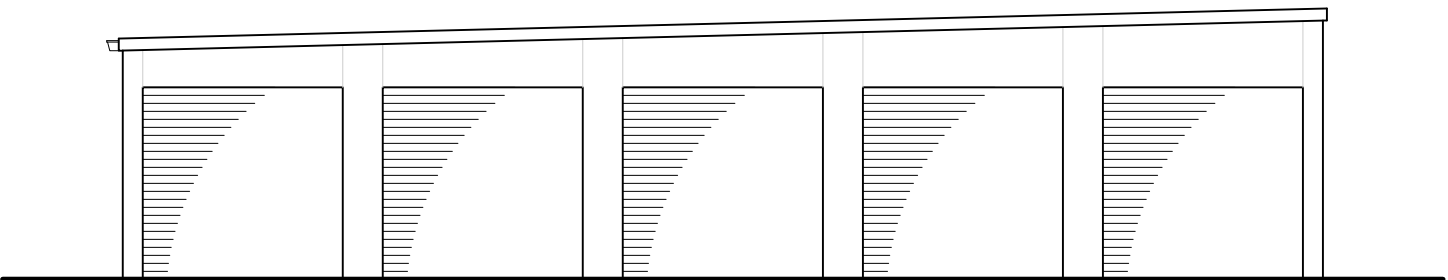
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406 W. MONAVILLE ROAD  
LAKE VILLA, IL  
JUNE 16, 2025



BUILDING C (NORTH ELEVATION)



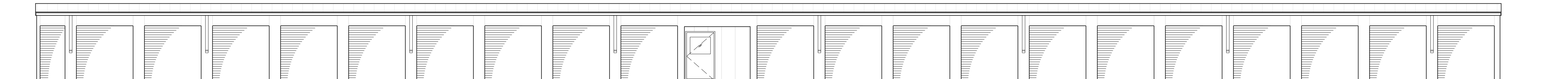
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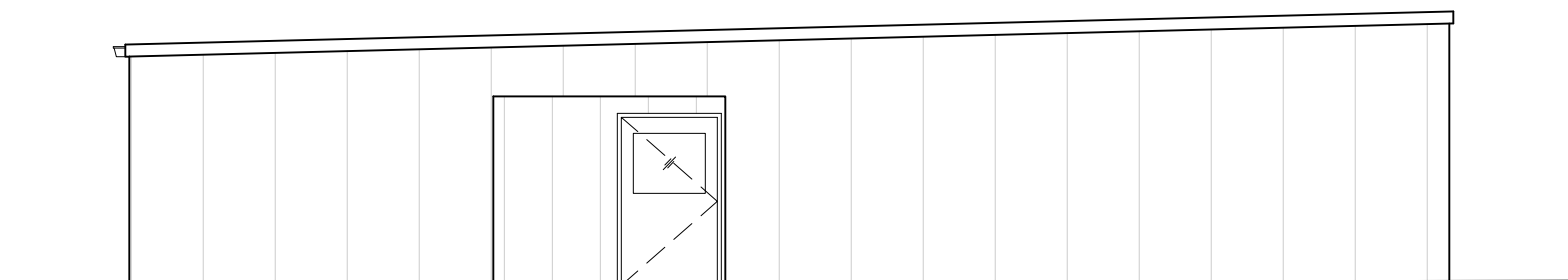
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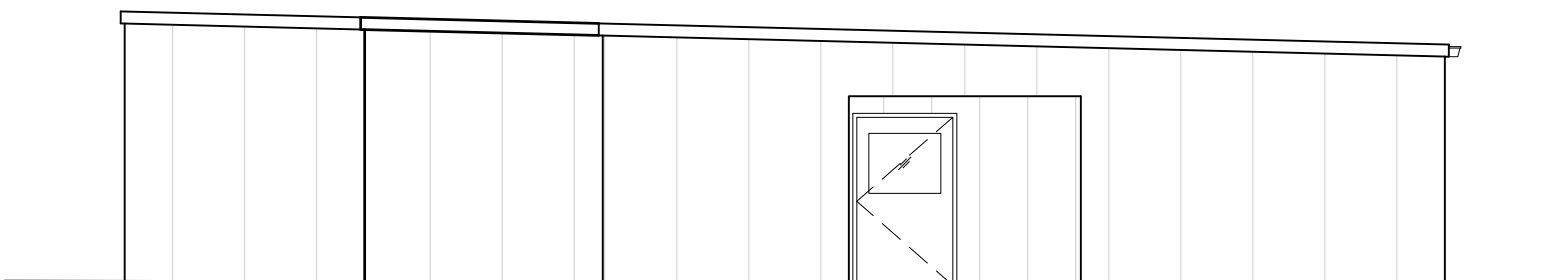
BUILDING C (SOUTH ELEVATION)



BUILDING D (NORTH ELEVATION)



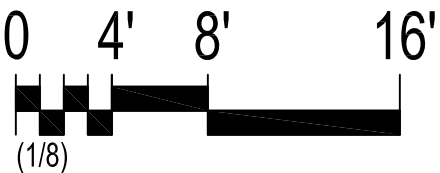
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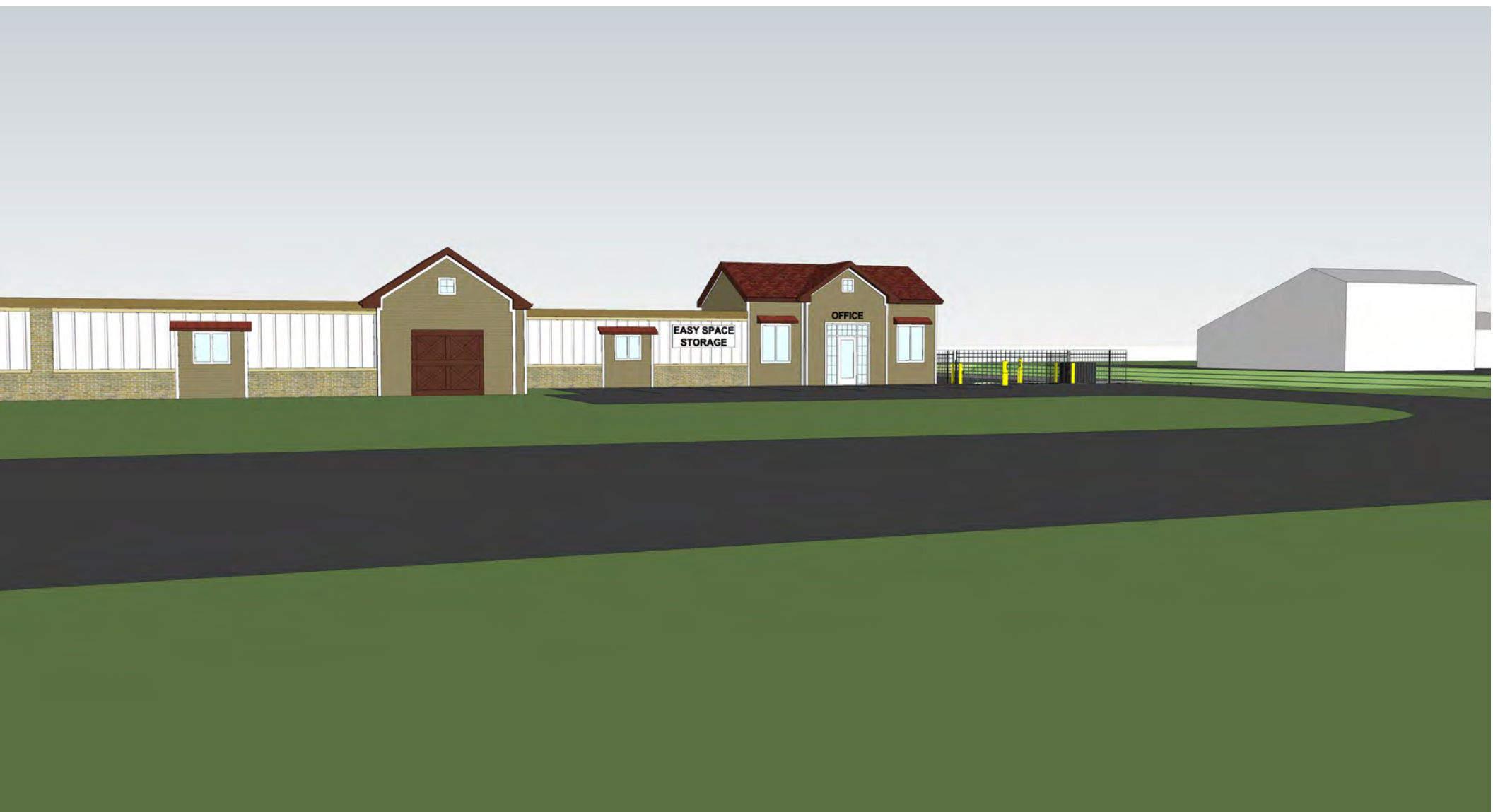
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BUILDING D (SOUTH ELEVATION)





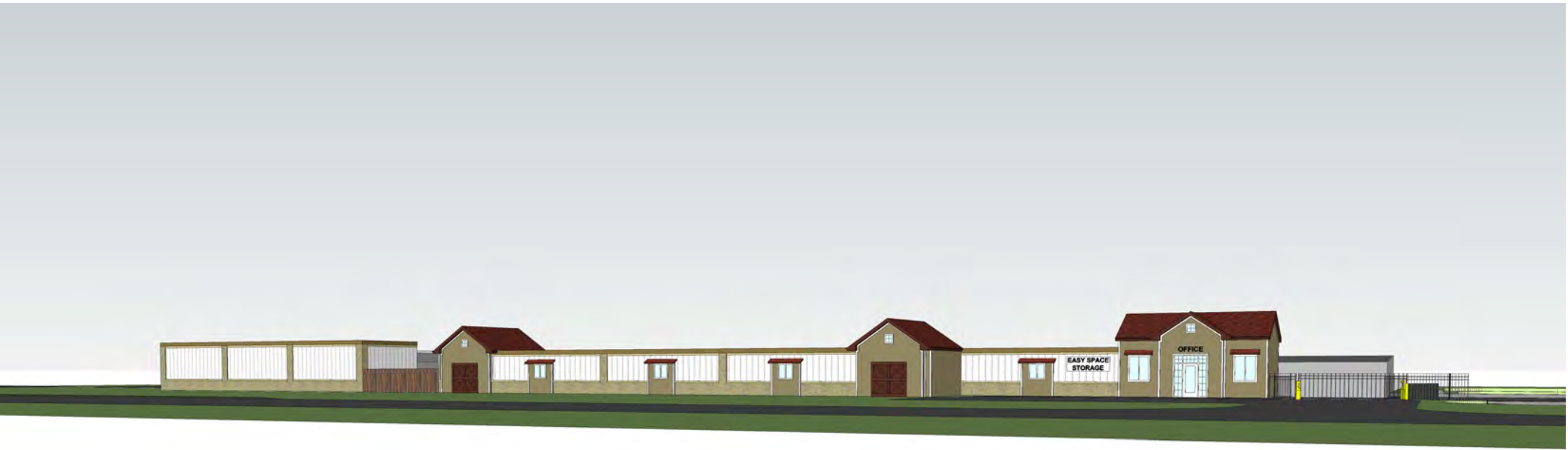












# EASY SPACE SELF-STORAGE FACILITY

406 W. MONAVILLE ROAD | LAKE VILLA, ILLINOIS

PROJECT TEAM

**OWNER / DEVELOPER:**  
SAFE & SECURE SELF STORAGE, INC.  
23366 W. WALL STREET  
LAKE VILLA, IL 60046  
CONTACT: MARK HAUFÉ

**SURVEYOR/CIVIL ENGINEER:**  
HAEGER ENGINEERING  
100 EAST STATE PARKWAY  
SCHAUMBURG, IL 60173  
TEL (847) 394-6600  
CONTACT: LEN KLEINJAN / KIM LASK

**ARCHITECT:**  
GROUNDWORK, LTD. & EDIFICIO ARCHITECTS  
351 W. DUNDEE ROAD, SUITE A  
BUFFALO GROVE, IL 60089  
TEL (847) 541-4151  
CONTACT: RUSSELL THIELE

**LANDSCAPE ARCHITECT:**  
DICKSON DESIGN STUDIO, INC.  
9 CRYSTAL LAKE ROAD, SUITE 110  
LAKE IN THE HILLS, IL 60156  
TEL (224) 241-8181  
CONTACT: SHARON DICKSON / JEFF TORRENS

**ARBORIST:**  
DAVEY RESOURCE GROUP, INC.  
NATURAL RESOURCE CONSULTING  
TEL (414) 517-1695  
CONTACT: PETE SORENSEN

**ECOLOGIST:**  
INDIGO ECOLOGICAL DESIGN  
P.O. BOX 26  
ALGONQUIN, IL 60102  
TEL (810) 923-6582  
CONTACT: STACEY LIBRA

SHEET INDEX

L0.1	SHEET INDEX PROJECT TEAM
L0.2	NOTES - TREE PRESERVATION TREE PROTECTION FENCE DETAIL PLANTING DETAILS NOTES - GENERAL LANDSCAPE PLANT SYMBOLS KEY
L1.0	TREE PRESERVATION / REMOVAL PLAN
L1.1	TREE INVENTORY CONDITION RATING SCALE VISUAL TREE ASSESSMENT TREE REMOVAL & REPLACEMENT SUMMARY
L2.0	PRELIMINARY LANDSCAPE PLAN CODE REQUIREMENTS (OVERALL DEVELOPMENT)
L3.0	FENCE DETAILS



dickson design  
STUDIO

9 CRYSTAL LAKE ROAD  
SUITE 110  
LAKE IN THE HILLS, IL 60156  
(224) 241-8181

CLIENT NAME AND ADDRESS

**SAFE & SECURE  
SELF-STORAGE, INC.**  
LAKE VILLA, ILLINOIS

PLAN DATE

**JUNE 17, 2025**

REVISIONS

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

PROJECT NAME AND SHEET TITLE

**EASY SPACE  
SELF-STORAGE**  
LAKE VILLA, IL  
**PRELIMINARY LANDSCAPE &  
TREE PRESERVATION PLAN  
- COVER**

SHEET NUMBER

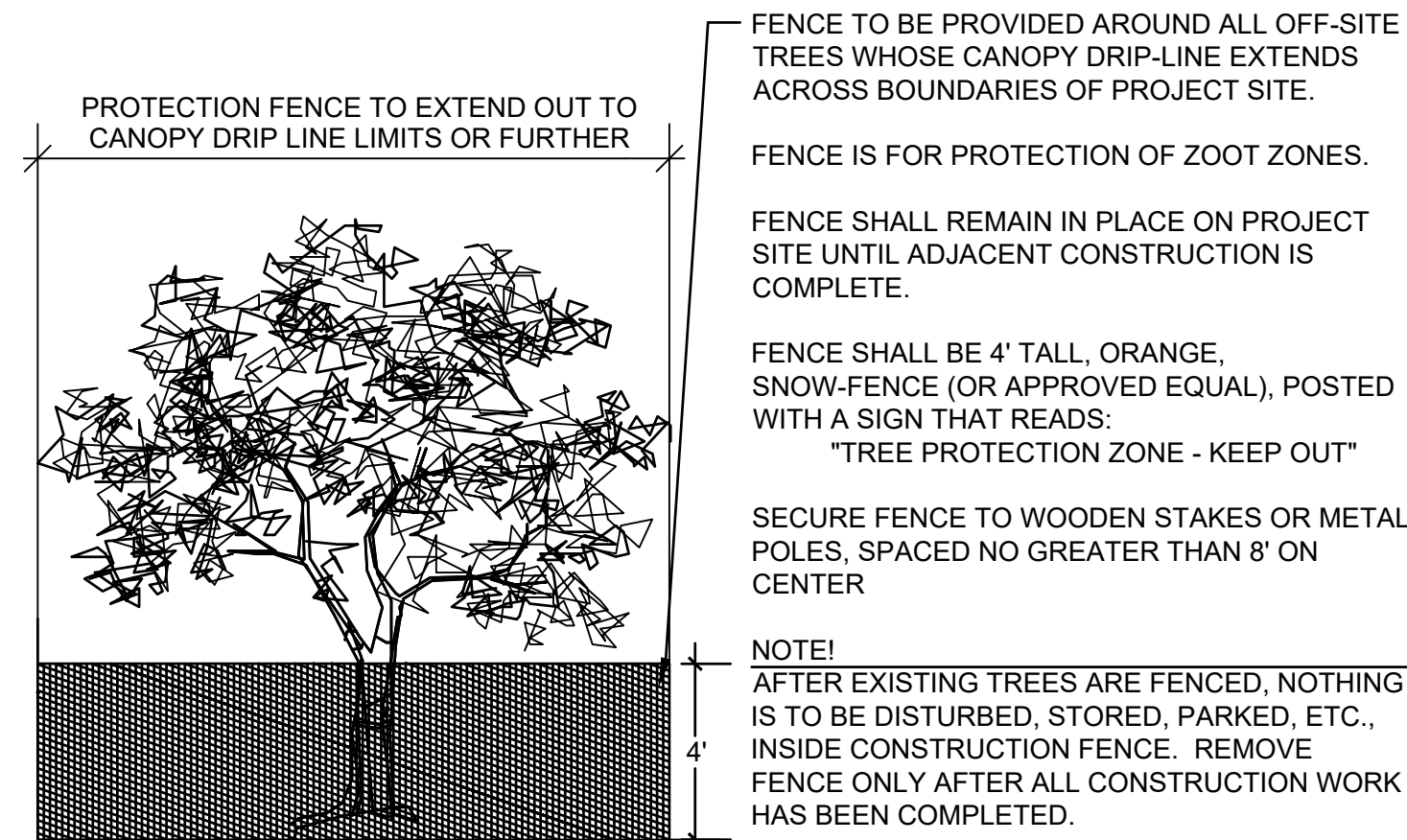
**L0.1**



NOTES: TREE PRESERVATION

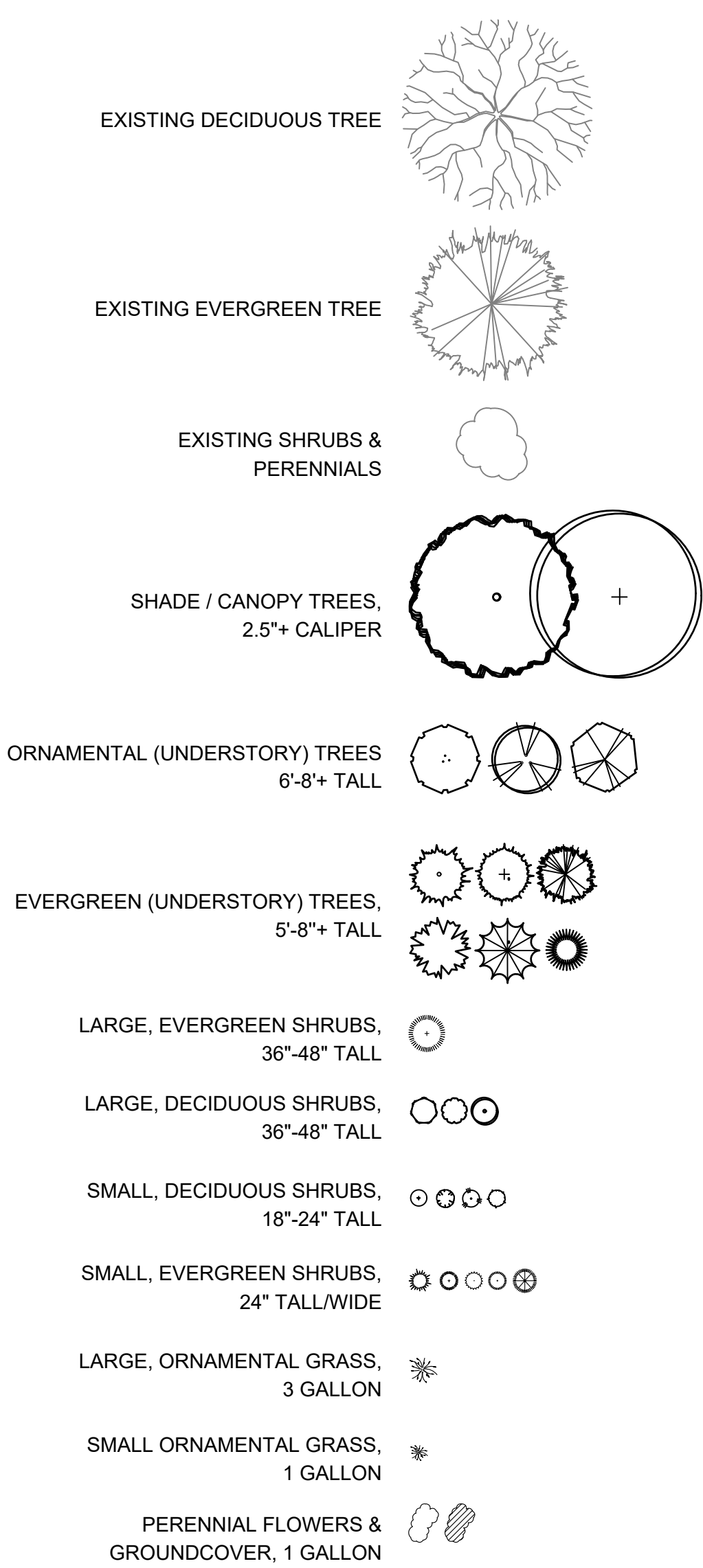
1. TREE PRESERVATION:
- A. **ALL WORK MUST BE PERFORMED ACCORDING TO THE APPROVED TREE PRESERVATION PLAN. IT IS STRONGLY RECOMMENDED TO DOCUMENT GOOD STEWARDSHIP PRACTICES DURING CONSTRUCTION. IF REQUIRED, PRIOR TO COMMENCING ANY DEMOLITION / CONSTRUCTION ACTIVITY, NOTIFY MUNICIPAL FORESTRY DEPARTMENT (NOTIFY AT LEAST 48 HOURS IN ADVANCE OF WORK).**
- B. AN APPROVED TREE PRESERVATION PLAN MUST BE AVAILABLE AT THE BUILDING SITE.
- C. PRIOR TO ANY DEMOLITION / CONSTRUCTION ACTIVITY, INSTALL TREE PRESERVATION FENCE AND PERFORM ROOT PRUNING FOR ALL PROTECTED TREES.
- D. FENCE THE CRITICAL ROOT ZONE (CRZ) / CANOPY DRIP-LINE, OF THE ENTIRE EXISTING TREE TO BE PRESERVED, WITH TREE PROTECTION FENCE. FENCE TO PREVENT WOUNDS TO THE TREE & SOIL COMPACTION. POST THE FENCE WITH A SIGN STATING, "TREE PROTECTION ZONE - KEEP OUT".
- E. ALL REQUIRED TREE PROTECTION FENCING SHALL REMAIN IN PLACE UNTIL THE TIME OF FINISH GRADING AND LANDSCAPING.
- F. NO TRENCHING SHOULD BE DONE WITHIN THE TREE PROTECTION ZONES FOR ANY CONSTRUCTION ACTIVITY, UNLESS PRE-APPROVED BY PROJECT ARBORIST &/OR PROJECT LANDSCAPE ARCHITECT.
- G. NO GRADE CHANGES SHOULD BE DONE WITHIN THE TREE PROTECTION ZONES OF TREES FOR ANY CONSTRUCTION ACTIVITY.
- H. SHOULD IT BE NECESSARY TO TRENCH WITHIN THE CRZ FOR UTILITIES, INCLUDING DISCONNECTION OR CAPPING OF EXISTING UTILITIES, ALL TRENCHES SHALL BE HAND DUG. NO ROOTS LARGER THAN TWO INCHES (2") SHALL BE CUT, UNLESS NO OTHER ALTERNATIVE IS FEASIBLE. ALL SMALLER ROOTS THAT REQUIRE CUTTING, SHALL BE CUT WITH A SHARP PRUNING SAW. CUTS SHALL BE MADE FLUSH WITH THE SIDE OF THE TRENCH. IF AT ANY TIME, TWENTY-FIVE PERCENT (25%) OF THE AREA WITHIN THE CRZ IS BEING SEPARATED FROM THE TREE BY A TRENCH, THEN THE LINE SHALL BE EITHER RELOCATED OR INSTALLED USING TRENCH-LESS METHODS.
- I. LOCATE THE PROPOSED WATER AND SEWER LINES OUTSIDE OF THE TREE PROTECTION ZONE OR INSTALL THE SEWER AND WATER UTILITIES USING TRENCH-LESS METHODS. AUGER THROUGH THE ENTIRE TREE PROTECTION ZONE, LOCATE PITS OUTSIDE OF THE TREE PROTECTION ZONE.
- J. THE PROPOSED WATER SERVICE LINE VALVES (B-BOXES), ARE TO BE TEN FEET (10') FROM PRESERVED TREES. IF FUTURE UTILITY EXCAVATIONS NEED TO OCCUR, THIS REDUCES THE CHANCES OF EXTENSIVE STEM OR ROOT DAMAGE, WHICH COULD LEAD TO TREE DECLINE.
- K. AT NO TIME SHALL ANY EQUIPMENT, MATERIALS, SUPPLIES OR FILL SOIL BE ALLOWED IN THE TREE PROTECTION ZONE(S). DO NOT STORE EXCAVATED SOIL OR THE DUMPSTER WITHIN THE DRIP-LINE (CRZ) OF THE PRESERVED TREE(S).
- L. **REMOVAL OF ANY HARDSCAPE WITHIN THE TREE PROTECTION ZONES WILL BE DONE BY HAND.** NO ROOTS LARGER THAN TWO INCHES (2") SHALL BE CUT, UNLESS THERE IS NO ALTERNATIVE FEASIBLE. CUTS WILL BE MADE WITH A SHARP PRUNING SAW TO AVOID TEARING AND WILL BE FLUSH WITH THE TREE SIDE OF THE TRENCH.
- M. THE TREE PROTECTION ZONE MAY BE MULCHED TO IMPROVE THE GROWING CONDITIONS FOR TREE ROOTS AND TO MINIMIZE MAINTENANCE OF THE LAWN.
- N. ALL OFF-SITE TREES SHALL BE PRESERVED.
- O. EXISTING TREES SHOWN TO REMAIN SHALL BE PRESERVED TO THE BEST EXTENT POSSIBLE, PENDING FINAL SITE PLAN, FINAL CIVIL ENGINEERING, AND/OR ANY UNFORESEEN ISSUES.

DETAIL: TREE PROTECTION FENCE

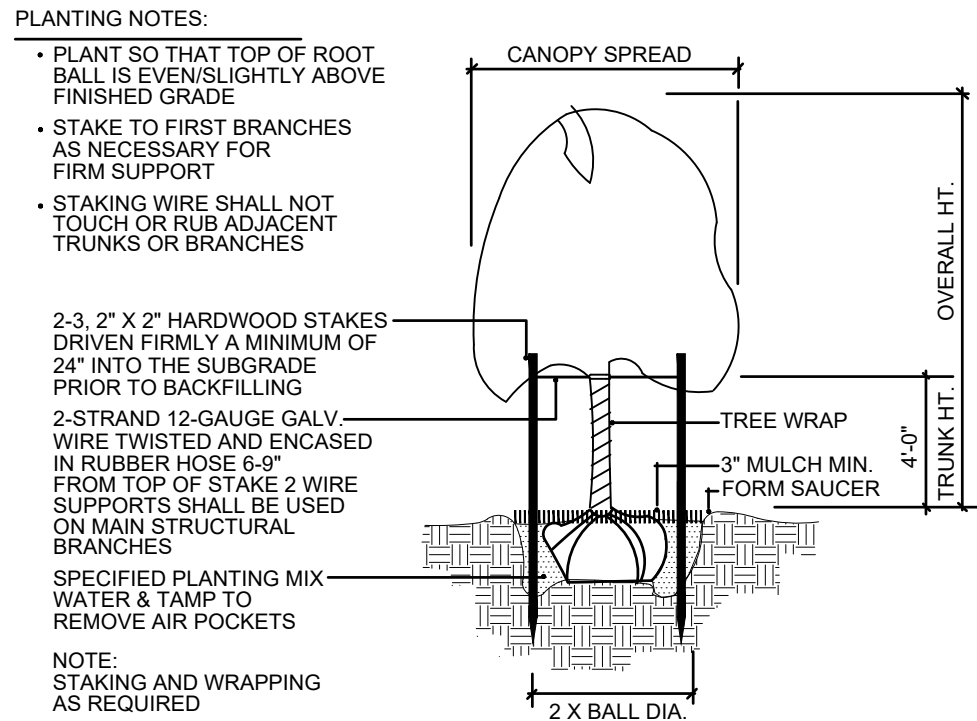


PLANT SYMBOLS KEY

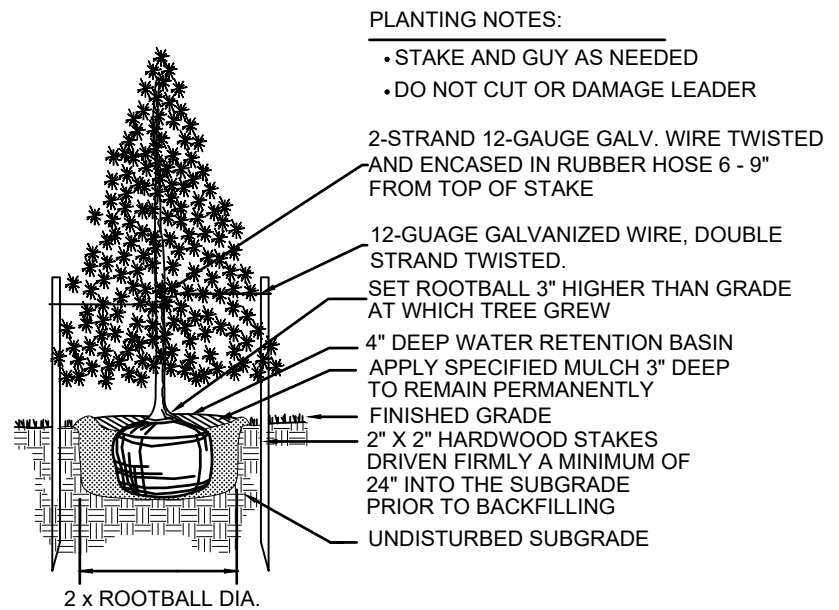
NOTE!  
NOT ALL PLANT SYMBOLS MAY BE DEPICTED ON PLANS.



