Inver Grove Heights Planning Commission
Tuesday, July 16, 2024 at 7:00 PM
8150 Barbara Avenue, Inver Grove Heights, MN 55077

AGENDA

NOTICE TO RESIDENTS: Individuals may submit written public comments in advance of the meeting by emailing comments to Stacy Bodsberg (sbodsberg@ighmn.gov). Comments received prior to 4:00 p.m. on Tuesday, July 16, 2024, will be provided to the Council at or before the July 16, 2024 meeting.

1. **Call to Order**
2. **Roll Call**
3. **Consent Agenda**
   - **A.** Minutes of the June 18, 2024, Planning Commission Meeting.
4. **Public Hearing**
   - **A.** Planned Unit Development Amendment to allow for the use of a business and trade school in the Bishop Heights District located at 5786 Blackshire Path. (Hilda Ortiz Vega - Case No. 24-18PUD)
   - **B.** Variance from Ordinance 10-15-17 for the exterior building materials of a structure located at 11300 Rich Valley Boulevard. (Republic Services - Case No. 24-20V)
   - **C.** Conditional Use Permit for an Essential Service Building to expand an existing electrical power substation; and a Variance from Ordinance 10-15-12 for the installation of a ten-foot-high fence located at 2015 105th Street East. (Xcel Energy - Case No. 24-23V)
   - **D.** Preliminary and Final Plat to consolidate two parcels; Vacation of certain Drainage and Utility Easements; and a Conditional Use Permit Amendment for the expansion of an automobile and off-highway vehicle sales lot located at 1290 50th Street East. (RJ Ryan Construction - Case No. 24-19CS)
5. **Regular Business**
6. **Adjourn**

This document is available upon a three (3) business day request in alternate formats such as braille, large print, audio recording, etc. Please contact Stacy Bodsberg, Community Development Support Specialist, at 651.450.2545 or sbodsberg@ighmn.gov.

PLANNING COMMISSION MINUTES – CITY OF INVER GROVE HEIGHTS

Tuesday, June 18, 2024 – 7:00 p.m.
City Council Chambers – 8150 Barbara Avenue

1. CALL TO ORDER

Chair Weber called the Planning Commission Meeting to order at 7:00 p.m.

The Pledge of Allegiance was recited.

2. ROLL CALL

Commissioners Present:	Jonathan Weber *(Chair)* Trisha Presley *(Secretary)* Jason Teiken Lance Twedt Aida Schaefer Dennis Wippermann
Commissioners Absent:	Scott Clancy *(Vice-Chair)* – excused Robert Heidenreich – *excused* Amy Hunting – *excused*
Staff Present:	Heather Botten, Associate Planner Stacy Bodsberg, Community Development Support Specialist

3. CONSENT AGENDA

A. Minutes of the June 4, 2024, Planning Commission Meeting.

Motion by Teiken, Second by Presley, to approve the minutes as corrected.
Ayes: 6
Nays: 0 Motion Carried.

4. PUBLIC HEARING

A. Ordinance Amendment to Title 10 of the City Code (Zoning Regulations) specifically Chapter 2, Section 10-2-2, Chapter 9C, Section 10-9C-1, Chapter 9C, Section 10-9C-2, Chapter 9C, Section 10-9C-3, Chapter 13, Article J, Section 10-13J-5, and Chapter 15 relating to regulations for multiple family districts. (City of Inver Grove Heights – Case No. 24-17X) *Tabled Action from the June 4, 2024, Planning Commission Meeting.*

Reading of Public Notice

Secretary Presley read the Public Hearing Notice.

Presentation of Request

Associate Planner Botten presented a summary of the staff report.

The proposals in the ordinance update the City's multi-family zoning regulations, including aligning density guiding with the Comprehensive Plan, consolidating performance standards, making multi-family housing a permitted rather than conditional use in multi-family zoning districts, and allowing for mixed unit types in the Northwest Area Overlay District (consistent with the Comprehensive Plan).

DRAFT

Commissioner Teiken inquired about the approval process for the ordinance updates. Botten stated that due to the size of the amendment, there would be three readings of the ordinance updates before the City Council. Depending on the Council's decision, the ordinance would be published and subsequently take effect if approved.

Commissioner Schaefer inquired about the rationale for reducing the parking requirement from 2.5 to 2 parking stalls per unit and adding 1 visitor stall for every 6 units. Botten stated that staff analyzed parking at multi-family developments in six nearby cities and found that 2 stalls plus guest parking exceeds what a lot of apartment/townhome developers are looking for. Schaefer mentioned larger events being a potential issue and inquired if street parking would be generally permitted. Botten confirmed except for specifically posted parking limitations. A lot of multi-family developments allow parking on at least one side of the street.

Commissioner Wippermann inquired about the rationale for reducing the enclosed parking stall requirements and that it's visually less appealing to have cars on the street. Botten stated that single-family homes have no requirement for enclosed parking, and that there would still be one enclosed stall required for multi-family housing developments.

Commissioner Wippermann inquired about the rationale for changing conditional use to permitted use. Botten stated that conditional use can mislead people into thinking an allowed use project can be denied, which is not the case; for multi-family areas, apartments or townhomes are the primary use. Therefore, they should be designated permitted use rather than conditional use. During the site plan review process, conditions can still be added.

Opening of Public Hearing

Kris Wilson, City Administrator, responded to Commissioner Teiken's earlier question about the approval process. She said that under City Code, an ordinance that has had a public hearing before the Planning Commission only requires one reading before the City Council. While the City Council could ask for more research or more readings, it is possible that they could approve it after one reading.

Chair Weber closed the Public Hearing.

Planning Commission Discussion

Commissioner Schaefer stated that the proposed ordinance contains many changes and would prefer a deeper understanding of all the implications.

Commissioner Wippermann stated that he agrees with most of the proposed ordinance changes but feels like the city is giving up a lot of say. He is not in favor of approving.

Commissioner Teiken stated that he was in favor of moving the ordinance forward, the changes are in line with the Comprehensive Plan's attempt to provide more housing supply and variety. The reduction of half a parking stall does not strike him as radical. Ridesharing and carpooling have become more popular as a strategy to address parking concerns for the occasional large event.

Commissioner Presley stated that she agrees with Commissioner Teiken.

Commissioner Schaefer commented that public transit in the area is not yet robust enough to be an effective alternative to driving. The impression of an area is negatively impacted when there is inadequate parking.

DRAFT

Commissioner Presley questioned what the ordinance's reduction in parking stalls would look like for a hypothetical 100-unit development. Botten stated that there would be 50 fewer resident stalls; however, there would be close to an added 20 guest stalls with the new guest stall requirement. Presley stated that those guest parking stalls could help alleviate any potential shortage in larger events, in addition to unused resident stalls.

Commissioner Schaefer stated that parking stalls for residents and guests would be different.

Chair Weber inquired about a specific local development in the Northwest Area. Botten stated that for the Northwest Area, developers only need to meet a certain percentage of the parking requirement, and even so, they ask for variances to decrease the parking requirement.

Commissioner Schaefer stated that developers can always request a variance to reduce the parking, but the City cannot request developers to provide parking above the required minimum.

Chair Weber questioned that the parking minimum cannot be raised for a specific project. Botten confirmed that it cannot.

Chair Weber inquired about the six other cities analyzed. Botten stated that City Planner Hunting did the analysis and found that developers in Inver Grove are similar to those in the studied cities. Some cities are considering removing parking requirements entirely.

Chair Weber stated that in Rosemount, there are lower parking requirements, and he has noticed that the lots still have plenty of empty stalls. The discrepancies between the City Code and the Comprehensive Plan create issues for staff, the Commission, and developers; and is in favor of increased clarity.

Commissioner Twedt stated that he is generally in favor of simplifying City Code.

Planning Commission Recommendation
Motion by Twedt, Second by Teiken, to approve the proposed Ordinance Amendment.
Ayes: 4
Nays: 2 (Schaefer, Wippermann) Motion Carried.

The item is tentatively scheduled to go before the City Council on July 8, 2024.

5. REGULAR BUSINESS

Associate Planner Botten stated that the originally scheduled Planning Commission meeting for Tuesday, July 2, 2024, has been cancelled.

6. ADJOURN

Motion to adjourn the meeting at 7:29 p.m.

Respectfully submitted by Will Clashe, Recording Secretary.

DRAFT

Agenda Item 4.A.

Planning Commission Report

MEETING DATE:	July 16, 2024
CASE NO:	24-18PUD
APPLICANT:	Hilda Ortiz Vega
PROPERTY OWNER:	MN Real Estate LLC
REQUEST:	Southeast Quadrant Ordinance Amendment (Bishop Heights)
LOCATION:	5786 Blackshire Path
COMPREHENSIVE PLAN:	RC, Regional Commercial
ZONING:	PUD (Southeast Quadrant)
STAFF CONTACT:	Allan Hunting, 651.450.2554

ACTION REQUESTED

In order to utilize the property as proposed, the applicant has requested the following specific action:

- Add "Business and Trade School" to the list of uses allowed on Lots 1-31, Block 1, Blackberry Town Office Park.

BACKGROUND

The applicant is requesting an amendment to the Bishop Heights PUD Ordinance to allow for a beauty school to be located within an existing building in Blackberry Town Office Park. The proposed beauty school would utilize the basement of the space at 5786 Blackshire Path. The use would be considered a “Business and Trade School”, which is a permitted use in the B-3 and B-4 zoning districts.

The beauty school would be a small scale operation with no more than 1–3 students plus an instructor. The school would operate on weekends from 9:00 am to 3:00 pm on limited weekends which were identified in the applicant's narrative. The school does not have a full-time Monday-Friday operation. Parking would be accommodated with the two spaces reserved for the space and any additional in the parking lot.

The Bishop Heights PUD was set up with its own ordinance with all uses approved individually and listed in the ordinance. The original approval for this lot is 65,415 square feet of office space divided into separate office townhouse type units.

EVALUATION OF REQUEST

The applicant has provided information on the number of students, hours of operation and the weekends of operation for the school. This appears to be a low intensity use and would not have a negative impact on the surrounding uses or create issues with parking.

When the Bishop Heights PUD was put in place in the mid 1990s, it was important to track traffic generation for all the new development to make sure traffic generation at the Upper 55th Street and Highway 52 intersection remains below capacity. All the lots in the Bishop Heights PUD are approved with a PM peak traffic generation number. As the area has now developed and matured, traffic has not exceeded traffic capacity along Upper 55th Street and at the intersection.

ALTERNATIVES

A. Approval. If the Planning Commission finds the application acceptable, the following request should be recommended for approval:

- Approval of an **Amendment** to the Southeast Quadrant PUD Ordinance to allow a business and trade school within Blackberry Town Office Park.

B. Denial. If the Planning Commission does not support the request, a recommendation of denial should be forwarded to the City Council. With a recommendation of denial, the basis of the recommendation should be given.

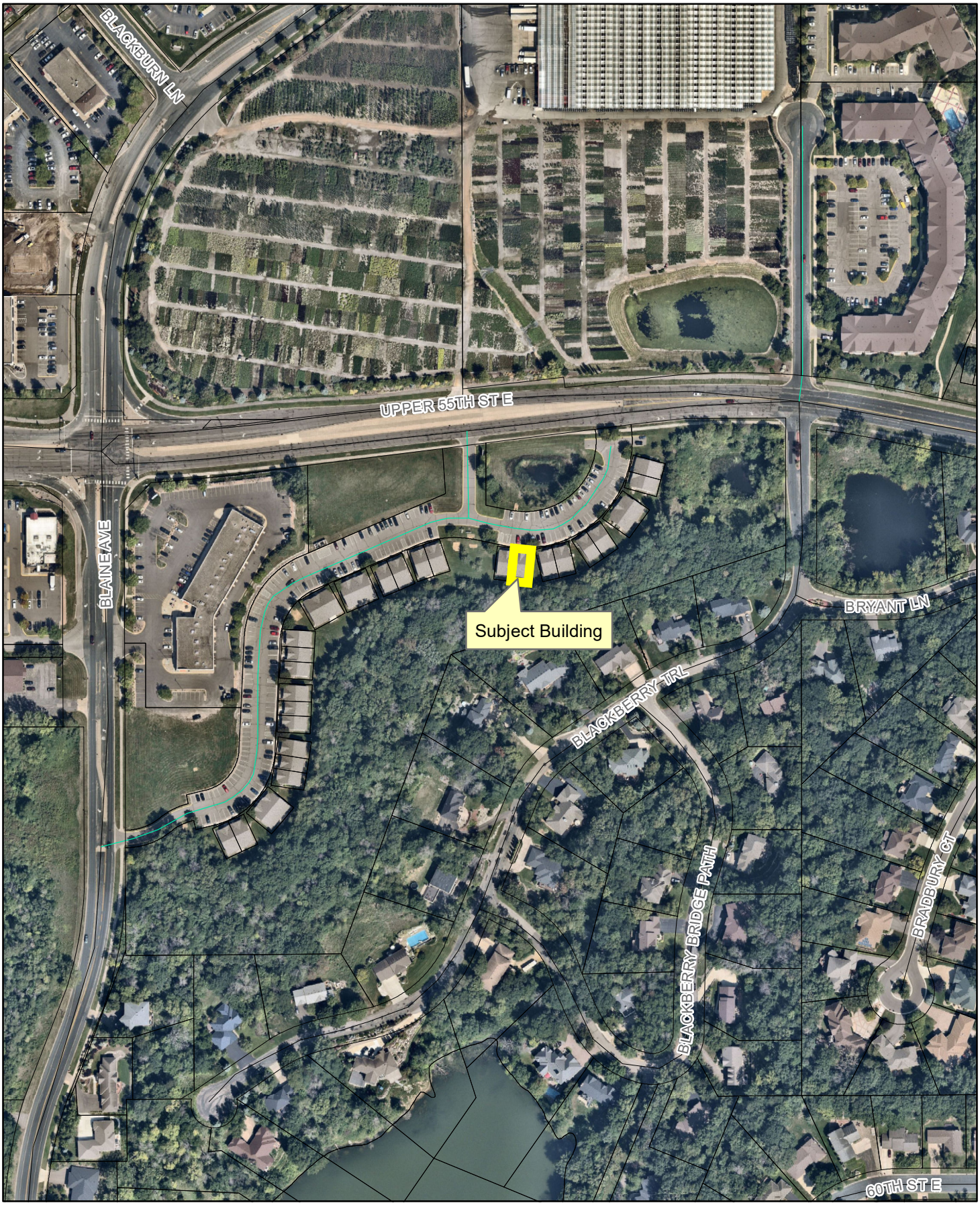
RECOMMENDATION

Based on the information in the preceding report, staff are recommending approval of the request as presented. No additional conditions of approval are needed as the business would be operating within an existing building with a low intensity use. There are no other conditions of approval for any of the office type uses that occupy the site currently.

ATTACHMENTS

1. Location Map
2. Site Map
3. Applicant Narrative
4. Floor Plan
5. Proposed Ordinance

Location Map
Case No. 24-18PUD



4-2 assigned parking space

AV Lash & Beauty School LLC
Business owner: Hilda M Ortiz Vega

5786 blackshire path Lower Level, Inver grove heights MN, 55076.

We will be licensed beauty school by state boards of cosmetology.

Mission Statement

AV Lash & Beauty School offers more than just technical training. We empower students to build confidence, creativity, and pursue a fulfilling career in the beauty industry.

School Hours

Friday-Saturday 9:00 a.m. - 3:30 p.m.

School Days closed: Easter day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Eve, Christmas Day, New Years Eve, New Years Day.

Eyelash Extension Technician is a 14 hour Program. We offer online theory and 2 days in class (dates below). Friday & Saturday 9:00am-3:30pm

Since it is a smaller space compared to other beauty schools. The maximum student I could have in the space is **2-3 students with 1 instructor.**

Estimate Start Dates for future classes:

2024 class dates:

August 9, 10, 23, 24

September 6, 7, 20, 21

October 4, 5, 18, 19

November 1, 2, 15, 16, 29, 30

December 6, 7, 20, 21, 27, 28

2025 class dates:

January 10, 11, 24, 25

February 7, 8, 21, 22

March 7, 8, 21, 22

April 4, 5, 18, 19

May 2, 3, 16, 17, 30, 31

June 13, 14, 27, 28

July 11, 12. 25. 26

August 8, 9, 22, 23

September 5, 6, 19, 20

October 3, 4, 17, 18, 31

November 1, 14, 15, 28, 29

December 12, 13, 19, 20

EVACUATION ROUTE

5786 Blackshire Path

DESIGNATED MEETING PLACE

Up the parking lot, next to the dumpster

CITY OF INVER GROVE HEIGHTS
DAKOTA COUNTY, MINNESOTA

Ordinance No._____

AN ORDINANCE AMENDING TITLE 10 OF THE CITY CODE RELATED TO THE PLANNED UNIT DEVELOPMENT ZONING DISTRICT IN THE SOUTHEAST QUADRANT OF HIGHWAYS 52 AND 494

THE CITY OF INVER GROVE HEIGHTS ORDAINS THAT ORDINANCE NUMBERS 891, 912, 915, 928, 946, 968, 976, 977, 985, 1022, 1056, 1058, 1062, 1064, 1074, 1101, 1106, 1112, 1133, 1135, 1136, 1187, 1190, 1230, 1298, 1313, 1329, 1331, 1350, 1356, 1426 AND 1448 ARE HEREBY RESTATED AND AMENDED TO READ AS FOLLOWS:

SECTION I. **Rezoning Land to Planned Unit Development (PUD).** Ordinance No. 1190 adopted July 27, 2009, entitled, "AN ORDINANCE ADOPTING THE RECODIFICATION OF THE INVER GROVE HEIGHTS CITY CODE INCLUDING THE CITY ZONING ORDINANCE, is hereby amended to rezone from MF PUD to Planned Unit Development Zoning District No. 2016-01 the following described property:

Lot 2, Block 1, Bishop Heights 4th Addition, Dakota County, Minnesota according to the recorded plat thereof

SECTION II. The Zoning Map of the City of Inver Grove Heights referred to and described in said Ordinance No. 1230 as that certain map entitled "Inver Grove Heights Zoning Map, June 24, 2002", together with all amendments thereto, hereinafter referred to as the "zoning map", shall not be republished to show the aforesaid rezoning, but the Clerk shall appropriately mark the said zoning map on file in the Clerk's Office for the purpose of indicating the rezoning hereinabove provided for in this ordinance and all of the notations, references and other information shown thereon are hereby incorporated by reference and made a part of this ordinance.

SECTION III. Purpose and Intent. The above referenced property is hereby rezoned to Commercial Planned Unit Development Zoning District No. 2023-01, for the purposes of:

A. Providing the means for greater creativity and flexibility in environmental design than is provided for under the strict application of the existing zoning code while at the same time preserving the health, safety, order, convenience, prosperity and general welfare of the City and its inhabitants.
B. Recognizing the economic and cultural advantages that will accrue to the residents of a planned community.
C. Encouraging the preservation and enhancement of desirable site characteristics and open space.
D. Encouraging a development pattern in harmony with land use density, transportation facilities and community objectives of the comprehensive plan.
E. Limiting development of tax exempt uses.
F. Providing incentives and encouraging development that will create a desirable tax base.

G. Prohibiting uses and developments that could be detrimental to the overall development of the area.

SECTION IV. Findings. In rezoning the above referenced property to Commercial Planned Unit Development No. 2023-01, the City Council has found the following:

A. That the proposed Commercial Planned Unit Development is consistent with the City's 2030 Comprehensive Plan.
B. That the proposed development has been designed as a complete and unified development within its own boundaries in terms of relationship of structures, patterns of circulation, visual character, interrelationship of utilities and drainage infrastructure, and overall architectural theme.
C. That the proposed layout of land use within the development will result in compatible land uses with present and planned uses in the surrounding area.
D. That the development is sufficient unto itself on the basis of size, composition, arrangement and the provision of municipal utilities.
E. That the impacts of the proposed development on municipal services and facilities have been reviewed and that mitigative measures have been identified where needed.
F. That the impacts of the proposed development on environmental quality and the reasonable enjoyment of surrounding property have been identified, analyzed and mitigative measures identified where needed.
G. That the existing and proposed layout and land use for Tracts A-D have been heretofore regulated in part by a succession of Conditional Use Permit Resolutions. Resolution No. 4573 was adopted by the City Council on 9/25/89. It was rescinded and replaced on 11/20/89 by Resolution No. 4615, which was rescinded on 8/27/90 and replaced with Resolution No. 4847, which was rescinded on 6/13/94 and replaced by Resolution No. 6055, which was rescinded on 4/10/95 and replaced by Resolution No. 6276, which was rescinded on 2/24/97 and replaced by Resolution No. 6789, which was rescinded on 2/23/98 and replaced by Resolution No. 98-30, which was rescinded on 2/28/11 and replaced by Resolution No. 11-28. This PUD Ordinance now replaces Resolution No. 11-28.

SECTION V. Land Use Regulations. For the above referenced property contained within the Commercial Planned Unit Development District No. 2011-01, the following land use regulations shall apply:

A. SITE PLAN
Prior to commencement of any development or issuance of grading or building permits, the City Council shall approve final development plans, including but not limited to: final plat, site plan, grading plan, utility plan, landscape plan, elevation plan, signage plan, lighting plan.

B. USES
All development shall be restricted to the following uses:

Parcel No.	Legal Description*	Specific Use
1	Lot 1, Block 1, Bishop Heights	65,000 square foot, 16-screen theater

2	Lot 2/3, Block 1, Bishop Heights	7,400 square foot sit down restaurant
3	Lot 2/3, Block 1, Bishop Heights	36,371 square foot, 89 room motel
4	Lot 4, Block 1, Bishop Heights	25,292 square foot, 63 room motel
5	Lot 5 and part of Lot 4, Bishop Heights	6,163 square foot sit down restaurant
6	Lot 2, Block 2, Bishop Heights	6,500 square foot bank and office building
7	Lot 3, Block 2, Bishop Heights	4,271 square foot gas station convenience store
8	Lot 1, Block 1, Krech's Addition	15,120 square foot drug store
9	Tracts A-D, F and G	42,000 square foot lawn, garden, floral & nursery retail center (two buildings: 29,400 sf in one, 12,400 sf in other); 605,000 square feet of greenhouses and nursery buildings; 2,150 sf accessory structures (2 barns) for storage of materials and equipment; nursery fields and nursery field caretaker's residence; outside storage/display of nursery and landscaping stock and materials; nursery and landscaping services, 5.7 acres of growing fields and one house for use by employees**
10	Lot 1, Block 1, Bishop Heights 2nd Addition	1,710 sf quick service oil change store
11	Lot 1, Block 1, Bishop Heights 3rd Addition	6,832 sf auto service center store
12	Lots 1-31, Block 1, Blackberry Town Office Park	65,415 net sf town office space and business and trade school, 31 units
13	Lot 1, Block 1, Blackberry Town Office Park Second Addition	4,950 gross sf veterinary clinic
14	Lot 1, Block 1, Inver Grove Market	10,200 square feet of general retail, 3,809 square feet of recreation center, 5,680 square feet of sit-down restaurant, and 1,516 square feet of fast-food restaurant (without a drive through window)
15	Lots 6-10, Block 7, Warren and McDowell's Acre Lots No. 2	Rock and Block Yard for Gerten's Greenhouses
16	Lots 1-88, Brentwood Village	80 townhome units
17	Lot 1, Bk 2, Bishop Heights	7,200 sf sit down restaurant
18	Lots 1 & 2, Block 1, Outlot A Brentwood Village Apts.	219 apartment units
19	Outlot B, Bishop Heights	43,400 square foot medical/office building
20	Lot 2, Block 1, Inver Grove Market	5,200 square foot bank building
21	Lot 3, Block 1, Bishop Heights 4th Addition	9,100 square feet of general retail, restaurant with a drive-through, feline veterinary clinic, and massage therapy.
22***	Lot 1, Block 1, Bishop Heights 4th Addition	15,400 square foot office/retail/ sit-down restaurant
23	Lot 1, Block 1, Scenic Heights Addition	16,000 square foot office condominium

24	Outlot A, Brentwood Hills Apartments	24 multiple family townhome units
25	Lot 2, Block 1, Inver Grove Professional Addition	13,318 square foot office building
26	Lot 2, Block 1, Bishop Heights 4th Addition	2,370 square foot sit-down restaurant with pick up only drive through window

* More detailed legal descriptions available in Exhibit A

** Uses on Tracts A-D, F & G shall be governed not only by this ordinance, but also by the conditions found in Resolution No 98-210, Resolution 11-28 and Resolution 16-82.

***Parcel 22 shall be subject to the following conditions:

1. A Joint Parking Agreement affecting the restaurant in Lot 1, Block 1 Bishop Heights 4th Addition between Outlot B, Bishop Heights and Lot 3, Block 1, Bishop Heights 4th Addition. This document must be drafted by the City attorney's office, signed by the land owners, and recorded with the County.
2. If restaurant parking becomes a problem restaurant employees shall park off site at any of the locations listed in the Joint Parking Agreement.

C. PERFORMANCE STANDARDS

All development shall meet the following performance standards. Where a specific standard is not addressed herein, the appropriate land use regulations of the City Code shall apply.

1. Minimum lot width - 100'

2. Setbacks:

	Structures	Parking Lots	Driveways
Upper 55th St., Blaine Ave. & Cahill Ave	50'	20'	10'
Other Public Streets	30'	20'	10'
Side Yard (adjacent to properties within PUD)	0'	0'	0'
Side Yard (adjacent to properties outside PUD)	30'	10'	10'

Internal private driveways (setbacks to be approved with final development plan).

3. Maximum Building Height:

a. Principal Structures - 35'

b. Accessory Structures - 30'

c. Greater building height shall be allowed by conditional use permit subject to City Code Section 515.59, Subd 10.

4. Minimum Open Space shall be 25% of lot area, with the lot area to be determined by the City. Ponding or steep slopes (in excess of 18%) shall not exceed 10% of the total lot area for purposes of this computation.

5. Parking/Circulation Requirements:

(a) All open off-street parking and loading areas shall have a perimeter continuous concrete curb barrier around the entire lot.

6. Landscaping, Signage and Architecture:

Development of all lots in Bishop Heights shall be in conformance with the design manual on file in the City Offices entitled Design Guidelines, Bishop Heights and Kerasotes Theaters, Inc., Planned Unit Development, Inver Grove Heights, dated June 23, 1997 and prepared by Damon Farber Associates and Abend Singleton Associates.

Development of all lots in Krech's Addition shall be in conformance with the Cahill Corridor Master Plan and those portions of the Design Guidelines, Bishop Heights and Kerasotes Theaters, Inc., Planned Unit Development, Inver Grove Heights which the City finds appropriate.

Development of Tracts A-D, as described in Exhibit A, shall be in conformance with those portions of the design manual on file in the City Offices entitled Design Guidelines, Bishop Heights and Kerasotes Theaters, Inc., Planned Unit Development, Inver Grove Heights which the City finds appropriate.

Development of all lots shall also be in conformance with the City landscape policy.

D. GENERAL PROVISIONS

All development, except Tracts A-D, shall meet the following general provisions. All development which occurs on Tracts A-D in accordance with Resolution No. 98-210, and which has occurred prior to the effective date of this Ordinance, shall not be required to meet General Provisions 1, 2, 3, 4, 5, 6 and 9. Where a specific provision is not addressed herein, the appropriate land use regulation of the City Code shall apply.

1. Loading Areas:

Loading and unloading areas shall be in compliance with the following:

a. Any use which the City believes requires the provision of designated spaces for the loading, unloading or parking of trucks or semi-trailers shall provide such spaces and maneuvering area in the number and configuration which shall be deemed necessary by the City to prevent interference with the use of the public right-of-way and with vehicles entering onto or exiting from the public right-of-way.

b. Screening shall be provided in accordance with provisions of Paragraph 2, below, of this Section.

2. Screens and Buffers:

a. Definition and Purpose: Screens and buffers are designated yards or open areas where distance, planting, berming and fencing help minimize adverse impacts of public nuisances, such as: noise, glare, activity or dust; which are sometimes associated with parking, storage, signs or buildings.

b. Screens and Buffer Requirements:

(i) All parking, loading, service, utility and outdoor storage areas shall be screened from all public streets and adjacent differing land use by a combination of any of the following: earth mounds, walls, fences, shrubs, deciduous overstory or coniferous trees or hedge materials. The height and depth of the screening shall be consistent with the height and size of the area to be screened. When natural materials, such as trees or hedges, are used to meet the screening requirements of this Paragraph, density and species of planting shall be such as to achieve seventy-five percent (75%) opacity year round at maturity.

c. All plant materials required within a specified buffer yard shall be planted to completion within six (6) months from the date of issuance of a building permit unless otherwise approved by the City due to the time of the year or construction for a large project. In no case shall the period exceed six (6) months from issuance of the certificate of occupancy.

3. Building Design Requirements:

a. Design Supervision by Architect: An architect shall be required for the construction of all buildings. The building plan, including site plan for such a building, shall be certified by an architect, registered by the State of Minnesota, stating that the individual personally viewed the site and has designed the building to fit the site as planned and to be harmonious with the adjacent buildings, topography and natural surroundings and in accordance with the purposes and objectives of this Chapter. This requirement shall not prohibit the preparation of the site by a professional site designer, or the landscape plan by a professional landscape architect or certified nurseryman.

b. Exterior Vertical Surface Design for Commercial Structures: All exterior vertical surfaces of any principal or accessory structure shall have an equally attractive or the same fascia as the front. At least 50% of the exterior vertical surface shall consist of one or a combination of the following or similar materials: brick veneer; sculptured, textured or concrete block or panels; natural wood siding; steel, aluminum or vinyl lap siding; natural stone or glass.

4. Site Design and Development Requirements:

a. Landscaping shall be in accordance with the provisions of the "Performance Standards" Section of this Planned Unit Development.

b. Interior curbs shall be constructed within the property to separate driving and parking surfaces from landscaped areas. Interior curbs required by this Section shall be Portland cement concrete construction.

c. Surfaced walkways shall be provided from parking, loading and recreational areas to the entrances of buildings.

d. All interior driveways, parking areas, and loading areas, etc. shall be of blacktop or concrete construction.

e. No exterior trash or garbage disposal or incineration shall be permitted. Any exterior storage shall be enclosed within a container and such container shall be completely screened by a wall or equivalent visual screen and shall be attached to the principal structure and be constructed of the same building material.

f. On-site lighting shall be provided as is necessary for security, safety and traffic circulation. Lighting shall not be directed upon public rights-of-way or adjacent properties. Such illumination shall be indirect and diffused.

g. Prior to the issuance of building permits, fire lanes shall be provided and identified as required by the City Fire Marshal.

5. Mechanical Equipment Screening:

All mechanical equipment possessing one or more of the following characteristics shall be physically screened, to the extent feasible, from all public streets and adjacent land uses with either natural or artificial materials in a manner architecturally compatible to the building(s) on the site. Said screening shall pertain to, but not be limited to, exposed and/or

protruding fans, grills, tubes, wires, vents, unfinished metal covering, exposed rivets and exposed seams.

6. Sidewalks, Trails and Pedestrian Walkways:

a. Sidewalks, trails and pedestrian walkways shall be provided and maintained in accordance with the Comprehensive Plan.

b. As a minimum, a pedestrian sidewalk and/or minimum eight (8) foot wide bituminous trail shall be provided by the developer or land owner along the north side of Upper 55th Street and an eight (8) foot wide bituminous trail along the west side of Blaine Avenue.

c. The developer shall install six (6) foot wide concrete sidewalks along both sides of Bishop Avenue and along both sides of the public roadway connecting Bishop Avenue and Blaine Avenue.

d. An interior pedestrian circulation; plan shall be submitted with each development for approval by the City.

7. Site Plan and Building Permit Review:

To ensure uniform development throughout the planned unit development area and development that is consistent with the provisions herein, all site and building plans required for building permits, grading permits, excavation permits or other similar permits issued by the City must be found by the Director of Community Development or assigns to be consistent with the approved PUD Plans, the provisions of this Ordinance, the Development Contract and all other applicable sections of the City Code.

8. Traffic:

The forecasted p.m. peak hour traffic generated by the developments shall not exceed:

Lot	Parcel #	Trips
Lot 1, Block 1, Bishop Heights	1	177
Parcel A, Bishop Heights (Described in Exhibit A)	2	72
Parcel B, Bishop Heights (Described in Exhibit A)	3	83
That part of Lot 4, Block 1, Bishop Heights described in Exhibit A.	4	38
Lot 5, Block 1, Bishop Heights and that portion of Lot 4 described in Exhibit A.	5	78
Lot 2, Block 2, Bishop Heights	6	120
Lot 3, Block 2, Bishop Heights	7	180
Lot 1, Block 1, Krech's Addition	8	116
Tracts A-D, F and G as described in Exhibit A	9	208
Lot 1, Block 1, Bishop Heights 2nd Addition	10	18
Lot 1, Block 1, Bishop Heights 3rd Addition	11	28
Lots 1-31, Block 1, Blackberry Town Office Park	12	141
Lot 1, Block 1, Blackberry Town Office Park Second Addition	13	20
Lot 1, Inver Grove Market	14	148
Lots 6-10, Block 7, Warren and McDowell's Acre Lots No. 2	15	40
Lots 1-88, Brentwood Village	16	43
Lot 1, Bk 1, Bishop Heights	17	78
Lots 1 & 2, Bk 1, Brentwood Village Apartments	18	136
Outlot B, Bishop Heights	19	146
Lot 2, Inver Grove Market	20	205
Lot 3, Block 1, Bishop Heights 4th Addition	21	34
Lot 1, Block 1, Bishop Heights 4th Addition	22	126
Lot 1, Block 1, Scenic Heights Addition	23	23
Outlot A, Brentwood Hills Apartments	24	19
Lot 2, Block 1, Inver Grove Professional Addition	25	20
Lot 2, Block 1, Bishop Heights 4th Addition	26	178

The trips have been determined by the City using national or state traffic generation studies or reports prepared by engineering professionals, including the Trip Generation Report, prepared by the Institute of Transportation Engineers. This determination is being made by the City at the time of final development plan approval. Any change which effects the site plan or uses, as approved in Section V, A and B, including an increase in building size, shall require a redetermination by the City of forecasted p.m. peak hour trips, and shall not exceed the number of trips, as hereby approved.

9. Maintenance Agreements:

Contemporaneous with recording the plat of Bishop Heights, the owners of Lots 1,2,3, Block 1; Lots 1,2,3, Block 2, Bishop Heights, shall execute a stormwater maintenance agreement, a landscape maintenance agreement, and a street light maintenance agreement, in a form to be approved by the Director of Public Works, the Director of Community Development, and the City Attorney.

SECTION VI. The effective date of the Planned Unit Development Zoning District No. 2010-01 as amended shall be from and after publication of this Ordinance pursuant to City Code Section 110.03 Subd. 5. The Planned Unit Development shall be designated on the official City Zoning Map as "Planned Unit Development No. 2011-01" upon approval of the rezoning by the City Council.

THIS ORDINANCE NO. _____ RESTATES AND AMENDS ORDINANCE NOS. 891, 912, 915, 928, 946, 968, 976, 977, 985, 1022, 1056, 1058, 1062, 1064, 1074, 1101, 1106, 1112, 1133, 1135, 1136, 1187, 1190, 1230, 1298, 1313, 1329, 1331, 1350, 1356, 1426 and 1448.

The City Deputy Clerk is hereby authorized and directed to record a certified copy of this ordinance at the Dakota County Recorder's Office.

This ordinance shall be in full force and effect from and after its publication according to law.