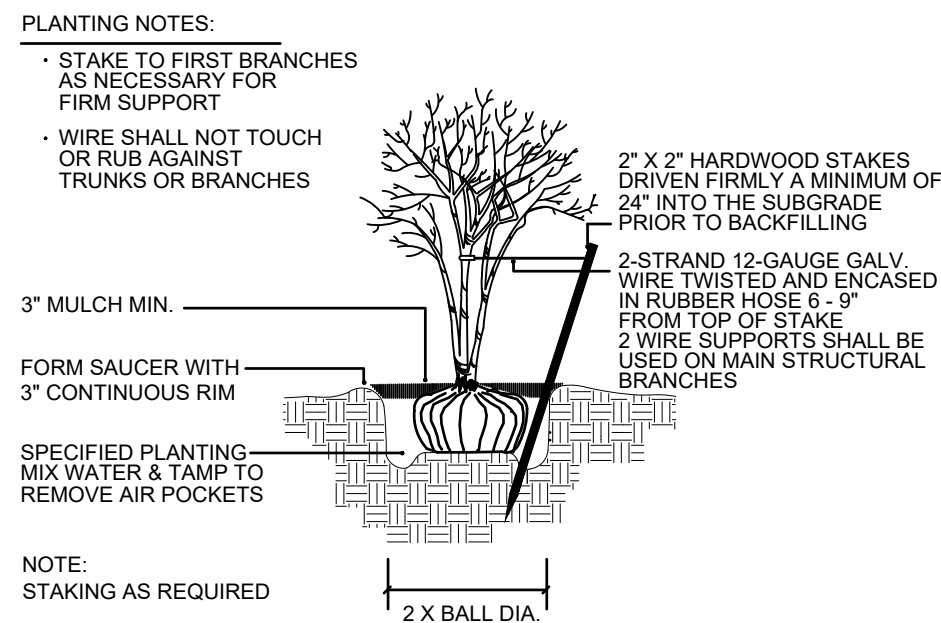
DETAILS: PLANTING



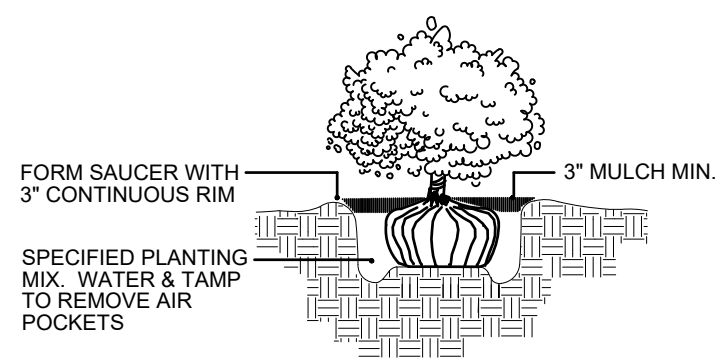
TREE PLANTING & STAKING  
NOT TO SCALE



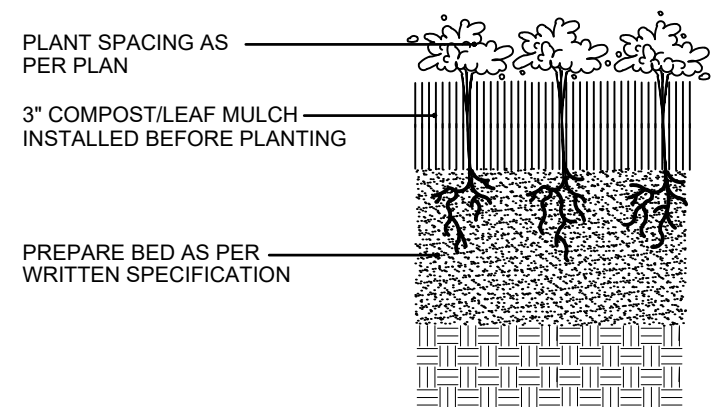
EVERGREEN TREE PLANTING  
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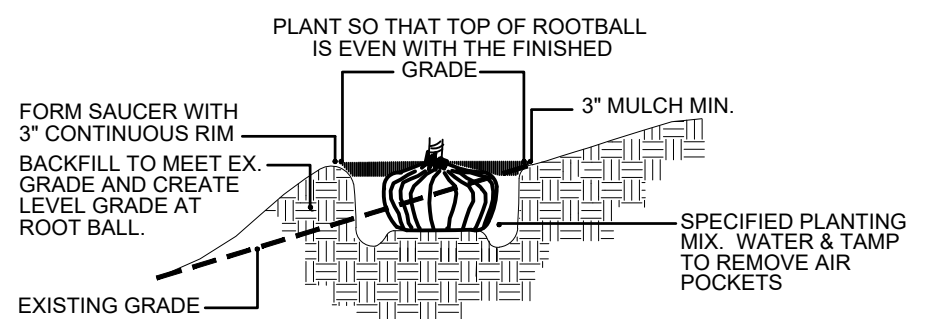
MULTI-TRUNK TREE STAKING  
NOT TO SCALE



SHRUB PLANTING  
NOT TO SCALE



PERENNIAL PLANTING  
NOT TO SCALE



HILLSIDE PLANTING  
NOT TO SCALE

NOTES: GENERAL LANDSCAPE

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE STANDARDS AND CODES.
2. CALL J.U.L.I.E. UTILITY LOCATING SERVICE (TEL 800.892.0123), 48 HOURS PRIOR TO THE START OF ANY DIGGING.
3. GENERAL PLANT NOTES:  
A. ALL PLANT MATERIAL SHALL CONFORM IN SIZE AND GRADE IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK.  
B. ALL PLANT MATERIAL SHALL BE MAINTAINED ALIVE, HEALTHY, AND FREE FROM DISEASE AND PESTS.  
C. ALL NEW PLANT MATERIAL SHALL BE FROM A LOCAL SOURCE WHENEVER POSSIBLE (LESS THAN 50 MILES).  
D. PLANTS SHALL BE ALLOWED TO GROW IN THEIR NATURAL FORM / HABIT. PLANTS SHALL NOT BE PRUNED/HEDGED UNLESS ABSOLUTELY NECESSARY (DUE TO VISIBILITY OR HAZARD OBSTRUCTION).  
E. ALL LANDSCAPED AREAS SHALL BE FREE OF WEEDS, LITTER, AND SIMILAR SIGNS OF DEFERRED MAINTENANCE.
4. LOCATIONS OF PROPOSED PLANT MATERIAL MAY BE ADJUSTED AT TIME OF INSTALLATION DUE TO FINAL ENGINEERING AND FINAL LOCATION OF SITE UTILITIES.
5. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SPREADING TOPSOIL (6"-12" DEEP), FINE GRADING, AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS. ALL SOILS SHALL BE FREE OF CONSTRUCTION DEBRIS, PRIOR TO INSTALLING ANY PLANT MATERIAL.
6. PRIOR TO SPREADING TOPSOIL, THE LANDSCAPE CONTRACTOR SHALL INSPECT AND ACCEPT ALL BASE GRADES. ANY DEVIATION FROM GRADES INDICATED ON THE GRADING PLAN SHALL BE CORRECTED BEFORE PLACING ANY TOPSOIL.
7. ALL SHRUB, GROUNDCOVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE PREPARED WITH A SOIL AMENDMENT MIX - 1/3 TOPSOIL, 1/3 MUSHROOM COMPOST, AND 1/3 TORPEDO SAND. MATERIAL SHALL BE ROTO-TILLED JUST PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
8. ALL PLANTING ISLANDS SHALL BE MOUNDED TO PROVIDE POSITIVE DRAINAGE.
9. ALL PLANTING BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SPADED EDGE BORDER, UNLESS METAL OR OTHER BORDER IS SPECIFIED.
10. ALL PLANTING BED AREAS SHALL MAINTAIN A MAX. 3" DEEP LAYER OF SHREDDED HARDWOOD MULCH (COLOR: NON-DYED, BROWN).
11. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING SCHEDULE WITH LANDSCAPE MAINTENANCE CONTRACTOR, TO ENSURE PROPER WATERING OF PLANTED AND SODDED AREAS AFTER INITIAL INSTALLATION.
12. LANDSCAPE CONTRACTOR SHALL COORDINATE WORK WITH OTHER CONTRACTORS ON SITE TO MINIMIZE ANY REDO OF COMPLETED LANDSCAPE WORK AND DAMAGE TO PLANT MATERIAL.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN LAYOUT WORK. UPON REQUEST, LANDSCAPE ARCHITECT SHALL BE AVAILABLE TO ASSIST/APPROVE CONTRACTOR LAYOUT.
14. EVERY ATTEMPT HAS BEEN MADE TO DEPICT ALL EXISTING UTILITY LINES. CONTRACTOR SHALL USE PRECAUTION WHEN DIGGING. CONTRACTOR SHALL MAKE THEMSELVES THOROUGHLY FAMILIAR WITH ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY DIGGING, VERIFYING LOCATIONS AND DEPTHS OF ALL UTILITIES.
15. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BID SUBMITTAL, TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
16. PLANT LIST QUANTITIES PROVIDED AT TIME OF FINAL PLANS ARE APPROXIMATIONS. CONTRACTORS ARE RESPONSIBLE FOR COMPLETING THEIR OWN QUANTITY TAKE-OFFS. IF A DISCREPANCY IS FOUND BETWEEN THE PLAN AND THE PLANT LIST, THEN THE PLAN SHALL PREVAIL.
17. PLANT SUBSTITUTIONS ARE ALLOWED DUE TO PLANT AVAILABILITY OR PLANTING TIME OF YEAR, ONLY WITH THE PRIOR CONSENT OF THE LANDSCAPE ARCHITECT. IF SUBSTITUTIONS ARE MADE WITHOUT PRIOR CONSENT, THE LANDSCAPE ARCHITECT MAINTAINS THE RIGHT TO REJECT MATERIAL IN THE FIELD, AT THE COST TO THE CONTRACTOR.
18. CONTRACTOR TO PROVIDE TEST OF EXISTING AND IMPORTED SOILS PER SPECIFICATIONS. PLANTING SOIL SHALL BE AMENDED PER SPECIFICATIONS.
19. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AREAS OF POOR DRAINAGE OR OTHER UNUSUAL SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING PITS.
20. ALL TURF SHALL BE KENTUCKY BLUEGRASS BLEND SOD (MINERAL, NOT PEAT), PER VILLAGE, SEED IS NOT ALLOWED.
21. CONTRACTOR SHALL RESTORE LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO FORM A SMOOTH, FULL, EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
22. LANDSCAPE DETAILS SHOWN ARE FOR DESIGN INTENT ONLY. LANDSCAPE ARCHITECT ASSUMES NO LIABILITY. CONTRACTOR IS RESPONSIBLE FOR ERECTING AND INSTALLING PROPERLY BUILT AMENITIES PER CODE, PER SITE CONDITIONS (FINAL GRADING & UTILITY LOCATIONS), AND PER AREA CLIMATE CONDITIONS. ALL LANDSCAPE SITE DETAILS FOR STRUCTURES AND FOOTINGS SHALL BE REVIEWED & APPROVED BY A STRUCTURAL ENGINEER.
23. CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A ONE-YEAR WARRANTY ON ALL PLANT MATERIAL.
24. (IF APPLICABLE) CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A THREE-YEAR MONITORING AND MAINTENANCE PROGRAM ON ALL NATURALIZED DETENTION AREAS.



dickson design  
STUDIO  
9 CRYSTAL LAKE ROAD  
SUITE 110  
LAKE IN THE HILLS, IL 60156  
(224) 241-8181

CLIENT NAME AND ADDRESS

**SAFE & SECURE  
SELF-STORAGE, INC.**  
LAKE VILLA, ILLINOIS

PLAN DATE

**JUNE 17, 2025**

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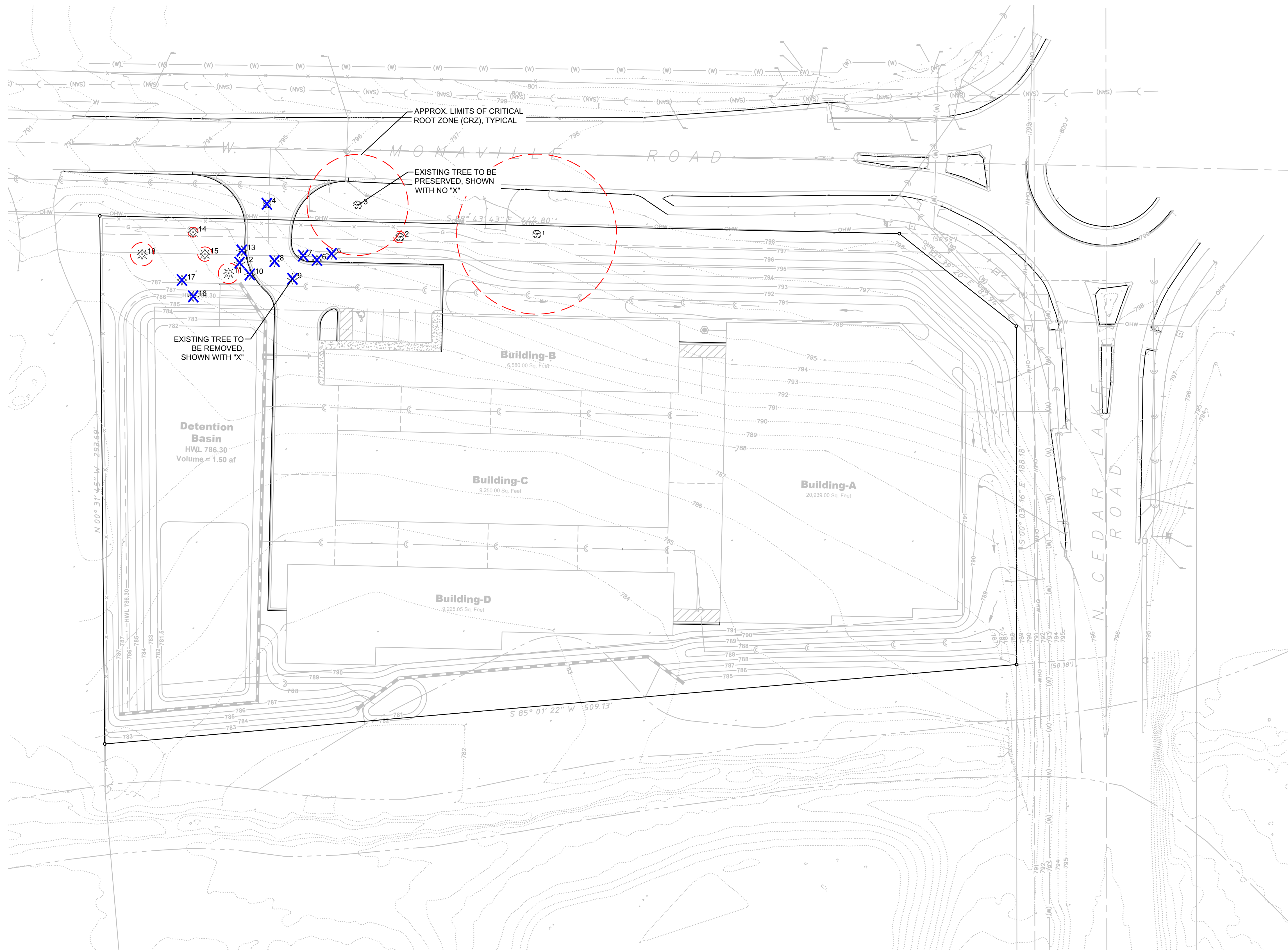
PROJECT NAME AND SHEET TITLE

**EASY SPACE  
SELF-STORAGE**  
LAKE VILLA, IL  
**LANDSCAPE & TREE  
PRESERVATION PLAN  
- NOTES & PLANTING DETAILS**

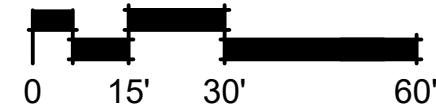
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**LO.2**





**TREE PRESERVATION & REMOVAL PLAN**  
SCALE: 1" = 30'-0"



**dickson design**  
**STUDIO**

9 CRYSTAL LAKE ROAD  
SUITE 110  
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(224) 241-8181

CLIENT NAME AND ADDRESS

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SELF-STORAGE, INC.**  
LAKE VILLA, ILLINOIS

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PROJECT NAME AND SHEET TITLE

**EASY SPACE  
SELF-STORAGE**  
LAKE VILLA, IL

**TREE PRESERVATION AND  
REMOVAL PLAN**

SHEET NUMBER

**L1.0**



RATING SCALE:  
TREE CONDITION / FORM

**Excellent / "1"**  
The tree is typical of the species, has less than 10% deadwood in the crown that is attributable to normal clauses, has no other observed problems, and required no remedial action.

**Good / "2"**  
The tree is typical of the species and/or has less than 20% deadwood in the crown, only one or two minor problems that are easily corrected with normal care.

**Fair / "3"**  
The tree is typical of the species and/or has less than 30% deadwood in the crown, one or two minor problems that are not eminently lethal to the tree, and no significant decay or structural problems, but the tree must have remedial care above normal care in order to minimize the impact of future stress and to insure continued health.

**Poor / "4"**  
The tree is not typical of the species and/or has significant problems such as 30-50% deadwood in the crown, serious decay or structural defect, insects, disease or other problems that can be eminently lethal to the tree or create a hazardous tree if not corrected in a short period of time or if the tree is subjected to additional stress.

**Critical / "5"**  
The tree is not typical of the species and/or has over 50% deadwood in the crown, major decay or structural problems, is hazardous or is severely infested with insects, disease, or other problems that even if aggressively corrected would not result in the long term survival of the tree.

**Dead / "6"**  
Less than 10% of the tree shows signs of life.

TREE INVENTORY - ONSITE

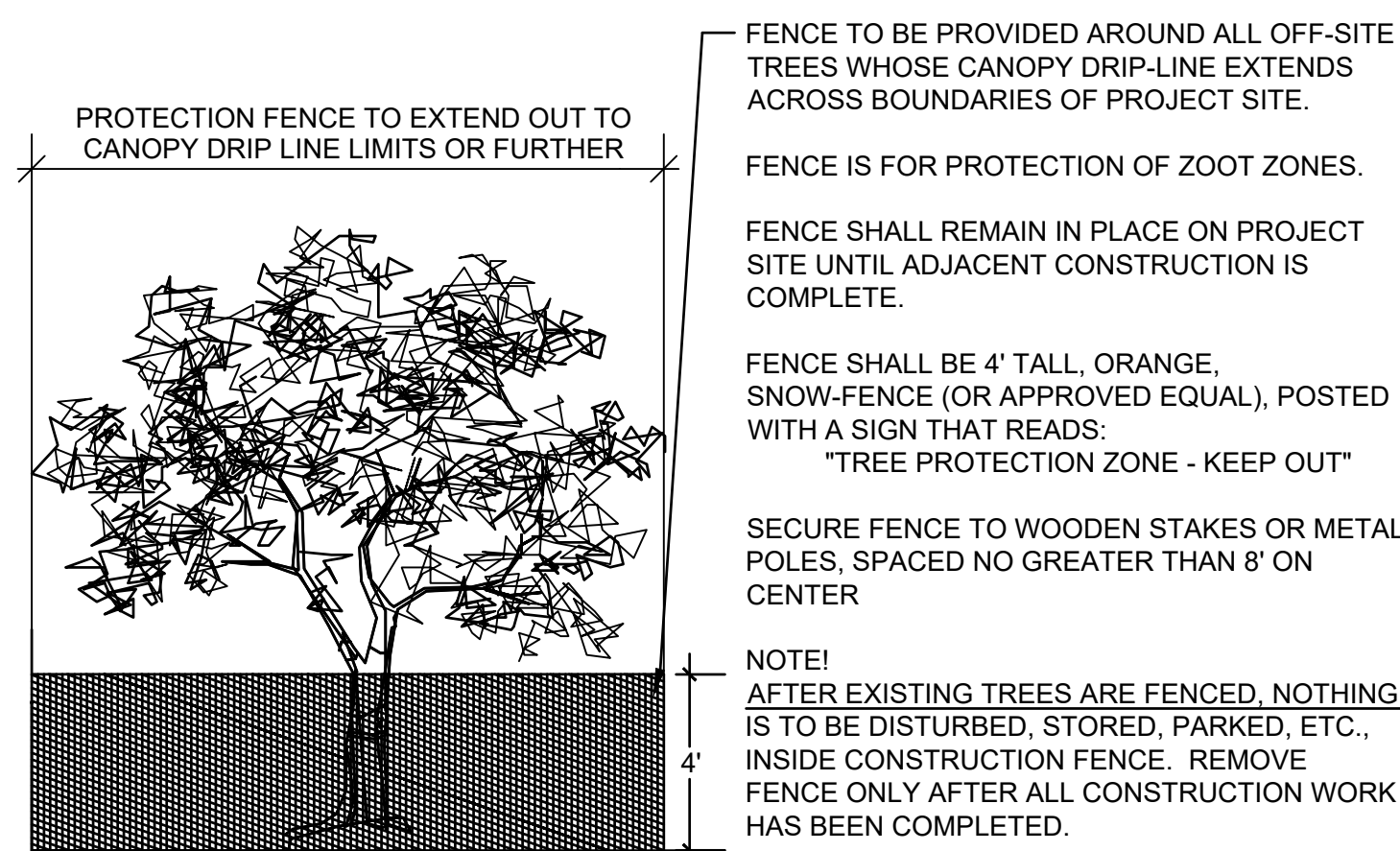
TAG #	COMMON NAME	SCIENTIFIC NAME	DBH	CONDITION	OUTCOME	REPLACEMENT
1	Bur oak	Quercus macrocarpa	44.5	Good	PRESERVE	NA
2	Bur oak	Quercus macrocarpa	3.2	Good	PRESERVE	NA
3	Bur oak	Quercus macrocarpa	28.1	Fair	PRESERVE	NA
4	Bur oak	Quercus macrocarpa	44.2	Fair	REMOVE	5, 4" CAL.
5	Juniper	juniper spp	2.7	Good	REMOVE	-
6	Juniper	juniper spp	2.5	Good	REMOVE	-
7	Juniper	juniper spp	4.2	Good	REMOVE	-
8	Juniper	juniper spp	3.8	Good	REMOVE	-
9	Juniper	juniper spp	3.5	Good	REMOVE	-
10	Juniper	juniper spp	4.7	Good	REMOVE	-
11	Juniper	juniper spp	5.7	Good	PRESERVE	NA
12	Juniper	juniper spp	4.9	Good	REMOVE	-
13	Juniper	juniper spp	3.8	Good	REMOVE	-
14	Juniper	juniper spp	2.8	Fair	PRESERVE	NA
15	Juniper	juniper spp	4	Fair	PRESERVE	NA
16	Juniper	juniper spp	2.5	Good	REMOVE	-
17	Scots pine	Pinus sylvestris	12.4	Fair	REMOVE	2, 3" CAL.
18	Scots pine	Pinus sylvestris	6.5	Good	PRESERVE	NA

TOTAL REPLACEMENT TREES REQUIRED = 7 TREES

NOTES: TREE PRESERVATION

1. TREE PRESERVATION:
- A. **ALL WORK MUST BE PERFORMED ACCORDING TO THE APPROVED TREE PRESERVATION PLAN. IT IS STRONGLY RECOMMENDED TO DOCUMENT GOOD STEWARDSHIP PRACTICES DURING CONSTRUCTION. IF REQUIRED, PRIOR TO COMMENCING ANY DEMOLITION / CONSTRUCTION ACTIVITY, NOTIFY MUNICIPAL FORESTRY DEPARTMENT (NOTIFY AT LEAST 48 HOURS IN ADVANCE OF WORK).**
- B. AN APPROVED TREE PRESERVATION PLAN MUST BE AVAILABLE AT THE BUILDING SITE.
- C. PRIOR TO ANY DEMOLITION / CONSTRUCTION ACTIVITY, INSTALL TREE PRESERVATION FENCE AND PERFORM ROOT PRUNING FOR ALL PROTECTED TREES.
- D. FENCE THE CRITICAL ROOT ZONE (CRZ) / CANOPY DRIP-LINE, OF THE ENTIRE EXISTING TREE TO BE PRESERVED, WITH TREE PROTECTION FENCE. FENCE TO PREVENT WOUNDS TO THE TREE & SOIL COMPACTION. POST THE FENCE WITH A SIGN STATING, "TREE PROTECTION ZONE - KEEP OUT".
- E. ALL REQUIRED TREE PROTECTION FENCING SHALL REMAIN IN PLACE UNTIL THE TIME OF FINISH GRADING AND LANDSCAPING.
- F. NO TRENCHING SHOULD BE DONE WITHIN THE TREE PROTECTION ZONES FOR ANY CONSTRUCTION ACTIVITY, UNLESS PRE-APPROVED BY PROJECT ARBORIST &/OR PROJECT LANDSCAPE ARCHITECT.
- G. NO GRADE CHANGES SHOULD BE DONE WITHIN THE TREE PROTECTION ZONES OF TREES FOR ANY CONSTRUCTION ACTIVITY.
- H. SHOULD IT BE NECESSARY TO TRENCH WITHIN THE CRZ FOR UTILITIES, INCLUDING DISCONNECTION OR CAPPING OF EXISTING UTILITIES, ALL TRENCHES SHALL BE HAND DUG. NO ROOTS LARGER THAN TWO INCHES (2") SHALL BE CUT, UNLESS NO OTHER ALTERNATIVE IS FEASIBLE. ALL SMALLER ROOTS THAT REQUIRE CUTTING, SHALL BE CUT WITH A SHARP PRUNING SAW. CUTS SHALL BE MADE FLUSH WITH THE SIDE OF THE TRENCH. IF AT ANY TIME, TWENTY-FIVE PERCENT (25%) OF THE AREA WITHIN THE CRZ IS BEING SEPARATED FROM THE TREE BY A TRENCH, THEN THE LINE SHALL BE EITHER RELOCATED OR INSTALLED USING TRENCH-LESS METHODS.
- I. LOCATE THE PROPOSED WATER AND SEWER LINES OUTSIDE OF THE TREE PROTECTION ZONE OR INSTALL THE SEWER AND WATER UTILITIES USING TRENCH-LESS METHODS. AUGER THROUGH THE ENTIRE TREE PROTECTION ZONE, LOCATE PITS OUTSIDE OF THE TREE PROTECTION ZONE.
- J. THE PROPOSED WATER SERVICE LINE VALVES (B-BOXES), ARE TO BE TEN FEET (10') FROM PRESERVED TREES. IF FUTURE UTILITY EXCAVATIONS NEED TO OCCUR, THIS REDUCES THE CHANCES OF EXTENSIVE STEM OR ROOT DAMAGE, WHICH COULD LEAD TO TREE DECLINE.
- K. AT NO TIME SHALL ANY EQUIPMENT, MATERIALS, SUPPLIES OR FILL SOIL BE ALLOWED IN THE TREE PROTECTION ZONE(S). DO NOT STORE EXCAVATED SOIL OR THE DUMPSTER WITHIN THE DRIP-LINE (CRZ) OF THE PRESERVED TREE(S).
- L. **REMOVAL OF ANY HARDSCAPE WITHIN THE TREE PROTECTION ZONES WILL BE DONE BY HAND.** NO ROOTS LARGER THAN TWO INCHES (2") SHALL BE CUT, UNLESS THERE IS NO ALTERNATIVE FEASIBLE. CUTS WILL BE MADE WITH A SHARP PRUNING SAW TO AVOID TEARING AND WILL BE FLUSH WITH THE TREE SIDE OF THE TRENCH.
- M. THE TREE PROTECTION ZONE MAY BE MULCHED TO IMPROVE THE GROWING CONDITIONS FOR TREE ROOTS AND TO MINIMIZE MAINTENANCE OF THE LAWN.
- N. ALL OFF-SITE TREES SHALL BE PRESERVED.
- O. EXISTING TREES SHOWN TO REMAIN SHALL BE PRESERVED TO THE BEST EXTENT POSSIBLE, PENDING FINAL SITE PLAN, FINAL CIVIL ENGINEERING, AND/OR ANY UNFORESEEN ISSUES.

DETAIL: TREE PROTECTION FENCE



dickson design  
STUDIO

9 CRYSTAL LAKE ROAD  
SUITE 110  
LAKE IN THE HILLS, IL 60156  
(224) 241-8181

CLIENT NAME AND ADDRESS

**SAFE & SECURE  
SELF-STORAGE, INC.**  
LAKE VILLA, ILLINOIS

PLAN DATE

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PROJECT NAME AND SHEET TITLE

**EASY SPACE  
SELF-STORAGE**  
LAKE VILLA, IL

**TREE PRESERVATION PLAN  
- NOTES, INVENTORY, DETAILS**

SHEET NUMBER

**L1.1**



\*INCLUDES 1 EXISTING AND 1 PROPOSED STREET TREE.

**PROVIDED:**

- 2.5" CALIPER CANOPY TREES	= 9
- UNDERSTORY TREES	= 18

**PROVIDED:**

- 2.5" CALIPER CANOPY TREES	= 2
- UNDERSTORY TREES	= 4

**PROVIDED:**

- 2.5" CALIPER CANOPY TREES	= 1
- SHRUBS	= 7

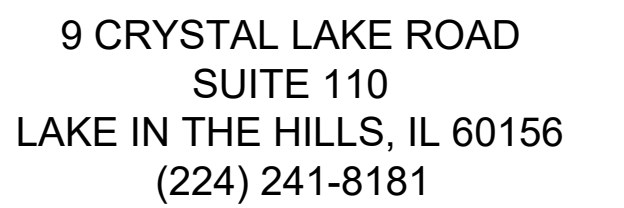
**PROVIDED:**

TYPE C SCREENING, OPTION 2	
- 10' WIDE BUFFER	
- 2.5" CALIPER CANOPY TREES	= 6
- UNDERSTORY TREES	= 12
- 4' HIGH EVERGREEN SHRUBS	= 18

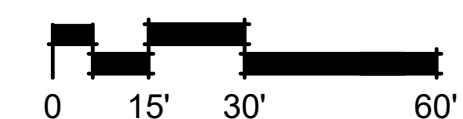
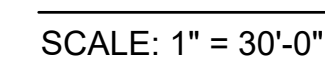
**NOTE! VARIATION REQUESTED:** ADJACENT ZONING IS SR, BUT THE PROPERTY ABUTS OPEN SPACE / DETENTION AND NO HOMES ARE PRESENT WITHIN ±500 FEET. PLANTINGS LIMITED TO BUILDING A ONLY.

**PROVIDED:**

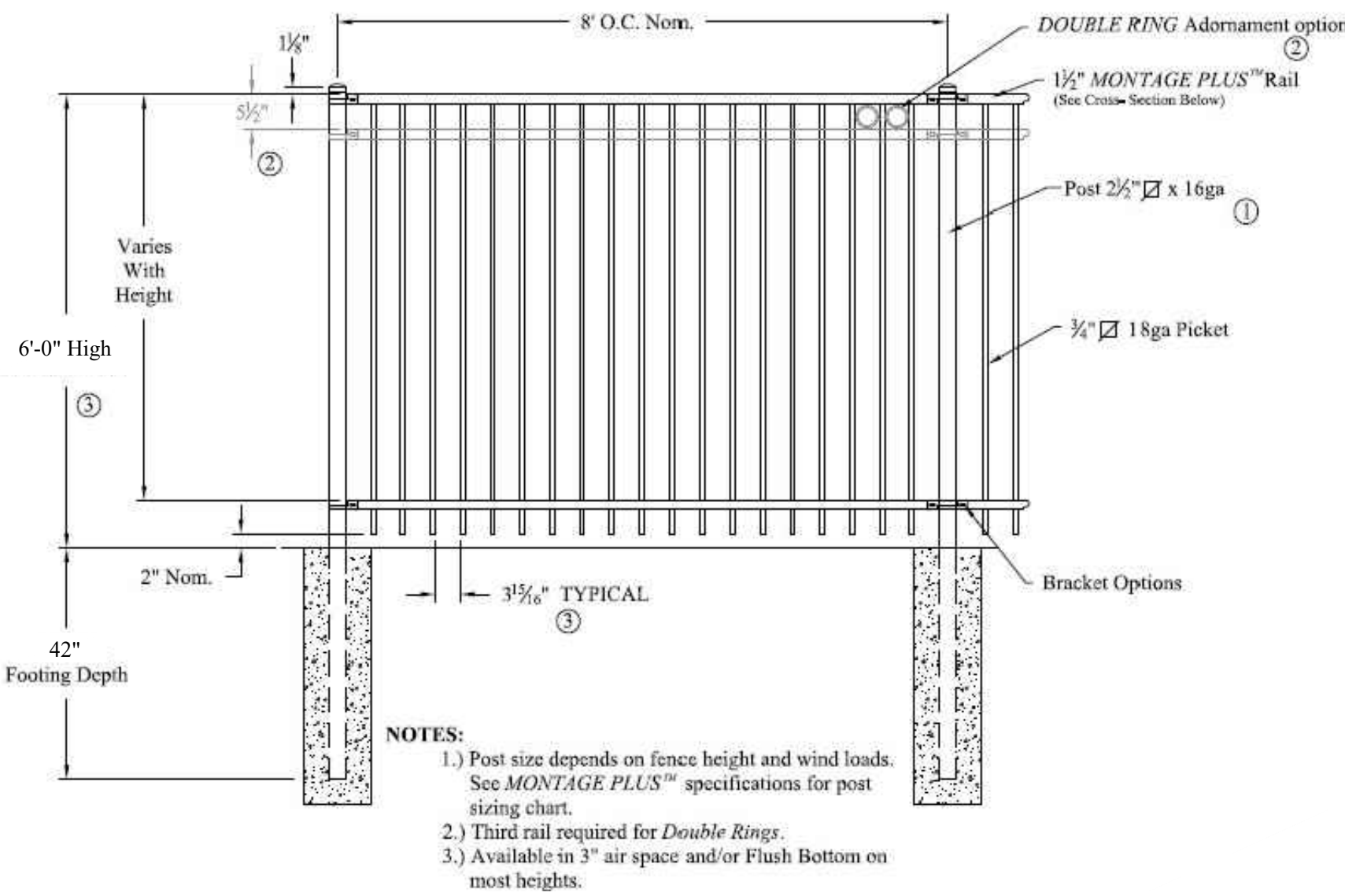
- 2.5" CALIPER CANOPY TREES	= 4
- UNDERSTORY TREES	= 8



## L2.0

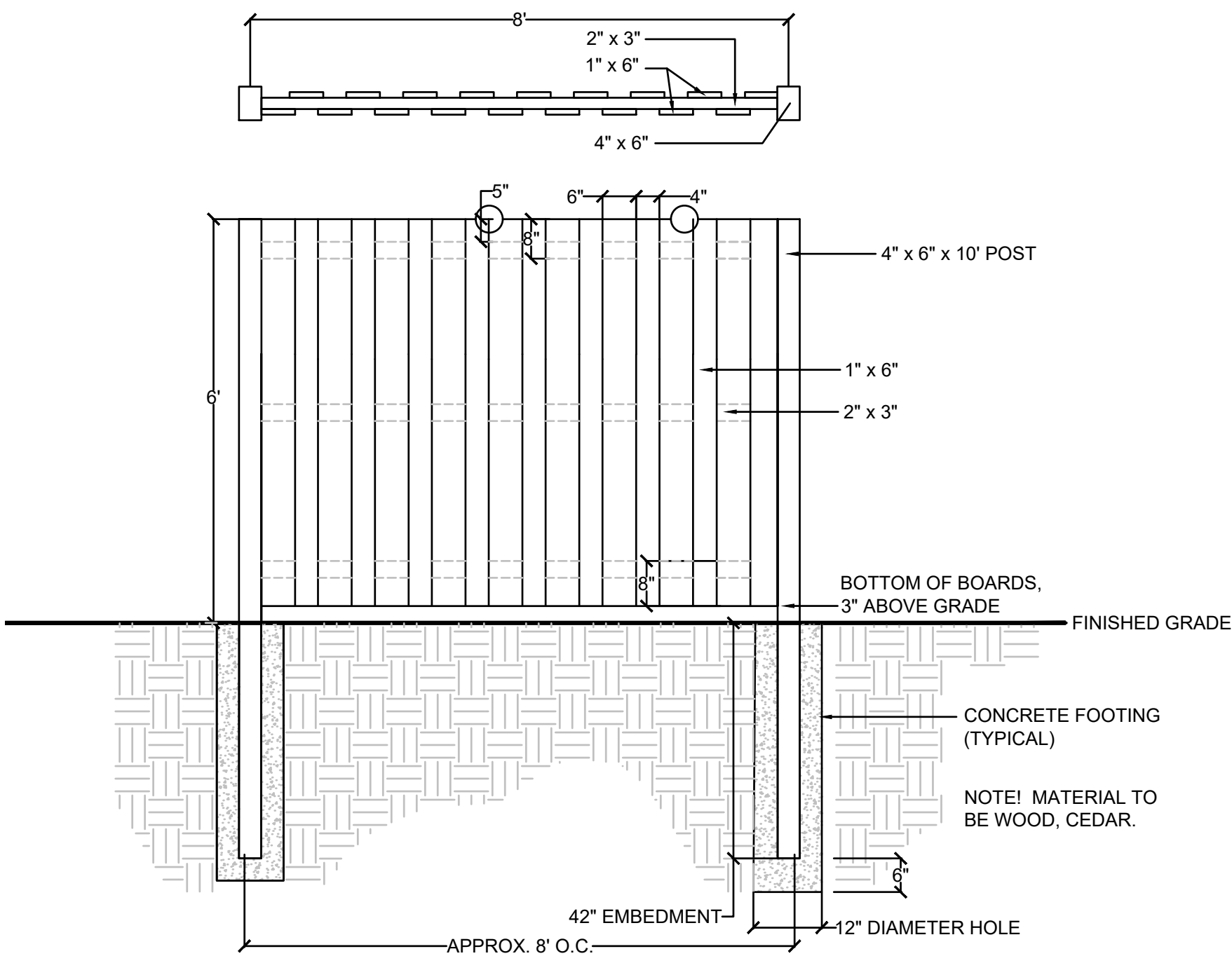






FENCE DETAIL

SCALE: 1/2" = 1'-0"