Enacted and ordained into an Ordinance this 22nd day of July, 2024.

Ayes:
Nays:

_____
Brenda Dietrich, Mayor

ATTEST:

_____
Rebecca Kiernan, City Clerk

EXHIBIT A

Parcel No.	Legal Description
1	Lot 1, Block 1, Bishop Heights, Dakota County, Minnesota
2	That part of Block 1, Lots 2 and 3, Bishop Heights, Dakota County, Minnesota which lies northerly and northeasterly of the following described line: Commencing at the northwest corner of said Lot 2; thence South 21 degrees 15 minutes 20 seconds East, bearing assumed, along the southwesterly line of said Lot 2 a distance of 24.16 feet to the point of beginning of the line to be described; thence South 89 degrees 25 minutes 07 seconds East 155.57 feet; thence South 0 degrees 34 minutes 53 seconds West 39.02 feet; thence South 20 degrees 40 minutes 09 seconds East 22.52 feet; thence South 89 degrees 25 minutes 07 seconds East 62.64 feet; thence South 0 degrees 34 minutes 53 seconds West 30.00 feet; thence South 89 degrees 25 minutes 07 seconds East 90.00 feet; thence South 0 degrees 34 minutes 53 seconds West 30.00 feet; thence South 89 degrees 25 minutes 07 seconds East 191.65 feet; thence South 76 degrees 45 minutes 56 seconds East 29.75 feet more or less to the westerly right of way line of Bishop Avenue, and there terminating.
3	That part of Block 1, Lots 2 and 3, Bishop Heights, Dakota County, Minnesota which lies southerly and southwesterly of the following described line: Commencing at the northwest corner of said Lot 2; thence South 21 degrees 15 minutes 20 seconds East, bearing assumed, along the southwesterly line of said Lot 2 a distance of 24.16 feet to the point of beginning of the line to be described; thence South 89 degrees 25 minutes 07 seconds East 155.57 feet; thence South 0 degrees 34 minutes 53 seconds West 39.02 feet; thence South 20 degrees 40 minutes 09 seconds East 22.52 feet; thence South 89 degrees 25 minutes 07 seconds East 62.64 feet; thence South 0 degrees 34 minutes 53 seconds West 30.00 feet; thence South 89 degrees 25 minutes 07 seconds East 90.00 feet; thence South 0 degrees 34 minutes 53 seconds West 30.00 feet; thence South 89 degrees 25 minutes 07 seconds East 191.65 feet; thence South 76 degrees 45 minutes 56 seconds East 29.75 feet more or less to the westerly right of way line of Bishop Avenue, and there terminating
4	Lot 4, Block 1, Bishop Heights, except that part lying south of the following described line: Commencing at the northwest corner of said Lot 4, thence southeasterly along the westerly line of said Lot 4 on an assumed bearing of South 21 degrees 15 minutes 20 seconds East 107.57 feet to the point of beginning of the line to be described; thence North 68 degrees 44 minutes 40 seconds East, a distance of 80.50 feet; thence South 21 degrees 15 minutes 20 seconds East, a distance of 17.04 feet; thence South 18 degrees 58 minutes 24 seconds East a distance of 65.59 feet; thence North 89 degrees 59 minutes 25 seconds East a distance of 216.22 feet; thence North 37 degrees 12 minutes 54 seconds East 28.52 feet; thence North 89 degrees 25 minutes 20 seconds East, a distance of 47.10 feet more or less to the Easterly line of Lot 4 and there terminating.
5	Lot 5, Block 1, Bishop Heights and that part of Lot 4, Lot 1, Bishop Heights lying south of the following described line: Commencing at the northwest corner of said Lot 4, thence southeasterly along the westerly line of said Lot 4 on an assumed bearing of South 21 degrees 15 minutes 20 seconds East 107.57 feet to the point of beginning of the line to be described; thence North 68 degrees 44 minutes 40 seconds East, a distance of 80.50 feet; thence South 21 degrees 15 minutes 20 seconds East, a distance of 17.04 feet; thence South 18 degrees 58 minutes 24 seconds East a distance of 65.59 feet; thence North 89 degrees 59 minutes 25 seconds East a distance of 216.22 feet; thence North 37 degrees 12 minutes 54 seconds East 28.52 feet; thence North 89 degrees 25 minutes 20 seconds East, a distance of 47.10 feet more or less to the Easterly line of Lot 4 and there terminating.
6	Lot 2, Block 2, Bishop Heights
7	Lot 3, Block 2, Bishop Heights
8	Lot 1, Block 1, Krech's Addition
9	Tract A, described as: The East Half of the Southwest Quarter of the Northeast Quarter; and the North 270 feet of the East Half of the Northwest Quarter of the Southeast Quarter, Section 33,

	Township 28, Range 22, according to the U.S. Government Survey thereof, Dakota County, Minnesota. Tract B, described as: Parcel 1: Lots 8 through 23, Block 3, Edgewood Addition to South St. Paul, Dakota County, Minnesota, the vacated alley in said Block 3, and that part of Boyd Avenue (formerly Hamilton Avenue) accruing thereto by reason of the vacation thereof, which lies South of the tract shown as parcel 240B on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and for Dakota County, Minnesota, and as said plat has been corrected by Certificate of Correction filed for record with said County Recorder on the 4th day of November 1982, at 9:00 a.m., as Document No. 610751; Parcel 2: Block 4, Edgewood Addition to South St. Paul, Dakota County, Minnesota including the alley in said Block 4 and that part of Boyd Avenue (formerly Hamilton Avenue) accruing thereto by reason of the vacation thereof, Except that part of Lots 1 through 8 inclusive and Lots 23 through 30 inclusive, in said Block 4, and that part of the alley in said Block 4 and that part of vacated Boyd Avenue (formerly Hamilton Avenue) accruing thereto by reason of the vacation thereof, shown as Parcel 240A on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and or Dakota County, Minnesota, and as said plat has been corrected by Certificate of Correction filed for record with said County Recorder on the 4th day of November 1982, at 9:00 a.m., as Document No. 610751. Tract C, described as: Parcel 1: Lots 3, 6, 7 and the westerly 60 feet of Lot 2, Block 8, Warren and McDowell's Acre Lots No. 2, according to the plat thereof on file and of record in the office of the office of the Register of Deeds in and for Dakota County, Minnesota, except that part shown as Parcel 233B on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and for Dakota County, Minnesota, except the existing Right of Way of Trunk Highway 110. Torrens Property, Torrens Certificate No. 32372 Parcel 2: Lot 1 and Lot 2 less the westerly 60 feet thereof, Block 8, Warren and McDowell's Acre Lots No. 2, according to the plat thereof on file and of record in the office of the Register of Deeds in and for Dakota County, Minnesota, except that part shown as Parcel 233C on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and for Dakota County, Minnesota, and except the existing Right of Way of Trunk Highway 110. Torrens Property, Torrens Certificate No. 101901. Parcel 3: Lots 4, 5, 8, 9 and 10, Block 8, Warren and McDowell's Acre Lots No. 2, according to the plat thereof on file and of record in the office of the Register of Deeds in and for Dakota County, Minnesota, except that part shown as Parcel 233A on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and for Dakota County, Minnesota, and except the existing Right of Way of Trunk Highway 110. Torrens Property, Torrens Certificate No. 101902. Tract D, described as: Lots 3, 4, 5, 26 and 27, Block 3, Glenwood, Dakota County, Minnesota, according to the recorded plat hereof, in Dakota County, Minnesota.

	Tract F, described as: The East Half of the Northwest Quarter of the Southeast Quarter of Section 33, Township 28, range 22, except the North 270 feet thereof lying Northerly of the Southerly right-of-way of Dakota County Road No. 18. Except that part described as follows: Commencing at the Southwest corner of the Northwest Quarter of the Southeast Quarter of Section 33, Township 28, Range 22 West; thence on an assumed bearing of North 89 degrees 50 minutes 28 seconds East along the South line of said Northwest Quarter of the Southeast Quarter a distance of 657.07 feet to the Southwest corner of the East Half of the Northwest Quarter of the Southeast Quarter and said point being the point of beginning; thence North 0 degrees 07 minutes 49 seconds West along the West line of said East Half of the Northwest Quarter of the Southeast Quarter a distance of 58.51 feet; thence North 83 degrees 29 minutes 34 seconds East 197.77 feet; thence South 6 degrees 30 minutes 26 seconds East a distance of 80.88 feet to the South line of said East Half of the Northwest Quarter of the Southeast Quarter; thence South 89 degrees 50 minutes 28 seconds West along said South line a distance of 205.52 feet to the point of beginning, except that part previously acquired for County Road No. 18 (a/k/a Upper 55th Street). Tract G, described as: Parts of Southeast Quarter of Northeast Quarter of Section 33, Township 28, Range 22, which was formerly platted as Lots 1 through 8 inclusive, Block 6, Lots 1 through 8 inclusive, Block 7, Lots 23 through 30 inclusive, Block 7, Lots 1 through 8 inclusive, Block 8 of Edgewood Addition to South St. Paul, and as the streets and alleys abutting on said Lots before the Vacation of Edgewood Addition to South St. Paul, Dakota County, Minnesota
10	Lot 1, Block 1, Bishop Heights 2nd Addition
11	Lot 1, Block 1, Bishop Heights 3rd Addition
12	Lots 1-31, Block 1, Blackberry Townoffice Park
13	Lot 1, Block 1, Blackberry Town Office Park Second Addition
14	Lot 1, Inver Grove Market
15	Lots 6, 7, 8, 9 and 10, Block 7, Warren and McDowell's Acre Lots No. 2, according to the plat thereof on file and of record in the office of the Register of Deeds in and for Dakota County, Minnesota, except that part shown as Parcel 333 on the plat designated as Minnesota Department of Transportation Right of Way Plat Numbered 19-46 on file and of record in the office of the County Recorder in and for Dakota County, Minnesota.
16	Lots 1-88, Brentwood Village
17	Lot 1, Block 2, Bishop Heights
18	Lots 1 & 2, Bk 1, Outlot A, Brentwood Village Apartments
19	Outlot B, Bishop Heights
20	Lot 2, Block 1, Inver Grove Market
21	Lot 3, Block 1, Bishop Heights 4th Addition
22	Lot 1, Block 1, Bishop Heights 4th Addition
23	Lot 1, Block 1, Scenic Heights Addition
24	Outlot A, Brentwood Hills Apartments
25	Lot 2, Block 1, Inver Grove Professional Addition
26	Lot 2, Block 1, Bishop Heights 4th Addition

Agenda Item 4.B.

Planning Commission Report

MEETING DATE:	July 16, 2024
CASE NO:	24-20V
APPLICANT:	Lindholm/Republic Services
PROPERTY OWNER:	Pine Bend Landfill
REQUEST:	Variance from the Exterior Building Material Requirements.
LOCATION:	11300 Rich Valley Boulevard
COMPREHENSIVE PLAN:	GI, General Industrial
ZONING:	I-2, General Industrial
STAFF CONTACT:	Heather Botten, 651.450.2569

ACTION REQUESTED

The specific request consists of the following:

- Variance from the exterior building material requirements to allow more than 1/3 of the building to have steel siding.

BACKGROUND

The applicant is requesting an after-the-fact Variance from the exterior building material requirements to allow steel siding on more than 1/3 of the building. The structure is located on the northeast corner of the property and would consist of metal siding around the entire building. The property is about 60 acres in size, with an additional 200 acres of property owned by Pine Bend Landfill to the east and Flint Hills has a vacant 70-acre parcel to the north.

The 1,000 +/- square foot building houses three-60 hp blowers and a control room. This system collects the landfill gas and directs the gas to the RNG facility to the west. The structure is designed to provide shelter from the elements for the equipment and reduce noise. It is not designed for human occupancy.

EVALUATION OF REQUEST

The following land uses, zoning districts, and comprehensive plan designations surround the subject property:

North	Vacant	Zoned: A, Agricultural	Guided: RDR, Rural Density Residential
East	Pine Bend Landfill	Zoned: I-2, General Industrial	Guided: GI, General Industrial

South	Pine Bend Landfill	Zoned: I-1, Limited Industrial	Guided: LI, Light Industrial
West	Bituminous Roadways	Zoned: A, Agricultural	Guided: RDR, Rural Density Residential

SITE PLAN REVIEW

Setbacks. The building exceeds the required perimeter setbacks for the site.

Engineering. Has reviewed the plans and takes no exception to the Variance request.

VARIANCE REVIEW

City Code allows a maximum 1/3 of a building wall to be sheet or corrugated steel or aluminum siding.

City Code Title 10, Chapter 3. Variances, states the the City Council may grant Variances when they are in harmony with the general purposes and intent of the Zoning Ordinances and consistent with the Comprehensive Plan and establishes that there are practical difficulties in complying with the official control. In order to grant the requested Variances, City Code identifies criteria which are to be considered practical difficulties. The applicant's request is reviewed below against those criteria.

1. *The Variance request is in harmony with the general purpose and intent of the City Code and consistent with the Comprehensive Plan.*

The use is consistent with the goals, policies, and plans of the Comprehensive Plan. The future land use of this parcel is Industrial and the accessory building to the RNG facility is compatible with the uses envisioned in this district.

2. *The property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.*

One of the purposes of the exterior building material ordinance is to provide aesthetic appeal to structures in the City. The building is located in the northeast portion of the property, not visible from the right-of-way. The building is not open to the public. The building is an accessory to the renewable energy building on site. The property is planned to be used in a reasonable manner.

3. *The plight of the landowner is due to circumstances unique to the property not created by the landowner.*

The property is unique in that Pine Bend owns over 300 acres of land surrounding the building. Additionally, the exterior building material requirements are not practical for this type of structure and use.

4. *The Variance will not alter the essential character of the locality.*

The structure is located at the back of the property. The steel siding on the building would not alter the character of the locality as the building is not visible from public right-of-way, and it is not open to the public.

5. *Economic considerations alone do not constitute an undue hardship.*

Economic considerations do not appear to be a basis for this request.

ALTERNATIVES
The Planning Commission has the following actions available on the following requests:

A. Approval. If the Planning Commission finds the application to be acceptable, the following action should be taken:

- Approval of a **Variance** from the exterior building material requirements subject to the following conditions:

1. The site shall be developed in substantial conformance with the site and elevation plans on file with the Planning Department.

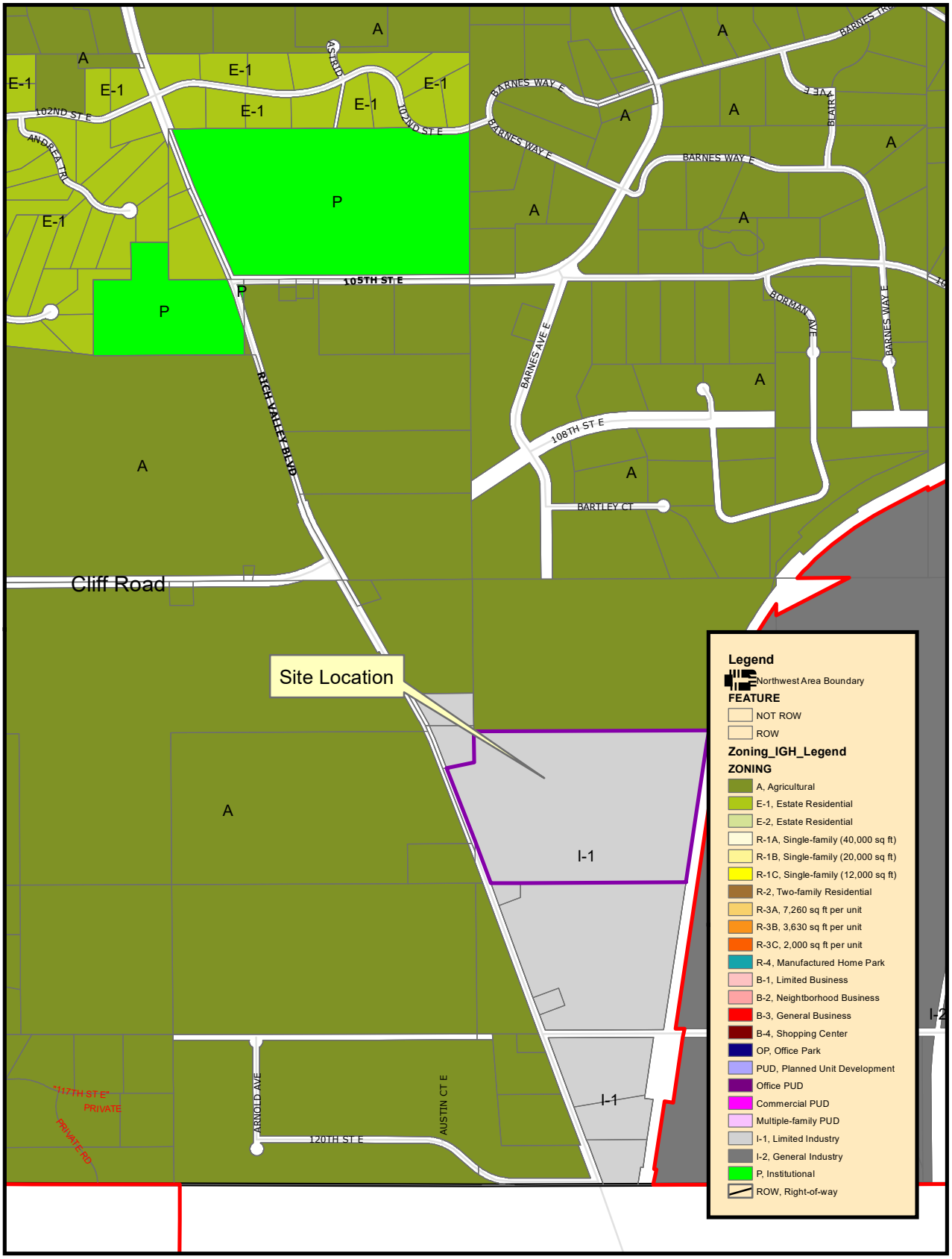
Rationale:
The request is in harmony with the general purposes and intent of the City Ordinance and is consistent with the Comprehensive Plan. Aesthetically, the proposed structure would meet setbacks and all other City Code requirements. The structure is in the northeast corner of the 60-acre parcel and is not visible from the public right-of-way. The building is not open to the public.

B. Denial. If the Planning Commission does not favor the proposed application, the above request should be recommended for denial. With a recommendation for denial, findings or the basis for the denial should be given.

RECOMMENDATION
Based on the information in the preceding report and the conditions listed in Alternative A, Staff is recommending Approval of the Variance request with the rationale listed.

ATTACHMENTS
1. Zoning and Location Map
2. Narrative
3. Aerial Photo
4. Picture of Building

11300 Rich Valley Blvd
Case No. 24-20V



THIS DRAWING IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, INFORMATION AND DATA LOCATED IN VARIOUS CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. THE CITY OF INVER GROVE HEIGHTS IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED
Map produced by the City of Inver Grove Heights GIS Dept.
Copyright© City of Inver Grove Heights 2020

N

Exhibit A
Zoning and Location Map

Project Description

Pine Bend Landfill (PBL) is partnered with Opal Fuels (Opal) to collect and process landfill gas into renewable natural gas (RNG). The RNG is pipeline grade and is transmitted to Xcel Energy for beneficial use.

Opal owns and operates the RNG facility located on this parcel.

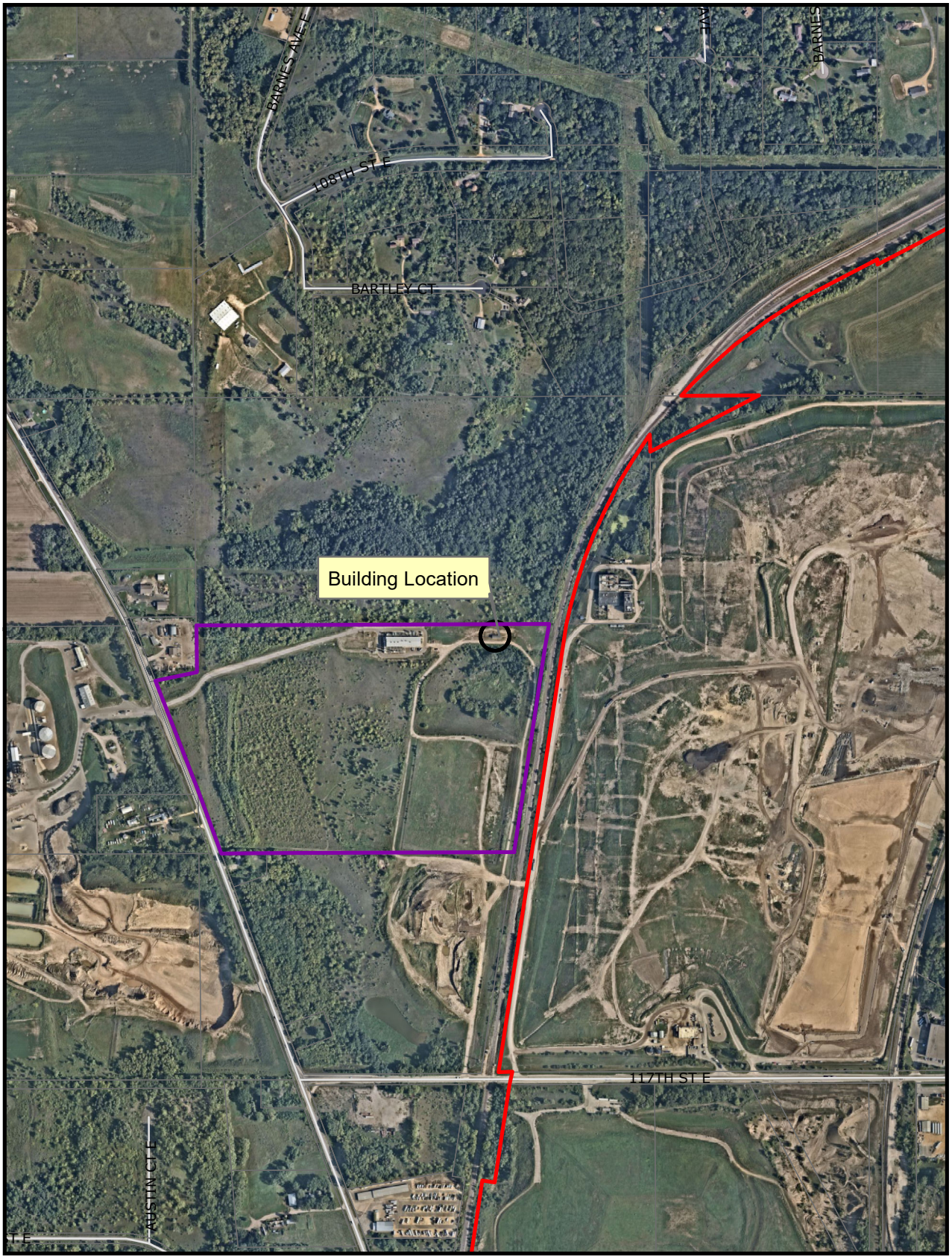
PBL owns and operates a blower/flare system that includes a structure that houses three-60 hp blowers and a control room. This system collects the landfill gas and directs the gas to the RNG facility. The structure is designed to provide shelter from the elements for the equipment and reduce noise. It is not designed for human occupancy.

The attached plan sheet file includes:

1) Site location map
2) RNG and blower/flare area site plan
3) Blower building design and plans

Variance request

PBL is requesting a variance from ordinance 10-15-17 for the blower structure. The structure is in harmony with the general purposes and intent of the City Ordinance. It does not alter the essential character of the area. It is adjacent to the landfill, and the RNG facility and is not easily seen by the public. The structure is visually attractive and is only being seen/used by landfill and RNG facility personnel. It is well-maintained and of sound, quality construction. The usage of the building is monitored and otherwise meets all City, County and State requirements.



THIS DRAWING IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, INFORMATION AND DATA LOCATED IN VARIOUS CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. THE CITY OF INVER GROVE HEIGHTS IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED
Map produced by the City of Inver Grove Heights GIS Dept.
Copyright© City of Inver Grove Heights 2020

N

Aerial photo

Agenda Item 4.C.

Planning Commission Report

MEETING DATE:	July 16, 2024
CASE NO:	24-23V
APPLICANT:	Northern States Power Company (Xcel Energy)
PROPERTY OWNER:	Northern States Power Company
REQUEST:	Conditional Use Permit and Variance
LOCATION:	2015 105th Street East
COMPREHENSIVE PLAN:	RDR, Rural Density Residential
ZONING:	A, Agricultural District
STAFF CONTACT:	Allan Hunting, 651.450.2554

ACTION REQUESTED

The applicant is requesting the following:

- Conditional Use Permit for an Essential Service Structure to allow an expansion of the existing electric power substation.

- Variance from Fence Ordinance Title 10, Chapter 15, Section 12, to allow a ten (10) foot tall chain link fence whereas seven (7) feet is the maximum height allowed.

BACKGROUND

Xcel Energy is proposing to expand the existing substation along the north side of 105th Street East, just east of Rich Valley Park. The expansion is needed to facilitate a connection between the Rosemount Transmission Line and the existing electric grid. New equipment will be installed that includes two 115 kV bays and foundations. The project would begin construction in fall 2024.

Xcel Energy is also requesting a Variance from fence height to construct a new 10-foot tall chain link security fence around the perimeter of the equipment area on the lot. The maximum fence height in the city is seven feet. The additional three feet of fence height is being requested to maintain consistency with the Federal Energy Regulation Commission which mandates owners of bulk-power systems to enhance physical security measures to lessen overall vulnerability against physical attacks.

EVALUATION OF REQUEST

Surrounding Uses: The following land uses, zoning districts, and comprehensive plan designations surround the subject property:

North	Large Lot Residential	Zoned: A, Agricultural	Guided: RDR, Rural Density Residential
West	Rich Valley Park	Zoned: P, Park	Guided: Public Park and Open Space
South	Large Lot Residential	Zoned: A, Agricultural	Guided: RDR, Rural Density Residential
East	Large Lot Residential	Zoned: A, Agricultural	Guided: RDR, Rural Density Residential

SITE PLAN REVIEW

Setbacks.

The new equipment would be an expansion of the existing northern most equipment. The City Code requires a 50-foot setback for essential service structures from any property zoned Residential or Estate. In this case, property closest to the expansion is zoned Agricultural, so no specific setbacks are required. The new equipment would be over 50 feet from the east property line.

Access.

Access to the site is not changing; there is one access point off 105th Street East.

CONDITIONAL USE PERMIT (CUP) REVIEW

This section reviews the plans against the CUP criteria in the Zoning Ordinance (Section 10-3A).

1. *The use is consistent with the goals, policies and plans of the City Comprehensive Plan, including future land uses, utilities, streets and parks.*

The use is consistent with the goals, policies, and plans of the 2040 Comprehensive Plan. Historical aerial photography reveals this substation has been in existence since at least 1962.

2. *The use is consistent with the City Code, especially the Zoning Ordinance and the intent of the specific Zoning District in which the use is located.*

This standard would be met. Essential Service Structures are a conditional use in all districts.

3. *The use would not be materially injurious to existing or planned properties or improvements in the vicinity.*

This standard would be met. The site is in a rural section of the city and would not pose any additional issues with surrounding land use.

4. *The use does not have an undue adverse impact on existing or planned City facilities and services, including streets, utilities, parks, police and fire, and the reasonable ability of the city to provide such services in an orderly, timely manner.*

The proposed request does not appear to have any negative effects on City facilities or services. Once constructed, the site would only have intermittent activity by Xcel Energy staff for routine maintenance.

5. *The use is generally compatible with existing and future uses of surrounding properties, including*:

a) *Aesthetics/Exterior Appearance*

The added equipment would not impact existing or future land use.

b) *Noise*

No additional noise beyond background noise that would currently exist at the site.

c) *Traffic*

Traffic is not an issue. The site would only have intermittent employee traffic.

d) *Drainage*

A Grading and Stormwater Management Plan has been provided and must be approved by the City Engineer before any work can commence on the site.

e) *Fencing, Landscaping and Buffering*

Since the site is expanding to the east closer to an existing residence, the plans include a number of pine, spruce, elm and linden trees to provide a vegetative screen on the east side of the site.

6. *The property is appropriate for use, considering: size and shape; topography, vegetation, and other natural and physical features; access, traffic volumes and flows; utilities; parking; setbacks; lot coverage and other zoning requirements; emergency access, fire lanes, hydrants, and other fire and building code requirements.*

The site has been used as a substation since at least 1962.

7. *The use does not have an undue adverse impact on public health, safety or welfare.*

Staff are not aware of any public health, safety or welfare issues associated with the proposal.

8. *The use does not have an undue adverse impact on the environment, including, but not limited to, surface water, groundwater and air quality.*

The site has operated without any issues and no new issues are expected to arise with the expansion.

VARIANCE REVIEW

Title 10, Chapter 15, Section 12, restricts new fences that must not exceed seven (7) feet in height. The applicant is proposing to construct a ten (10) foot tall chain link fence.

City Code Title 10, Chapter 3. Variances, states that the City Council may grant Variances when they are in harmony with the general purposes and intent of the Zoning Ordinance and consistent with the Comprehensive Plan and establishes that there are practical difficulties in complying with the official control. In order to grant the requested Variance, the City Code identifies criteria which are to be considered practical difficulties. The applicant's request is reviewed below against those criteria.

1. *The Variance request is in harmony with the general purpose and intent of the City Code and consistent with the Comprehensive Plan.*

The area of the lot that contains equipment is currently protected by a chain link fence. New Federal regulations require additional security measures. A taller fence with one inch chain link openings provides for a deterrent fence for security reasons.

2. *The property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.*

As stated above, the proposed height is related to the need for heightened security around electric substations. There is no barbed wire proposed, only a ten (10) foot tall fence with a smaller opening chain link.

3. *The plight of the landowner is due to circumstances unique to the property not created by the landowner.*

The need for additional height is based on Federal Regulations to provide enhanced physical security measures for critical facilities to lessen the overall vulnerability of the power system against physical attacks.

4. *The variance will not alter the essential character of the locality.*
The fencing would be located at least 140 feet from 105th Street East and 70 feet from the property to the east.

5. *Economic considerations alone do not constitute an undue hardship.*
Economic considerations do not appear to be a basis or a sole basis for this request.

ALTERNATIVES
The Planning Commission has the following actions available for the proposed request:

A. Approval. If the Planning Commission finds the application acceptable, the Commission should make the following recommendations:

- Approval of the Conditional Use Permit for an Essential Service Structure to allow expansion of the existing electrical power substation subject to the following conditions:

1. The site shall be developed in substantial conformance with the following plans on file with the Planning Department except as may be modified by the conditions below.

General Arrangement Plan (Site Plan)	dated 6/18/2024
Removal Drawing (Existing Conditions)	dated 6/18/2024
Grading Plan	dated 6/18/2024
Fence Plan (2 sheets)	dated 6/18/2024
Planting Plan	dated 6/18/2024

2. The Grading and Stormwater Management Plan shall be approved by the City Engineer and subject to all conditions noted by the City Engineer.

- Approval of the Variance to allow a fence ten (10) feet tall whereas seven (7) feet is the maximum allowed by City Code and subject to the following condition:

1. The fencing shall be consistent with the Fencing Plans showing location and type of fence to be constructed.

Practical Difficulty:

- Additional fence height needed to be in compliance with the Federal Energy Regulatory Commission Order No. 802-CIP-014-1.

B. Denial. If the Planning Commission does not support the requests, the Commission could recommend denial of the proposed requests. With a recommendation for denial, findings or the basis for the denial should be given.

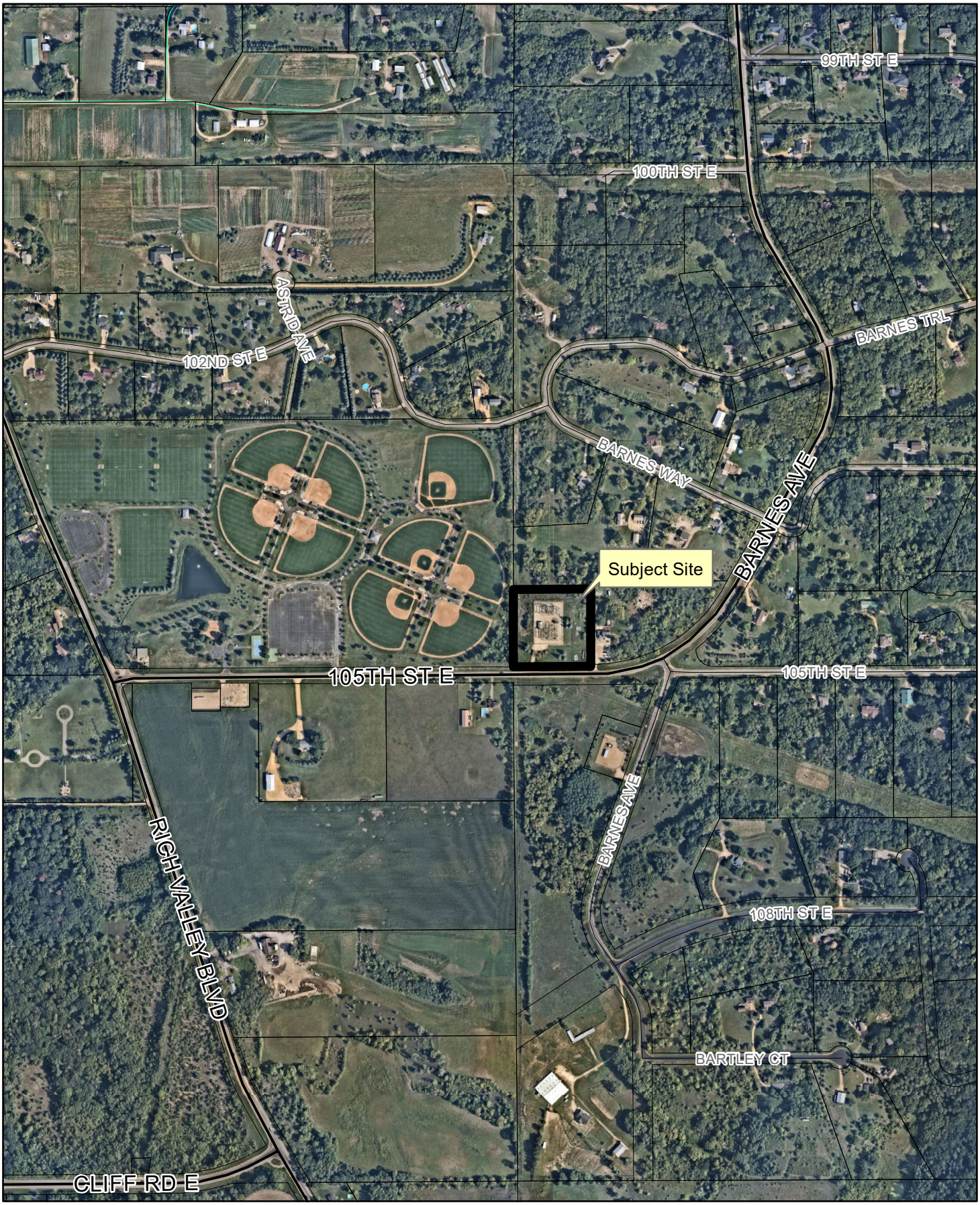
RECOMMENDATION

Based on the information in the preceding report and the conditions listed in Alternative A, Staff is recommending Approval of the Conditional Use Permit and Variance as presented.