FENCE DETAIL - 6 FT. BOARD ON BOARD

SCALE: 1/2" = 1'-0"



9 CRYSTAL LAKE ROAD  
SUITE 110  
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(224) 241-8181

CLIENT NAME AND ADDRESS

**SAFE & SECURE  
SELF-STORAGE, INC.**  
LAKE VILLA, ILLINOIS

PLAN DATE

**JUNE 17, 2025**

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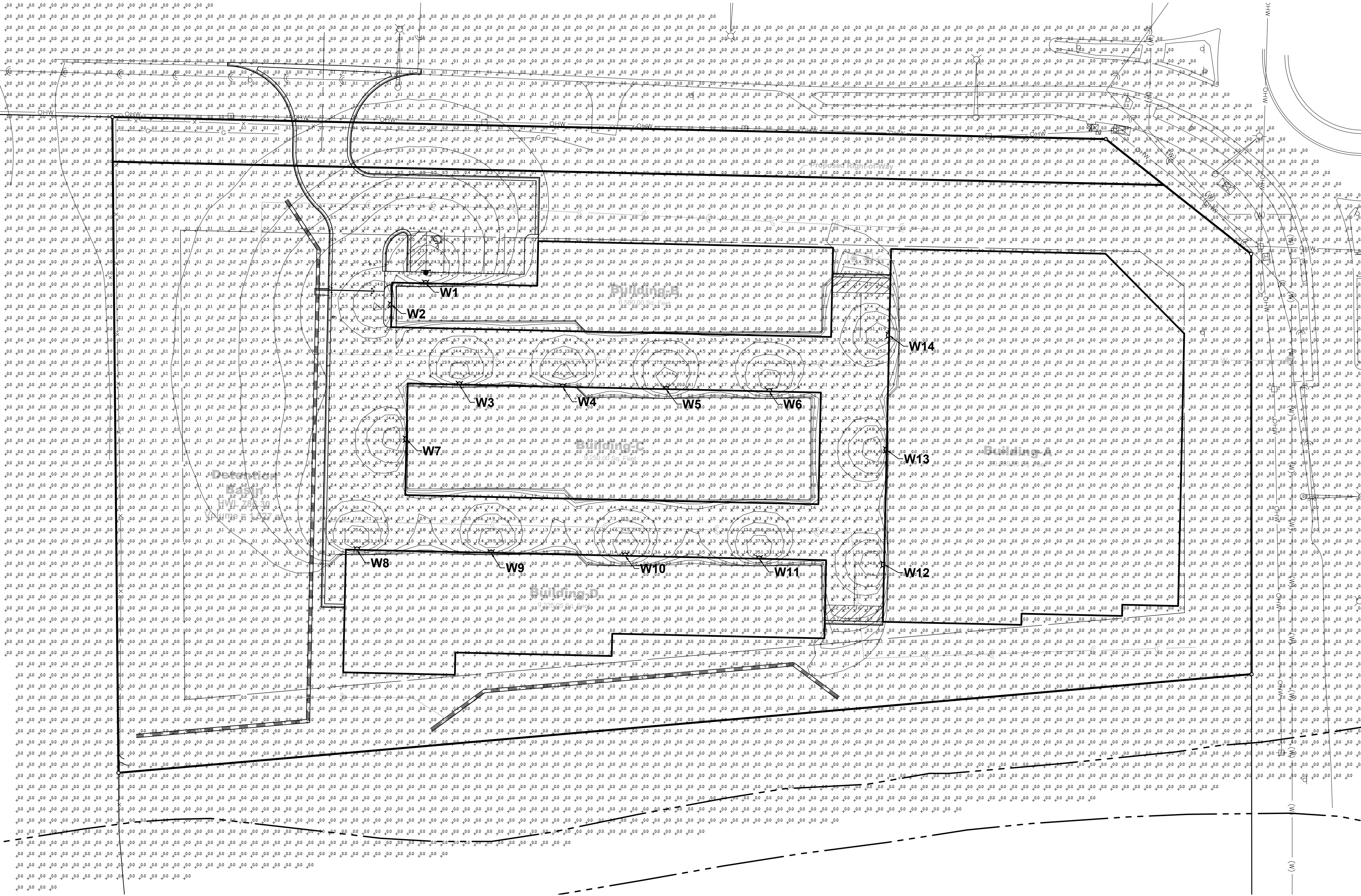
PROJECT NAME AND SHEET TITLE

**EASY SPACE  
SELF-STORAGE**  
LAKE VILLA, IL  
**LANDSCAPE PLAN  
- FENCE DETAILS**

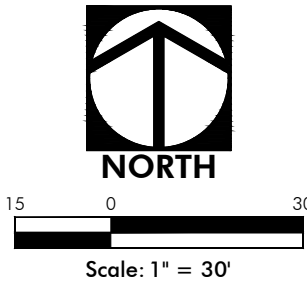
SHEET NUMBER

**L3.0**



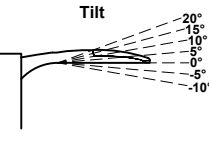
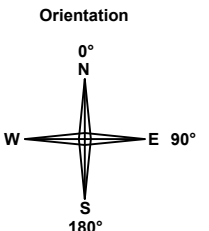


Schedule						
Symbol	Label	Qty.	Manufacturer	Description	Lamp	Lumens
W	W	14	US LED	QubePAK4 Outdoor LED Wall Pack ULWL1-Standard-UNVL-5000K-96W ULWL1-1-UNVL-50-96-XX-ies	LED	16,117



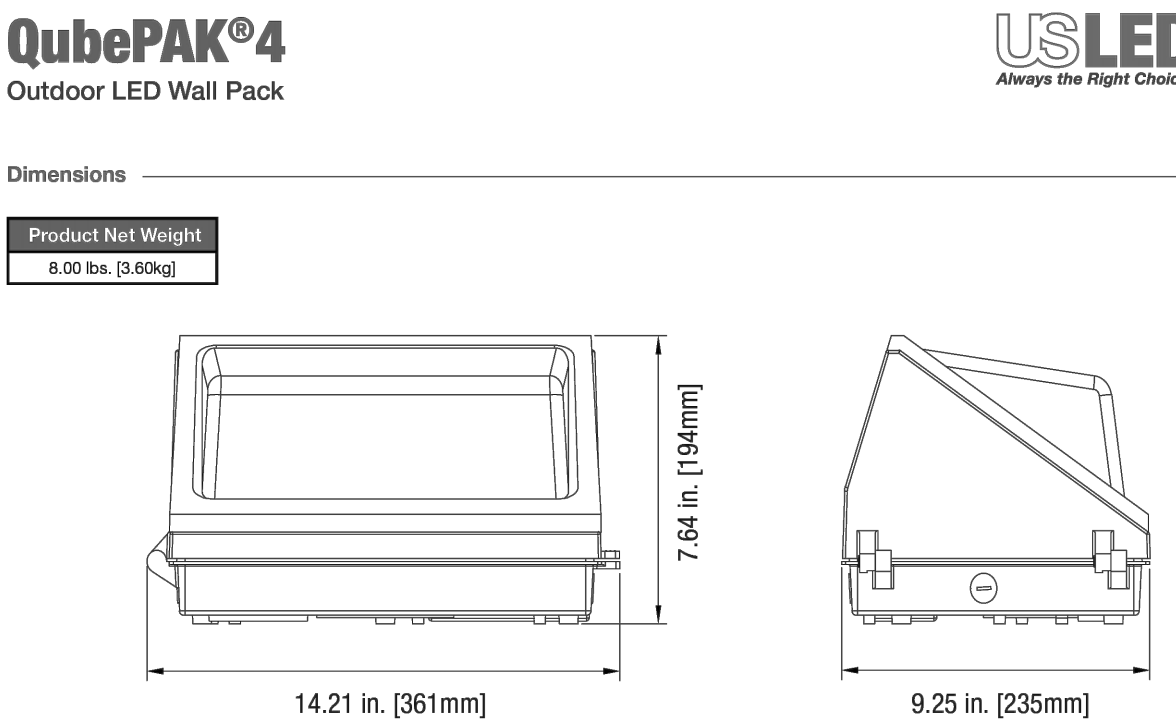
Statistics (Calculation Height: At Finished Grade)					
Description	Avg (fc)	Max (fc)	Min (fc)	Max/Min	Avg/Min
Calculation Zone - 50 ft Beyond Property Line	0.7	41.9	0.0	N/A	N/A
Statistic Zone - On Site Pavement	6.3	41.9	0.0	N/A	N/A

Luminaires			
Label	Mounting Height	Orientation	Tilt
W1	12.0'	1°	0°
W2	12.0'	271°	0°
W3	10.5'	1°	0°
W4	10.5'	1°	0°
W5	10.5'	1°	0°
W6	10.5'	1°	0°
W7	10.0'	271°	0°
W8	9.5'	1°	0°
W9	9.5'	1°	0°
W10	9.5'	1°	0°
W11	9.5'	1°	0°
W12	9.5'	271°	0°
W13	9.5'	271°	0°
W14	9.5'	271°	0°



- Key Features**
- Low-voltage, highly-efficient patented LED replacement for legacy HID wall packs.
  - Traditional aesthetics offer a familiar commercial look for any outdoor application.
  - Robust die-cast housing is IP65-rated to protect integral components.
- Construction**
- Two-piece die-cast aluminum housing optimizes thermal management (IP65 Rated).
  - Housing is protected by a RotRex compliant, corrosion resistant powder coat finish.
  - Standard architectural bronze finish.
  - High-impact, heat-resistant borosilicate glass lens is hinged and won't degrade.
- Optics**
- Industry-leading LEDs with 5000K CCT (minimum 70 CRI).
  - IES Type II distribution.
  - Lumen Maintenance >167,000 hours (L70, 1+ >40°F to 113°F).
- Mounting**
- Designed for wall mounting above four feet from the ground.
  - Housing is configured for mounting directly over a standard 4" outlet box (by drilling or surface wiring via any of the convenient 1/2" threaded conduit entries).
- Warranty**
- Backed by US LED's industry-leading Ten-Year Warranty.

Project	Date
Catalog Number	Type
Product Performance Summary	
Lumen Output	Up to 16,664 lumens
Efficiency	Up to 173 LPW
CRI	> 70 CRI
Available CCT	5000K
Warranty	Ten-Year Warranty
Product Overview	
Introducing the QubePAK®4. US LED's latest advancement in wall pack lighting. Engineered to outperform and outlast traditional HID wall packs, the QubePAK®4 is the epitome of energy efficiency and durability. Built with a robust housing and traditional aesthetics, it stands resistant against the elements, ensuring exceptional performance for 167,000 hours (L70, T0). The QubePAK®4 is perfect for new construction and retrofit projects, offering outstanding illumination in a popular classic design.	
Product Applications	
• Self-Storage Facilities • Recreational Areas • Educational Facilities • Building Exteriors • Business Campuses • Security Lighting • Industrial Facilities • Wall Washing • Mall/Retail Areas • Parking Lots	
Product Certifications	
• UL Listed • UL Premium Listed • Complies with UL1598 and CSA C22.2 • Suitable for Wet Locations • IP65 Rated Enclosure • RoHS Compliant	
Example: ULWL1-1-UNVL-50-40-BZ	



Performance Data						
Model	CCT	System Input Power	Delivered Lumens	Efficiency	BIMB Rating	L70 Calculated Life
ULWL1-1-UNVL-50-24-XX	5000K	24W	3,994	173 LPW	B1-U5-G3	>167,000 Hours
ULWL1-1-UNVL-50-32-XX	5000K	32W	5,447	170 LPW	B1-U5-G3	>167,000 Hours
ULWL1-1-UNVL-50-40-XX	5000K	38W	6,545	168 LPW	B1-U5-G4	>167,000 Hours
ULWL1-1-UNVL-50-72-XX	5000K	74W	12,528	169 LPW	B2-U4-G5	>167,000 Hours
ULWL1-1-UNVL-50-96-XX	5000K	97W	16,099	165 LPW	B3-U5-G5	>167,000 Hours
ULWL1-1-UNVL-50-120-XX	5000K	119W	19,864	164 LPW	B3-U5-G5	>167,000 Hours

Accessories	
[Option BB] Remote Emergency Battery Back-Up	
Product Overview	
UL Listed LED emergency driver that allows the same luminaire to be used for both normal and emergency operation. In the event of a power failure, the battery back-up switches to the emergency mode and operates the luminaire for 90 minutes.	
Key Features	
• Meets all NEC, IBC, and Life Safety Code Emergency Lighting Requirements • Suitable for use in plenum or damp locations. • Constant wattage delivery maintains illumination for the full emergency runtime with no degradation. • Self-testing feature. • Five-Year warranty.	
Specifications	
Rated Input Voltage	100-347VAC, 50/60Hz
Input Current	≤100mA Max
Input Power	12W Max
Output Voltage Range	170V DC
Output Power	6-25W
Recharge Time	24 Hours
Discharge Time	90 Minutes
Ambient Temperature Rating	0°C to 50°C (32°F to 122°F)
Product Dimensions	
12.91" 326mm	
1.45" 36.8mm	
1.97" 50mm	
12.4" 315mm	
1.94" 49.3mm	

Accessories	
[Option PC] Electronic Photocell 120-277VAC	
Product Overview	
The electronic photocell accessory is perfect for simplified outdoor lighting control, providing easy ON/OFF function in accordance with the ambient lighting level.	
Key Features	
• Installed internally within the fixture (no external mounting required). • Non-dirty silicon light sensor with IR filter. • DC relay with zero-crossing circuitry for extended life.	
Specifications	
Sensor Time Delay	Instant ON; 3 sec to 10 sec OFF
Photocell Type	Silicon Diode
Photo Control Switch Type	Relay
Power Consumption	0.4W Max
Activation On	10-20Lx
Activation Off	50-80Lx
Dimensions	2.25" (64 x 1.14" (64 x 1.17" (64
Operation Temperature	-40°C to 70°C (-40°F to 158°F)





# PRELIMINARY STORMWATER REPORT



ENGINEERING | SURVEYING | CONSTRUCTION

## Contents:

- 1 Project Overview
- 2 Proposed Conditions
- 3 Stormwater Detention Design
- 4 Water Quality
- 5 Floodplain
- 6 Wetlands
- Appendix A Site Exhibits
- Appendix B Proposed Drainage Exhibit
- Appendix C Stormwater Management Calculations

**Project:**  
Self-Storage Development

**Location:**  
406 W. Monaville Road  
Lake Villa, Illinois

**Prepared For:**  
Easy Space Storage II, LLC  
Lake Villa, IL 60046

**Date:**  
June 17, 2025

Prepared By:  
Kim Lask, P.E., PTOE, CFM  
Haeger Project No.: 25-058



## 1 PROJECT OVERVIEW

The property is located at 406 W. Monaville Road in Lake Villa, Illinois, within Section 45, Township 10 North, Range 8 East. The parcel area is 3.08 acres, and the P.I.N. is 06-08-100-050. The property is bounded by W. Monaville Road to the north, N. Cedar Lake Road to the east, single-family to the west, and East Branch Eagle Creek and Cedar Ridge single-family subdivision to the south.

The site is currently vacant with one driveway to W. Monaville Road at the midpoint of the property. A 20 ft strip of property will be dedicated as public right-of-way along W. Monaville Road. The net property area after dedication will be 2.857 ac.

## 2 PROPOSED CONDITIONS

The proposed development includes one climate-controlled self-storage building and three non-climate-controlled storage buildings. There will be a parking lot on the north side of the site and stormwater management basin on the west side of the site. Access to the site includes one full access driveway connecting to W. Monaville Road.

A summary of the existing and proposed land coverage breakdown for the development area is in *Table 1* below.

*Table 1 – Land Coverage*

Development Area	Area	Impervious Area		Pervious Area		VC Basin Area	
	(ac)	(ac)	(%)	(ac)	(%)	(ac)	(%)
Existing Conditions	2.857	0	0	2.857	100	0.000	0.0
Proposed Development	2.857	1.581	55.3	1.058	37.0	0.218	7.6

## 3 STORMWATER DESIGN

The property currently drains from the north to the East Branch of Eagle Creek to the south. The proposed development will maintain the same drainage pattern as existing, and stormwater management will be provided in accordance with Lake County Watershed Development Ordinance (WDO). Stormwater detention is proposed for the development area. Offsite areas from W. Monaville Road and N. Cedar Lake Road rights-of-way will be detained onsite as a swap for unrestricted areas at the south side of the property. Remaining offsite areas from the rights-of-way will bypass through the detention basin. The **Proposed Drainage Exhibit** in *Appendix B* illustrates the proposed drainage areas.

The site is located in the Manitou Creek sub-watershed, which is subject to stricter release rate requirements. In accordance with WDO regulations, the maximum allowable release rates are 0.02 cfs/acre for the 2-year, 24-hour storm event and 0.09 cfs/acre for the 100-year, 24-hour storm event. The release rate is controlled by



a two-stage outlet control structure. The 2-year orifice, 1.15 inches in diameter with an invert of 781.00, provides a discharge of 0.055 cfs. The 100-year orifice, 2 inches in diameter with an invert of 783.50, provides a total discharge of 0.257 cfs.

Stormwater detention requirements were determined using PondPack stormwater modeling software and Bulletin 75 rainfall data. It was determined that 0.486 acre-ft of detention volume is required for the 2-year storm event and 1.52 acre-ft is required for the 100-year storm event. See *Appendix C* for the calculations and PondPack modeling results.

The proposed detention basin is designed to provide the required storage of 1.52 acre-ft at a high-water level of 786.3. The berm around the basin will have a crest elevation of 787.3. Stormwater runoff from the development will enter the basin via a storm sewer system. Outflow will be conveyed through the outlet control structure into an energy dissipator that overflows to the East Branch of Eagle Creek.

## 4 WATER QUALITY

According to the WDO, the water quality treatment standard requires that at least the first 0.01 inch of runoff for every 1% of new impervious surface be diverted and detained. The required water quality volume for the development is 0.077 acre-ft.

Runoff Volume Reduction (RVR) storage is located below the basin outlet. A total of 0.78 acre-ft of storage is proposed. The RVR storage will capture initial first flush discharges and encourage infiltration and evapotranspiration. The basin will be planted with native plantings that will aid in filtering potential pollutants such as metals, oils, nutrients, and organics prior to leaving the site. Runoff from the new impervious areas will flow into and be filtered in the system.

These measures will meet the County's stormwater quality RVR requirements. By implementing RVR storage and native plantings, the overall runoff volume will be reduced and treated as required.

## 5 FLOODPLAIN

The FEMA flood map for the area indicates a portion of the site's southern boundary lies within "Zone AE" Special Flood Hazard Area (SFHA). Grading within this floodplain is proposed to facilitate grading transitions between the building and the southern area. In compliance with WDO requirements, any fill placed within the floodplain must be compensated for with 1.2 times the volume of storage displaced. The necessary compensatory storage will be provided, and supporting calculations will be included in the final stormwater management report.

## 6 WETLANDS

Lake County GIS application identifies wetlands along the East Branch of Eagle Creek. A wetland delineation report is currently being prepared to evaluate and map the wetland boundary. Preliminary findings reveal that no wetlands exist on the property. No impacts are proposed to the wetland, and as such, a Letter of No Objection will be requested from Lake County Stormwater Management Commission.



In compliance with Section 505.01.B of the WDO, a 50-ft buffer will be maintained around any wetlands with a watershed greater than 20 acres but less than 1 square mile. Additionally, an energy dissipation level spreader is proposed at the basin outlet to manage stormwater flow.





## **APPENDIX A – Exhibits**

Aerial Exhibit

USGS Contour Exhibit

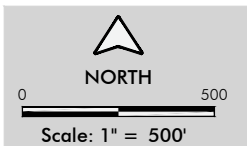
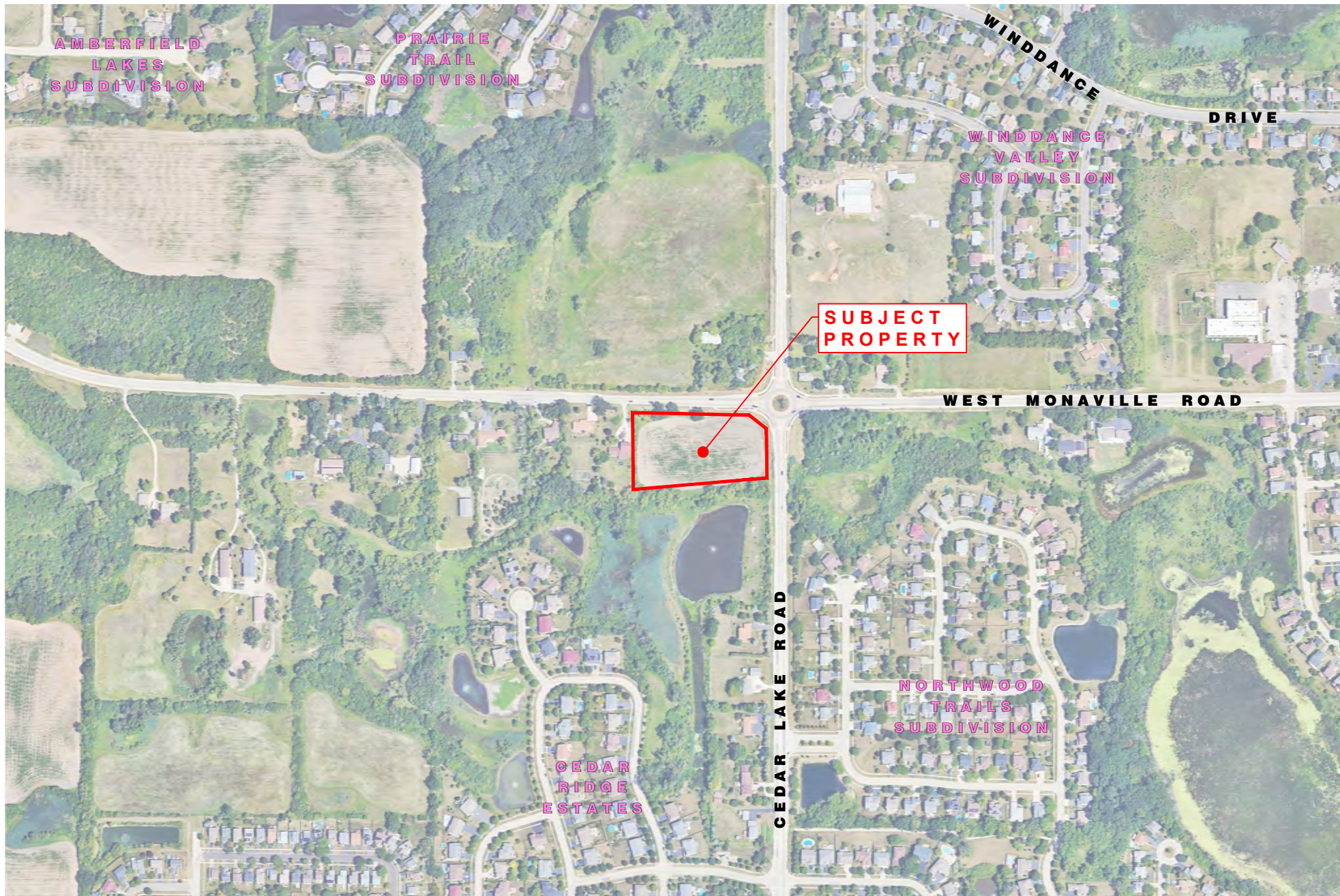
FEMA Exhibit

Wetland Exhibit

NRCS Soils Exhibit

HARGIS Exhibit

Hydrologic Atlas Exhibit

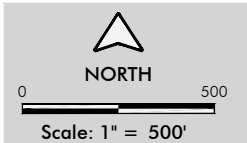
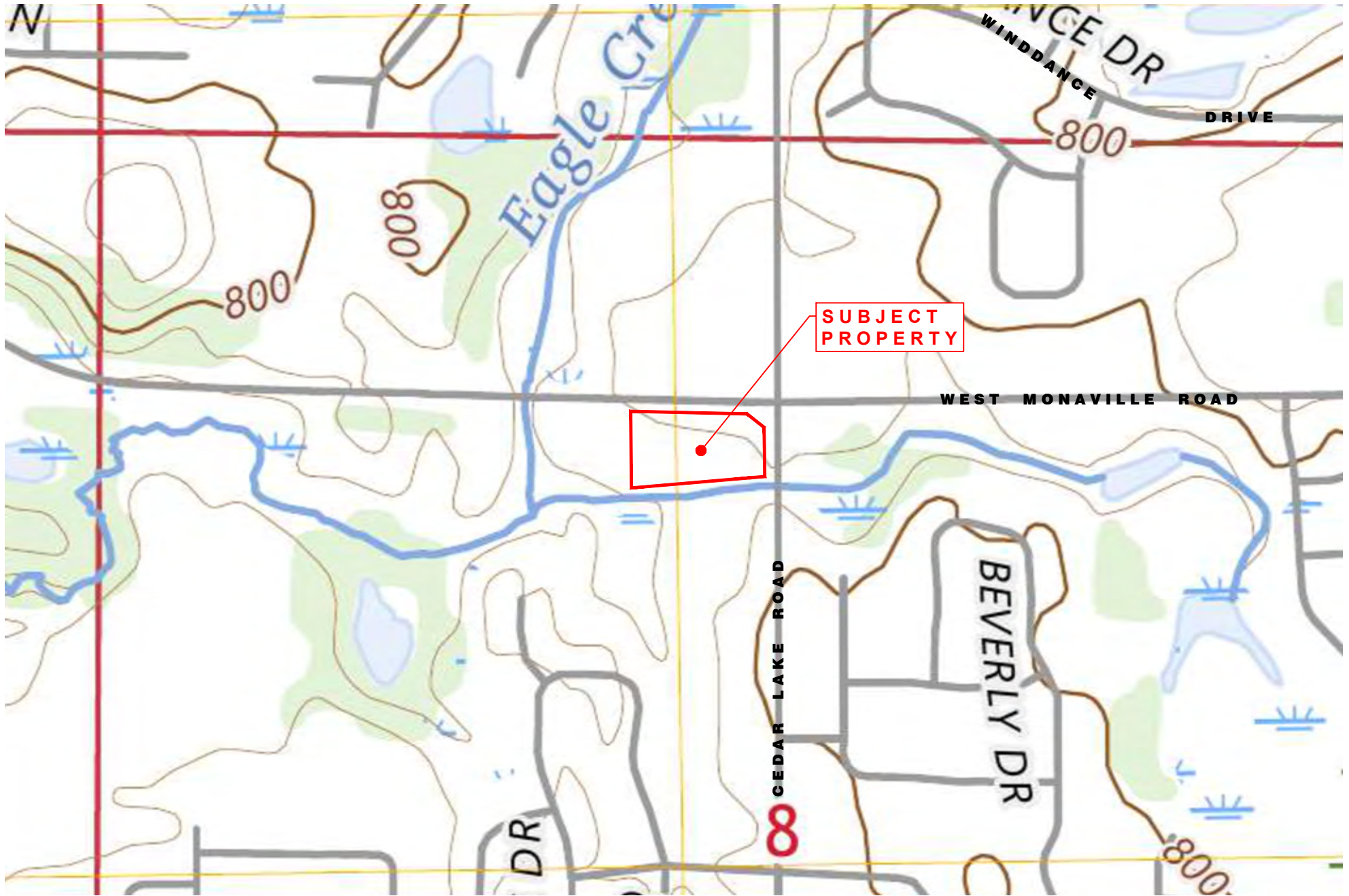


**AERIAL EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
**SELF-STORAGE**  
 VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS

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 Illinois Professional Design Firm License No. 184-003152 www.HaegerEngineering.com

Project Manager: LAK  
 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/1



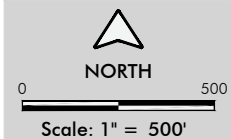
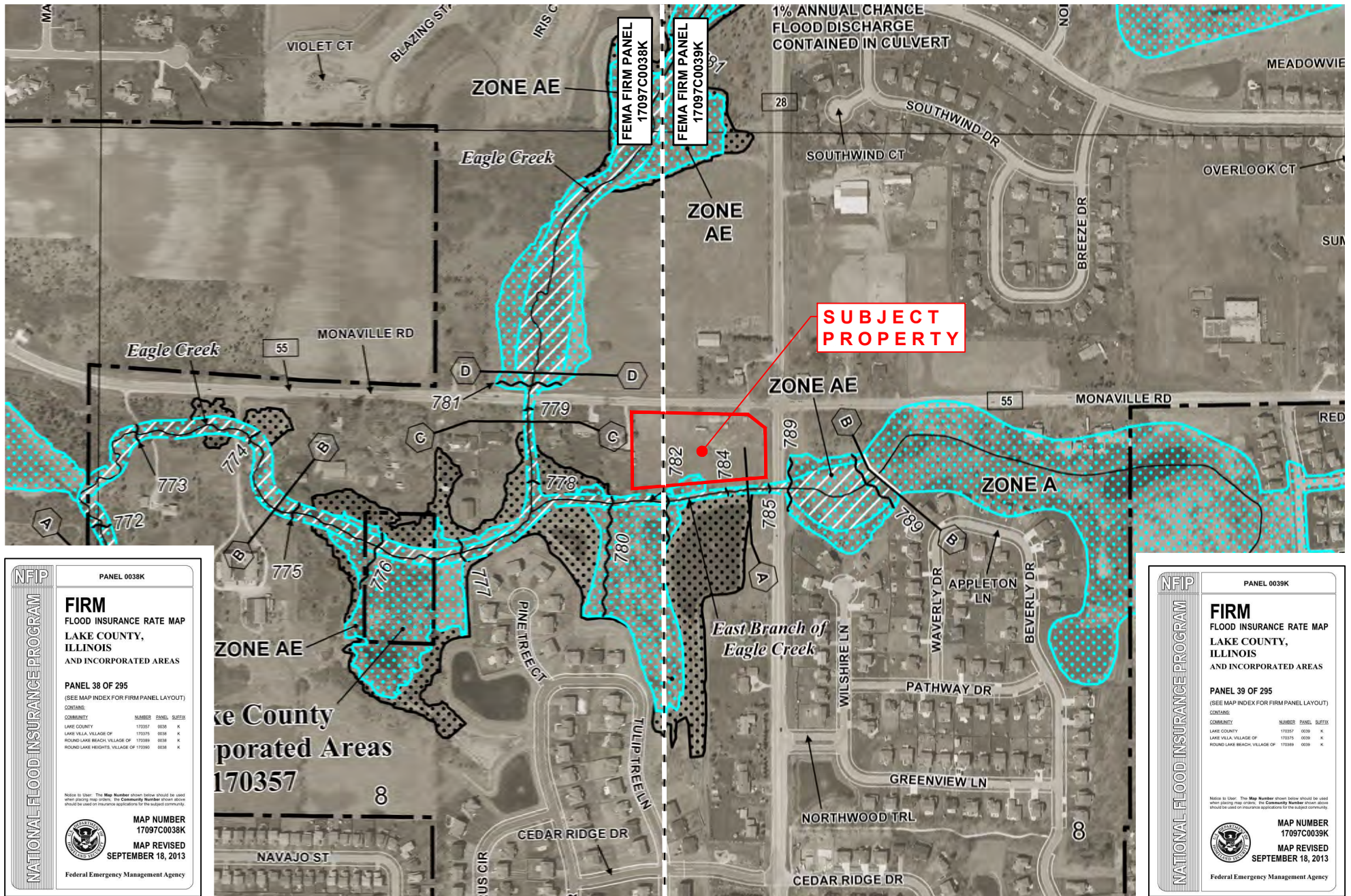


**USGS CONTOUR EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
**SELF-STORAGE**  
VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS

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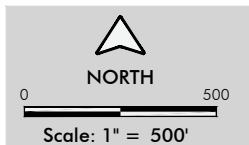
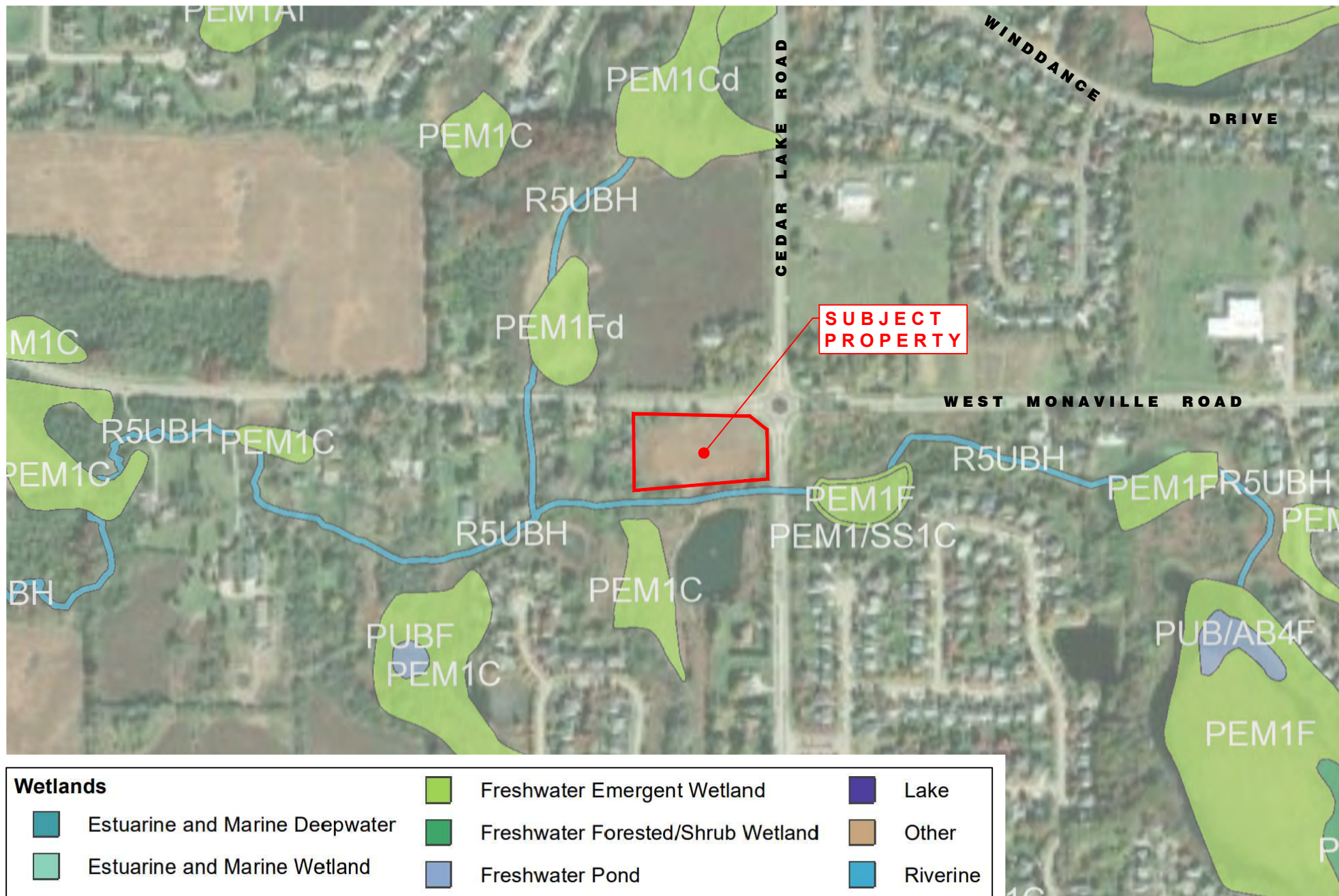


**FEMA FLOODPLAIN EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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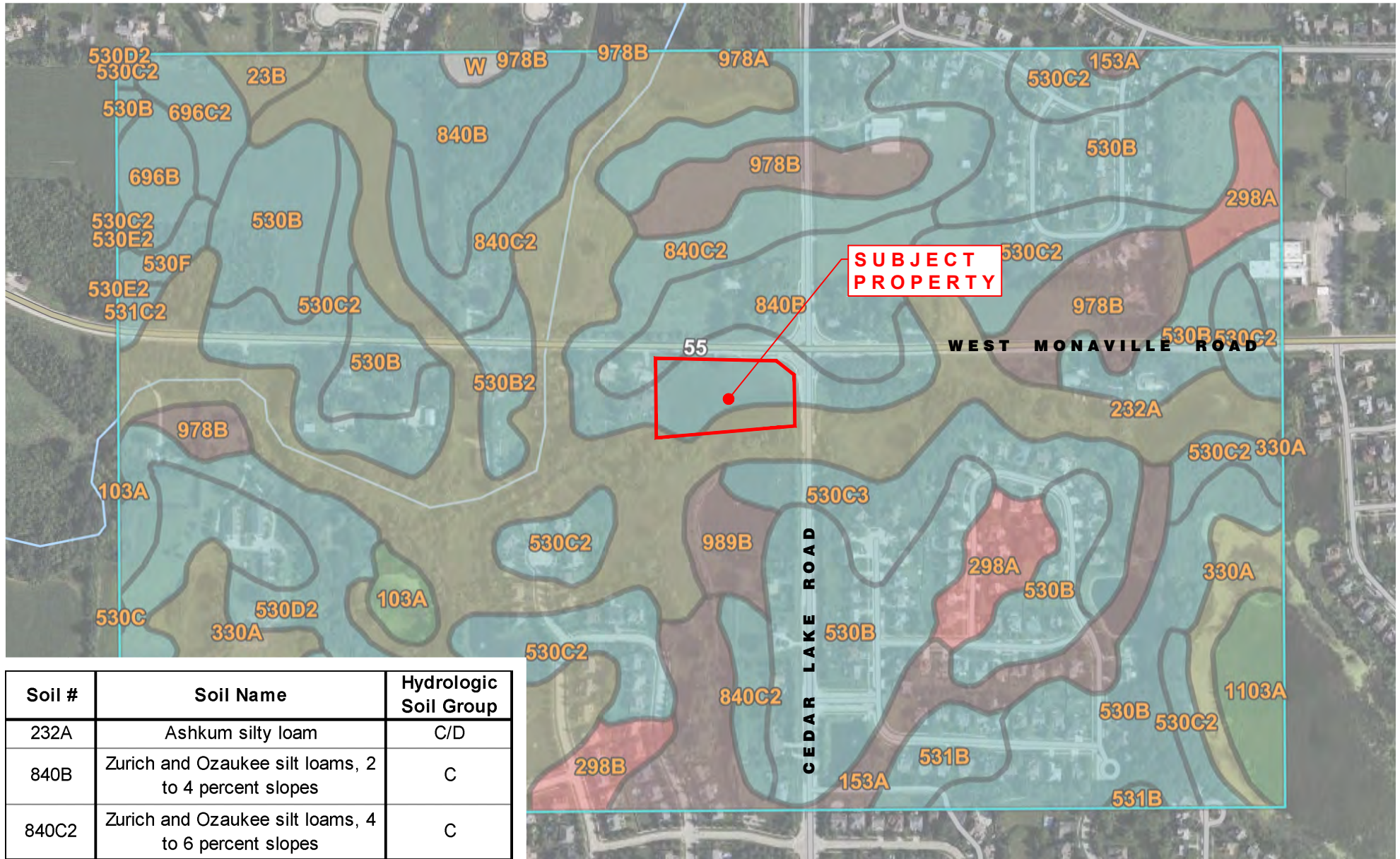


**USFW WETLAND EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
**SELF-STORAGE**  
VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS

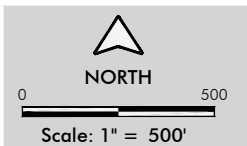
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Project No. 25-058  
Sheet 1/ 1





Soil #	Soil Name	Hydrologic Soil Group
232A	Ashkum silty loam	C/D
840B	Zurich and Ozaukee silt loams, 2 to 4 percent slopes	C
840C2	Zurich and Ozaukee silt loams, 4 to 6 percent slopes	C

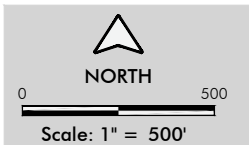
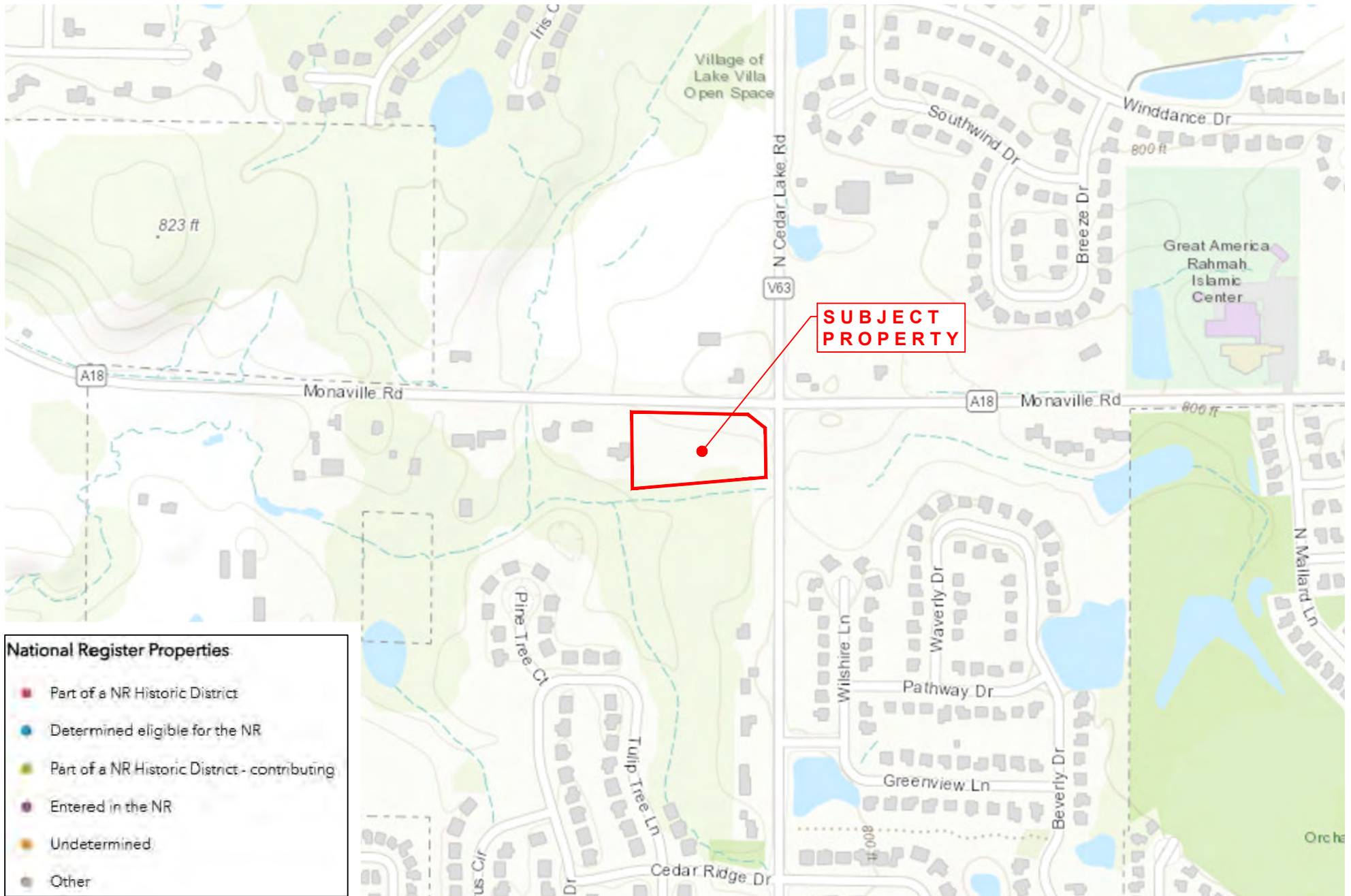


**NRCS SOIL EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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 Sheet 1/1



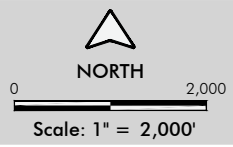
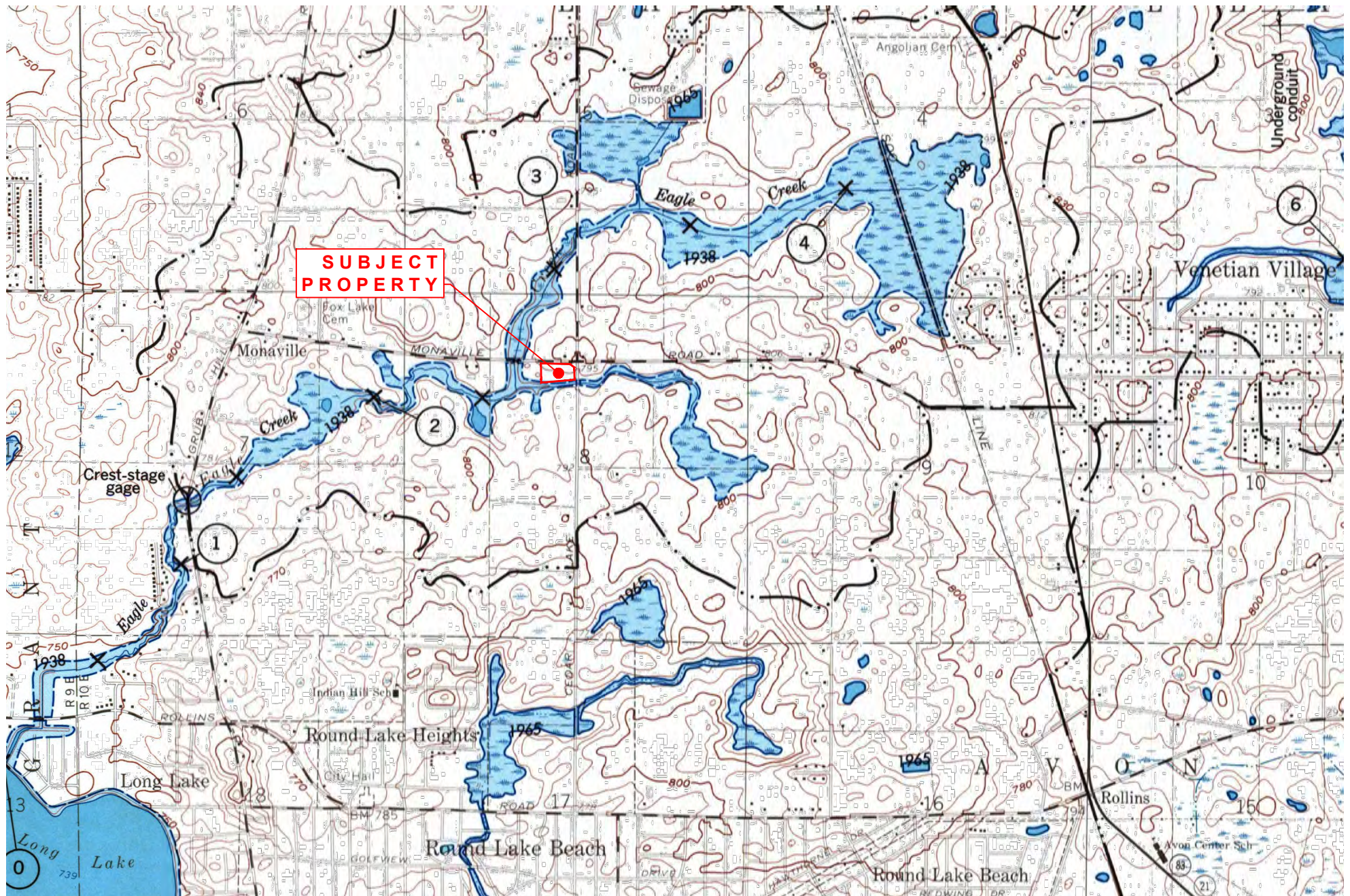


**IHPA HARGIS EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
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 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/1





**HYDROLOGIC ATLAS EXHIBIT**  
**406 WEST MONAVILLE ROAD**  
**SELF-STORAGE**  
 VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS

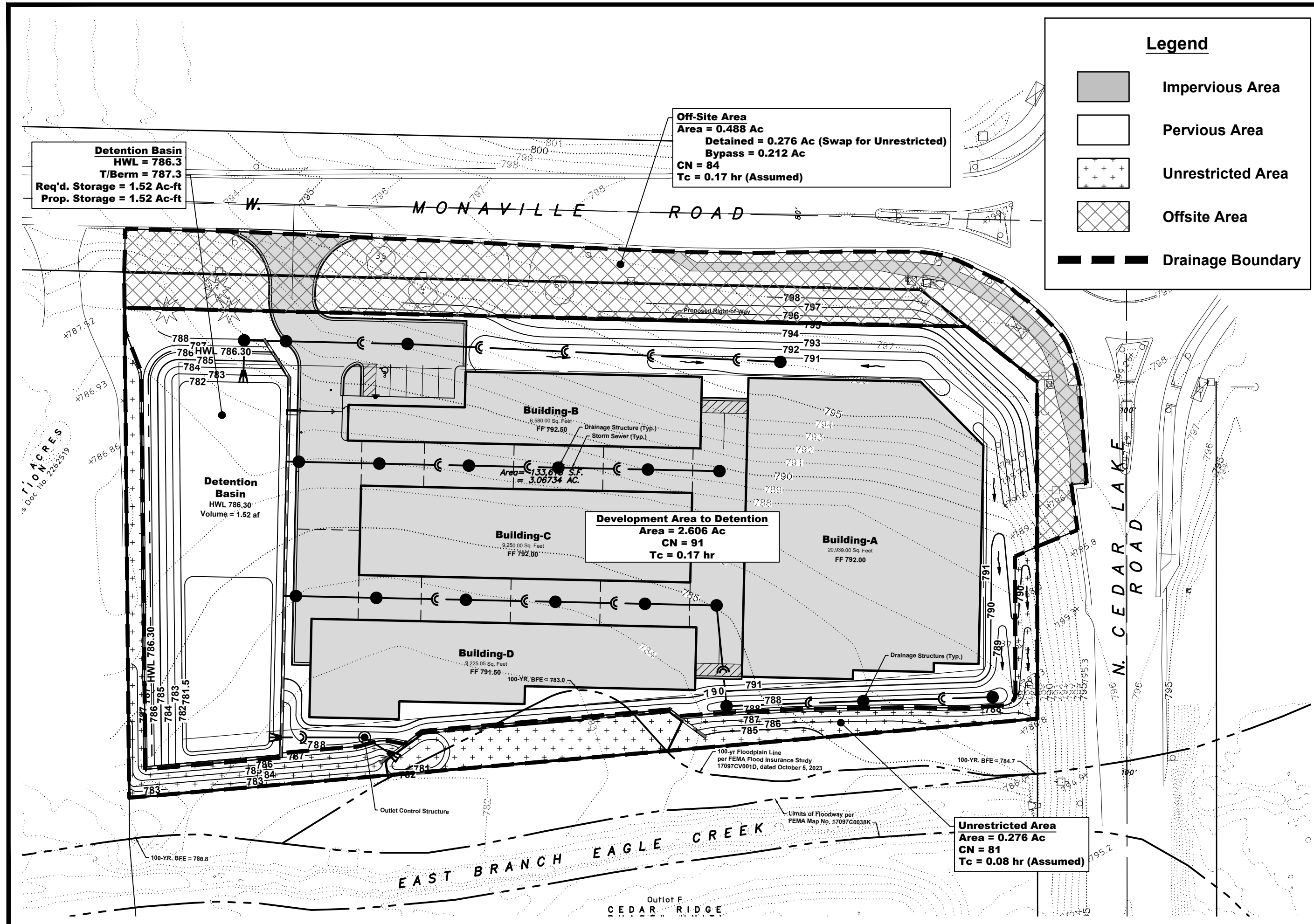
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Project Manager: LAK  
 Engineer: FRM  
 Date: 2025-04-16  
 Project No. 25-058  
 Sheet 1/1





## **APPENDIX B – Proposed Drainage Exhibit**





## **APPENDIX C – Stormwater Management Calculations**

## Drainage Calculations

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KL

Date: 6/17/2025

### A. Land Coverage

#### Entire Site Area

Existing Conditions	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.90
Pervious Area =	124,464	2.857	100.00%	74.0	0.45
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>74.0</b>	<b>0.45</b>

Proposed Conditions	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	68,866	1.581	55.33%	98.0	0.90
Pervious Area =	46,087	1.058	37.03%	81.0	0.45
VC Area =	9,511	0.218	7.64%	63.0	0.45
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>89.0</b>	<b>0.70</b>

#### Existing Drainage Areas

Onsite to Creek	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.90
Pervious Area =	124,464	2.857	100.00%	74.0	0.45
<b>Total Area =</b>	<b>124,464</b>	<b>2.857</b>	<b>100.00%</b>	<b>74.0</b>	<b>0.45</b>

#### Proposed Drainage Areas

Development Area to Detention	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	69,065	1.586	61.42%	98.0	0.90
Pervious Area =	38,276	0.879	34.04%	81.0	0.45
Volume Control Area =	5,110	0.117	4.54%	81.0	0.70
<b>Total Area =</b>	<b>112,451</b>	<b>2.582</b>	<b>100.00%</b>	<b>91.4</b>	<b>0.74</b>

Unrestricted Area	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	0	0.000	0.00%	98.0	0.90
Pervious Area =	12,013	0.276	100.00%	81.0	0.45
<b>Total Area =</b>	<b>12,013</b>	<b>0.276</b>	<b>100.00%</b>	<b>81.0</b>	<b>0.45</b>



### Offsite Area

Offsite Detained (Swap for Unrestricted)	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	1,530	0.035	12.74%	98.0	0.90
Pervious Area =	10,483	0.241	87.26%	81.0	0.45
<b>Total Area =</b>	<b>12,013</b>	<b>0.276</b>	<b>100.00%</b>	<b>83.2</b>	<b>0.51</b>

Offsite Bypass	Sq. Ft	Acre	Percentage	CN	C-Value
Impervious Area =	2,264	0.052	19.75%	98.0	0.90
Pervious Area =	9,199	0.211	80.25%	81.0	0.45
<b>Total Area =</b>	<b>11,463</b>	<b>0.263</b>	<b>100.00%</b>	<b>84.4</b>	<b>0.54</b>

### B. Release Rate for Detention Basin Sizing

Detained Area (Development Area + Offsite Swap) 2.857 ac.

#### Release Rate

2-Year Release Rate =	0.02	cfs/ac	0.057 cfs
100-Year Release Rate =	0.09	cfs/ac	0.257 cfs



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## Detention Basin Volume (Stage - Storage - Discharge)

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KL

Date: 6/17/2025

### Detention Basin - with walls at east and south sides

Elevation (ft)	Area (sq.ft.)	Volume (cu.ft.)	Cummulative Volume (cu.ft.)	Cummulative Volume (ac.ft.)	Discharge (cfs)	
781.50	7,170.00	0	0	0	0	
782.00	11,053.00	4,555.75	4,555.75	0.105	0.034	
783.00	13,219.00	12,136.00	16,691.75	0.383	0.049	
783.50					0.055	2-Yr HWL
784.00	14,348.00	13,783.50	30,475.25	0.700	0.130	
785.00	15,493.00	14,920.50	45,395.75	1.042	0.197	
786.00	16,654.00	16,073.50	61,469.25	1.411	0.244	
786.30	17,026.00	5,052.00	66,521.25	1.527	0.257	100-Yr HWL
787.00	17,731.00	12,164.95	78,686.20	1.806	0.283	



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## RVR WATER QUALITY CALCULATIONS

Project: 406 Monaville Road

Location: Lake Villa, IL

Project #: 25-058

Prepared: KML

Date: 6/17/2025

Total Detained Area = 2.857 Acres

Impervious Area = 1.621 Acres

% Impervious = 57%

Required Water Quality Storage Rate = 0.57 in/Acre

Required Water Quality Storage Volume = 0.077 Ac-ft

Retention Volume Below Basin NWL (Based on Contour Slice Method)				
Contour	Area (SF)	Incremental Volume (CF)	Incremental Volume (Ac-ft)	Accumulated Volume (Ac-ft)
781.00	6,410			0.000
		3,395	0.078	
781.50	7,170			0.078

(Pond Bottom)

(Pond NWL)

Provided Retention Storage Volume =	0.078 Ac-ft
RVR Credit (Water Quality Treatment) =	100%
RVR Quantity =	0.078 Ac-ft
RVR Quantity per Acre of Impervious Area =	2094.854 cu-ft/ac
Percent of Annual Rainfall Events =	84%



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## Outlet Control Structure - Detention

Project: 406 Monaville Road  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KML  
Reviewed:  
Date: 6/17/2025

### Orifice Sizing - 2 Stage

#### A. Formula

$$Q = CA\sqrt{2gh}$$

Where:

Q = Allowable Discharge (cfs)

C = Orifice Discharge Coefficient

A = Area of Orifice (sq.ft.)

g = 32.17ft./sec<sup>2</sup>

h = Head (ft.)

#### B. Values

	2-Year	100-Year
Allowable Release Rate =	0.02 cfs/ac.	0.09 cfs/ac.
Q =	0.057 cfs	0.257 cfs
C =	0.61	0.61
Invert of Orifice =	781.00 ft.	783.50 ft.
HWL =	783.50 ft.	786.30 ft.
h =	2.45 ft.	2.72 ft.
Max. Orifice Dia. =	1.17 in.	2.00 in.
Actual Orifice Dia. =	1.15 in.	2 in.
2-Year Discharge =	0.055 cfs	0.000 cfs
100-Year Discharge =	0.081 cfs	0.176 cfs
Total 100-Year Discharge =	0.257 cfs	

#### C. Rating Table

WATER ELEVATION (ft.)	HEAD (ft.)	Q (cfs)
781.50	0.45	0.024
782.00	0.95	0.034
783.00	1.95	0.049
783.50	2.45	0.055
784.00	2.95	0.130
785.00	3.95	0.197
786.00	4.95	0.244
786.30	5.25	0.257
787.00	5.95	0.283

Project Summary	
Title	25-058 Proposed Conditions PondPack Model
Engineer	KML
Company	Haeger Engineering LLC
Date	6/16/2025
Notes	
Proposed Conditions Model.	



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Subsection: User Notifications

User Notifications?	No user notifications generated.
---------------------	----------------------------------

## Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Development Area	2 yr 24 hr	2.00	0.513	15.80	0.688
Development Area	100 yr 24 hr	100.00	1.610	15.80	1.933
Offsite Detained	2 yr 24 hr	2.00	0.040	15.90	0.060
Offsite Detained	100 yr 24 hr	100.00	0.150	15.80	0.196

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
To Creek	2 yr 24 hr	2.00	0.359	24.10	0.053
To Creek	100 yr 24 hr	100.00	1.236	24.10	0.256

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	2 yr 24 hr	2.00	0.553	15.80	0.748	(N/A)	(N/A)
Detention Basin (OUT)	2 yr 24 hr	2.00	0.359	24.10	0.053	783.33	0.487
Detention Basin (IN)	100 yr 24 hr	100.00	1.760	15.80	2.129	(N/A)	(N/A)
Detention Basin (OUT)	100 yr 24 hr	100.00	1.236	24.10	0.256	786.29	1.522

Subsection: Time-Depth Curve  
 Label: B75 - 100 Year Critical Storm  
 Scenario: 100 yr 24 hr

Return Event: 100.00 years  
 Storm Event: 24 hr 100 yr

Time-Depth Curve: 24 hr 100 yr

Label	24 hr 100 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	100.00 years

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.24 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.04	0.08	0.13	0.17
1.20	0.21	0.26	0.31	0.35	0.40
2.40	0.45	0.50	0.55	0.60	0.65
3.60	0.70	0.75	0.80	0.85	0.91
4.80	0.96	1.01	1.07	1.12	1.18
6.00	1.23	1.28	1.34	1.39	1.44
7.20	1.50	1.55	1.61	1.66	1.73
8.40	1.79	1.86	1.92	1.99	2.06
9.60	2.13	2.21	2.29	2.38	2.48
10.80	2.57	2.67	2.78	2.89	3.00
12.00	3.12	3.27	3.43	3.58	3.74
13.20	3.90	4.07	4.24	4.41	4.59
14.40	4.77	4.95	5.14	5.32	5.50
15.60	5.69	5.87	6.05	6.22	6.39
16.80	6.56	6.72	6.86	7.00	7.14
18.00	7.28	7.38	7.48	7.58	7.67
19.20	7.75	7.82	7.89	7.96	8.01
20.40	8.06	8.10	8.15	8.19	8.22
21.60	8.26	8.29	8.33	8.36	8.39
22.80	8.42	8.45	8.48	8.51	8.54
24.00	8.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: B75 - 2 Year Critical Storm  
 Scenario: 2 yr 24 hr

Return Event: 2.00 years  
 Storm Event: 24 hr 2 yr

---

Time-Depth Curve: 24 hr 2 yr

---

Label	24 hr 2 yr
Start Time	0.00 hours
Increment	0.24 hours
End Time	24.00 hours
Return Event	2.00 years

---

**CUMULATIVE RAINFALL (in)**

**Output Time Increment = 0.24 hours**

**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.03	0.05	0.07
1.20	0.08	0.10	0.12	0.14	0.16
2.40	0.18	0.19	0.21	0.23	0.25
3.60	0.27	0.29	0.31	0.33	0.35
4.80	0.37	0.39	0.42	0.44	0.46
6.00	0.48	0.50	0.52	0.54	0.56
7.20	0.58	0.60	0.63	0.65	0.67
8.40	0.70	0.72	0.75	0.78	0.80
9.60	0.83	0.86	0.89	0.93	0.97
10.80	1.00	1.04	1.08	1.13	1.17
12.00	1.21	1.27	1.34	1.40	1.46
13.20	1.52	1.59	1.65	1.72	1.79
14.40	1.86	1.93	2.00	2.07	2.14
15.60	2.22	2.29	2.36	2.42	2.49
16.80	2.56	2.62	2.67	2.73	2.78
18.00	2.84	2.87	2.91	2.95	2.99
19.20	3.02	3.05	3.07	3.10	3.12
20.40	3.14	3.16	3.18	3.19	3.21
21.60	3.22	3.23	3.25	3.26	3.27
22.80	3.28	3.29	3.31	3.32	3.33
24.00	3.34	(N/A)	(N/A)	(N/A)	(N/A)



Subsection: Elevation vs. Volume Curve  
Label: Detention Basin  
Scenario: 2 yr 24 hr

Return Event: 2.00 years  
Storm Event: 24 hr 2 yr

### Elevation-Volume

Pond Elevation (ft)		Pond Volume (ac-ft)	
	781.00		0.000
	781.50		0.001
	782.00		0.105
	783.00		0.383
	784.00		0.700
	785.00		1.042
	786.00		1.411
	786.30		1.527
	787.00		1.806
	788.00		2.000

Subsection: Outlet Input Data

Label: OCS

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

---

Requested Pond Water Surface Elevations

---

Minimum (Headwater) 781.00 ft

Increment (Headwater) 0.10 ft

Maximum (Headwater) 788.00 ft

---

**Outlet Connectivity**

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	2-Year Restrictor	Forward	TW	781.00	788.00
Orifice-Circular	100-Year Restrictor	Forward	TW	783.50	788.00
Rectangular Weir	Overflow Weir	Forward	TW	787.00	788.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data

Label: OCS

Scenario: 2 yr 24 hr

Return Event: 2.00 years

Storm Event: 24 hr 2 yr

---

Structure ID: 2-Year Restrictor  
Structure Type: Orifice-Circular

---

Number of Openings	1
Elevation	781.00 ft
Orifice Diameter	1.15 in
Orifice Coefficient	0.610

---

---

Structure ID: 100-Year Restrictor  
Structure Type: Orifice-Circular

---

Number of Openings	1
Elevation	783.50 ft
Orifice Diameter	2.00 in
Orifice Coefficient	0.610

---

---

Structure ID: Overflow Weir  
Structure Type: Rectangular Weir

---

Number of Openings	1
Elevation	787.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft <sup>0.5</sup> )/s

---

---

Structure ID: TW  
Structure Type: TW Setup, DS Channel

---

Tailwater Type	Free Outfall
----------------	--------------

---

---

Convergence Tolerances

---

Maximum Iterations	50
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft <sup>3</sup> /s
Flow Tolerance (Maximum)	10.000 ft <sup>3</sup> /s

---

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### D

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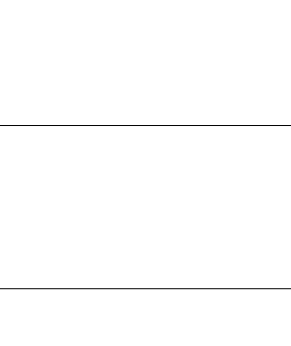
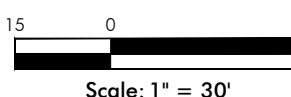
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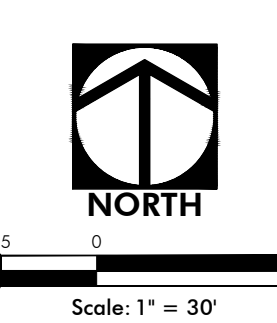
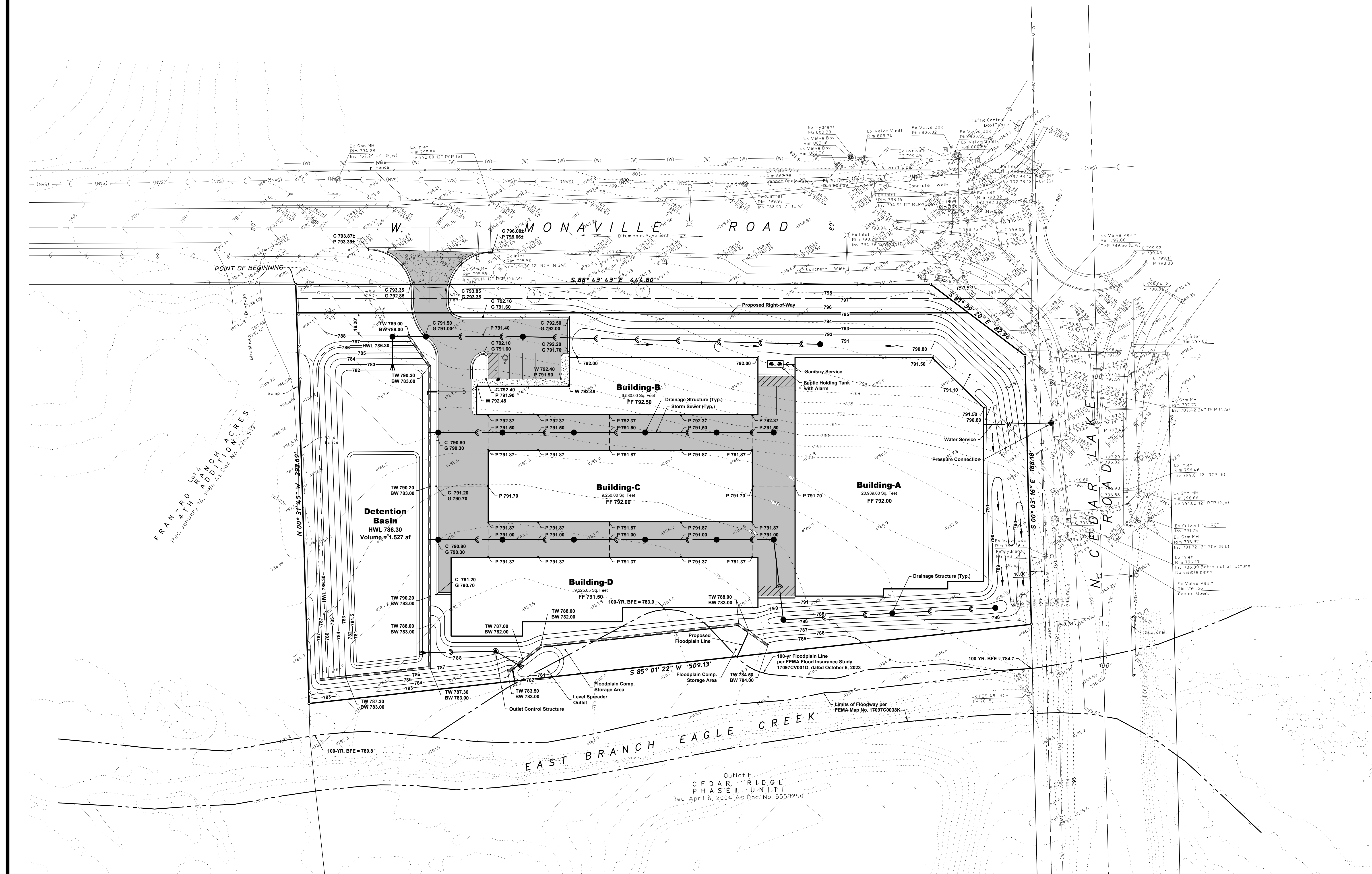
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**SELF-STORAGE FACILITY**  
**406 MONAVILLE ROAD**

Project Manager: K M  
Engineer: V D  
Date: 06-17-202  
Project No. 2505  
Sheet C1.0

**C1.0**





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**PRELIMINARY ENGINEERING PLAN**  
**SELF-STORAGE FACILITY**  
**406 MONAVILLE ROAD**  
LAKE VILLA, ILLINOIS

Project Manager: K.M.L.  
Engineer: V.D.R.  
Date: 06-17-2025  
Project No. 25058  
Sheet **C2.0**

# TRAFFIC IMPACT STUDY



ENGINEERING | SURVEYING | CONSTRUCTION

**Project:**  
Self-Storage Development

**Location:**  
406 W. Monaville Road  
Lake Villa, Illinois

**Prepared For:**  
Easy Space Storage II, LLC  
Lake Villa, IL 60046

**Date:**  
June 17, 2025

Prepared By:  
Kimberly Lask, P.E., PTOE, CFM  
Haeger Project No.: 25-058



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TABLE 2 – Trip Distribution

TABLE 3 – Level of Service Criteria – Signalized and Unsignalized Intersections

TABLE 4 – Level of Service Summary – W. Monaville Rd. and N. Cedary Lake Rd. (Roundabout)

TABLE 5 – Level of Service Summary – Access Driveway (Unsignalized)



## **1 – INTRODUCTION**

Haeger Engineering LLC has conducted a Traffic Impact Study for a self-storage development located at 406 W. Monaville Road in Lake Villa, Illinois. The subject property is in Section 45 Township 10N, Range 8E. The parcel area is 3.08 acres, and the P.I.N. is 06-08-100-050. The property is currently zoned SB – Suburban Business. The location map and aerial photograph of the site vicinity are illustrated on *Figure 1* in *Appendix A*.

The project consists of the construction of one climate-controlled self-storage building and three non-climate-controlled storage buildings. There will be a parking lot at the north side of the site and stormwater management basin on the west side of the site. Access to the site includes one full access driveway connecting to W. Monaville Road.

The Traffic Impact Study was conducted to assess the impact the proposed development would have on traffic conditions in the area and improvements necessary to accommodate site generated traffic safely and efficiently. The proposed site plan is included in *Appendix B*.

## **STUDY PARAMETERS**

The scope of this analysis includes the following:

- *Data Collection*: This preliminary phase of the analysis included a reconnaissance survey of the site and its environs to determine the physical and operational characteristics of the existing street network that would serve the proposed development. Traffic counts conducted at the roundabout intersection of W. Monaville Road and N. Cedar Lake Road were used to determine existing weekday AM peak, weekday PM peak, and Saturday midday peak street traffic flow volumes within the vicinity of the site.
- *Land Uses*: Existing and proposed land uses near the development were evaluated.
- *Existing Roadway Network*: Traffic volumes (weekday AM/PM peak and Saturday midday peak), road geometrics, intersection geometrics, and traffic control devices were evaluated in the vicinity of the site. The influence area has been determined by the traffic generated from the site, the trip distribution of traffic, and the trip assignment of the traffic generated by the development over the surrounding area road network.
- *Peak-Hour Trip Generation Rates and Volumes*: A summary table was prepared listing each type of land use for the proposed development, the size or area for each type of land use, the average trip generation rates (weekday AM/PM peak and Saturday midday peak on adjacent street traffic) for each type of land use, and total number of trips generated.
- *Trip Distribution*: Both a figure and table are presented to show the directional distribution of site-generated traffic approaching and departing the site on the area road network.
- *Trip Assignment*: The technical analysis, methods, and assumptions used in the assignment are indicated. The trip distribution and subsequent assignment represent the most logically traveled routes.





- *Total Peak Hour Traffic Volumes:* The traffic volumes for access facilities, intersections, and the area road network within the area of influence area provided in a graphical format.
- *Capacity Analyses:* Capacity analyses were conducted at proposed access points. Consideration was given to the existing and projected levels of service and the adequacy of storage for projected queue lengths.
- *Traffic Control Measures:* The type and extent of traffic control measures were examined.
- *Conclusions and Recommendations:* These findings include all improvements for access facilities, intersections, and the area road network.

## **2 – LAND USE**

The subject property is 3.08 acres of undeveloped land located at the southwest corner of W. Monaville Road and N. Cedar Lake Road in the Village of Lake Villa. There is an existing driveway along W. Monaville Road at the center of the property. Major land uses in the vicinity of the development include Cedar Ridge single-family residential to the south, Northwood Trails single-family residential to the southeast, single-family to the west, and future multi-family residential to the north. There is a small parcel of undeveloped land to the east that is zone R2 Residential.

## **3 – EXISTING ROADWAY NETWORK**

A field investigation was conducted along the adjacent segments of W. Monaville Road and N. Cedar Lake Road. The following information was obtained about the existing roadway network. See *Figure 2* for an exhibit illustrating the existing street characteristics.

### **W. MONAVILLE ROAD (LAKE COUNTY HIGHWAY A18)**

- An east-west, medium mobility, minor arterial roadway providing one lane in each direction that is under the jurisdiction of Lake County Division of Transportation (LCDOT).
- At its roundabout intersection with N. Cedar Lake Road, W. Monaville Road provides one lane at both east and west approaches.
- The posted speed limit is 45 mph and the roundabout speed limit is 20 mph.
- The average daily traffic volume on W. Monaville Road, published by IDOT, was 6,700 vpd west of N. Cedar Lake Road and 8,350 vpd east of N. Cedar Lake Road in 2023.

### **N. CEDAR LAKE ROAD (LAKE COUNTY HIGHWAY V63)**

- A north-south low mobility, minor arterial roadway providing one lane in each direction that is under the jurisdiction of Lake County Division of Transportation (LCDOT).
- At its roundabout intersection with W. Monaville Road, N. Cedar Lake Road provides one lane at both north and south approaches.
- The posted speed limit is 40 mph and the roundabout speed limit is 20 mph.
- The average daily traffic volume on N. Cedar Lake Road, published by IDOT, was 4,850 vpd north of W. Monaville Road and 7,600 vpd south of W. Monaville Road in 2023.



## EXISTING TRAFFIC

*Figure 3* summarizes the existing weekday AM peak hour, weekday PM peak hour, and Saturday midday peak hour traffic volumes. Traffic counts were conducted at the roundabout intersection of W. Monaville Road and N. Cedar Lake Road. Hourly counts were conducted on Saturday April 12, 2025 from 11:00 AM – 2:00 PM, and on Tuesday, April 15, 2025 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

The results indicate that the weekday AM peak hour street traffic occurred from 7:15 AM to 8:15 AM, the weekday PM peak hour occurred from 4:00 PM to 5:00 PM, and the Saturday midday peak hour occurred from 12:45 PM – 1:45 PM. The existing traffic count data can be found in *Appendix C*. *Figure 3* also provides the ADT 24-hour volume along W. Monaville Road and N. Cedar Lake Road as published by IDOT.

## 4 – PEAK HOUR TRIP GENERATION AND DIRECTIONAL DISTRIBUTION

In order to accurately estimate the traffic that will be generated by the proposed development, data compiled by the Institute of Transportation Engineers (ITE) in the 11<sup>th</sup> Edition of the *Trip Generation Manual* was utilized. Trip generation for a proposed development depends on the size and characteristics of the anticipated land uses. The volume of traffic generated by the square footage of the proposed facility was used to determine anticipated traffic volume. The ITE land use code that was consulted for this analysis is indicated in *Table 1* along with the estimated weekday AM, weekday PM, and Saturday midday peak hour traffic volumes.

Table 1 – ITE Land Use Codes and Peak Hour Trip Generation

Land Use	ITE Code	Weekday Traffic Volumes						Saturday Traffic Volumes			
		AM Peak		PM Peak		Daily		Midday Peak		Daily	
		In	Out	In	Out	In	Out	In	Out	In	Out
Mini-Warehouse (46,000 sf)	151	4	4	4	4	33	34	5	3	41	40
Total Traffic		4	4	4	4	33	34	5	3	41	40

Note: \* Data for ITE Code 151 indicates a small sample size for Saturday peak hour volumes.

## DIRECTIONAL DISTRIBUTION

The directional distribution of site-generated trips on the external street system is a function of several variables, including the operational characteristics of the adjacent roadways and the ease that drivers can travel over various sections of the street system without encountering major levels of congestion. The directions from which employees and patrons approach and depart the site were estimated based on the existing travel patterns as determined from the traffic count data. The estimated directional distribution of patron arrival and departure patterns are listed in *Table 2* and illustrated in *Figure 4*.



Table 2 – Trip Distribution

Route and Direction	To / From Percent
W. Monaville Road	
- East of N. Cedar Lake Road	30%
- West of N. Cedar Lake Road	25%
N. Cedar Lake Road	
- North of W. Monaville Road	20%
- South of W. Monaville Road	25%

## **5 – TRIP ASSIGNMENT & PROPOSED ACCESS DRIVEWAYS**

The estimated weekday AM, weekday PM, and Saturday midday peak hour traffic volumes that will be generated from the proposed development were assigned to the street and access driveway serving the site as illustrated in *Figure 5*. The volumes assigned to the proposed access driveway are in accordance with the previously described directional trip distribution patterns. As mentioned previously, one full access driveway on W. Monaville Road is proposed.

- Access 1: This driveway is a full access driveway that will provide one inbound and one outbound lane. The centerline of Access 1 is located 465 ft west of the intersection of W. Monaville Road and N. Cedar Lake Road. Exiting movements will be under stop sign control.

## **6 – TOTAL PEAK HOUR TRAFFIC VOLUMES**

To evaluate the impact that site-generated traffic will have on area roadways, the total weekday AM, weekday PM, and Saturday midday peak hour traffic volumes at the study intersections were estimated for the year 2030. To develop future volumes on the existing roadway system, a growth rate of 3.0 percent per year was used to estimate the 2030 peak hour traffic volumes according to the requirements in the Lake County Highway Access and Use Ordinance.

The future no-build traffic volumes are shown on *Figure 6* in *Appendix A*. *Figure 7* illustrates the site-generated traffic with 2030 traffic volumes to obtain the total peak hour traffic assignments.

## **7 – CAPACITY ANALYSIS**

The traffic impact that the development will have on the adjacent external road system is dependent on its vehicular access and internal circulation plan. Analysis of intersection and access drive operations were conducted for the AM peak, PM peak, and Saturday midday peak hours using the methodology in the Transportation Research Board's *Highway Capacity Manual, 7<sup>th</sup> Edition*. Transportation analysis software, Synchro Studio 12, was used to calculate the levels of service (LOS) for individual movements, approaches, and for the intersection as a whole.



LOS is a qualitative measure of the traffic operations at an intersection or on a roadway segment. It is ranked from LOS A, which signifies little or no congestion and is the highest rank, to LOS F, which signifies congestion and jam conditions. LOS D is typically considered adequate for peak hour operations at intersections. The LOS for an intersection is based on the control delay per vehicle which is the portion of the total delay attributed to traffic control measures such as stop signs and traffic signals. For signalized intersections, the control delay is calculated for each lane group and then compiled for each approach and for the entire intersection. For an unsignalized intersection, LOS is calculated for those movement that must each stop or yield to oncoming traffic and is based on average control delay for the particular movement. The criteria for LOS are shown in *Table 3* and *Table 4*.

**Table 3 – Level of Service Criteria – Signalized and Unsignalized Intersections**

Level of Service	Signalized Intersection Delay (sec/veh)	Unsignalized Intersection Delay (sec/veh)	Description
A	$\leq 10$	$\leq 10$	Little to no delay to motorists
B	$> 10$ and $\leq 20$	$> 10$ and $\leq 15$	Relatively low delay to motorists
C	$> 20$ and $\leq 35$	$> 15$ and $\leq 25$	Average delays to motorists
D	$> 35$ and $\leq 55$	$> 25$ and $\leq 35$	Congestion becomes more noticeable. Delays are within an acceptable range.
E	$> 55$ and $\leq 80$	$> 35$ and $\leq 50$	High delays to motorists.
F	$> 80$	$> 50$	High delays to motorists. Arrival flow rates exceed the capacity of the intersection.

**Table 4 – Level of Service Criteria – Roundabouts**

Control Delay (s/veh)	LOS by Volume to Capacity Ratio	
	$\leq 1.0$	$> 1.0$
$\leq 10$	A	F
$> 10$ and $\leq 15$	B	F
$> 15$ and $\leq 25$	C	F
$> 25$ and $\leq 35$	D	F
$> 35$ and $\leq 50$	E	F
$> 50$	F	F

Levels of service were calculated at W. Monaville Road and N. Cedar Lake Road and the proposed access drive for the following scenarios.

- Existing Conditions – Year 2025
- Future No Build – Year 2030
- Future with Project Traffic – Year 2030



A summary of the results for the W. Monaville Road and N. Cedar Lake Road intersection are included in *Table 5*, and the results for the unsignalized access driveway are in *Table 6*. The Synchro Studio capacity analyses are included in *Appendix E*.

**Table 5 – Level of Service Summary – W. Monaville Road and N. Cedar Lake Road (Roundabout)**

Year	Peak Hour	Eastbound	Westbound	Northbound	Southbound	Overall Intersection
		LTR	LTR	LTR	LTR	
2025 Existing Conditions	Weekday AM	A 7.5	A 7.3	A 7.6	A 6.8	A 7.3
	Weekday PM	A 7.8	A 7.9	A 7.0	A 7.9	A 7.7
	Saturday Middy	A 6.6	A 7.2	A 6.6	A 6.1	A 6.8
2030 No-Build	Weekday AM	A 9.0	A 8.6	A 9.1	A 7.9	A 8.7
	Weekday PM	A 9.4	A 9.6	A 8.3	A 9.6	A 9.3
	Saturday Middy	A 7.7	A 8.6	A 7.7	A 7.1	A 7.9
2030 Total with Project	Weekday AM	A 9.1	A 8.6	A 9.2	A 7.9	A 8.7
	Weekday PM	B 10.0	B 11.2	A 9.1	B 11.2	B 10.4
	Saturday Middy	A 9.2	A 10.0	A 8.7	A 8.2	A 9.2





Table 6 – Level of Service Summary – W. Monaville Road and Access Driveway (Unsignalized)

Year	Peak Hour	Westbound	Northbound
		L	LR
2030 Total with Project	Weekday AM	A 8.1	B 11.5
	Weekday PM	A 8.1	B 11.8
	Saturday Midday	A 8.1	B 12.0

#### W. Monaville Road and N. Cedar Lake Road

Based on the results of the capacity analyses, the intersection currently operates at LOS A during the AM peak, PM Peak, and Saturday midday peak hours. The intersection is projected to continue operating at the same LOS in 2030. The 2030 with project PM peak hour is projected to operate at LOS B with only a 1.1 second increase in delay compared to 2030 without project conditions. The total intersection delay remains consistent with existing conditions, and the proposed development will have minimal impact on the intersection operations.

#### W. Monaville Road and Access 1 (Full Access Driveway)

The WB shared right-turn and left-turn lane is expected to operate at LOS A for the AM peak, PM peak, and Saturday midday peak hours. The NB shared left and right-turn lane will operate at LOS B during all evaluated peak hours.

To determine whether auxiliary turn lanes are required at Access 1, the total projected 2030 traffic volumes were compared with the right-turn lane warrant criteria (Table 5.3) and left-turn lane warrant criteria (Table 5.5) in the *Lake County Highway Access and Use Technical Reference Manual*. Based on the criteria, an exclusive right-turn lane and an exclusive left-turn lane are not warranted at Access 1. The turn-lane warrant figures are included in *Appendix H*.

## **8 – RECOMMENDATIONS AND CONCLUSION**

Several components were considered to facilitate traffic on and off the site.

- Provide a full access drive to W. Monaville Road.
- Provide sufficient storage distance to allow appropriate decisions when entering the site.
- Provide sufficient storage to allow queuing of vehicles exiting the site.



## APPENDIX A - Figures

FIGURE 1 – Site Location and Area Roadway Network

FIGURE 2 – Existing Street Characteristics

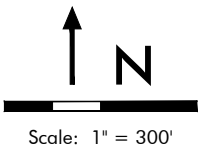
FIGURE 3 – Existing Traffic Volumes - 2025

FIGURE 4 – Estimated Directional Distribution

FIGURE 5 – Site Generated Traffic Volumes

FIGURE 6 – Future No-Build Traffic Volumes – 2030

FIGURE 7 – Future Total Traffic Volumes – 2030

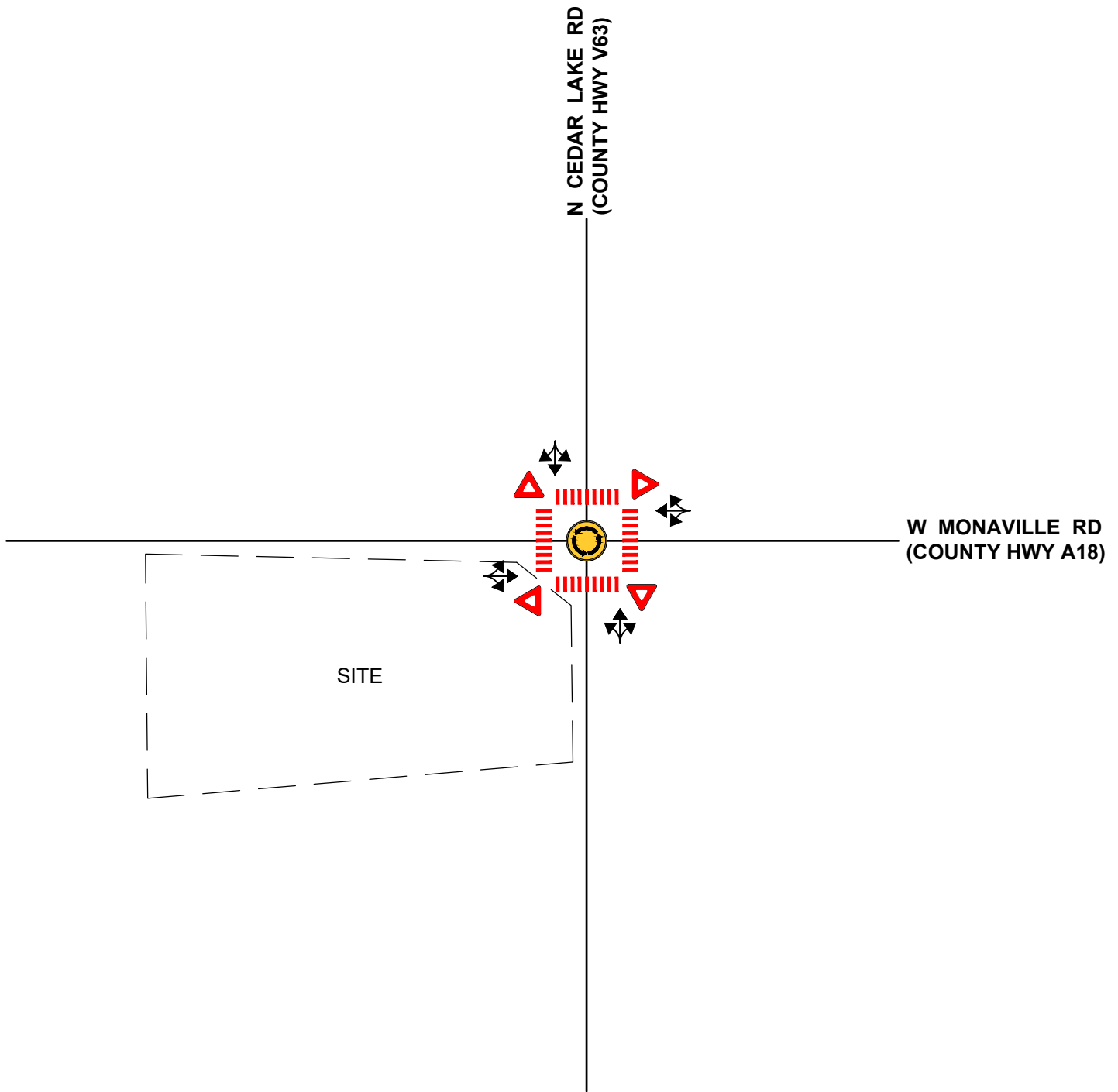


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## FIGURE 1 - SITE LOCATION & AREA ROADWAY NETWORK

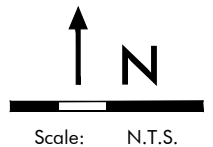
**SELF-STORAGE DEVELOPMENT**  
 LAKE VILLA, ILLINOIS

Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **1** / ----



### LEGEND

- Travel Lane
-  Roundabout
-  No Parking
-  Yield Sign
-  Crosswalk

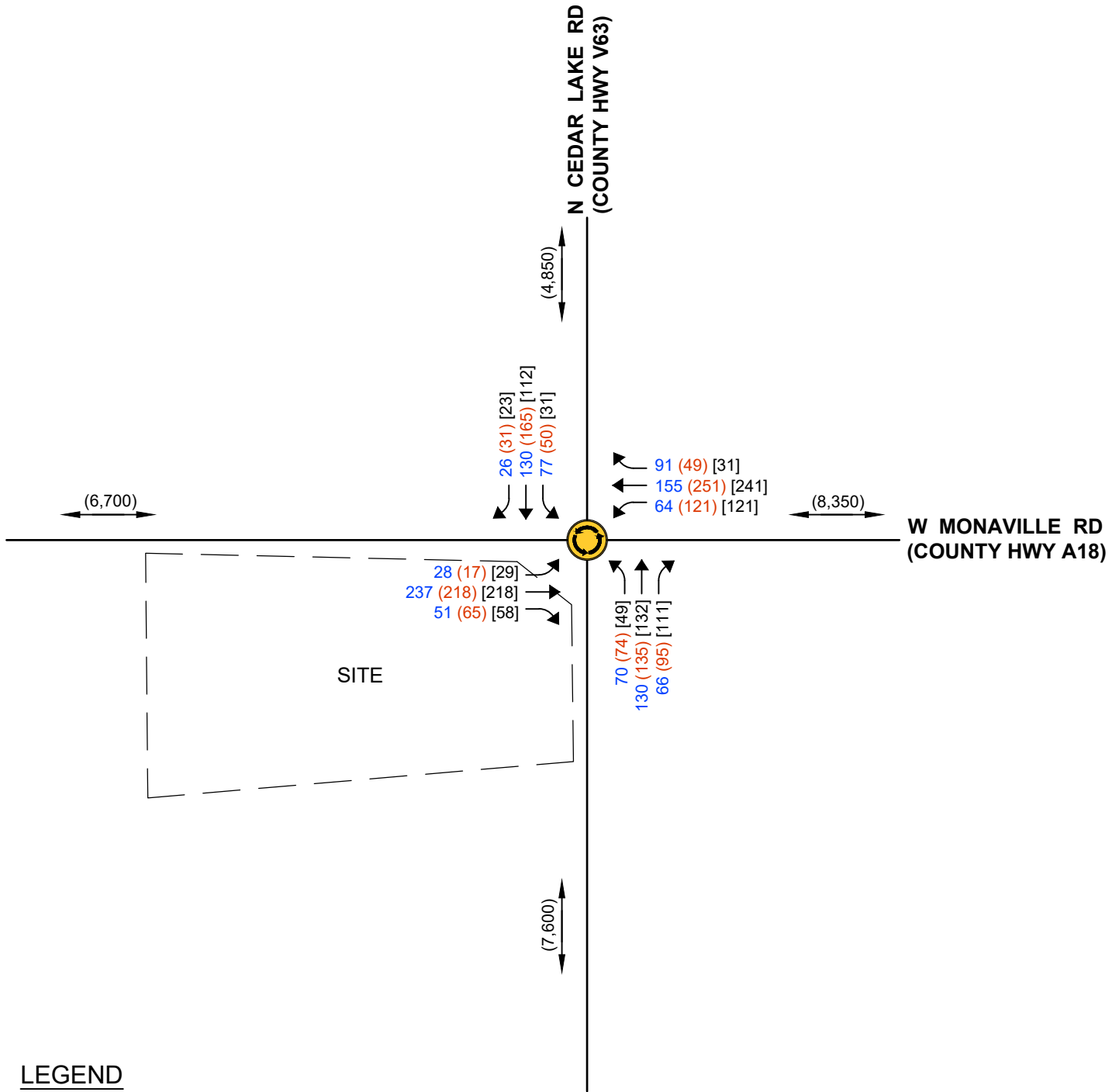


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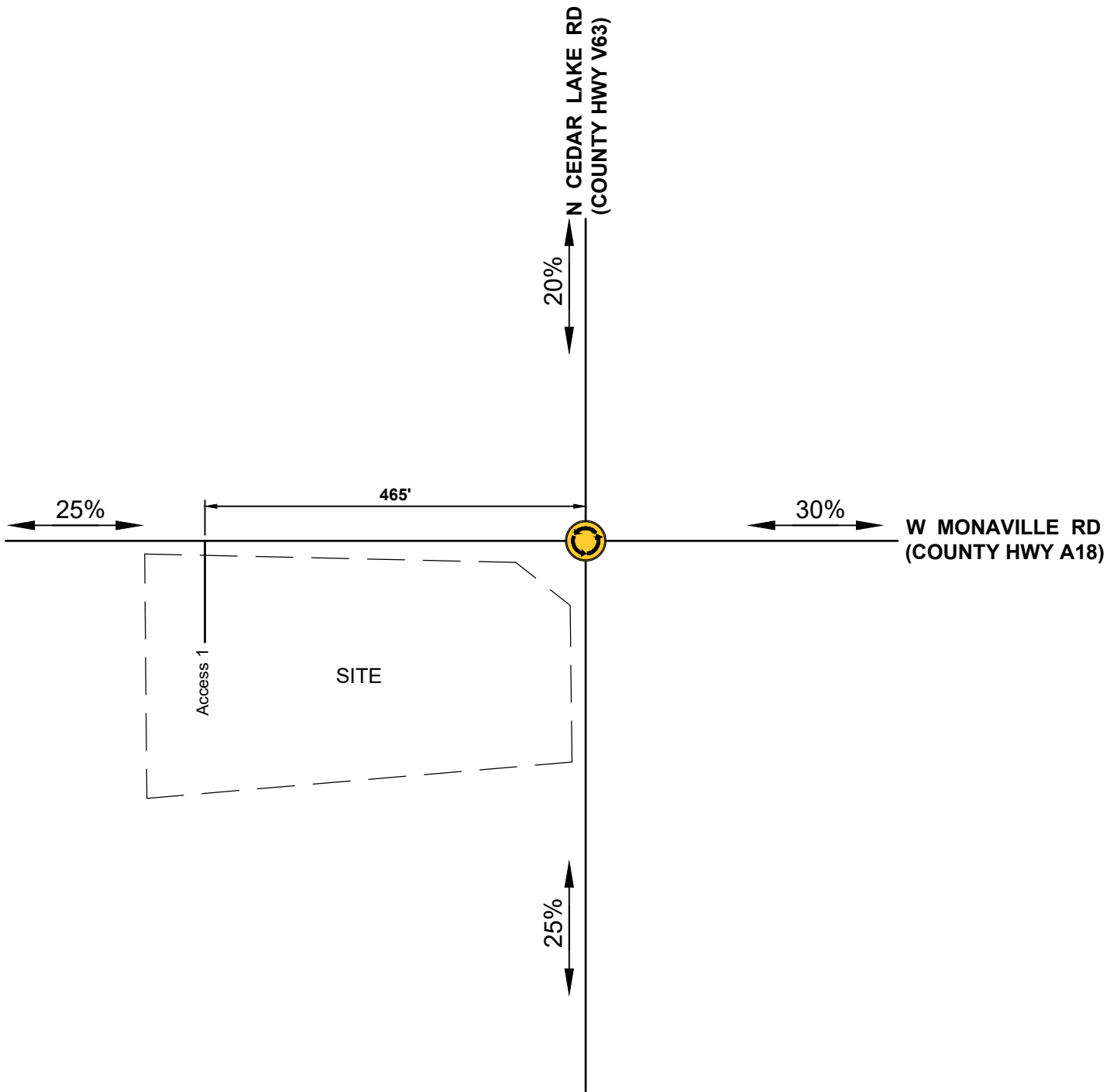
## FIGURE 2 - EXISTING STREET CHARACTERISTICS