ATTACHMENTS

1. Location Map
2. Narrative and Response to Staff Comments
3. Site Plan
4. Existing Conditions Plan
5. Grading Plan
6. Fencing Plan
7. Landscape Plan

Location Map
Case No. 24-23V



414 Nicollet Mall,
Minneapolis, Minnesota 55401-1993

June 17, 2024

Allan Hunting
City Planner
City of Inver Grove Heights
8150 Barbara Avenue
Inver Grove Heights, MN 55077

RE: Xcel Energy Inver Grove Substation Expansion Project – City of Inver Grove Heights Conditional Use Permit Application

Mr. Hunting:

Northern States Power, a Minnesota Corporation (Xcel Energy) is proposing to expand its existing substation located at 2015 105th Street East, Inver Grove Heights, Minnesota 55077. The Project is referred to as the Inver Grove Substation Expansion Project (Substation Expansion). Project location maps are attached to this application (figures 1 and 2).

The Substation Expansion is located at the northern terminus of the proposed 115 kV Rosemount Transmission Line and Associate Facilities project corridor on property owned by Xcel Energy. A Route Permit was issued for the 115 kV Rosemount Transmission Line and Associated Facilities on March 21, 2023, per the Alternative Permitting Process authorized by Minn. Stat. § 216E.04, Subd. 2(3), and Minn. R. 7850.2800, Subp. 1(C). The City of Rosemount, as the lead Responsible Government Unit (RGU), approved the Route Permit per the local review process outlined in Minn. R. 7850.5300.

The Substation Expansion is needed to facilitate connection between the proposed 115 kV Rosemount Transmission Line and the existing electrical grid. Equipment to be installed in association with the Project includes two-115 kV bays, foundations, and structures. Refer to the attached Design Plan for further engineering details. The Project is anticipated to begin construction in fall 2024.

Xcel Energy submits the enclosed application, abstractor's certificate, legal property description, and supporting figures and design drawings to amend the existing Conditional Use Permit for the Inver Grove Substation. The application feeof $1,196 will be provided as soon as possible. If you have any questions or require additional information, please contact me at (612) 330-1955 or Timothy.G.Rogers@xcelenergy.com, or Chris Schmidt at Environmental Resources Management (ERM), Xcel Energy's consultant for this Project, at (612) 347-7112 or Chris.Schmidt@erm.com.

Sincerely,

Timothy G Rogers Digitally signed by Timothy G Rogers Date: 2024.06.17 16:22:48 -05'00'

Timothy Rogers
Manager, Siting and Land Rights, Xcel Energy

Enclosures:
City of Inver Grove Heights Conditional Use Permit Application
Abstractors Certificate
Legal Property Description
Supporting Figures
Supporting Design Plans

Cc:
Heather Rand – Community Development Director, City of Inver Grove Heights
Peter Gitzen – Land Agent, Xcel Energy
Chris Schmidt – Managing Consultant, ERM

414 Nicollet Mall,
Minneapolis, Minnesota 55401-1993

July 8, 2024

Allan Hunting
City Planner
City of Inver Grove Heights
8150 Barbara Avenue
Inver Grove Heights, MN 55077

RE: Xcel Energy Inver Grove Substation Expansion Project
Response Letter to City of Inver Grove Heights Plan Review Committee Meeting on June 26, 2024
Case No. 24-23C – Conditional Use Permit Amendment

Mr. Hunting:

This letter is in response to comments received during the City of Inver Grove Heights Plan Review Committee Meeting on June 26, 2024, regarding the Northern States Power, a Minnesota Corporation (Xcel Energy) Inver Grove Substation Expansion Project (Case No. 24-23C). Please refer to Xcel Energy's response to comments received during the meeting below:

Variance Request for Fence Height

Ensuring the energy grid is secure from cyber and physical threats is a top priority for Xcel Energy and our partners across the electric industry. As Advanced Grid technology is deployed, this responsibility grows. The Advanced Grid uses several devices that are interconnected on the energy grid, and it is critical that we not only keep the devices secured, but also safeguard the connection and all the information being transmitted. Various security measures developed and implemented by Xcel Energy deliver reliable and safe electricity to our customers and maintain our commitment to operational excellence.

To protect employees, contractors, the general public, and company property and equipment, Xcel Energy has adopted measures to ensure the safe operation of our facilities. The National Electric Safety Code in Part I Section II, states in part that rooms and spaces in which electrical supply conductors or equipment are installed will be so arranged with fences, screens, partitions, or walls; to minimize the entrance, tampering, or destruction of Xcel Energy equipment by unauthorized persons. The electric transmission line, structures, and devices that support the lines are an integral part to the delivery of electricity to our customers. The risk of interrupted service and injury is high for unauthorized access to Xcel Energy's equipment. Only specially trained and equipped personal may enter these areas.

The Federal Energy Regulatory Commission (FERC) issued Order No. 802 – CIP-014-1 Physical Security which mandates owners of bulk-power systems to enhance physical security measures for critical facilities to lessen the overall vulnerability of the power system against physical attacks. To comply with the FERC Order, standards were adopted by Xcel Energy, and security measures were implemented to reduce the possibility of unauthorized access to the property and substation equipment. To comply with the FERC order, Xcel Energy is proposing to construct ten foot (10') tall perimeter fence around the Inver Grove Substation.

Per the City of Inver Grove Heights Fence Ordinance (Title 10, Chapter 15, Section 12), all newly installed fences must not exceed seven feet (7') in height. As such, Xcel Energy formally requests a variance from Title 10, Chapter 15, Section 12 to allow for the installation of a permanent 10' tall perimeter fence around the Inver Grove Substation. Please refer to the attached variance request checklist, as well as the planning application form, fence detail, and legal description

provided within the Conditional Use Permit amendment application dated June 17, 2024, for additional information regarding this variance request.

Stormwater Management Plan and Revised Grading Design

Xcel Energy submits the attached stormwater management plan and revised grading design indicating that the Inver Grove Substation, including the proposed infiltration basin, will be compliant with the City of Inver Grove Heights Stormwater Management Plan Standards (Title 10, Chapter 5, Section 8).

If you have any questions or require additional information, please contact me at (612) 330-1955 or Timothy.G.Rogers@xcelenergy.com, or Chris Schmidt at Environmental Resources Management (ERM), Xcel Energy's consultant for this Project, at (612) 347-7112 or Chris.Schmidt@erm.com.

Sincerely,

Timothy Rogers
Manager, Siting and Land Rights, Xcel Energy

Enclosures: Variance Request Checklist
Revised Grading Design
Stormwater Management Plan

Cc: Heather Botten – Associate Planner, City of Inver Grove Heights
Paul Merchlewicz – City Engineer, City of Inver Grove Heights
Peter Gitzen – Land Agent, Xcel Energy
Chris Schmidt – Managing Consultant, ERM

Variance Request Checklist

CITY OF INVER GROVE HEIGHTS
8150 Barbara Avenue
Inver Grove Heights, MN 55077
(651) 450-2545
www.ighmn.gov

VARIANCE

INSTRUCTIONS

The following must be submitted by e-mail to ighplanning@ighmn.gov prior to review and processing a request. If you have any questions, please contact the Planning Department at 651-450-2545.

❒ Planning Application Form with the appropriate fees.

☑ Narrative clearly describing the request. The following pages of this form contain the requirements of the City Code and a list of guidelines to aid in the preparation of the written statement.

❒ Electronic Plan Set of a survey or scaled drawing including the following information:

- Lot/parcel boundaries
- Location of existing and proposed structures with dimensions and their distance from all setbacks
- Location and size of driveways, parking areas and any other impervious coverage

❒ Legal Description of the property in Word format.

VARIANCE

Title 10, Chapter 3, Section 4 of the City Code states that the City Council may grant Variances in instances where practical difficulties exist where the property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance. City Code Title 10, Chapter 3, Section 4D states the determinations upon which the City Council may approve Variances.

These are summarized as follows:

- The Variance must be in harmony with the general purposes and intent of City Ordinances and be consistent with the Comprehensive Plan.
- Variances may be granted when the applicant establishes that there are practical difficulties in complying with the Zoning Ordinance.
- The plight of the landowner is due to circumstances unique to the property not created by the landowner.
- The Variance will not alter the essential character of the neighborhood.
- Economic considerations alone do not constitute practical difficulties.
- The Council may impose conditions in the granting of a Variance that are directly related to and must bear a rough proportionality to the impact created by the Variance.
- Variances may not be granted to allow a use that is not allowed under the Zoning Ordinance in the zoning district where the affected person's land is located.

When preparing an application for a Variance, the following guidelines may be helpful in establishing the basis upon which the Variance is requested:

1. A practical difficulty exists, as distinguished from a mere inconvenience, because of the particular physical surroundings, shape, or topographical conditions of the property.
2. A practical difficulty means that the property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.
3. The Variance is not detrimental to the public welfare or the neighborhood in which the property is located.
4. The Variance does not affect the supply of light and air to adjacent properties.
5. The Variance is in keeping with the spirit and intent of the City Code and Comprehensive Plan.

SUPPLEMENT TO VARIANCE APPLICATION

Introduction

The following memorandum is meant to assist the landowner in understanding (1) the purpose of a Variance and (2) the framework within which a Variance request is considered. This memorandum does not purport to recite all the applicable Ordinances and state laws dealing with Variances. Further, this memorandum does not purport to list all the provisions of the Inver Grove Heights Code that may apply to the subject property. The landowner is encouraged to review the Code to further familiarize themselves with the requirements that must be met before a variance can be granted. The Code is on file with the City Clerk.

Types of Variances

Inver Grove Heights City Code (IGH Code), Title 10 (Zoning Regulations) and Title 11 (Subdivision Regulations) impose standards and controls dealing with land development, subdividing, and platting. The Code establishes a procedure for obtaining a Variance from these regulations. IGH Code, Title 10, Chapter 3-4 deals with zoning and land use restrictions; it likewise establishes a procedure for obtaining a Variance. Thus, the landowner should initially determine whether they wish a Variance from the subdivision standards or from the zoning restrictions or from both.

Processing of the Variance Application

Once the application for a Variance has been completed and the requisite fees have been paid, the City will process the request. The application will be reviewed initially by the City's Planning and Engineering Departments; they, in turn, will make a report to the City's Planning Commission. The Planning Commission will review the Variance application and make a recommendation to the City Council. Finally, the City Council will act on the Variance required and will either approve or deny the request.

Authority to Grant a Variance

Under Minn. Stat. 462.357, Subd. 6; the Board of Appeals and Adjustments has the power to grant a Variance from the literal provisions of the Zoning Ordinance. In Inver Grove Heights, the City Council is the Board of Appeals and Adjustments. Thus, by Statute and by Ordinance, the City Council has the ultimate authority to grant or to deny a Variance.

Definition of a Variance

A Variance is the authorization for the construction or maintenance of a building or structure in a manner which is not allowed by the IGH Code. In some exceptional cases, due to the unique physical characteristics of the property, full compliance with the Code is either impossible or results in practical difficulty. By varying the terms of the Code, a Variance provides the opportunity for specific amelioration of practical difficulty resulting from the literal enforcement of the City's generally applicable zoning and subdivision regulations. The need for a Variance stems from where the property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.

The Statute – Variance from Zoning Restrictions

City Code sets forth when a Zoning Variance may be granted. Title 10, Chapter 3, Section 4, provides in part:

"The Planning Commission may recommend to approve, approve with conditions, or deny a request for a Variance. The City Council may deny or approve such Variances and impose conditions thereon.

1. Variances shall only be granted:

    a. When they are in harmony with the general purposes and intent of the Zoning and Subdivision Ordinances; and

    b. When the Variances are consistent with the Comprehensive Plan.

2. Variances may be granted when the applicant for the Variance establishes that there are practical difficulties in complying with the Zoning Ordinance.

3. Practical difficulties," as used in connection with the granting of a Variance", means that:

    a. The property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.

    b. The plight of the landowner is due to circumstances unique to the property not created by the landowner; and

    c. The Variance, if granted, will not alter the essential character of the locality.

4. Economic considerations alone do not constitute practical difficulties. Practical difficulties include, but are not limited to, inadequate access to direct sunlight for solar energy systems.

See Ordinance #1237, adopted July 11, 2011.

Reasons for Granting a Variance

The applicant must demonstrate that the reasons exist for granting a Variance. The City Council, in acting upon a request for a Variance, shall consider the following factors:

1. The Variance must be in harmony with the general purposes and intent of the Zoning Ordinance.

2. The Variance must be consistent with the Comprehensive Plan.

3. The applicant must show that there are "practical difficulties" in complying with the Zoning Ordinance:

    a. Property owner proposes to use the property in a reasonable manner not permitted by the Zoning Ordinance.

    b. The plight of the landowner is due to circumstances unique to the property not created by the owner.

    c. The Variance will not alter the essential character of the locality.

    d. Economic considerations alone do not constitute practical difficulties.

It is impossible to describe in detail all the factual situations which meet the criteria set forth above. The clearest situation, however, is where the property does not have a practical and beneficial use unless a Variance is granted.

Practical Difficulties and Circumstances Unique to the Property

The term "practical difficulties" does not mean the personal circumstances or characteristics of the applicant. Circumstances which are merely personal to the current landowner or to a supposed future owner will not justify a Variance. Rather, practical difficulties relate to the unique characteristics of the individual tract under consideration. The practical difficulty must relate to the land. For example, because of certain unique physical characteristics of the property, such as irregularity in shape, narrowness, shallowness of lot size, or exceptional topographical or other physical conditions peculiar to and inherent in the particular lot, it may be that a Variance from the Code is the only way that a lot can have a practical and beneficial use. Because of such unique physical conditions, it may be that practical difficulties arise in complying with the Code. Practical difficulty is not peculiar to the applicant's land if it is shared by the entire neighborhood or surrounding area. Where the practical difficulty imposed upon the applicant's property is no greater than that suffered by nearby land, a Variance may not be the proper vehicle to alleviate the hardship. Where a practical difficulty is shared by several pieces of land or by an entire area, the appropriate remedy may be to seek a change in the Code itself rather than a Variance from its literal language and application.

Practical and Beneficial Use

In general, all properties are entitled to have a practical and beneficial use. A Variance may be granted when, because of unique physical characteristics, the property does not have a practical and beneficial use unless the Code is varied. However, a mere showing that the land will be more valuable if the Variance is granted is not in itself a sufficient reason to support a Variance. Further, the mere showing that the applicant will make a greater profit in the sale of the land or from the business conducted on the land is not in itself a sufficient reason to support a Variance. A Variance cannot be granted solely on the ground that the applicant will be unable to realize a business advantage without it. Proof that a more profitable use could be made of the land if a Variance is granted is not in itself sufficient to establish the practical difficulty or undue hardship required by the IGH Code, and Minn. Stats. 462.357 and 462.358. Where the applicant merely shows that the land could be more economically improved or used, a sufficient showing has not been made.

The Spirit and Intent of the Ordinances

By state law, a Variance must be in harmony with the general purposes and intent of the Zoning Ordinance.

With zoning, the City regulates and restricts the use of land by dividing land within the City into appropriate zoning classifications or districts and by authorizing only certain uses within the districts. If a variance would alter the essential character of the neighborhood, the variance may be denied.

Self-Created Hardship

A Variance may be denied when the "practical difficulty" has been self-created. One example of a self-created practical difficulty is when the owner of a large tract divides the tract into smaller, separate parcels, none of which meet the minimum lot size requirement. When the only "practical difficulty" is that the applicant subdivided his land and sold portions of it retaining a substandard lot, it is proper to deny a variance for the substandard lot. Further, a variance may not be granted to an applicant who wishes to subdivide a lot to create a standard and a substandard lot or to an applicant who proposes to divide a standard lot into two or more substandard parcels.

A Variance is Not a Rezoning

A Variance is not the way to change the zoning classification of the property. The statute provides that a Variance cannot be granted to permit a use which is prohibited by the Zoning Ordinance. To change the zoning classification of the property, the applicant will have to seek a Rezoning.

Reasons for Denying Variance

Whenever a variance is denied, it is the judgment of the City Council that the applicant has failed to demonstrate the reasons prescribed by state law for the granting of a variance. The considerations that result in denial are expressed in many ways. It is impossible to list comprehensively all of the expressed considerations because each request is created individually and on its own merits; the considerations differ from case to case. However, some of the common reasons, among others, for denying a variance are:

1. The practical difficulty, if any, is personal to the landowner, rather than the property.

2. The practical difficulty is not caused by any unique circumstances of the individual property.

3. The practical difficulty is self-created.

4. If granted, the variance would change the essential character of the surrounding neighborhood.

5. The circumstances or conditions of the property are not unique but rather apply generally to the surrounding neighborhood or to other properties within the same zoning classification.

6. The variance request is for a use not permitted in the zoning classification.

7. A variance would not be in keeping with the spirit and intent of the zoning ordinance or subdivision ordinance.

The order in which the reasons for denial are listed is not meant to indicate any priority nor is any particular stated reason meant to indicate that other justifiable concerns will be ignored. Each application is treated on its own merits.