**SELF-STORAGE DEVELOPMENT**  
 LAKE VILLA, ILLINOIS


Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **2** / ----

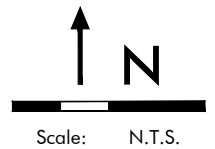






## LEGEND

- XXX Percent Distribution
-  Existing Roundabout

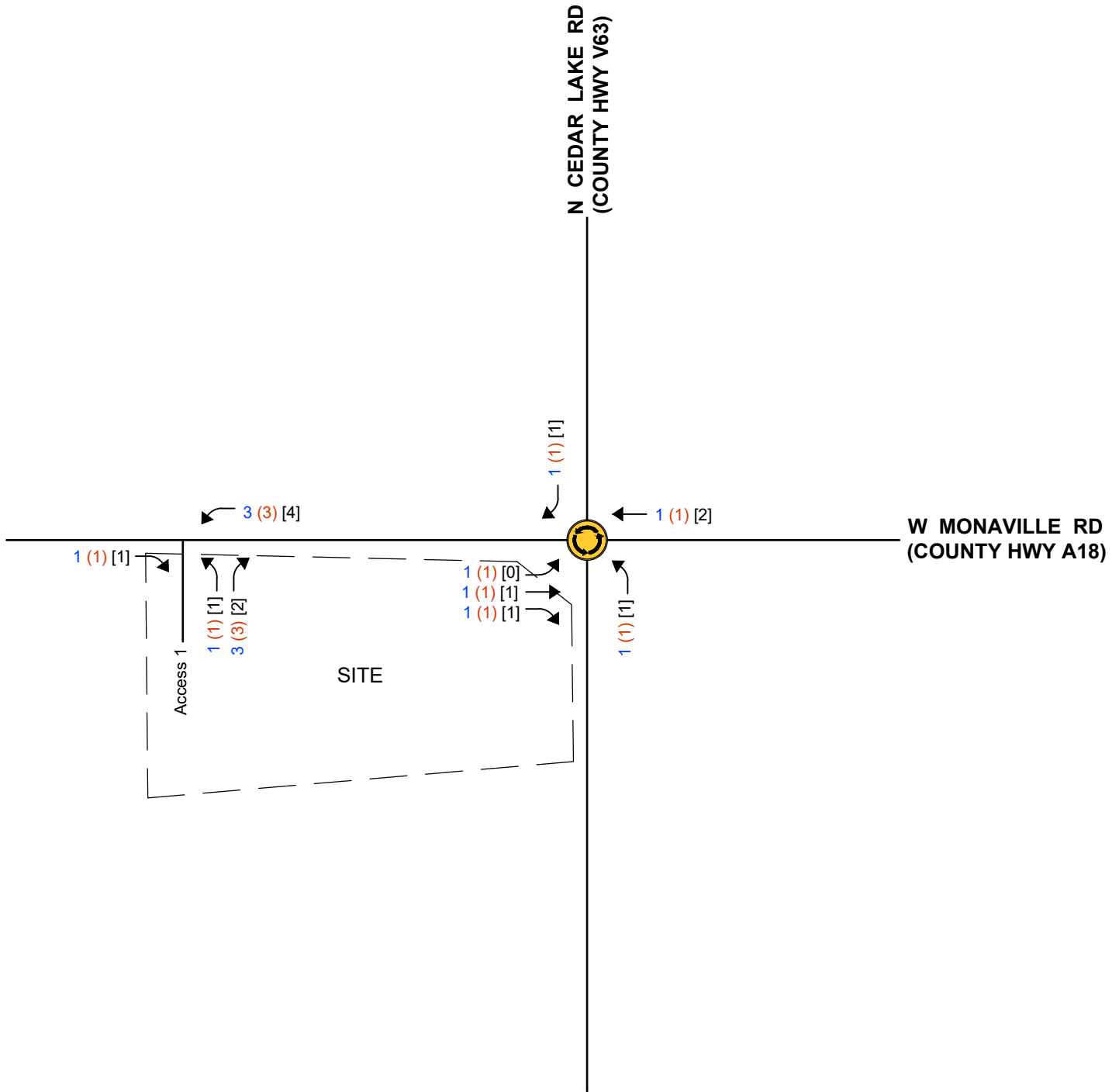


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**FIGURE 4 - ESTIMATED  
 DIRECTIONAL DISTRIBUTION**

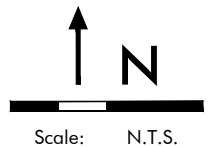
**SELF-STORAGE  
 DEVELOPMENT**  
 LAKE VILLA, ILLINOIS

Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **4** / ----



## LEGEND

- XX Weekday AM Peak Hour 7:15 - 8:15 AM
- (XX) Weekday PM Peak Hour 4:00 - 5:00 PM
- [XX] Saturday PM Peak Hour 12:45 - 1:45 PM
-  Existing Roundabout

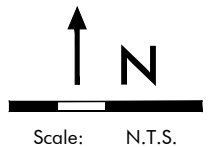
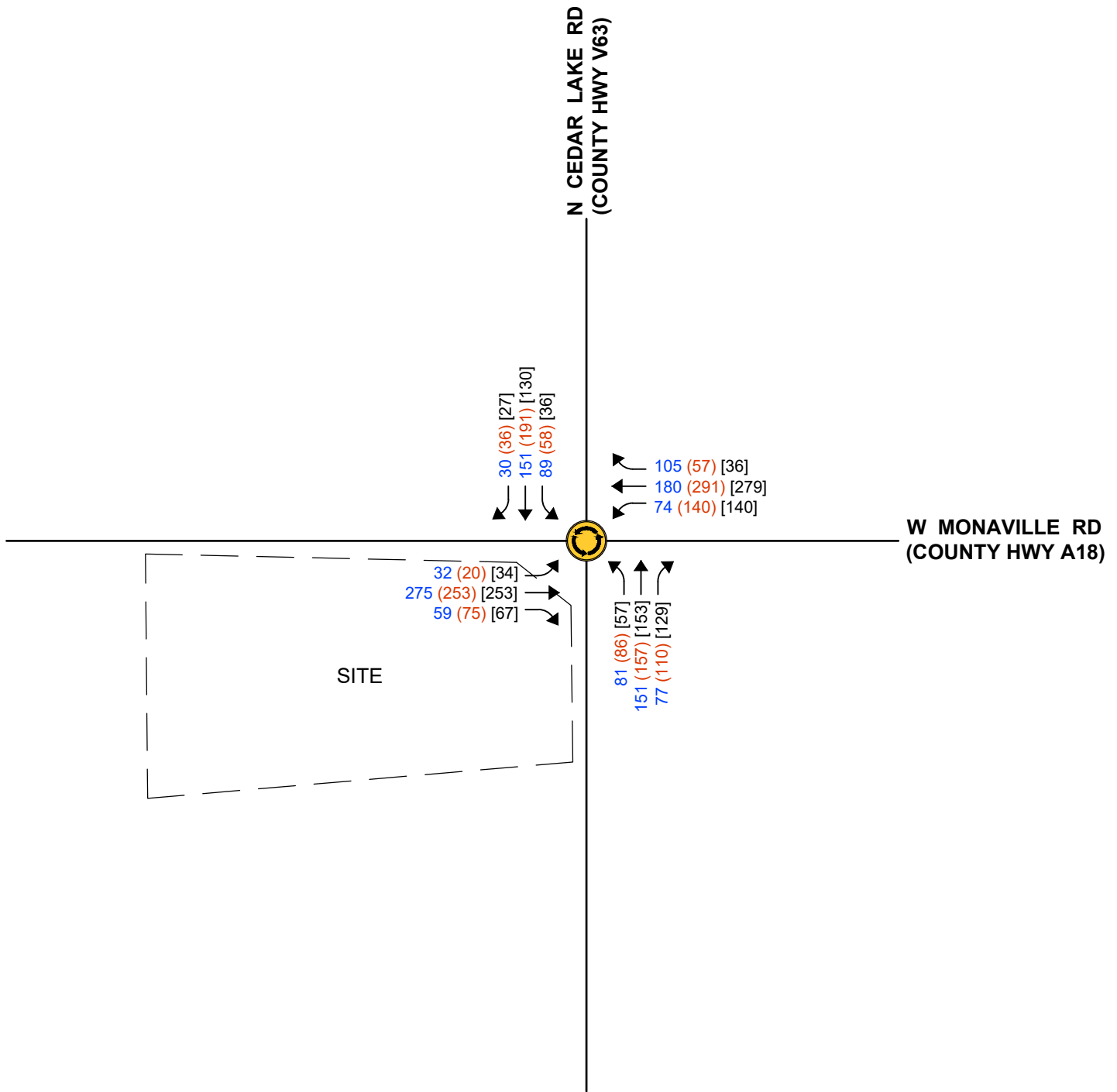


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## FIGURE 5 - SITE GENERATED TRAFFIC VOLUMES

**SELF-STORAGE DEVELOPMENT**  
 LAKE VILLA, ILLINOIS

Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **5** / ----



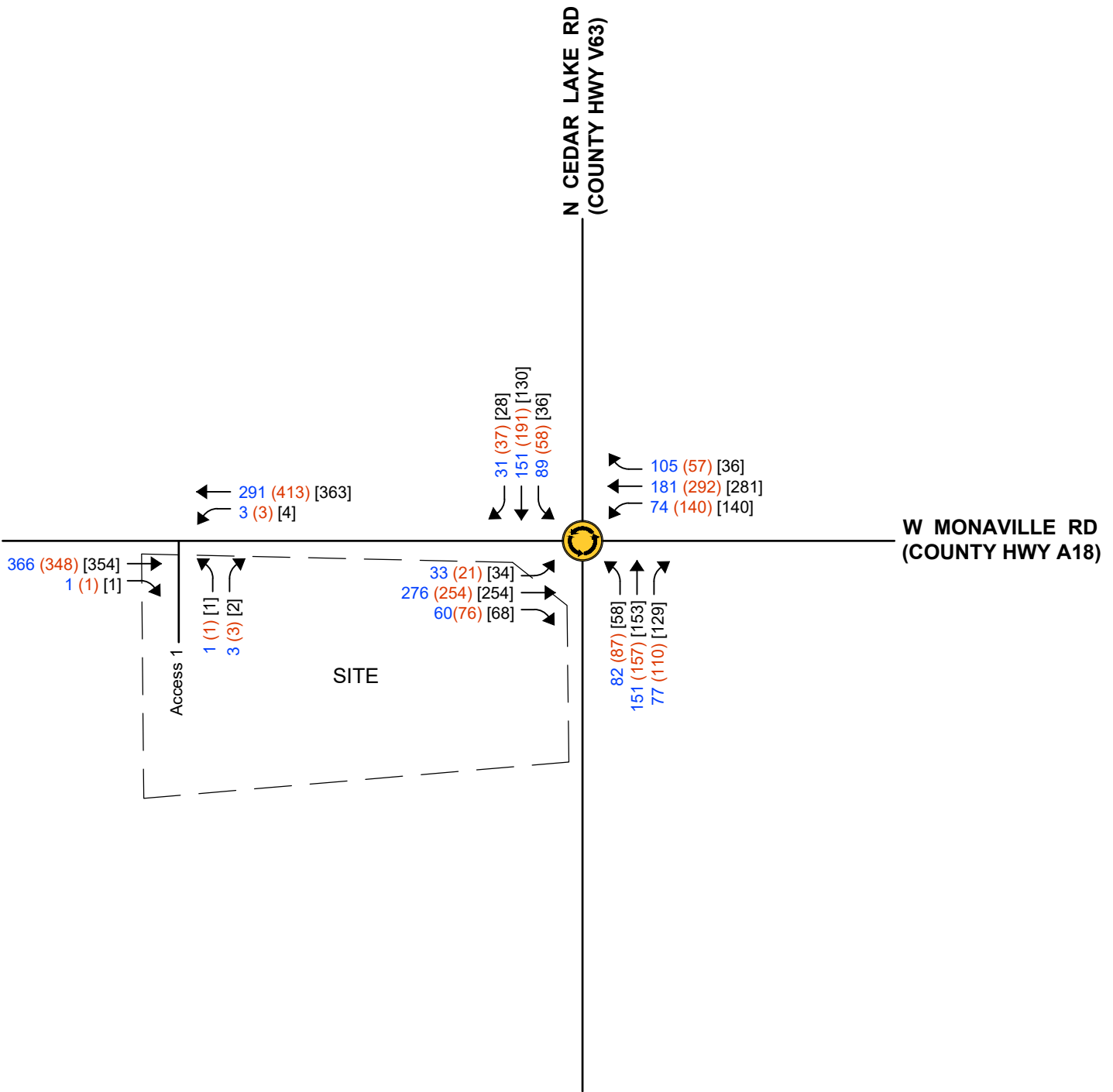
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**FIGURE 6 - FUTURE NO-BUILD  
 TRAFFIC VOLUMES - 2030**

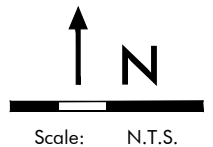
**SELF-STORAGE  
 DEVELOPMENT**  
 LAKE VILLA, ILLINOIS

Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **6** / ----



## LEGEND

- Weekday AM Peak Hour 7:15 - 8:15 AM
- Weekday PM Peak Hour 4:00 - 5:00 PM
- Saturday PM Peak Hour 12:45 - 1:45 PM
- Existing Roundabout



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## FIGURE 7 - TOTAL TRAFFIC VOLUMES - 2030

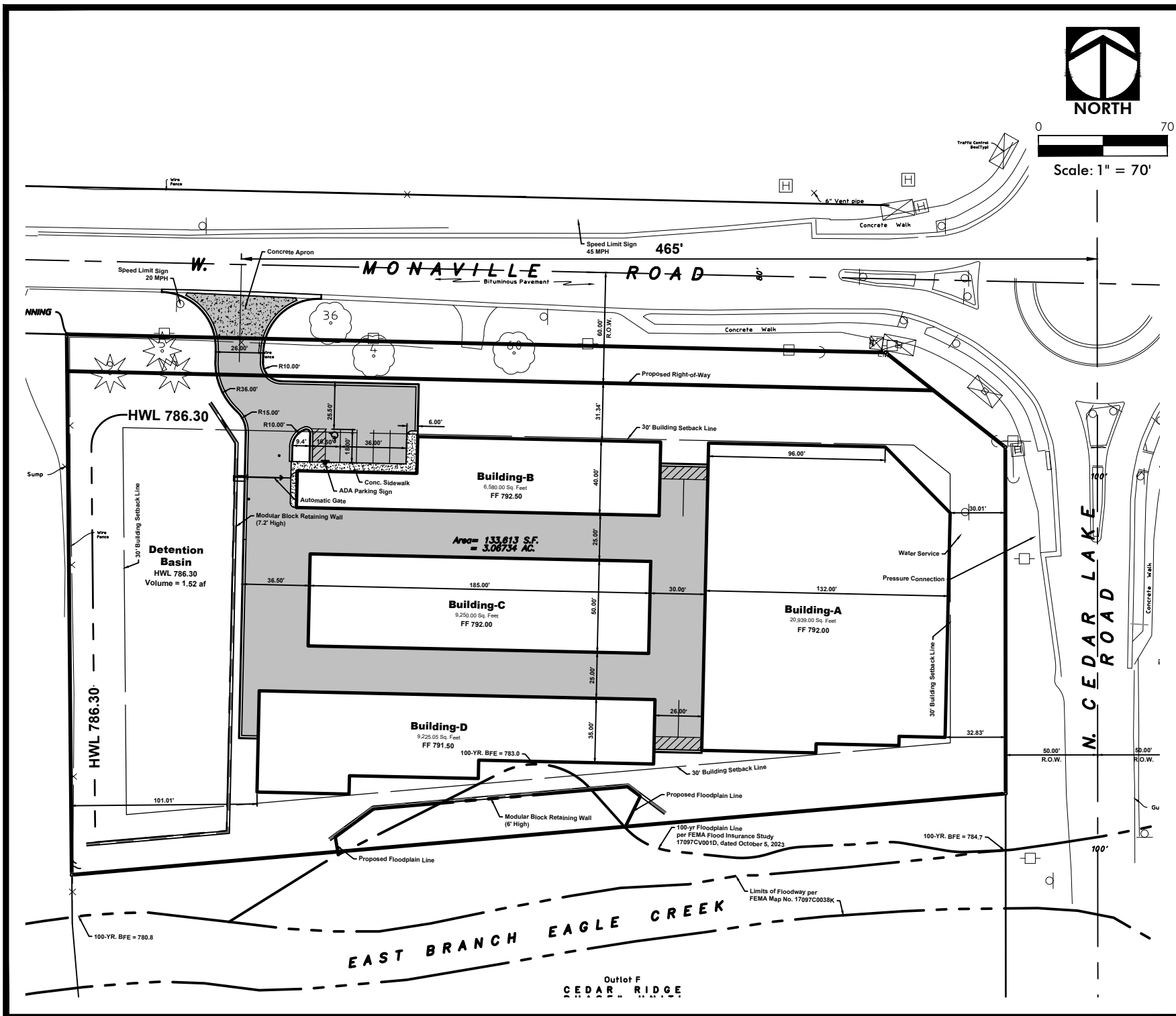
**SELF-STORAGE DEVELOPMENT**  
 LAKE VILLA, ILLINOIS

Project Manager: KML  
 Engineer: KML  
 Date: 06-17-2025  
 Project No. 25-058  
 Sheet **7** / ----



## APPENDIX B – Proposed Site Plan





Scale: 1" = 70'

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**SITE PLAN**  
**SELF-STORAGE DEVELOPMENT**  
LAKE VILLA, ILLINOIS

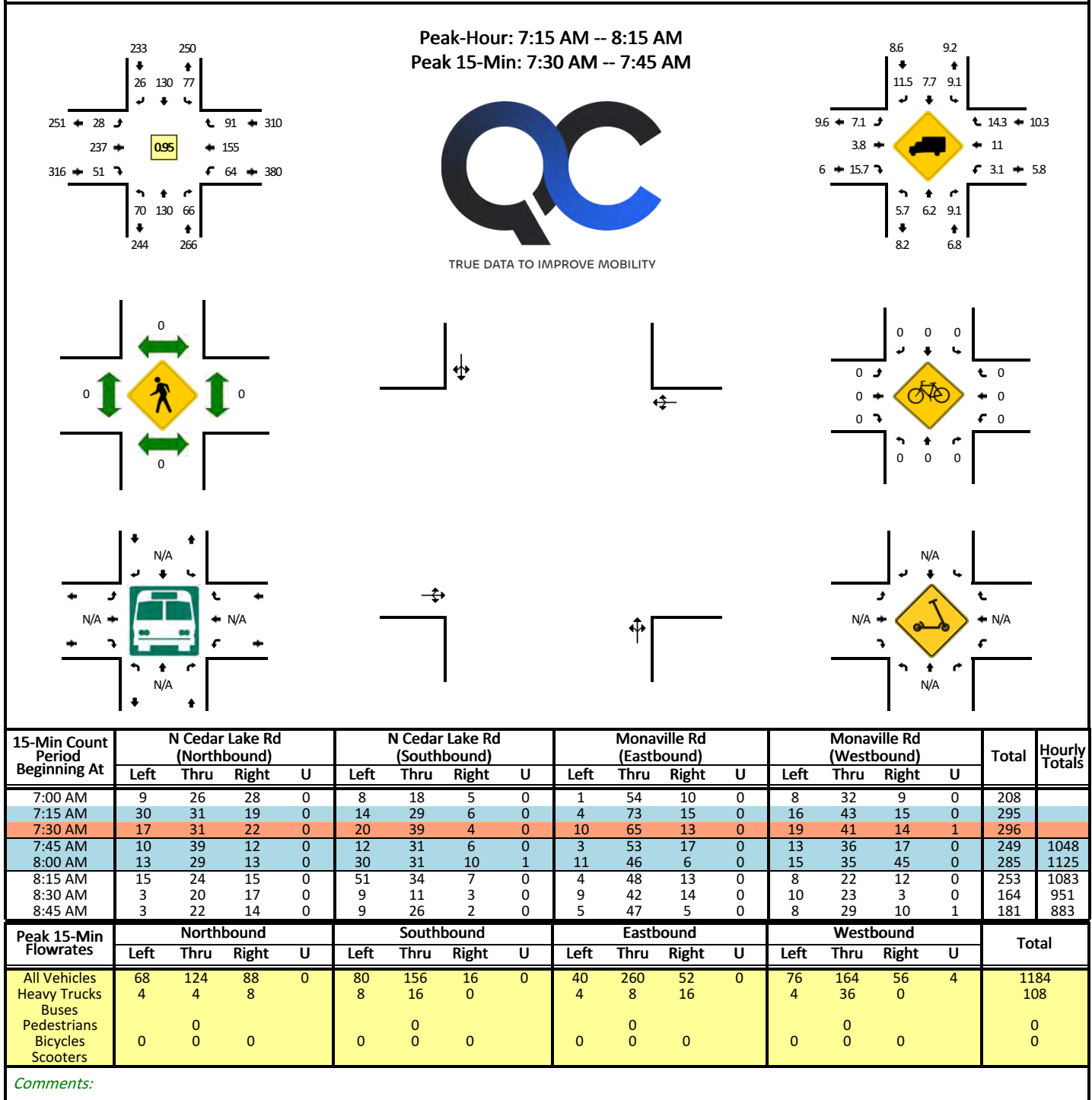
Project Manager: KML  
Engineer: KML  
Date: 6-17-2025  
Project No. 25-058  
Sheet 1 / 1



## APPENDIX C – Traffic Counts

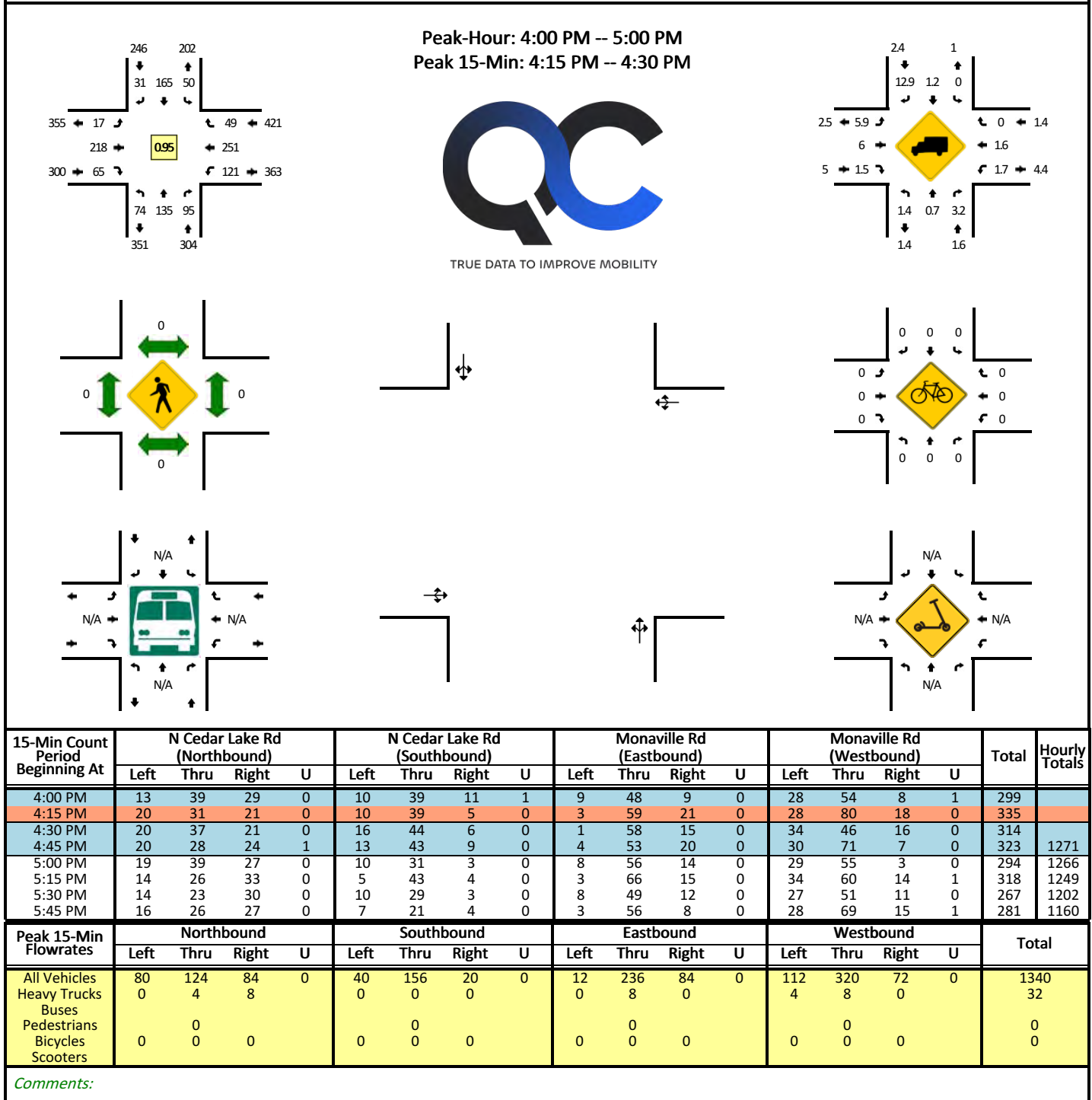
**LOCATION:** N Cedar Lake Rd -- Monaville Rd  
**CITY/STATE:** Lake Villa, IL

**QC JOB #:** 16963601  
**DATE:** Tue, Apr 15 2025



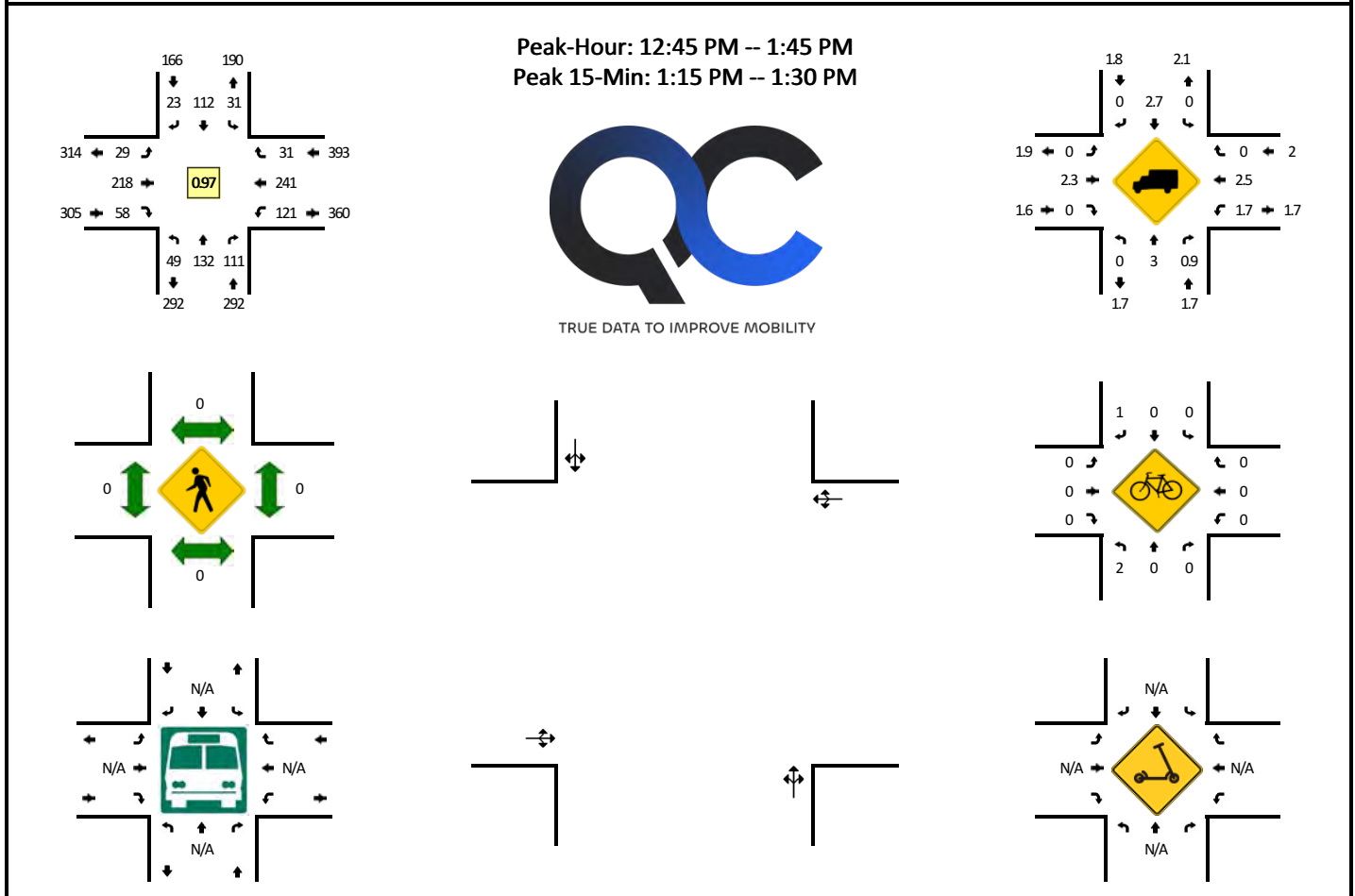
**LOCATION:** N Cedar Lake Rd -- Monaville Rd  
**CITY/STATE:** Lake Villa, IL

**QC JOB #:** 16963602  
**DATE:** Tue, Apr 15 2025



**LOCATION:** N Cedar Lake Rd -- Monaville Rd  
**CITY/STATE:** Lake Villa, IL

**QC JOB #:** 16963603  
**DATE:** Sat, Apr 12 2025



15-Min Count Period Beginning At	N Cedar Lake Rd (Northbound)				N Cedar Lake Rd (Southbound)				Monaville Rd (Eastbound)				Monaville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	14	26	25	1	11	22	5	0	1	55	9	1	19	49	7	1	246	995
11:15 AM	10	20	25	0	13	29	0	0	1	50	11	1	20	62	11	1	254	
11:30 AM	9	33	28	0	7	31	1	0	2	43	14	0	22	59	6	0	255	
11:45 AM	4	21	24	0	11	24	5	0	3	60	10	0	19	47	12	0	240	
12:00 PM	19	23	24	1	8	34	3	0	4	53	12	1	23	48	4	0	257	
12:15 PM	13	37	38	0	14	23	3	0	5	55	9	0	35	52	10	0	294	1046
12:30 PM	23	23	24	0	10	23	4	0	1	61	10	0	22	45	6	0	252	1043
12:45 PM	12	31	32	1	6	23	7	0	8	55	16	0	24	62	9	0	286	1089
1:00 PM	12	38	30	0	6	23	7	0	6	56	16	0	31	48	10	0	283	1115
1:15 PM	12	32	23	0	11	31	3	0	8	51	15	1	31	74	7	0	299	1120
1:30 PM	12	31	26	0	8	35	6	0	5	56	11	1	35	57	5	0	288	1156
1:45 PM	18	30	24	1	3	36	5	0	2	60	11	0	25	58	10	0	283	1153
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	48	128	92	0	44	124	12	0	32	204	60	4	124	296	28	0	1196	
Heavy Trucks	0	4	0	0	0	4	0	0	0	12	0	0	0	4	0	0	24	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	
Scooters																		

*Comments:*

Report generated on 4/21/2025 9:06 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212





## APPENDIX D – Trip Generation Spreadsheet

## Trip Generation

Project: Self-Storage  
Location: Lake Villa, IL  
Project #: 25-058

Prepared: KML

Date: 6/13/2025

Year Start 2025  
Year End 2030  
Growth Rate % 3.000 (Per Lake County Highway Access and Use Ordinance Page 36)

			2025			2030 No Build			Site Generated			2030 with Project		
			AM	PM	SAT Mid	AM	PM	SAT Mid	AM	PM	SAT Mid	AM	PM	SAT Mid
Monaville and Cedar Lake	EB	LT	28	17	29	32	20	34	1	1	0	33	21	34
		TH	237	218	218	275	253	253	1	1	1	276	254	254
		RT	51	65	58	59	75	67	1	1	1	60	76	68
	WB	LT	64	121	121	74	140	140				74	140	140
		TH	155	251	241	180	291	279	1	1	2	181	292	281
		RT	91	49	31	105	57	36				105	57	36
	NB	LT	70	74	49	81	86	57	1	1	1	82	87	58
		TH	130	135	132	151	157	153				151	157	153
		RT	66	95	111	77	110	129				77	110	129
	SB	LT	77	50	31	89	58	36				89	58	36
		TH	130	165	112	151	191	130				151	191	130
		RT	26	31	23	30	36	27	1	1	1	31	37	28
Access 1	EB	TH				366	348	354				366	348	354
		RT							1	1	1	1	1	1
	WB	LT							3	3	4	3	3	4
		TH				291	413	363				291	413	363
	NB	LT							1	1	1	1	1	1
		RT							3	3	2	3	3	2



## APPENDIX E – Synchro Studio Capacity Analyses



## Capacity Analyses

Existing AM Peak, PM Peak, Saturday Midday Peak – 2025

Intersection				
Intersection Delay, s/veh	7.3			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	332	326	280	245
Demand Flow Rate, veh/h	353	359	298	266
Vehicles Circulating, veh/h	305	254	378	328
Vehicles Exiting, veh/h	289	422	280	285
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.5	7.3	7.6	6.8
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	353	359	298	266
Cap Entry Lane, veh/h	1011	1065	938	988
Entry HV Adj Factor	0.941	0.908	0.939	0.921
Flow Entry, veh/h	332	326	280	245
Cap Entry, veh/h	951	967	881	910
V/C Ratio	0.349	0.337	0.318	0.269
Control Delay, s/veh	7.5	7.3	7.6	6.8
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	1



Intersection				
Intersection Delay, s/veh	7.7			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	315	443	320	260
Demand Flow Rate, veh/h	331	451	325	266
Vehicles Circulating, veh/h	359	241	315	478
Vehicles Exiting, veh/h	385	399	375	214
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.8	7.9	7.0	7.9
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	331	451	325	266
Cap Entry Lane, veh/h	957	1079	1001	847
Entry HV Adj Factor	0.952	0.982	0.983	0.978
Flow Entry, veh/h	315	443	320	260
Cap Entry, veh/h	911	1059	984	829
V/C Ratio	0.346	0.418	0.325	0.314
Control Delay, s/veh	7.8	7.9	7.0	7.9
LOS	A	A	A	A
95th %tile Queue, veh	2	2	1	1

Intersection				
Intersection Delay, s/veh	6.8			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	315	405	301	171
Demand Flow Rate, veh/h	320	415	306	174
Vehicles Circulating, veh/h	278	221	292	434
Vehicles Exiting, veh/h	330	377	306	202
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.6	7.2	6.6	6.1
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	320	415	306	174
Cap Entry Lane, veh/h	1039	1101	1024	886
Entry HV Adj Factor	0.986	0.975	0.983	0.980
Flow Entry, veh/h	315	405	301	171
Cap Entry, veh/h	1025	1074	1007	869
V/C Ratio	0.308	0.377	0.299	0.196
Control Delay, s/veh	6.6	7.2	6.6	6.1
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	1



## Capacity Analyses

Future No Build AM Peak, PM Peak, Saturday Midday Peak – 2030

Intersection				
Intersection Delay, s/veh	8.7			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	385	378	325	285
Demand Flow Rate, veh/h	409	417	347	310
Vehicles Circulating, veh/h	354	295	439	380
Vehicles Exiting, veh/h	336	491	324	332
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.0	8.6	9.1	7.9
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	409	417	347	310
Cap Entry Lane, veh/h	962	1021	882	937
Entry HV Adj Factor	0.942	0.907	0.938	0.920
Flow Entry, veh/h	385	378	325	285
Cap Entry, veh/h	906	926	827	862
V/C Ratio	0.425	0.408	0.393	0.331
Control Delay, s/veh	9.0	8.6	9.1	7.9
LOS	A	A	A	A
95th %tile Queue, veh	2	2	2	1

Intersection				
Intersection Delay, s/veh	9.3			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	366	513	372	300
Demand Flow Rate, veh/h	385	522	378	307
Vehicles Circulating, veh/h	414	281	365	554
Vehicles Exiting, veh/h	447	462	434	249
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.4	9.6	8.3	9.6
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	385	522	378	307
Cap Entry Lane, veh/h	905	1036	951	784
Entry HV Adj Factor	0.951	0.983	0.985	0.977
Flow Entry, veh/h	366	513	372	300
Cap Entry, veh/h	860	1018	937	766
V/C Ratio	0.426	0.504	0.397	0.391
Control Delay, s/veh	9.4	9.6	8.3	9.6
LOS	A	A	A	A
95th %tile Queue, veh	2	3	2	2



HCM 7th Roundabout  
3: Monaville Road

05/01/2025

Intersection				
Intersection Delay, s/veh	7.9			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	365	469	350	199
Demand Flow Rate, veh/h	370	481	356	203
Vehicles Circulating, veh/h	322	257	338	503
Vehicles Exiting, veh/h	384	437	354	235
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.7	8.6	7.7	7.1
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	370	481	356	203
Cap Entry Lane, veh/h	994	1062	978	826
Entry HV Adj Factor	0.986	0.976	0.984	0.980
Flow Entry, veh/h	365	469	350	199
Cap Entry, veh/h	980	1036	962	810
V/C Ratio	0.372	0.453	0.364	0.246
Control Delay, s/veh	7.7	8.6	7.7	7.1
LOS	A	A	A	A
95th %tile Queue, veh	2	2	2	1



## Capacity Analyses

Future with Project AM Peak, PM Peak, Saturday Midday Peak – 2030




Intersection				
Intersection Delay, s/veh	8.7			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	389	380	326	286
Demand Flow Rate, veh/h	413	419	348	311
Vehicles Circulating, veh/h	354	297	442	383
Vehicles Exiting, veh/h	340	493	325	333
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.1	8.6	9.2	7.9
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	413	419	348	311
Cap Entry Lane, veh/h	962	1019	879	934
Entry HV Adj Factor	0.943	0.907	0.938	0.920
Flow Entry, veh/h	389	380	326	286
Cap Entry, veh/h	907	924	825	859
V/C Ratio	0.429	0.411	0.396	0.333
Control Delay, s/veh	9.1	8.6	9.2	7.9
LOS	A	A	A	A
95th %tile Queue, veh	2	2	2	1

Intersection				
Intersection Delay, s/veh	10.4			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	369	514	373	301
Demand Flow Rate, veh/h	395	560	399	327
Vehicles Circulating, veh/h	434	297	368	590
Vehicles Exiting, veh/h	483	470	461	267
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.0	11.2	9.1	11.2
Approach LOS	B	B	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	395	560	399	327
Cap Entry Lane, veh/h	886	1019	948	756
Entry HV Adj Factor	0.935	0.918	0.935	0.920
Flow Entry, veh/h	369	514	373	301
Cap Entry, veh/h	829	936	887	696
V/C Ratio	0.446	0.549	0.421	0.433
Control Delay, s/veh	10.0	11.2	9.1	11.2
LOS	B	B	A	B
95th %tile Queue, veh	2	3	2	2

Intersection				
Intersection Delay, s/veh	9.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	396	481	358	204
Demand Flow Rate, veh/h	425	523	384	221
Vehicles Circulating, veh/h	340	275	358	545
Vehicles Exiting, veh/h	426	467	407	253
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.2	10.0	8.7	8.2
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	425	523	384	221
Cap Entry Lane, veh/h	976	1042	958	791
Entry HV Adj Factor	0.932	0.920	0.933	0.923
Flow Entry, veh/h	396	481	358	204
Cap Entry, veh/h	910	959	894	731
V/C Ratio	0.436	0.502	0.401	0.279
Control Delay, s/veh	9.2	10.0	8.7	8.2
LOS	A	A	A	A
95th %tile Queue, veh	2	3	2	1

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	366	1	3	291	1	3
Future Vol, veh/h	366	1	3	291	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	398	1	3	316	1	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	399
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1160
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1160
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-




Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.08	11.49
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	559	-	-	18	-
HCM Lane V/C Ratio	0.008	-	-	0.003	-
HCM Ctrl Dly (s/v)	11.5	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Intersection




Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	348	1	3	413	1	3
Future Vol, veh/h	348	1	3	413	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	378	1	3	449	1	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	379
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1179
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1179
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.06	11.77
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	536	-	-	13	-
HCM Lane V/C Ratio	0.008	-	-	0.003	-
HCM Ctrl Dly (s/v)	11.8	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	354	1	4	363	1	2
Future Vol, veh/h	354	1	4	363	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	385	1	4	395	1	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	386	0	789	385
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1173	-	360	662
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1173	-	358	662
Mov Cap-2 Maneuver	-	-	-	-	358	-
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	671	-
Approach	EB	WB		NB		
HCM Ctrl Dly, s/v	0	0.09		12.02		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	516	-	-	20	-	
HCM Lane V/C Ratio	0.006	-	-	0.004	-	
HCM Ctrl Dly (s/v)	12	-	-	8.1	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	



## APPENDIX F – ITE Trip Generation Worksheets

# Mini-Warehouse (151)

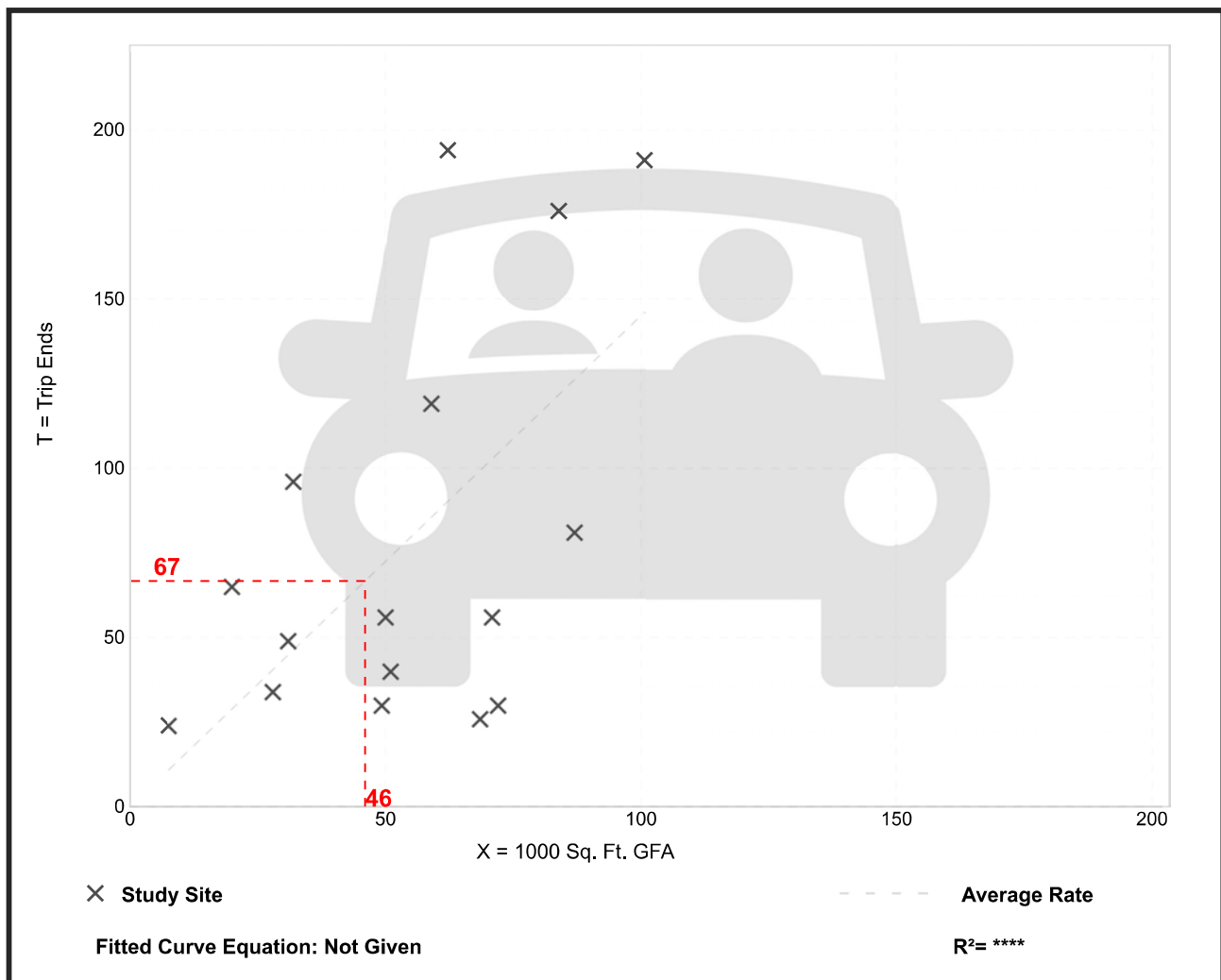
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Weekday

Setting/Location: General Urban/Suburban  
Number of Studies: 16  
Avg. 1000 Sq. Ft. GFA: 55  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

## Data Plot and Equation



# Mini-Warehouse (151)

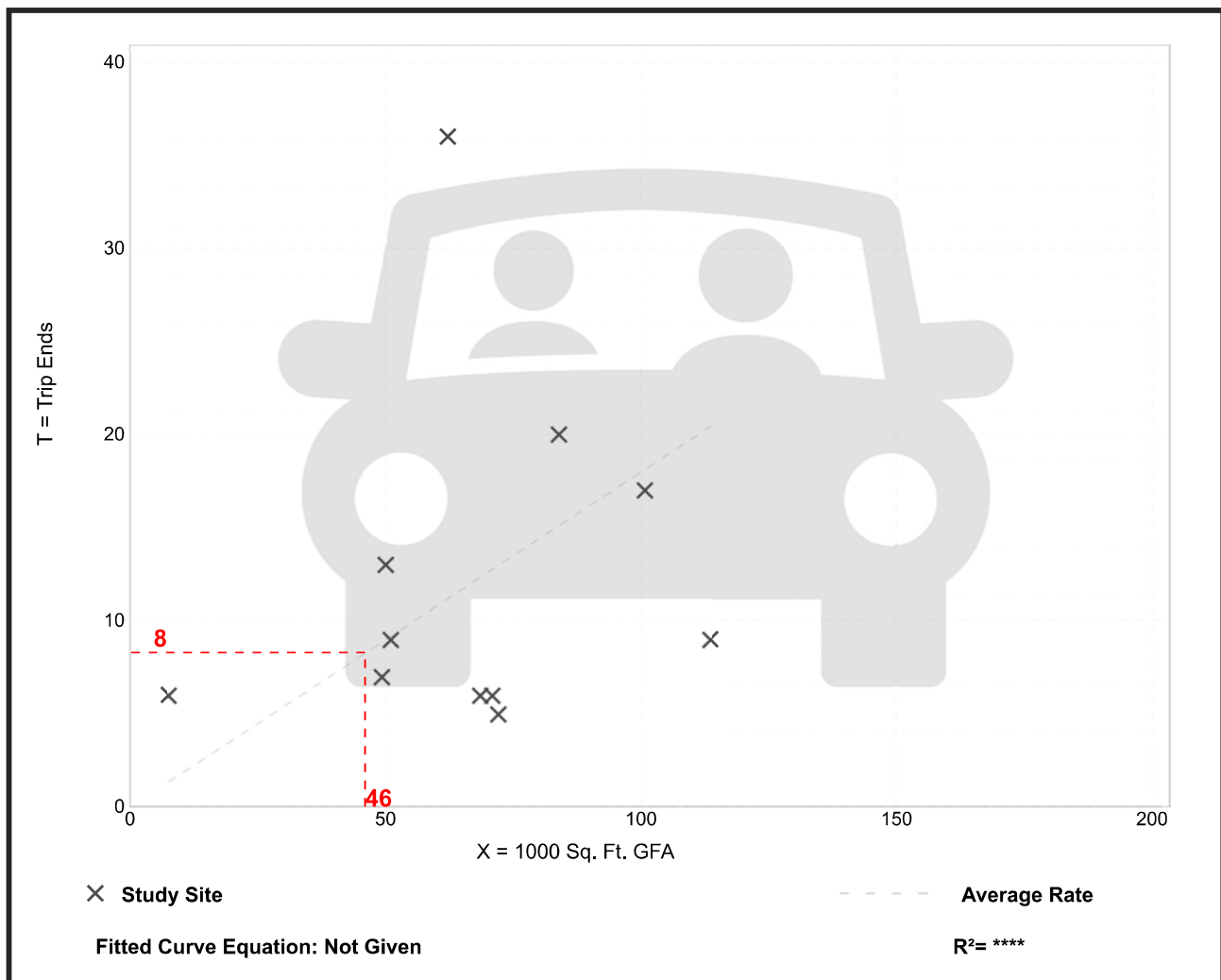
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Weekday,  
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban  
Number of Studies: 11  
Avg. 1000 Sq. Ft. GFA: 66  
Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.07 - 0.79	0.16

## Data Plot and Equation



# Mini-Warehouse (151)

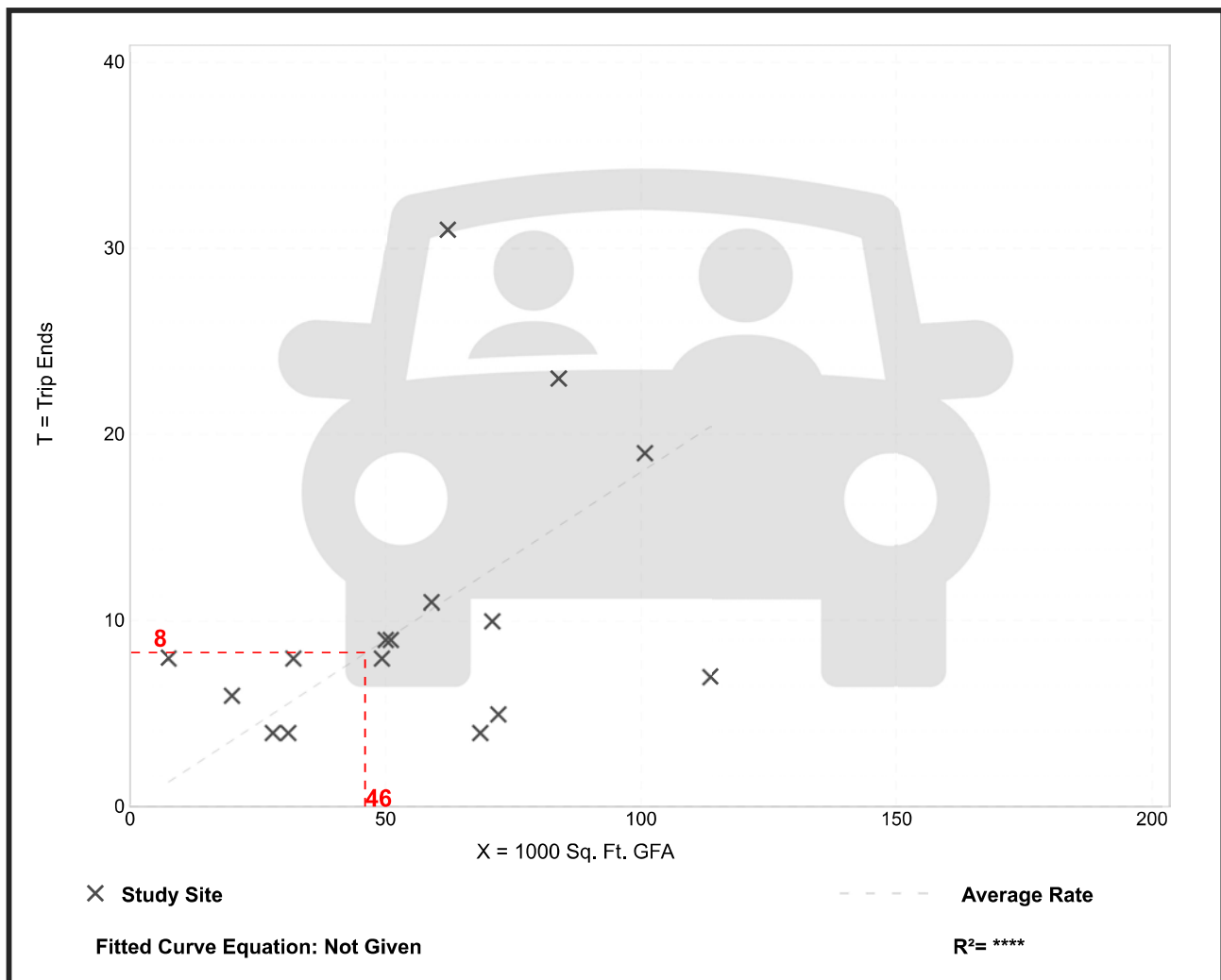
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Weekday,  
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban  
Number of Studies: 16  
Avg. 1000 Sq. Ft. GFA: 56  
Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.06 - 1.05	0.14

## Data Plot and Equation





# Mini-Warehouse (151)

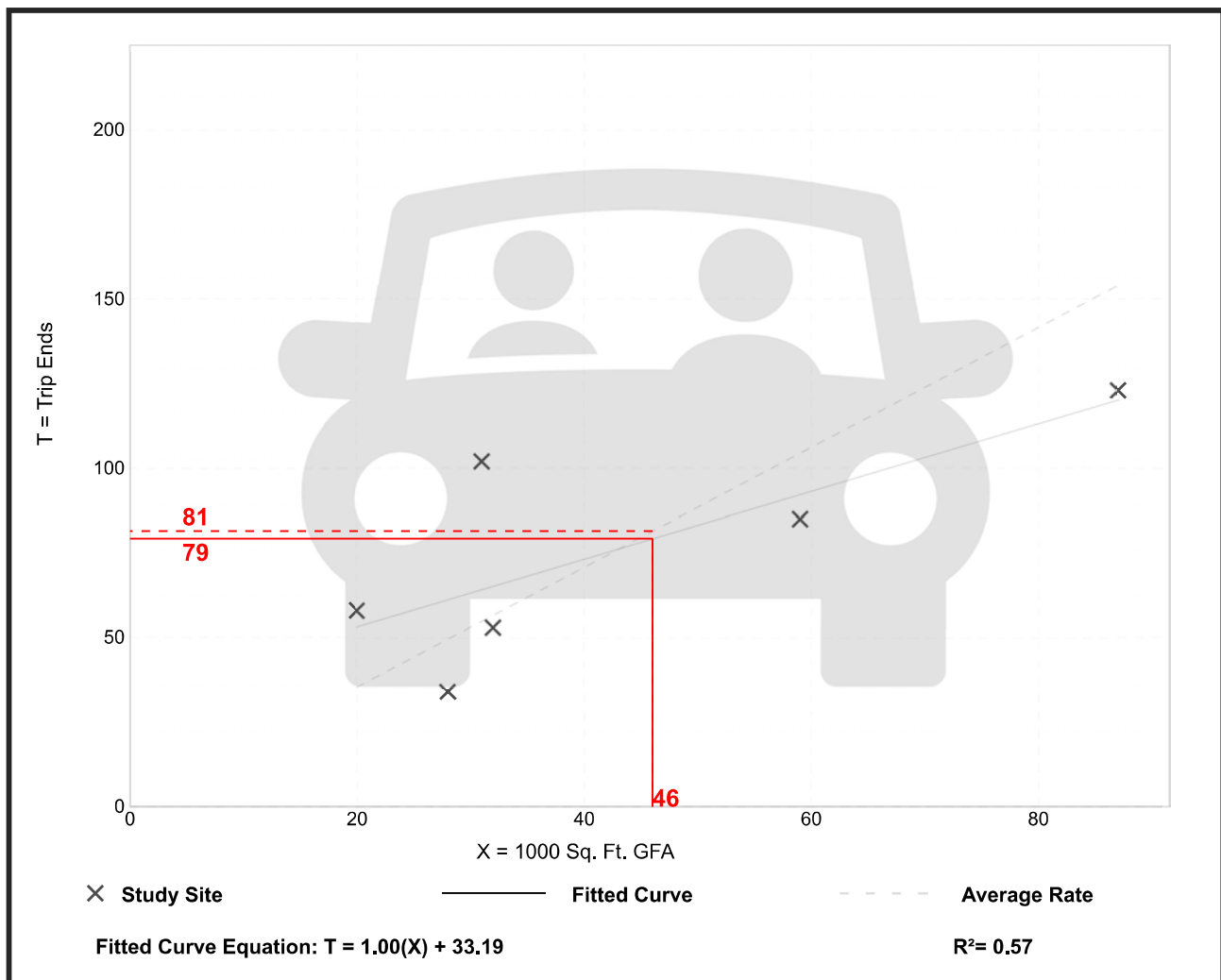
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Saturday

Setting/Location: General Urban/Suburban  
Number of Studies: 6  
Avg. 1000 Sq. Ft. GFA: 43  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.77	1.21 - 3.29	0.76

## Data Plot and Equation



# Mini-Warehouse (151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Saturday, Peak Hour of Generator

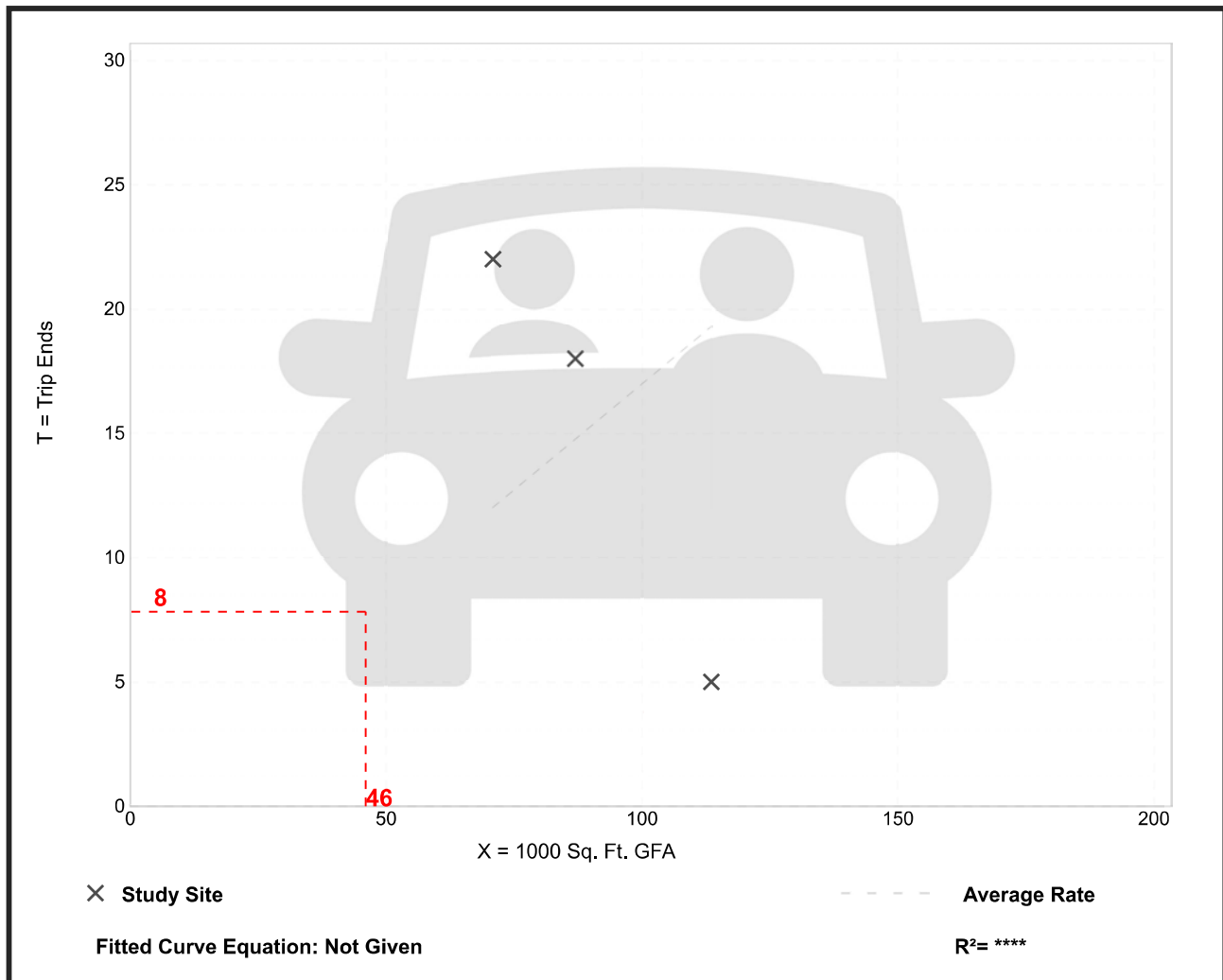
Setting/Location: General Urban/Suburban  
Number of Studies: 3  
Avg. 1000 Sq. Ft. GFA: 90  
Directional Distribution: 62% entering, 38% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.04 - 0.31	0.14

## Data Plot and Equation

*Caution – Small Sample Size*





## APPENDIX G – CMAP ADT Projections



June 16, 2025

Kimberly Lask  
Project Manager  
Haeger Engineering  
100 East State Parkway  
Schaumburg, IL 60173

***Subject: W. Monaville Road and N. Cedar Lake Road***  
IDOT

Dear Ms. Lask:

In response to a request made on your behalf and dated June 12, 2025, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Monaville Rd west of Cedar Lake Rd	6,700	7,900
Cedar Lake Rd south of Monaville Rd	7,600	8,200

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2024 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at [jrodriguez@cmap.illinois.gov](mailto:jrodriguez@cmap.illinois.gov)

Jose Rodriguez, PTP, AICP  
Senior Planner, Research & Analysis

cc: Rios (IDOT)  
S:\AdminGroups\ResearchAnalysis\2025\_trafficForecasts\LakeVilla\la-26-25\la-26-25.docx



## APPENDIX H – Lake County Turn Lane Warrants

1 Right-turn Max.

**Table 5.3 Right-Turn Lane Guidelines for Two-Lane Highways**

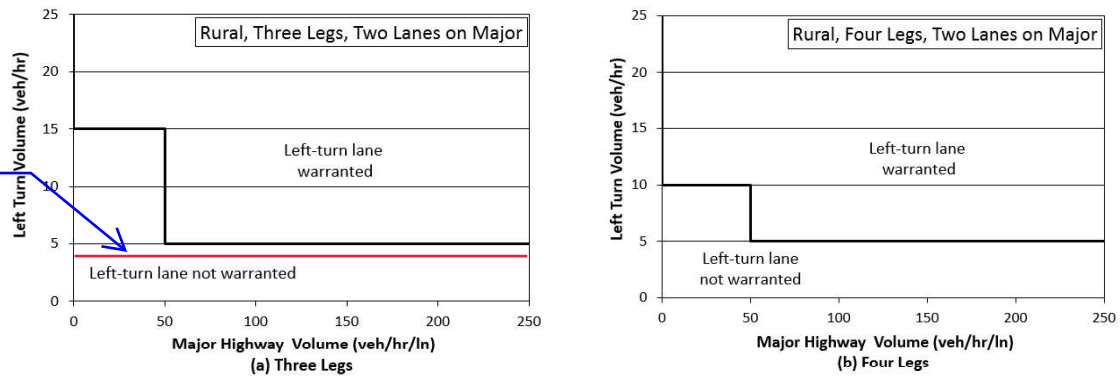
Approach Lane Volume (vph)	Minimum Right-turn Volume Warranting Exclusive Lane (vph)				
	By Posted Speed Limit				
	35 mph	40 mph	45 mph	50 mph	55 mph
200	--	--	75	35	20
300	--	120	40	25	15
400	200	50	30	20	10
500	50	25	20	15	10
600	25	15	15	10	10
800	15	10	10	10	10
1200	10	10	10	10	10

**Table 5.4 Right-Turn Lane Guidelines for Four-Lane Highways**

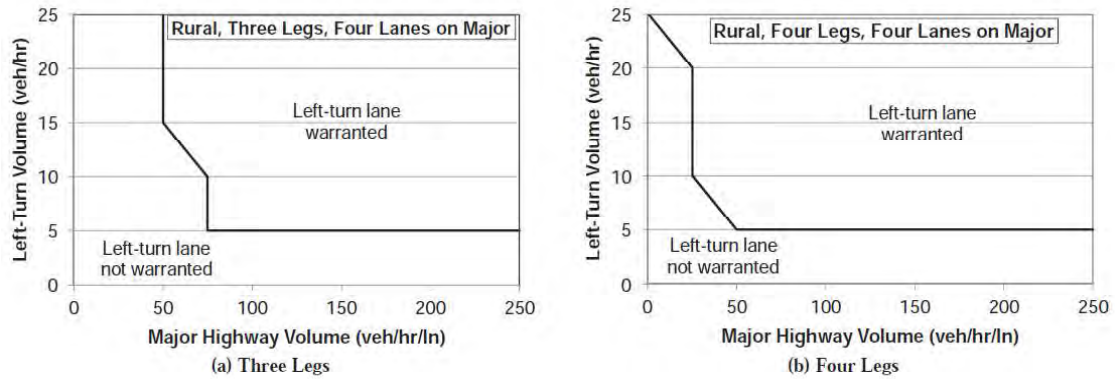
Approach Lane Volume (vph)	Minimum Right-turn Volume Warranting Exclusive Lane (vph)				
	By Posted Speed Limit				
	35 mph	40 mph	45 mph	50 mph	55 mph
300	--	--	--	75	20
400	--	40	40	40	15
500	--	40	40	30	15
600	40	40	40	25	10
800	40	35	30	20	10
1200	25	30	20	15	10
1600	15	15	15	10	5
2000	10	10	10	10	5



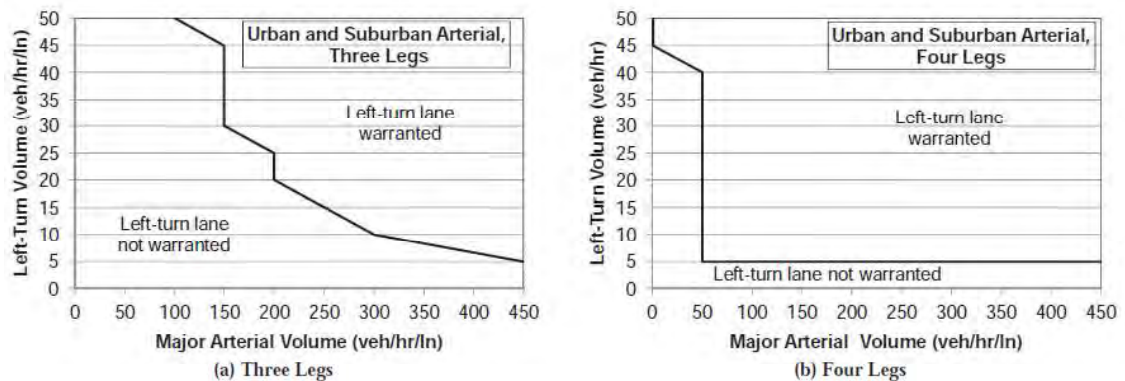
**Table 5.5 Left Turn Lane Guidelines for Rural Two-Lane Highways**



**Table 5.6 Left Turn Lane Guidelines for Rural Four-Lane Highways**



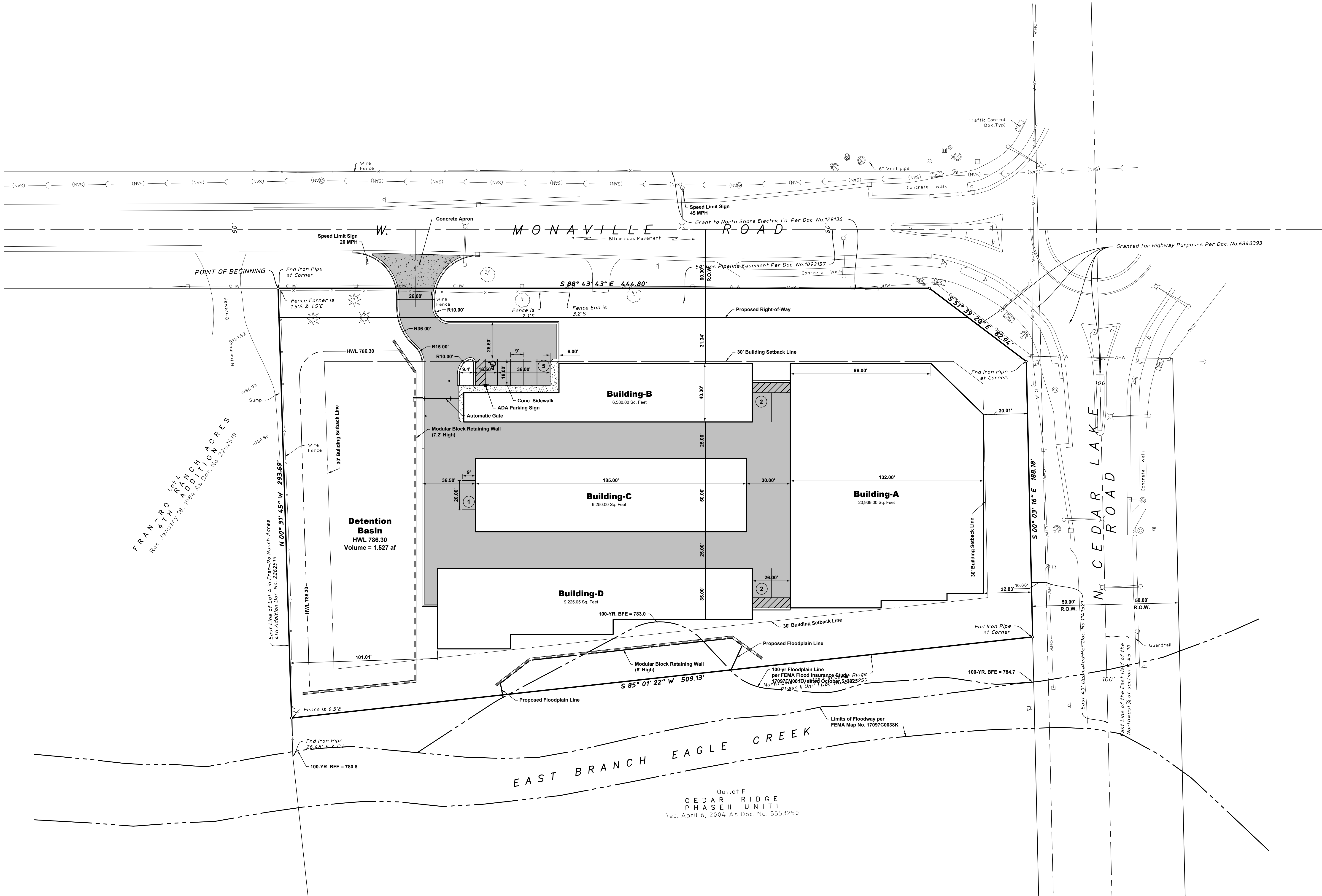
**Table 5.7 Left Turn Lane Guidelines for Urban and Suburban Arterials**



Source: NCHRP Report 745: Left Turn Accommodations at Unsignalized Intersections, TRB 2013



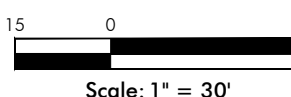
Scale: 1" = 30'



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www.haegerengineering.com

**SITE PLAN**  
**SELF-STORAGE FACILITY**  
**406 MONAVILLE ROAD**  
LAKE VILLA, ILLINOIS

Project Manager: K.M.L.  
Engineer: V.D.R.  
Date: 06-17-2025  
Project No. 25058  
Sheet **C1.0**



**SELF-STORAGE FACILITY  
406 MONAVILLE ROAD**

R  
25  
68





**Date:** July 11, 2025 **Project #:** 6623 – 406 Monaville Road  
**To:** Mike Strong, Village Administrator  
Jake Litz, Assistant to the Village Administrator  
**Organization:** Village of Lake Villa  
**From:** Robert Doeringsfeld, P.E.  
**Regarding:** Cedar Lake Estates – Engineering Review  
**Cc:** \_\_\_\_\_

We have received and reviewed the following documents related to the Easy Space Storage II, LLC at 406 Monaville Road

- Application for Conditional Use and Variance
- Boundary and Topographic Survey – May 7, 2025
- Photometric Plan – June 17, 2025
- Site Photos
- Site Plan and Preliminary Engineering – June 17, 2025

We have reviewed the preliminary submittal for conformance with water, sanitary sewer, pavement, and site considerations and have the following comments. Final submittal shall include the required elements called out in Title 11 of the Village Ordinances.