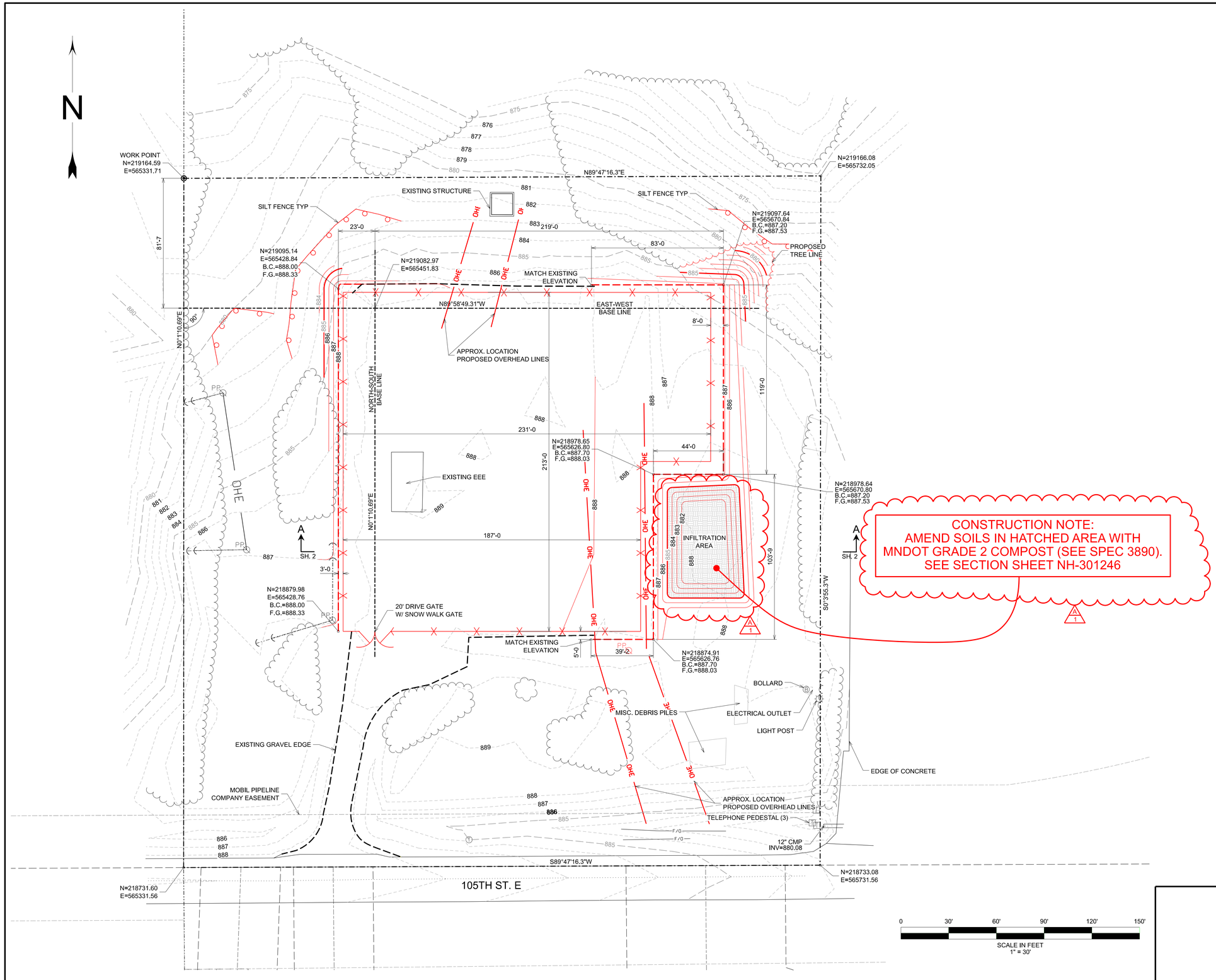
Conditions to the Variance

By state law, the City Council "may impose conditions in the granting of variances to ensure compliance and to protect adjacent properties." If conditions are imposed, they are an essential part of the variance. If the landowner violates the conditions, the variance automatically terminates.

Lapse of the Variance

If a zoning variance is not used within two (2) years after it is granted or is not used within such longer period as the City Council may determine, the variance becomes void.

Revised Grading Design



HORIZONTAL DATUM:

NAD83 DAKOTA COUNTY U.S. SURVEY FEET

VERTICAL DATUM:

ELEVATIONS ON NAVD88 ADJUSTMENT

GENERAL NOTES

1. LOCATION OF BENCH MARK FOR GRADE ELEVATION IS TO BE SET PRIOR TO GRADING CONSTRUCTION.
2. CONTOURS AT ONE FOOT INTERVALS.
3. ELEVATIONS INDICATED IN SUBSTATION GRADED AREA ARE TOP OF BASE MATERIAL.
4. CONTOURS OUTSIDE OF THE SUBSTATION GRADED AREA INDICATE THE TOP OF FINISHED TOPSOIL.
5. FINISHED GRADE IN SUBSTATION GRADED AREA IS 4 INCHES HIGHER THAN THE ROUGH GRADE ELEVATION. FINISHED GRADE CONSISTS OF 4 INCHES OF CRUSHED ROCK PROVIDED AND INSTALLED BY XCEL ENERGY.
6. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC. 31 22 00 "SPECIFICATION FOR CONSTRUCTION OF GRADING", REV. 6.2, DATED 11/8/2022
7. EROSION CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC. 31 25 00 "NSP-STD-EROSION CONTROL", REV. 1.1, DATED 10/11/2021.
8. EXCESS SOIL FROM GRADING EXCAVATION TO BE PROPERLY DISPOSED OF OFF-SITE OR UTILIZED IN LANDSCAPING ACTIVITIES AND IN NO CASE SHALL IT AFFECT OVERALL SITE DRAINAGE.

CONSTRUCTION SEQUENCE

1. INSTALL SILT FENCE.
2. CLEARING AND GRUBBING.
3. GRADE DIVERSION BERMS AND DIVERSION SWALES.
4. APPLY TEMPORARY SEED (IF NECESSARY).
5. COMPLETE MASS GRADING.
6. SEED AND MULCH/BLANKET.

MAINTENANCE

1. MAINTENANCE SHALL BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
2. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED THROUGH SCRAPING OR DRESSING WITH ADDITIONAL AGGREGATE.
3. REMOVE ANY DEBRIS THAT MAY BE TRACKED OFF-SITE DAILY.

AFTER MASS GRADING IS COMPLETED

1. SEED AND BLANKET.

AFTER VEGETATION IS ESTABLISHED

1. REMOVE SILT FENCE.

LEGEND

- BASELINE
- PROPERTY LINE
- SECTION LINE
- RIGHT OF WAY
- ROADWAY CENTERLINE
- EDGE OF PAVEMENT
- 890 EXISTING MAJOR CONTOURS
- 896 EXISTING MINOR CONTOURS
- 896 PROPOSED CONTOUR
- X EXISTING MINOR CONTOURS
- GRAVEL BASE EDGE
- OHE OVERHEAD ELECTRIC
- F/O FIBER OPTIC LINE
- EXISTING TREE LINE
- EXISTING FLOW ARROW
- WORK POINT
- TELEPHONE PEDESTAL
- LIGHT POLE
- PP POWERPOLE
- POWER POLE ANCHOR
- SB? SOIL BORING LOCATIONS
- SILT FENCE

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION. FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS.YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.

INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION

IVG

CONTOUR AND GRADING LAYOUT

GRADING PLAN

Xcel Energy®

NH-301246-1

SCALE 1"=30'-0"

REV 1

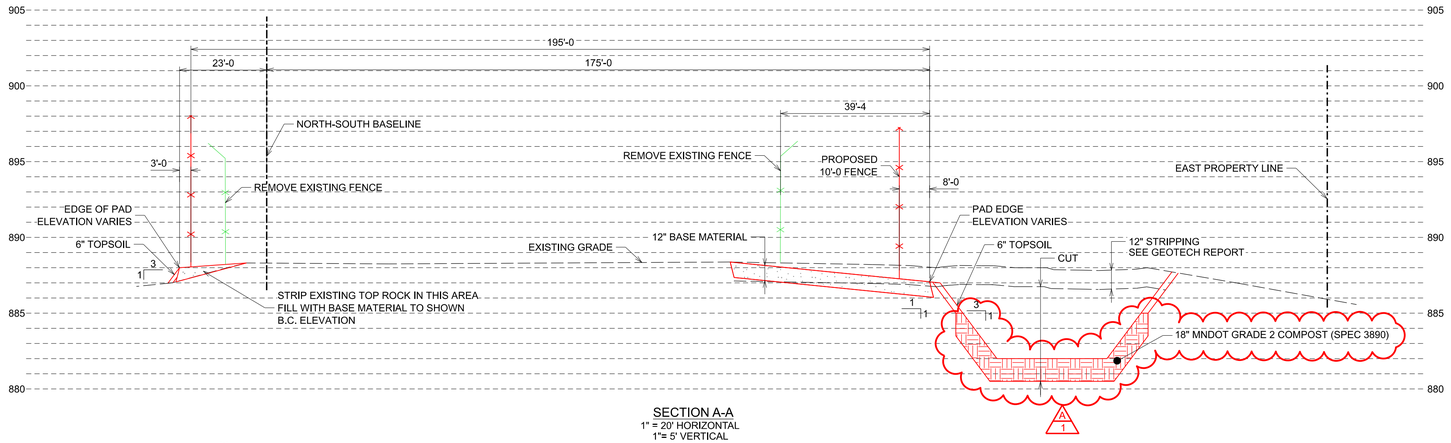
REV	DATE	WBS 4	REVISION DESCRIPTION

REV	DATE	WBS 4	REVISION DESCRIPTION

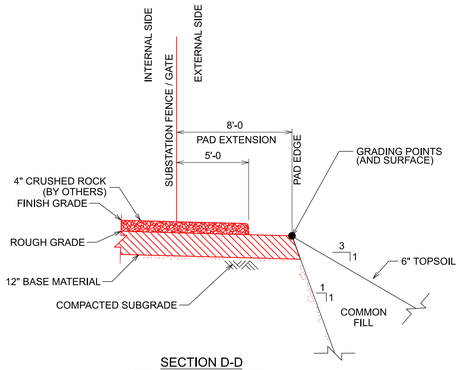
REV	DATE	WBS 4	REVISION DESCRIPTION
0A	5/31/2024	A.0001885.010.001.002	IFC - INVER GROVE SUB UPGRADES
0A	7/8/2024	A.0001885.010.001.002	IFC - INVER GROVE SUB UPGRADES - POND UPDATE

NH-301246-1.DGN

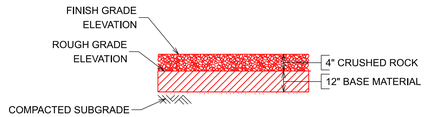
7/8/2024 11:39:38 AM



SECTION A-A
1" = 20' HORIZONTAL
1"= 5' VERTICAL



SECTION D-D
GRADING PAD SECTION DETAIL
SCALE: NONE



SEE SECTION DETAILS FOR SITE SPECIFIC INFORMATION

NOTES:

1. SELECT FILL SHALL BE USED IN ACCORDANCE WITH XCEL SPEC. 220 SECTION 2 "SPECIFICATIONS FOR SITE GRADING."
2. SEE GEOTECH REPORT FOR UNIQUE SITE GRADING AND DRAINAGE REQUIREMENTS.

TYPICAL PAD GRADING SECTION
SCALE: NONE

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

FOR GENERAL NOTES SEE NH-301246-1
FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS.YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.

INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION — IVG

CONTOUR AND GRADING LAYOUT

SECTIONS AND DETAILS

Xcel Energy® | NH-301246-2 | SCALE: 1"=20'-0" | REV: 1

REV	DATE	WBS 4	REVISION DESCRIPTION

REV	DATE	WBS 4	REVISION DESCRIPTION

REV	DATE	WBS 4	REVISION DESCRIPTION
0A	5/31/2024	A.0001885.010.001.002	IFC - INVER GROVE SUB UPGRADES
1A	7/8/2024	A.0001885.010.001.002	IFC - INVER GROVE SUB UPGRADES - POND UPDATE

5/28/2024 2:35:04 PM

NH-301246-2.DGN

Stormwater Management Plan

INVER GROVE SUBSTATION
Stormwater Management Narrative

The purpose of this section is to explain and demonstrate the efforts made to achieve compliance with MPCA standards for construction stormwater. Associated calculations will be referenced throughout this narrative.

Project Background

The purpose of this project is ultimately to construct an addition to a power substation. The existing substation pad is approximately 46,560 sq ft. We are proposing the addition of 13,610 sq ft of substation pad to expand the substation. We are proposing to build a retention pond on the east side of the substation. There is currently no storm water retention system in place. The existing substation is slightly pitched from a high point in the center of the substation. Half the existing substation drains west and half drains east, towards the location of the addition. To keep run-off from leaving the property, we have chosen to construct an infiltration basin. The basin will catch water from half the existing substation and the entire addition. The site has very good infiltration characteristics. We have attached infiltration estimates from the geotechnical engineer. The lowest estimate is 18 in/hr. We have assumed one third of that in our calculations, assuming that at some point sediment will slow infiltration

Stormwater Management Plan General Requirements –

1. Rate Control
2. Infiltration Assumptions
3. BMPs used

1. *Rate Control*

   Below is a summary of the 1-, 2-, 10-, and 100-year design storms. The associated hydrocad calculations are included in this Stormwater Management Plan. The existing site flows east and west equally

   2-year design storm –
   - Existing Site Run-off to the west – 0.92 cfs (this will remain the same)
   - Existing Site Run-off to the east – 0.92 cfs
   - Proposed Site Run-off to the east – 0.00 cfs (infiltrate the full volume)

   10-year design storm –
   - Existing Site Run-off to the west – 1.42 cfs (this will remain the same)
   - Existing Site Run-off to the east – 1.42 cfs
   - Proposed Site Run-off to the east – 0.00 cfs (infiltrate the full volume)

   100-year design-storm –
   - Existing Site Run-off to the west – 2.60 cfs (this will remain the same)
   - Existing Site Run-off to the east – 2.60 cfs
   - Proposed Site Run-off to the east – 0.00 cfs (infiltrate the full volume)

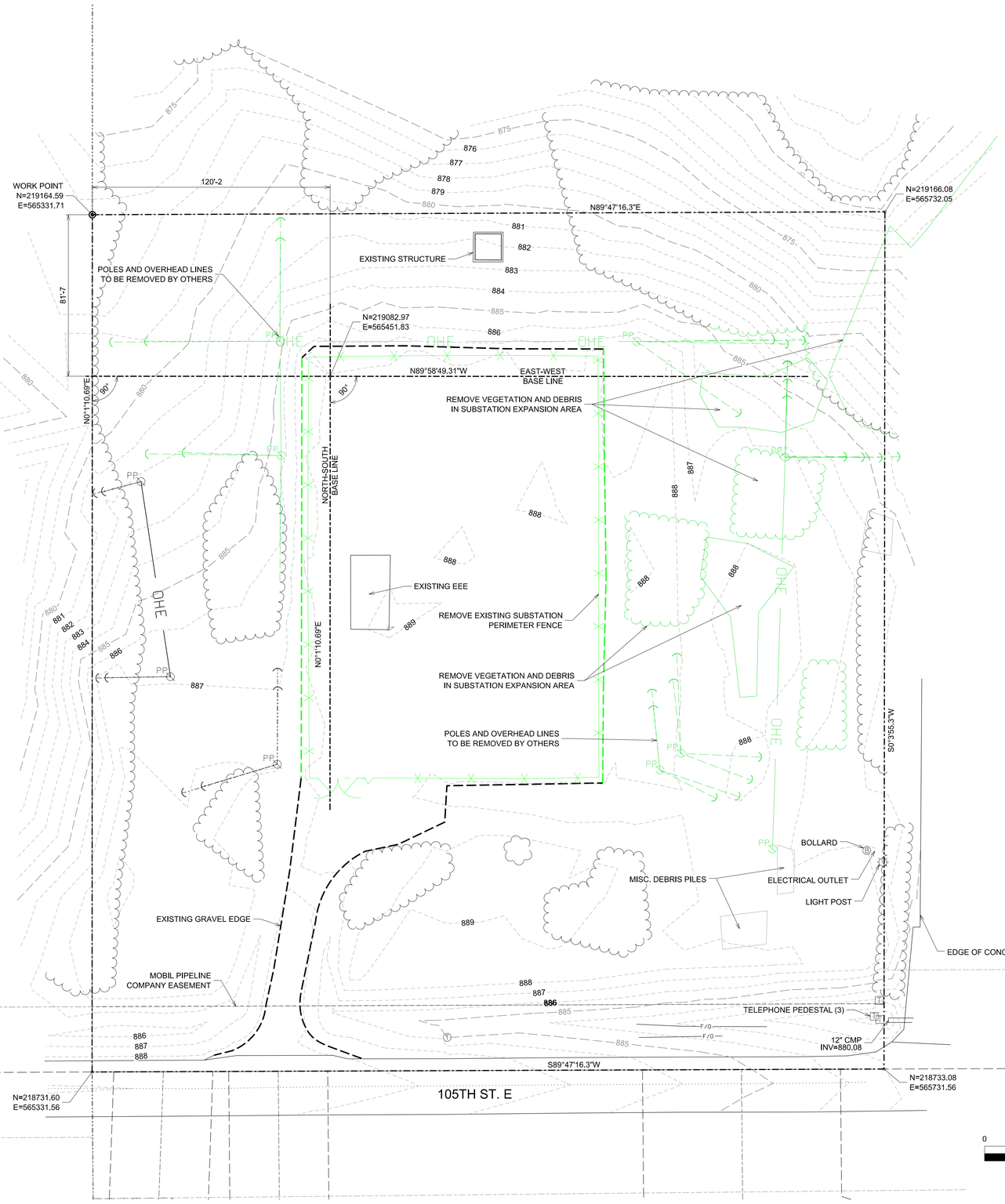
2. *Infiltration Assumptions*

   The attached Geotech report determined that the infiltration capacity of the soils for our site were somewhere between 18 and 31 in/hr, for the purpose of our calculations we have assumed 6 in/hr. This should account any reduction in infiltration rate we will see due to sediment.

3. *Best Management Practices (BMPs)*

   The BMPs being implemented on this site are;

   Grassy Swale
   Seed and mulch (or erosion control blanket) all disturbed soils
   Infiltrate Full Volume of Run-off

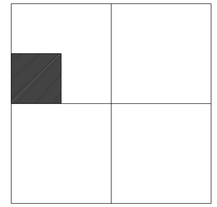


0 30' 60' 90' 120' 150'

SCALE IN FEET
1" = 30'

HORIZONTAL DATUM:
NAD83 DAKOTA COUNTY U.S. SURVEY FEET
VERTICAL DATUM:
ELEVATIONS ON NAVD88 ADJUSTMENT

SECTION MAP



SW ¼ OF NW ¼
SEC 28, T. 27N, R. 22W
DAKOTA COUNTY, MN

LEGEND

- BASELINE
- PROPERTY LINE
- SECTION LINE
- RIGHT OF WAY
- ROADWAY CENTERLINE
- EDGE OF PAVEMENT
- 890 EXISTING MAJOR CONTOURS
- 896 EXISTING MINOR CONTOURS
- GRAVEL BASE EDGE
- REMOVE CHAINLINK FENCE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- EXISTING TREE LINE
- APPROX TREE REMOVAL
- EXISTING FLOW ARROW
- WORK POINT
- TELEPHONE PEDESTAL
- LIGHT POLE
- POWERPOLE
- POWER POLE ANCHOR
- SB? SOIL BORING LOCATIONS

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION.
FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
DATE 5/31/2024 REG. NO. 43382
BRIAN D. ROBIDEAU

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS.YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.
INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

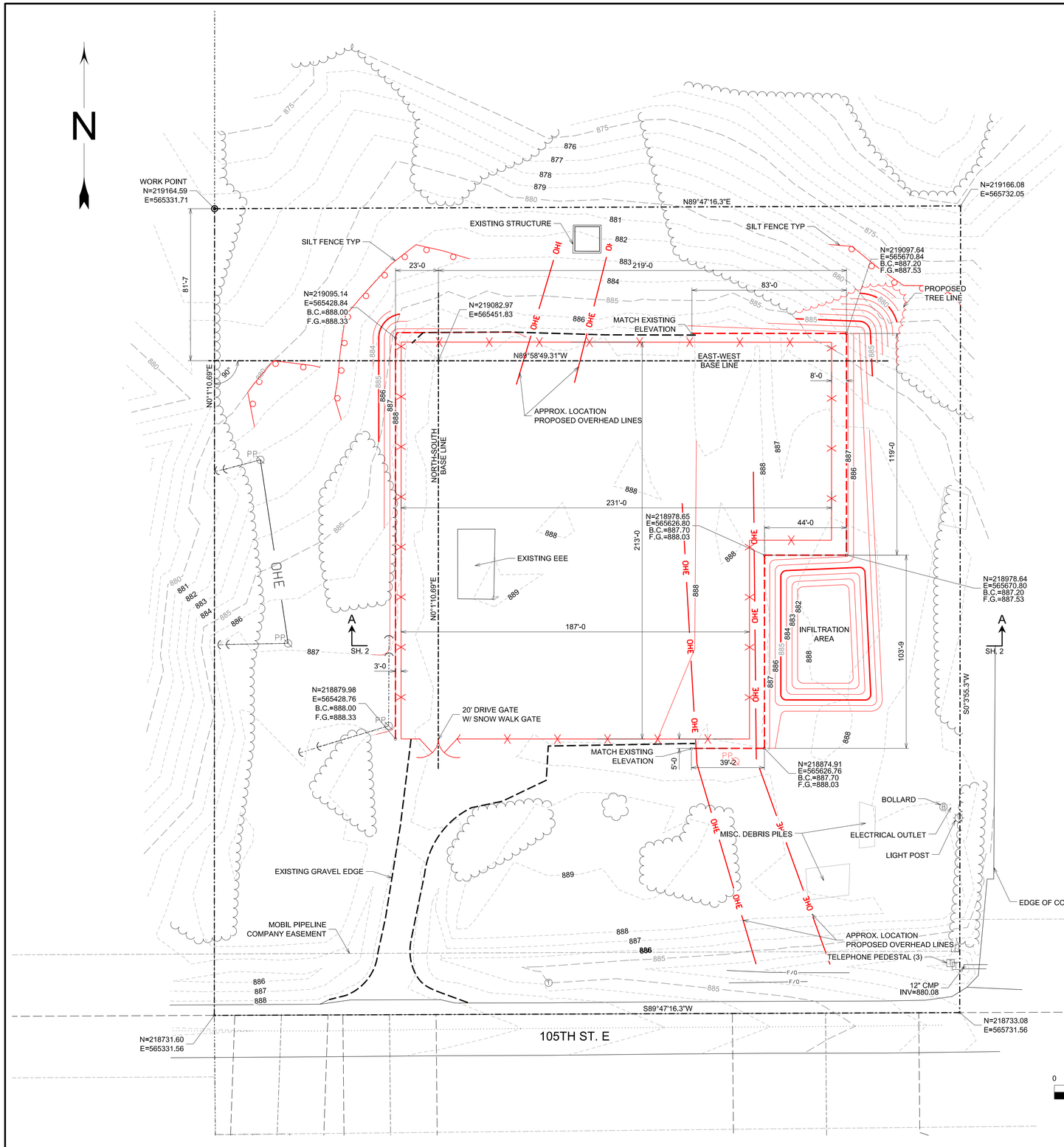
INVER GROVE SUBSTATION IVG

TOPOGRAPHY LAYOUT
EXISTING CONDITIONS

Xcel Energy® | NH-301245 | SCALE 1"=30'-0" | REV 0

REV	DATE	WBS 4	REVISION DESCRIPTION
0A	5/31/2024	A.0001685.010.001.002	IFC - INVER GROVE SUB UPGRADES

NH-301245.DGN
4/29/2024 12:42:45 PM



HORIZONTAL DATUM:

NAD83 DAKOTA COUNTY U.S. SURVEY FEET

VERTICAL DATUM:

ELEVATIONS ON NAVD88 ADJUSTMENT

GENERAL NOTES

1. LOCATION OF BENCH MARK FOR GRADE ELEVATION IS TO BE SET PRIOR TO GRADING CONSTRUCTION.
2. CONTOURS AT ONE FOOT INTERVALS.
3. ELEVATIONS INDICATED IN SUBSTATION GRADED AREA ARE TOP OF BASE MATERIAL.
4. CONTOURS OUTSIDE OF THE SUBSTATION GRADED AREA INDICATE THE TOP OF FINISHED TOPSOIL.
5. FINISHED GRADE IN SUBSTATION GRADED AREA IS 4 INCHES HIGHER THAN THE ROUGH GRADE ELEVATION. FINISHED GRADE CONSISTS OF 4 INCHES OF CRUSHED ROCK PROVIDED AND INSTALLED BY XCEL ENERGY.
6. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC. 31 22 00 "SPECIFICATION FOR CONSTRUCTION OF GRADING", REV. 6.2, DATED 11/8/2022
7. EROSION CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC. 31 25 00 "NSP-STD-EROSION CONTROL", REV. 1.1, DATED 10/11/2021.
8. EXCESS SOIL FROM GRADING EXCAVATION TO BE PROPERLY DISPOSED OF OFF-SITE OR UTILIZED IN LANDSCAPING ACTIVITIES AND IN NO CASE SHALL IT AFFECT OVERALL SITE DRAINAGE.

CONSTRUCTION SEQUENCE

1. INSTALL SILT FENCE.
2. CLEARING AND GRUBBING.
3. GRADE DIVERSION BERMS AND DIVERSION SWALES.
4. APPLY TEMPORARY SEED (IF NECESSARY).
5. COMPLETE MASS GRADING.
6. SEED AND MULCH/BLANKET.

MAINTENANCE

1. MAINTENANCE SHALL BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
2. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED THROUGH SCRAPING OR DRESSING WITH ADDITIONAL AGGREGATE.
3. REMOVE ANY DEBRIS THAT MAY BE TRACKED OFF-SITE DAILY.

AFTER MASS GRADING IS COMPLETED

1. SEED AND BLANKET.

AFTER VEGETATION IS ESTABLISHED

1. REMOVE SILT FENCE.

LEGEND

- BASELINE
- PROPERTY LINE
- SECTION LINE
- RIGHT OF WAY
- ROADWAY CENTERLINE
- EDGE OF PAVEMENT
- 890 EXISTING MAJOR CONTOURS
- 896 EXISTING MINOR CONTOURS
- 896 PROPOSED CONTOUR
- X EXISTING MINOR CONTOURS
- GRAVEL BASE EDGE
- OHE OVERHEAD ELECTRIC
- F/O FIBER OPTIC LINE
- EXISTING TREE LINE
- EXISTING FLOW ARROW
- WORK POINT
- TELEPHONE PEDESTAL
- LIGHT POLE
- PP POWERPOLE
- POWER POLE ANCHOR
- SB? SOIL BORING LOCATIONS
- SILT FENCE

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION. FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
DATE 5/31/2024 REG. NO. 43382
BRIAN D. ROBIDEAU

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS.YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.
INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION
IVG

CONTOUR AND GRADING LAYOUT

GRADING PLAN

Xcel Energy®

NH-301246-1

SCALE 1"=30'-0"

REV 0

REV	DATE	WBS 4	REVISION DESCRIPTION

REV	DATE	WBS 4	REVISION DESCRIPTION

REV	DATE	WBS 4	REVISION DESCRIPTION
0A	5/31/2024	A.0001885.010.001.002	IFC - INVER GROVE SUB UPGRADES

NH-301246-1.DGN

5/28/2024 2:23:50 PM

Subcat Reach Pond Link

Routing Diagram for Inver Grove
Prepared by Ulteig Engineers, Printed 6/26/2024
HydroCAD® 10.20-3c s/n 02198 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2YR	Type II 24-hr		Default	24.00	1	2.78	2
2	10YR	Type II 24-hr		Default	24.00	1	4.14	2
3	100YR	Type II 24-hr		Default	24.00	1	7.42	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.447	96	Gravel surface, HSG A (1S, 2S, 3S)
1.447	**96**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.447	HSG A	1S, 2S, 3S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.447		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.447	0.000	0.000	0.000	0.000	1.447	Gravel surface	1S, 2S, 3S
1.447	**0.000**	**0.000**	**0.000**	**0.000**	**1.447**	**TOTAL AREA**	

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Existing West Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=2.34"
Tc=20.0 min CN=96 Runoff=0.92 cfs 0.074 af

Subcatchment2S: Proposed East Runoff Area=30,085 sf 0.00% Impervious Runoff Depth=2.34"
Tc=20.0 min CN=96 Runoff=1.69 cfs 0.134 af

Subcatchment3S: Existing East Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=2.34"
Tc=20.0 min CN=96 Runoff=0.92 cfs 0.074 af

Pond 4P: Infiltration Basin Peak Elev=882.97' Storage=1,966 cf Inflow=1.69 cfs 0.134 af
Outflow=0.32 cfs 0.134 af

Total Runoff Area = 1.447 ac Runoff Volume = 0.282 af Average Runoff Depth = 2.34"
100.00% Pervious = 1.447 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Existing West

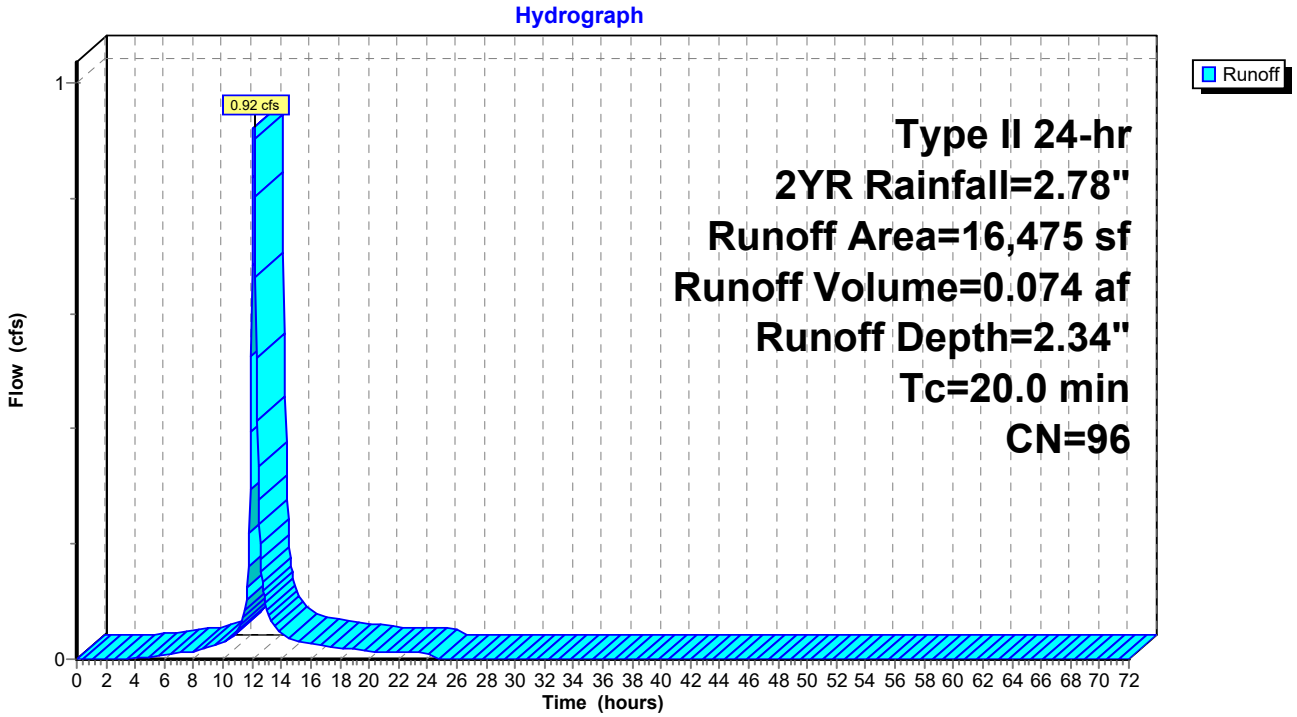
Runoff = 0.92 cfs @ 12.12 hrs, Volume= 0.074 af, Depth= 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2YR Rainfall=2.78"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 1S: Existing West



Summary for Subcatchment 2S: Proposed East

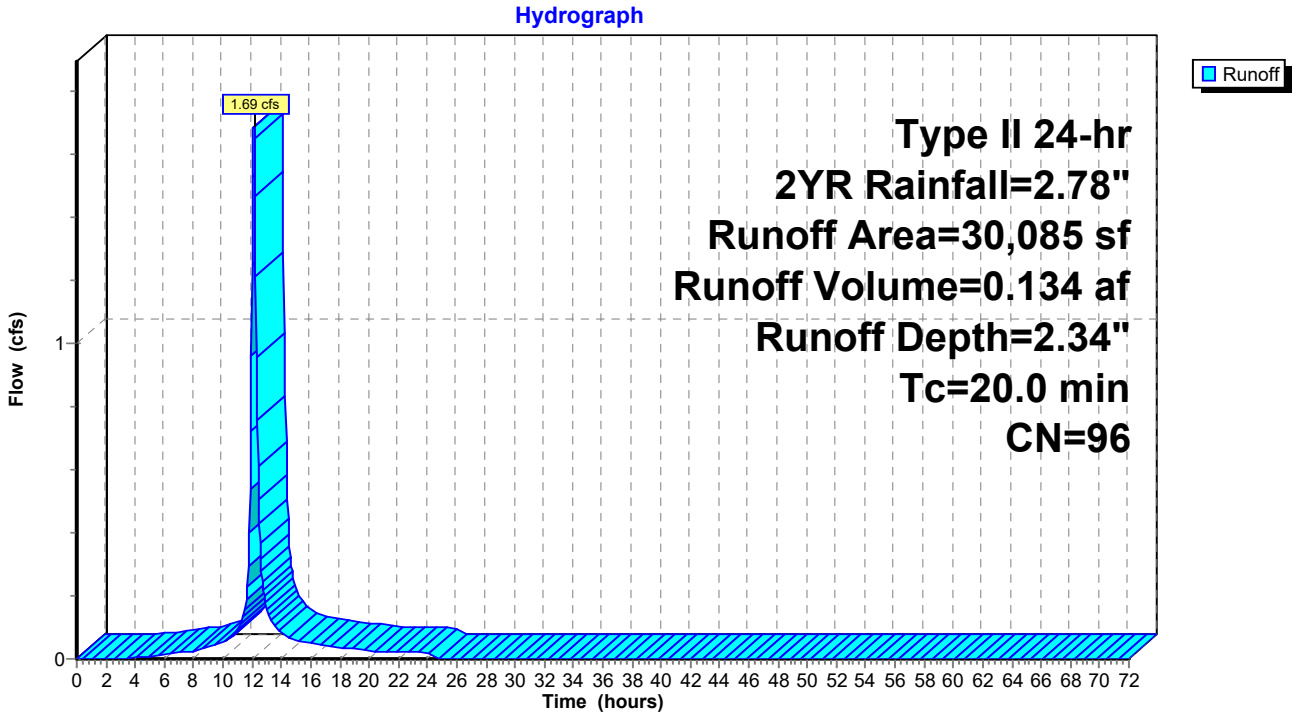
Runoff = 1.69 cfs @ 12.12 hrs, Volume= 0.134 af, Depth= 2.34"
Routed to Pond 4P : Infiltration Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2YR Rainfall=2.78"

Area (sf)	CN	Description
30,085	96	Gravel surface, HSG A
30,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 2S: Proposed East