1. Pre Village Ordinance 5-4-2 use of the public Village Sewer System is required. The development can not use a septic system/holding tank. Connection can be made to the north of Monaville Road or to the east of Cedar Lake Road.
2. Development shall provide approval from Lake County Division of Transportation for the driveway entrance on Monaville Road.
3. Development shall follow the design requirements from Title 5 and Title 11 of the Village Ordinances.
4. Connection Fee Estimate
  - a. This estimate is provided based on the submitted Preliminary Engineering Plans. All Connection Fees will be based on Final Approved Plans. Fees associated with Lake County Sewer are estimates only. The Development must submit the required information to [pwengineeringgroup@lakecountyil.gov](mailto:pwengineeringgroup@lakecountyil.gov) for Final Connection Fee.
  - b. 406 Monaville Road – 46,000 sf of warehouse = 4.6 Residential Equivalents (RE)
  - c. Village Water: \$4,300/RE (5-4-3.F.1)
    - i. \$4,300/RE x 130 RE = **\$19,780**
  - d. Village Sewer: \$2,200/RE (5-4-3.F.7)
    - i. \$2,200/RE x 130 RE = **\$10,120**
  - e. Lake County Sewer (Intermediate Sewer and Treatment): \$3,540/RE (5-4-3.2) {LC 51.23.A}
    - i. \$3,540/RE x 130 RE = **\$16,284**
  - f. Total Water/Sewer Connection Fee: **\$46,184**

**JON M. TACK, P.E.**  
**PROFESSIONAL ENGINEERING SERVICES**

**MEMORANDUM**

TO: Mike Strong, Village Administrator

FROM: Jon M. Tack, P.E.

DATE: 7-11-2025

SUBJECT: Lake Villa Self Storage Development  
406 Monaville Rd. C.U.P. & Variation - Preliminary Plan Review #1

CC:

---

Below are the comments from the review of:

- Preliminary Engineering Plan for Self-Storage Facility 406 Monaville Road, Lake Villa, IL Date 6-17-2025 - Prepared by Haeger Engineering.
- Preliminary Stormwater Report for Self-Storage Facility 406 Monaville Road, Lake Villa, IL Date 6-17-2025 - Prepared by Haeger Engineering.
- Boundary & Topographic Survey 406 Monaville Road, Lake Villa, IL Date 5-7-2025 - Prepared by Haeger Engineering.
- Preliminary Landscape & Tree Preservation Plan for Easy Space Self-Storage Facility, 406 Monaville Road, Lake Villa, IL Date 6-17-2025 Prepared by Dickson Design Studio, Date 6-17-2025
- Narrative to Petition For Conditional Use Permit and Zoning Variation

General Comments

1. Prior to Final Approval of the stormwater improvements as-built/record drawings shall be provided for all stormwater facilities improvements per the WDO.
2. The detention basin, storm sewers and overland flow routes shall be placed in a plat restricted area per WDO requirements. Provide a plat of survey for recording that includes all stormwater facilities (basin, storm sewer, bio-swales, overland routes, etc.).
3. Final engineering shall provide contact information for the required designated erosion control inspector (DECI). Weekly reports from the DECI will need to be emailed to the Village.
4. All applicable permits shall be received by the Village prior to the issuing of the site development permit. Such as a copy of the NPDES NOI approval letter.
5. A maintenance plan for the stormwater facilities needs to be provided for review, approval, and then recorded with the plat for the stormwater facilities. Due to the large retaining walls immediately adjacent to the detention facility the maintenance plan needs to include specific wall inspections by a qualified inspector.
6. Provide wetland; boundary approval, jurisdictional determination(JD) and/or letter of no impact as applicable for the development. All wetland impacts will need mitigation.

**JON M. TACK, P.E.**  
**PROFESSIONAL ENGINEERING SERVICES**

7. Wetland type basins require detailed list of the plant material used. The basins will also require a 3-year maintenance and monitoring program with biannual reports to the Village on the quality and establishment of the wetland. A maintenance surety shall be on deposit during the monitoring program.
8. All submittals of plans and calculations shall be signed and sealed by an Illinois Registered Professional Engineer.
9. If additional plans were provided to LCDOT please provide the Village a copy. Also, the Village would like to be copied on the review comments from LCDOT.
10. Provide a copy of the IDNR Eco CAT.
11. The development appears to be proposing a holding tank for on-site waste disposal. Approval from the Lake County Health Department will be required.

**Stormwater Report Comments**

12. Provide the profile for East Branch of Eagle Creek in the report.
13. Include the existing conditions TC supporting calculations for all subareas.
14. Provide a detailed discussion of the impacts of the bypass area flowing thru the detention basin and explain bypass flow effects on the overtopping frequency.
15. Final engineering requires that a sub-area drainage map be included in the report depicting the tributary area to; culverts, catch basins, inlets, area not restricted/detained, etc.
16. Final Engineering to provide storm sewer calculations for all pipes and overland routes.
17. The freeboard for the detention basin is 1' above the depth of the runoff over the spillway.
18. The floodplain fill area will require specific calculations for fill volume and compensatory storage.

**Preliminary Engineering**

19. Review the grading along the west property line to assure no impacts to adjoining property owner.
20. Spillway location.
21. The sheet should identify the overland and emergency overland routes.
22. The wall is more than 7' high in some locations and will require a structural engineer's design.
23. Provide all details and calculations with final engineering.





JULY 11, 2025

TO: JAKE LITZ, VILLAGE OF LAKE VILLA

FR: SCOTT GOLDSTEIN, TESKA ASSOCIATES

RE: 406 MONAVILLE DEVELOPMENT REVIEW

#### General Information:

Applicant Name: Easy Space Storage II, LLC  
Project Name: Easy Space Storage  
Location: 406 Monaville Rd., at the Southeast corner of Monaville Rd. and Cedar Lake Rd.  
Subject PIN: 06-08-100-050-0000  
Zoning District: Suburban Business (SB)  
Action: CUP and Zoning Variances for Setback and Landscape Requirement

#### Project Overview:

The Applicant, Easy Space Storage II, LLC is proposing a personal self-storage facility to be located at 406 Monaville, PIN Number. Current zoning is Suburban Business (SB) as shown in Exhibit 1:



**Exhibit 1: Village of Lake Villa Zoning Map with Site Highlighted in Red**

The Applicant is requesting Mini warehouse, personal storage facility which would require a Conditional Use Permit. Section 10-4-4.

The site is bordered by R1 to the west and SR 2 to the south. The south side of the property abuts the East Branch of Eagle Creek. The project would have one entrance/egress from Monaville Road.

The Project consists of four proposed buildings at the southwest corner of Monaville Road and Cedar Lake Road:

Building A: 20,939 SF

Building B: 6,500 SF

Building C: 9,250 SF

Building D: 9,225 SF

## Zoning Review

The site is currently zoned SB. The following requirements of SB zoning are shown as required and proposed. Two variations are requested:

- Reduce minimum setback abutting a residential zone.
  - o **Consideration:** Floodplain and East Branch Creek provides an additional buffer between the development and residential development to the south
- Reduce parking requirements
  - o **Consideration:** More information is needed on the number of employees and whether 6 parking spaces is sufficient to service the personal warehouse use.

	Required	Proposed
Min. Area	40,000	133,613
Min. Width	150	238' (Cedar Lake) & 509.5 (Monaville)
Min Front Yard	50	30
Min Rear Yard	20	30
Total Side Yard	30	100
Min Side Yard	15	
Min. Setback Abutting A Street	50	100
Min. Setback Abutting a Residential or AG Zone	50	30
Max. Lot Coverage	70%	52%
Max FAR	80%	34.2%
Max Height of Principal Building	40	+/- 30
Story	3	1
Parking (warehousing)	1 space per employee on the largest work shift, plus 1 space for every 6,000 SF (8 required plus 1 space per employee)	6 including 1 ADA

## CUP Landscape and Other Standards

As a CUP to allow for Miniwarehouse, Personal Storage Facility has additional standards:

### 10-4-4: Standards for Certain Conditional Uses:

#### B. 13. Miniwarehouse; Personal Storage Facility:

- a. Perimeter of property shall be screened with a minimum "D" buffer yard.
- b. Any storage area door must not be visible from a public right of way.
- c. Building exterior must be designed to complement the appearance of nearby developed properties, regardless of their zoning district.

Page | 3

### Landscape Plan

#### A. Western boundary Commercial Development Adjacent to Suburban Residential

Landscape Plan shows Type C Option 2, with 6 canopy trees, 12 understory trees and 18 shrubs.

Type D is required as part of the CUP, which is met by providing a 6' opaque fence shown in the Landscape Plan.

#### B. Southern boundary Commercial Development Adjacent to Residential

Landscape Plan shows Type C Option 6 with 2 canopy trees, 4 understory trees and 5 high evergreen shrubs.

Type D Landscaping is required for CUP.

Type D Option 6 requires canopy trees, 10 understory trees, and 10 shrubs

A variance would be required to allow for Type C use at the Southern boundary.

**Consideration:** On the Southern boundary, a 6' High Modular Retaining Wall is proposed for the central area for flood control rather than landscaping. Due to the layout of the site and floodplain, landscaping in this area is supplanted by the Retaining Wall and there would be insufficient space to add Type D requirements in that area.

## Summary of Requested Variances

1. Reduction of setback abutting a Residential Zone from 50 feet to 30 feet.
2. Reduction in parking standards from 8 required spaces plus parking for employees to a total of 6 spaces including one ADA space.
3. Allowing Type C landscape instead of Type D along the southern boundary.

## Conditional Use Permits

The proposed CUP should be reviewed for 10-7-2 E. General Standards for Conditional Use Permits.

## Findings of Fact for Variations

The Zoning Board of Appeals should review the proposed to determine Findings of Fact for 10-7-4 Variations.

### Considerations:

Among other Findings of Fact, three are highlighted for this site:

- The proposed project has unique physical condition in relation to floodplain conditions and distance to abutting residential use.
- Special circumstances or conditions such as exceptional narrowness, topography or siting, fully described in the report of the zoning board, apply to the land for which the variation is sought, and that those conditions do not apply generally in the applicable zoning district.
- The requested variation is the minimum measure of relief necessary to alleviate the alleged hardship or practical difficulty presented by the strict application of this chapter.

## Conditions

Conditions On Variation(s): The zoning board of appeals may recommend and the board of trustees may impose such specific conditions and limitations concerning use, construction, character, location, landscaping, screening, and other matters relating to the purposes and objectives of these zoning regulations upon any lot benefited by a variation as may be necessary or appropriate to prevent or minimize adverse effects upon other property and improvements in the vicinity of the subject lot or upon public facilities and services.

**From:** [Rebecca Bateman Alexopoulos](#)  
**To:** [Jake Litz](#); [Michael Strong](#)  
**Cc:** [Jim McDonald](#); [JBateman@batemanlawltd.com](mailto:JBateman@batemanlawltd.com)  
**Subject:** Re: FW: Petition for Conditional Use and Variance for 406 Monaville  
**Date:** Tuesday, June 24, 2025 2:11:08 PM  
**Attachments:** [LEG.NOT-COND.USE-406 Monaville Rd \(Easy Storage\) \(Grenus\) \(2025\) \(06-24-25\).docx](#)

---

Hi Jake,

Please see the attached legal notice for your review and possible use. Please note that I have highlighted in yellow on the legal notice the two (2) places where we are still waiting for confirmation relative to the applicable standards.

I have reviewed all of the submittals and note that in the Preliminary Stormwater Report the Applicant references that they are preparing a Wetland Delineation Report and they are in the process of seeking a letter of no objection from LCSWM although they did not provide these as submittals. I would recommend that the Wetland Delineation Report and LCSWM no objection letter be provided in advance of this going to hearing for preliminary approval.

Also, they have not provided an IDNR endangered species report (only required if required by another agency) and/or a Lake County Natural Resources opinion letter and I would recommend that at least the Lake County Natural Resources opinion letter also be provided in advance of this going to hearing relative to preliminary approval.

They have not provided a location map, which is also required and which I would recommend that they also submit in advance of the hearing relative to preliminary approval.

It also appears to me that they will need a variation with respect to parking (I've asked that Scott weigh in on his reading of the parking requirements here as well in his review) but how much of a variation is yet to be determined as we do not know what their proposed staffing plan will be. 10-6A-2(C) provides that for "warehouse" uses, which I believe applies here, requires one space per employee on the largest work shift plus one space for every 6000 square feet of gross floor area. It appears that they have approximately 45,000 square feet of gross floor area which would require at least 8 parking spots based on square footage not counting employee spots. It appears from their site plan that they have only 6 parking spots including one ADA spot. I would recommend they submit some kind of exhibit or documentation relative to how they are calculating parking and/or why they are proposing only 6 spots. (Perhaps parking is permitted throughout the site in non-designated parking spots such as in front of the storage units?)

Finally, in their application letter they note that they are seeking a variation relative to the landscape buffer required for a portion of the southern property line to provide a retaining wall in lieu of landscaping and they note that they believe they are otherwise required to comply with the "Type C" landscape buffer pursuant to the chart in 10-4-6(G) (2). I also asked Scott to weigh in on this, as to me it's unclear if the proposed use falls into "SR non residential" on the chart in that section which requires a type B buffer or whether it should be classified instead as "commercial" requiring the Type C" landscape buffer. We should confirm the standard which they are seeking a variation from.

Please let me know if you have any questions or suggested changes to the legal notice.

Thanks,  
Becky

On Thu, Jun 19, 2025 at 8:57 AM Jake Litz <[jlitz@lake-villa.org](mailto:jlitz@lake-villa.org)> wrote:

Good morning, Jim & Becky,

We have received an application for a Conditional Use Permit and Zoning Variation for the lot at the southwest corner of Monaville Road and Cedar Lake Road. They are proposing a self-storage facility. Becky, you and I had briefly chatted about this one in the past. If they are missing any submittals, please let me know. We are going to tentatively target the regularly scheduled August 7 Plan Commission meeting for their public hearing. If you could, please prepare the legal notice.

They will be dropping of their CUP fee and Escrow payment today. Please review and let me know if you have any questions.

Thanks,

Jake

**Jacob Litz**

Assistant to the Village Administrator

Village of Lake Villa

65 Cedar Avenue | P.O. Box 519

Lake Villa, IL 60046

[jlitz@lake-villa.org](mailto:jlitz@lake-villa.org)

847-356-6100 ext. 224



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**From:** Michael Durlacher <[mdurlacher@ghulaw.com](mailto:mdurlacher@ghulaw.com)>

**Sent:** Thursday, June 19, 2025 8:32 AM

**To:** Jake Litz <[jlitz@lake-villa.org](mailto:jlitz@lake-villa.org)>

**Cc:** Mark Haufe <[mhaufe@comcast.net](mailto:mhaufe@comcast.net)>; David Wytmar <[david@groundworkltd.com](mailto:david@groundworkltd.com)>; Kimberly Lask <[kim-l@haegerengineering.com](mailto:kim-l@haegerengineering.com)>; Russell Thiele <[russell@groundworkltd.com](mailto:russell@groundworkltd.com)>

**Subject:** Petition for Conditional Use and Variance for 406 Monaville



Jake:

Per our discussion, please review the following attached submittal of the Application for Zoning Variation and Conditional Use Permit for the Property common known as 406 Monaville, Lake Villa:

1. Application for Zoning Request
2. Owner authorization Letter
3. Title Commitment ( reflecting current ownership)
4. Narrative – Exhibit to the Application.
5. 406 Monaville – Legal Description
6. Boundary and Topographical Survey
7. Elevations drawings
8. Sketch up Renderings of Building exterior
9. Landscape Plan
10. Pohotmetric Plan
11. Preliminary Stormwater Report
12. Site Photos
13. Site Plan and Preliminary Engineering
14. Traffic Impact Study

Groundwork Ltd Architects will be delivering the print copies of the Exhibits. Please confirm once you are able to review and open all the attachments.

Let's us know the amount of the application Fee and any deposit the Village will required and Mark will drop off a check.

If you require anything further on the initial submittal, please let us know. Let's touch base Friday or Monday to confirm that you have received everything.

Thank you

Michael Durlacher, Partner

Grogan Hesse & Uditsky, P.C.

2 Mid America Plaza, Suite 110

Oakbrook Terrace, IL 60181

(O) 630-833-5533 (M) 312-304-6453



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July 22, 2025

Mike Strong  
Village Administrator  
Village of Lake Villa  
65 Cedar Avenue  
P.O. Box 519  
Lake Villa, IL 60046

RE: Self-Storage Facility – 406 Monaville Road  
Response to the Village of Lake Villa Comments  
Haeger Project No.: 25-058

Dear Mr. Strong,

Haeger Engineering is in receipt of review comments for the proposed development, dated July 11, 2025. We have revised the submittal materials per the comments. The original review comments are included below, shown in *italics*, with our responses to each comment followed in **bold**.

Engineering Review (by Robert Doeringsfeld, P.E., Applied Technologies)

1. *Pre Village Ordinance 5-4-2 use of the public Village Sewer System is required. The development cannot use a septic system/holding tank. Connection can be made to the north of Monaville Road or to the east of Cedar Lake Road.*

**A sanitary connection at the north side of Monaville is shown.**

2. *Development shall provide approval from Lake County Division of Transportation for the driveway entrance on Monaville Road.*

**A submittal was made to LCDOT on 7-1-2025.**

3. *Development shall follow the design requirements from Title 5 and Title 11 of the Village Ordinances.*  
**Understood.**

4. *Connection Fee Estimate*

- a. *This estimate is provided based on the submitted Preliminary Engineering Plans. All Connection Fees will be based on Final Approved Plans. Fees associated with Lake County Sewer are estimates only. The Development must submit the required information to [pwengineeringgroup@lakecountyil.gov](mailto:pwengineeringgroup@lakecountyil.gov) for Final Connection Fee.*
- b. *406 Monaville Road – 46,000 sf of warehouse = 4.6 Residential Equivalents (RE)*
- c. *Village Water: \$4,300/RE (5-4-3.F.1)*
  - i. *\$4,300/RE x 130 RE = \$19,780*
- d. *Village Sewer: \$2,200/RE (5-4-3.F.7)*
  - i. *\$2,200/RE x 130 RE = \$10,120*
- e. *Lake County Sewer (Intermediate Sewer and Treatment): \$3,540/RE (5-4-3.2) {LC 51.23.A}*
  - i. *\$3,540/RE x 130 RE = \$16,284*
- f. *Total Water/Sewer Connection Fee: \$46,184*

**Noted.**



Engineering Review (by Jon M. Tack, P.E.)

*General Comments*

1. *Prior to Final Approval of the stormwater improvements as-built/record drawings shall be provided for all stormwater facilities improvements per the WDO.*

**Noted.**

2. *The detention basin, storm sewers and overland flow routes shall be placed in a plat restricted area per WDO requirements. Provide a plat of survey for recording that includes all stormwater facilities (basin, storm sewer, bio-swales, overland routes, etc.).*

**This will be provided during final engineering.**

3. *Final engineering shall provide contact information for the required designated erosion control inspector (DECI). Weekly reports from the DECI will need to be emailed to the Village.*

**Noted.**

4. *All applicable permits shall be received by the Village prior to the issuing of the site development permit. Such as a copy of the NPDES NOI approval letter.*

**Permits will be applied for during final engineering.**

5. *A maintenance plan for the stormwater facilities needs to be provided for review, approval, and then recorded with the plat for the stormwater facilities. Due to the large retaining walls immediately adjacent to the detention facility the maintenance plan needs to include specific wall inspections by a qualified inspector.*

**The maintenance plan will be provided during final engineering.**

6. *Provide wetland; boundary approval, jurisdictional determination(JD) and/or letter of no impact as applicable for the development. All wetland impacts will need mitigation.*

**The wetland boundary was confirmed by Hey and Associates and is reflected on the Preliminary Engineering Plan. A LONI will be obtained.**

7. *Wetland type basins require detailed list of the plant material used. The basins will also require a 3-year maintenance and monitoring program with biannual reports to the Village on the quality and establishment of the wetland. A maintenance surety shall be on deposit during the monitoring program.*

**This will be provided during final engineering.**

8. *All submittals of plans and calculations shall be signed and sealed by an Illinois Registered Professional Engineer.*

**All final engineering documents will be signed and sealed by a P.E.**

9. *If additional plans were provided to LCDOT please provide the Village a copy. Also, the Village would like to be copied on the review comments from LCDOT.*

**Additional plans were not prepared.**

10. *Provide a copy of the IDNR Eco CAT.*

**A copy of the EcoCAT is included with the submittal.**

11. *The development appears to be proposing a holding tank for on-site waste disposal. Approval from the Lake County Health Department will be required.*

**A sanitary connection will be made to the sanitary sewer at the north side of Monaville.**

*Stormwater Report Comments*

12. *Provide the profile for East Branch of Eagle Creek in the report.*

**The profile is included in the report.**



13. *Include the existing conditions TC supporting calculations for all subareas.*

**TC calculations are included in the PondPack analysis in the report.**

14. *Provide a detailed discussion of the impacts of the bypass area flowing thru the detention basin and explain bypass flow effects on the overtopping frequency.*

**Additional information is included in the stormwater report narrative.**

15. *Final engineering requires that a sub-area drainage map be included in the report depicting the tributary area to; culverts, catch basins, inlets, area not restricted/detained, etc.*

**A sub-area drainage map will be provided in the final stormwater management report.**

16. *Final Engineering to provide storm sewer calculations for all pipes and overland routes.*

**This will be provided in the final stormwater management report.**

17. *The freeboard for the detention basin is 1' above the depth of the runoff over the spillway.*

**Noted.**

18. *The floodplain fill area will require specific calculations for fill volume and compensatory storage.*

**Floodplain compensatory storage calculations will be provided in the final stormwater management report.**

*Preliminary Engineering*

19. *Review the grading along the west property line to assure no impacts to adjoining property owner.*

**The grading will have no impacts to the adjoining property.**

20. *Spillway location.*

**The detention basin spillway is located at the south side of the detention basin. It is noted on the preliminary engineering plan.**

21. *The sheet should identify the overland and emergency overland routes.*

**Emergency overland flow routes are indicated on the preliminary engineering plan.**

22. *The wall is more than 7' high in some locations and will require a structural engineer's design.*

**Noted.**

23. *Provide all details and calculations with final engineering.*

**Noted.**

If you have any questions or if additional information is required to facilitate the approval, please contact me at [kim-l@haegerengineering.com](mailto:kim-l@haegerengineering.com) or 847-230-3176.

Sincerely,

**HAEGER ENGINEERING LLC**

Kim Lask, P.E., PTOE, CFM  
Project Manager

Cc: Mark Haufe, Easy Space Storage, II, LLC  
Michael Durlacher, Grogan Hesse & Uditsky, P.C.

NOTICE OF PUBLIC HEARING BEFORE THE  
PLAN COMMISSION/ ZONING BOARD OF APPEALS  
OF THE VILLAGE OF LAKE VILLA

NOTICE IS HEREBY GIVEN of a public hearing to be held by the Plan Commission/ Zoning Board of Appeals of the Village of Lake Villa on August 7, 2025, at 7:00 p.m., or as soon thereafter as the Plan Commission/ Zoning Board of Appeals' agenda permits, at the Village of Lake Villa Village Hall, 65 Cedar Avenue, Lake Villa, Illinois, 60046.

**NATURE OF REQUEST:** The Petitioner, Easy Space Storage II, LLC, is the contract purchaser of the Subject Property and is requesting the Village's approval of a Conditional Use Permit to allow the construction and operation of a mini-warehouse facility for personal storage on the Subject Property. The Subject Property is located within the Village of Lake Villa's SB (Suburban Business) Zoning District, and the Petitioner is not requesting any rezoning of the Subject Property but is requesting the Village's approval of variations from certain provisions of the Village's Zoning Regulations (Title 10 of the Lake Villa Village Code) including but not limited to Section 10-3C-1 thereof relative to the minimum required front yard setback, to permit the subject storage facility to have a thirty foot (30') front yard setback, notwithstanding the fact that a fifty foot (50') front yard setback is otherwise required by the Village's Zoning Regulations, including but not limited to Section 10-4-6(G)(2)(5) and Section 10-4-4(B)(13)(A) thereof to permit the subject facility to provide a minimum Type C landscaping buffer along the perimeter of the property in addition to a proposed six foot (6') high modular block retaining wall along a portion of the Southern buffer yard, notwithstanding that a minimum Type D landscaping buffer is otherwise required by the Village's Zoning Regulations, and including but not limited to Section 10-6A-2(c) thereof to permit a total of nine (9) parking spaces, including one (1) ADA parking space, notwithstanding that ten (10) parking spaces are otherwise required by the Village's Zoning Regulations and such other variations as may be identified in the Plan Commission/ Zoning Board of Appeals hearing process.

**OWNER OF RECORD:** The owner of the Subject Property is the Estate of Robert Grenus, c/o Sandra Johnson, whose address is P. O. Box 466, Lake Villa, IL 60046.

**PETITIONER:** The Petitioner for the Conditional Use Permit is Easy Space Storage II, LLC, 23366 Wall Street, Lake Villa, IL 60046.

**ADDRESS AND LOCATION OF PROPERTY:** The Subject Property is commonly known as 406 Monaville Road, Lake Villa, IL 60046, is approximately 3.067 acres in area, is located within the corporate limits of the Village on the South side of Monaville Road at the Southwest corner of the intersection of Cedar Lake Road and Monaville Road.

**LEGAL DESCRIPTION OF PROPERTY ("the Subject Property"):**

THAT PART OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF LOT 4 IN FRAN-RO RANCH ACRES 4<sup>TH</sup> ADDITION PER DOC. NO. 2262519; THENCE SOUTH 88 DEGREES 43 MINUTES 43 SECONDS EAST ALONG THE SOUTH LINE OF MONAVILLE ROAD PER DOC. NO. 129136, A DISTANCE OF 444.80 FEET; THENCE SOUTH 51 DEGREES 39 MINUTES 20 SECONDS EAST ALONG THE SOUTHWESTERLY ROW PER DOC. NO. 6848393, A DISTANCE OF 82.94 FEET; THENCE SOUTH 00 DEGREES 03 MINUTES 16 SECONDS EAST ALONG THE WEST LINE OF CEDAR LAKE ROAD PER DOC. NO. 2262519,



A DISTANCE OF 188.18 FEET TO THE NORTH LINE OF OUTLOT F IN CEDAR RIDGE PHASE II UNIT I SUBDIVISION PER DOC. NO. 5553250; THENCE SOUTH 85 DEGREES 01 MINUTES 22 SECONDS WEST ALONG SAID NORTH LINE 509.13 FEET TO THE EAST LINE OF SAID LOT 4; THENCE ALONG SAID EAST LINE, NORTH 00 DEGREES 31 MINUTES 45 SECONDS WEST A DISTANCE OF 293.69 FEET TO THE POINT OF BEGINNING, ALL IN LAKE COUNTY, ILLINOIS.

ALSO DESCRIBED AS:

THE EAST HALF OF THE NORTH WEST QUARTER OF SECTION 8 AND THE EAST HALF OF THE SOUTH WEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE 3RD P.M., EXCEPT THE EAST 265 FEET OF THE NORTH 1700 FEET OF THE SOUTH 2166 FEET OF SAID EAST HALF OF THE SOUTH WEST QUARTER OF SAID SECTION, AND ALSO EXCEPT THE SOUTH 400 FEET OF THE EAST 930.6 FEET OF THE EAST HALF OF THE SOUTH WEST QUARTER OF SAID SECTION IN LAKE COUNTY, ILLINOIS, EXCEPTING LOTS 1, 2, 3 AND 4 OF FRAN-RO RANCH ACRES FOURTH ADDITION BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTH WEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF LAKE VILLA, COUNTY OF LAKE, STATE OF ILLINOIS; AND EXCEPTING LOTS 1 AND 2 IN FRAN-RO RANCH ACRES THIRD ADDITION, BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 45 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN IN THE VILLAGE OF LAKE VILLA, COUNTY OF LAKE, STATE OF ILLINOIS; EXCEPT THAT PART CONVEYED TO THE LAKE COUNTY DEPARTMENT OF TRANSPORTATION BY DEED RECORDED AUGUST 26, 1986 AS DOCUMENT 2475785 AND BY DEED RECORDED MAY 3, 2012 AS DOCUMENT 6848393.

P.I.N. 06-08-100-050

Copies of the Petition and related submittals are on file and available for inspection and/or copying at the office of the Village Clerk, 65 Cedar Avenue, Lake Villa, IL 60046 during the Village Clerk's normal business hours.

The Village of Lake Villa is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the Village's facilities, are requested to contact the Village's ADA Coordinator at (847) 356-6100 promptly to allow the Village to make reasonable accommodations for those persons.

ALL INTERESTED PERSONS ARE INVITED TO ATTEND THE PUBLIC HEARING AND WILL BE GIVEN AN OPPORTUNITY TO BE HEARD, AND SUCH PERSONS, IF THEY SO REQUEST, WILL BE GIVEN THE OPPORTUNITY TO INQUIRE OF AND CROSS-EXAMINE WITNESSES FOR THE PETITIONER.

/s/ Michael Strong  
Village Administrator, Village of Lake Villa