Summary for Subcatchment 3S: Existing East

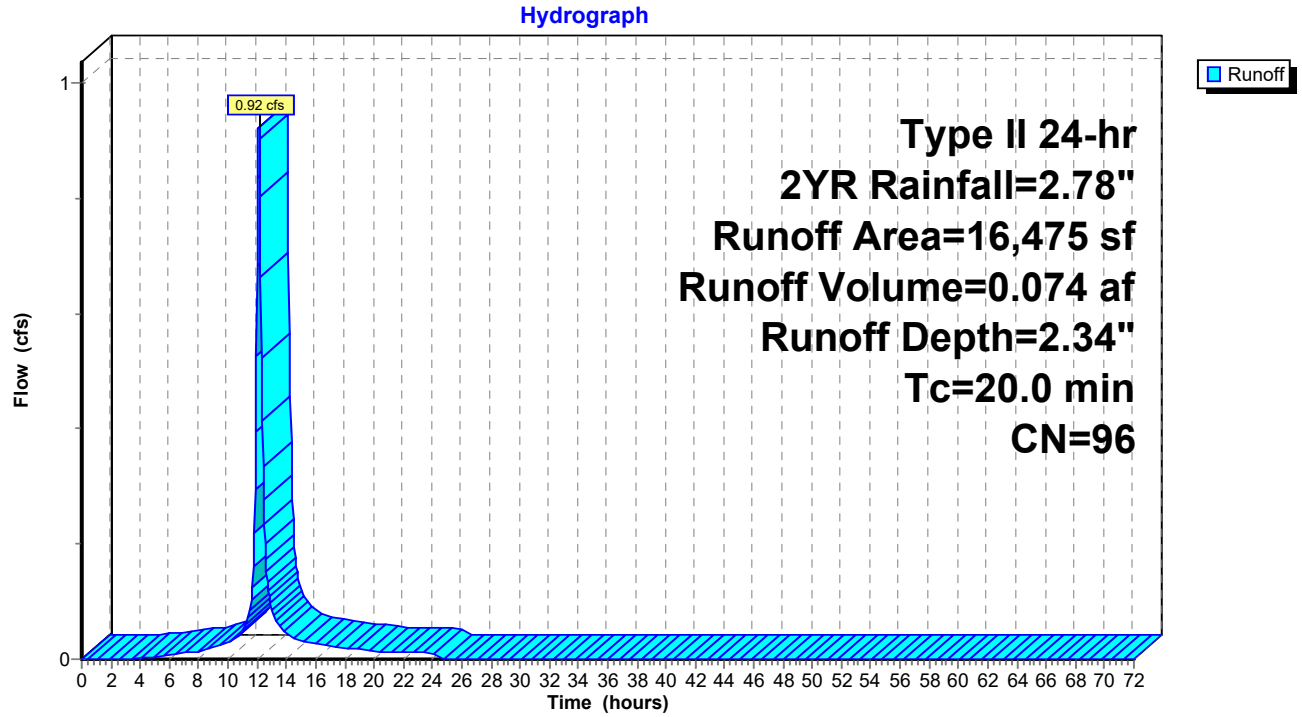
Runoff = 0.92 cfs @ 12.12 hrs, Volume= 0.074 af, Depth= 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 2YR Rainfall=2.78"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 3S: Existing East



Summary for Pond 4P: Infiltration Basin

Inflow Area = 0.691 ac, 0.00% Impervious, Inflow Depth = 2.34" for 2YR event
Inflow = 1.69 cfs @ 12.12 hrs, Volume= 0.134 af
Outflow = 0.32 cfs @ 12.60 hrs, Volume= 0.134 af, Atten= 81%, Lag= 29.0 min
Discarded = 0.32 cfs @ 12.60 hrs, Volume= 0.134 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 882.97' @ 12.60 hrs Surf.Area= 2,292 sf Storage= 1,966 cf

Plug-Flow detention time= 44.0 min calculated for 0.134 af (100% of inflow)
Center-of-Mass det. time= 44.0 min (831.7 - 787.7)

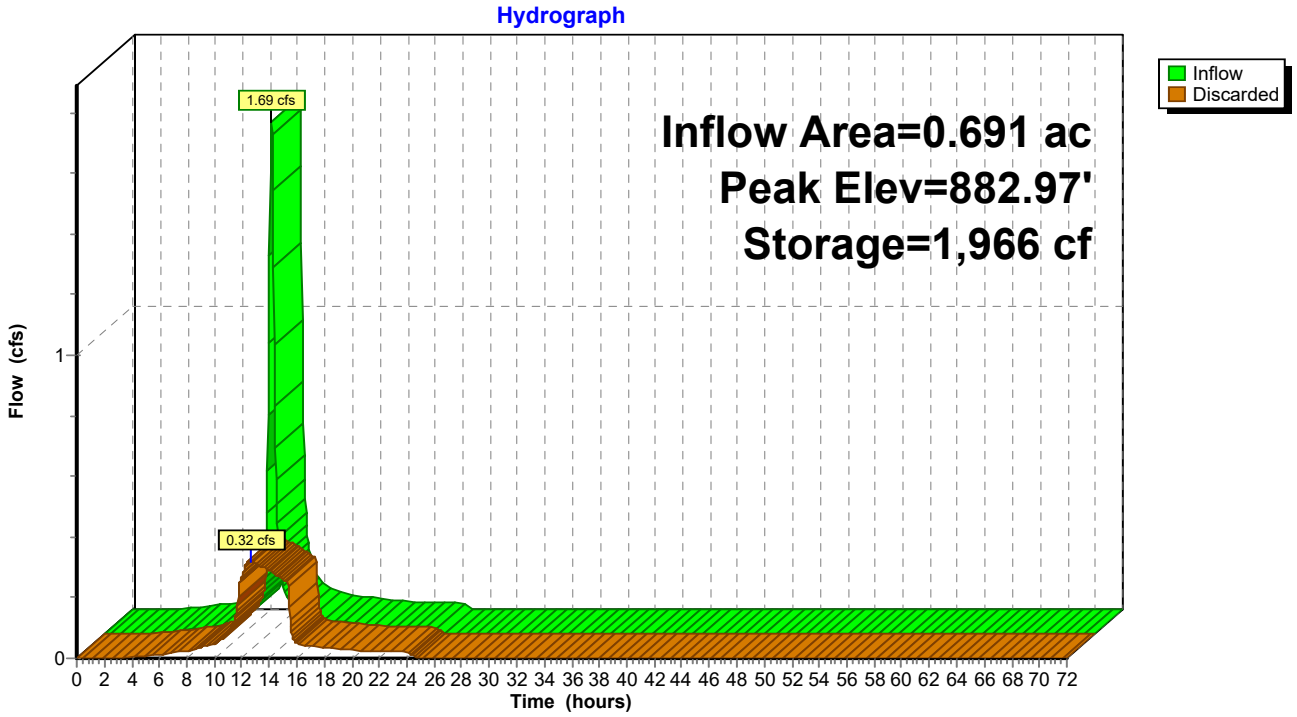
Volume	Invert	Avail.Storage	Storage Description
#1	882.00'	22,571 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
882.00	1,756	0	0
883.00	2,308	2,032	2,032
884.00	2,933	2,621	4,653
885.00	3,629	3,281	7,934
886.00	5,129	4,379	12,313
887.00	5,129	5,129	17,442
888.00	5,129	5,129	22,571

Device	Routing	Invert	Outlet Devices
#1	Discarded	882.00'	**6.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.32 cfs @ 12.60 hrs HW=882.97' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.32 cfs)

Pond 4P: Infiltration Basin



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Existing West Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=3.68"
Tc=20.0 min CN=96 Runoff=1.42 cfs 0.116 af

Subcatchment2S: Proposed East Runoff Area=30,085 sf 0.00% Impervious Runoff Depth=3.68"
Tc=20.0 min CN=96 Runoff=2.60 cfs 0.212 af

Subcatchment3S: Existing East Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=3.68"
Tc=20.0 min CN=96 Runoff=1.42 cfs 0.116 af

Pond 4P: Infiltration Basin Peak Elev=883.57' Storage=3,446 cf Inflow=2.60 cfs 0.212 af
Outflow=0.37 cfs 0.212 af

Total Runoff Area = 1.447 ac Runoff Volume = 0.444 af Average Runoff Depth = 3.68"
100.00% Pervious = 1.447 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Existing West

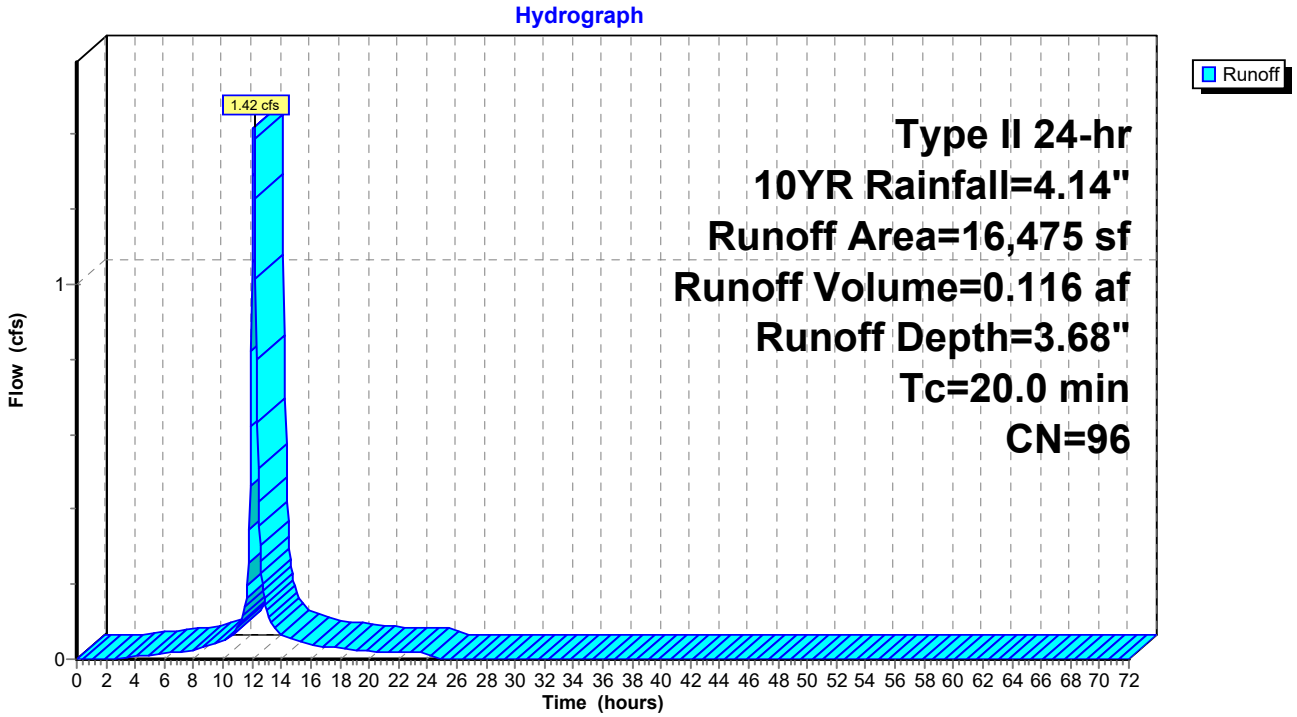
Runoff = 1.42 cfs @ 12.12 hrs, Volume= 0.116 af, Depth= 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10YR Rainfall=4.14"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 1S: Existing West



Summary for Subcatchment 2S: Proposed East

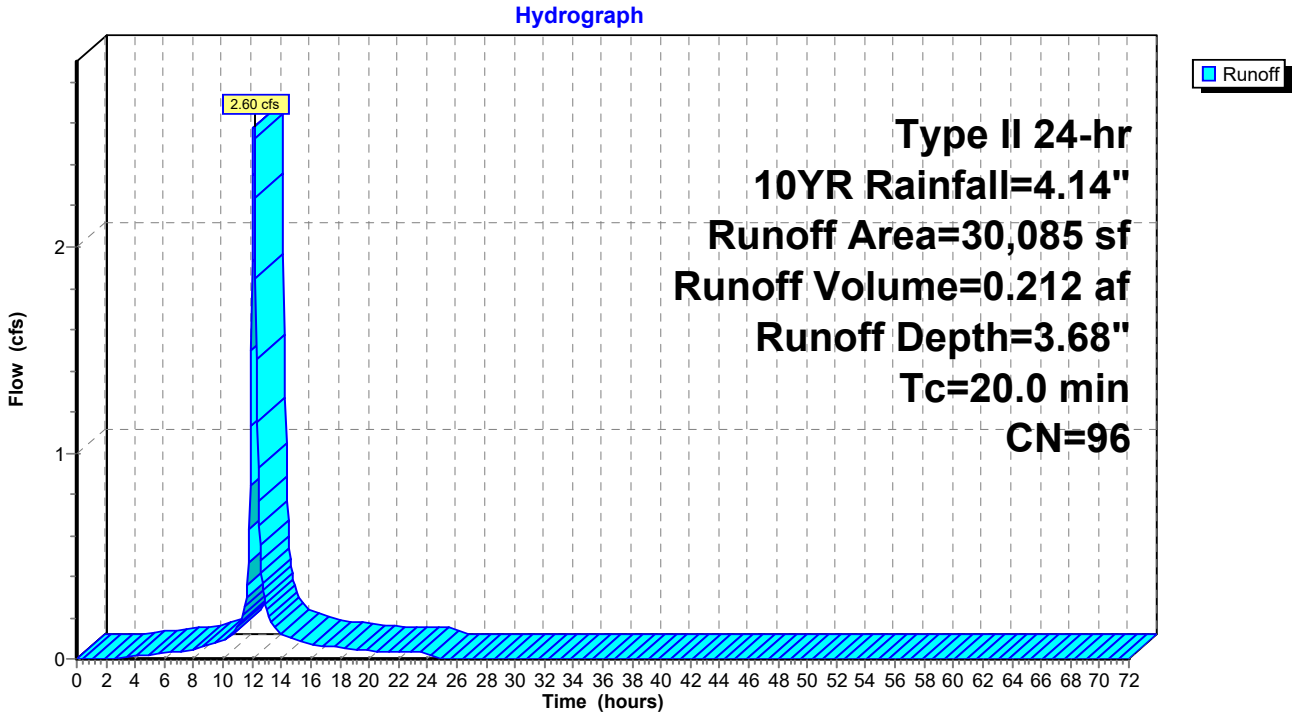
Runoff = 2.60 cfs @ 12.12 hrs, Volume= 0.212 af, Depth= 3.68"
Routed to Pond 4P : Infiltration Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10YR Rainfall=4.14"

Area (sf)	CN	Description
30,085	96	Gravel surface, HSG A
30,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 2S: Proposed East



Summary for Subcatchment 3S: Existing East

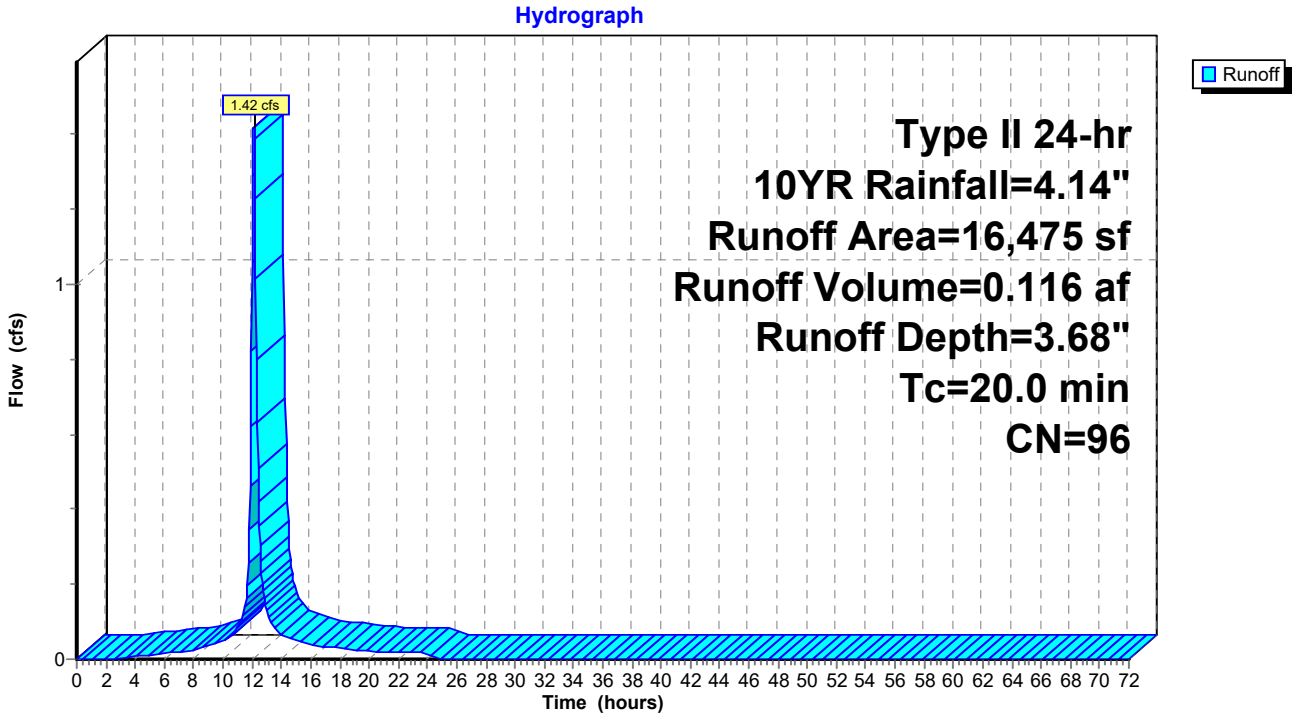
Runoff = 1.42 cfs @ 12.12 hrs, Volume= 0.116 af, Depth= 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 10YR Rainfall=4.14"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 3S: Existing East



Summary for Pond 4P: Infiltration Basin

Inflow Area = 0.691 ac, 0.00% Impervious, Inflow Depth = 3.68" for 10YR event
Inflow = 2.60 cfs @ 12.12 hrs, Volume= 0.212 af
Outflow = 0.37 cfs @ 12.70 hrs, Volume= 0.212 af, Atten= 86%, Lag= 35.3 min
Discarded = 0.37 cfs @ 12.70 hrs, Volume= 0.212 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 883.57' @ 12.70 hrs Surf.Area= 2,664 sf Storage= 3,446 cf

Plug-Flow detention time= 70.8 min calculated for 0.212 af (100% of inflow)
Center-of-Mass det. time= 70.8 min (847.2 - 776.4)

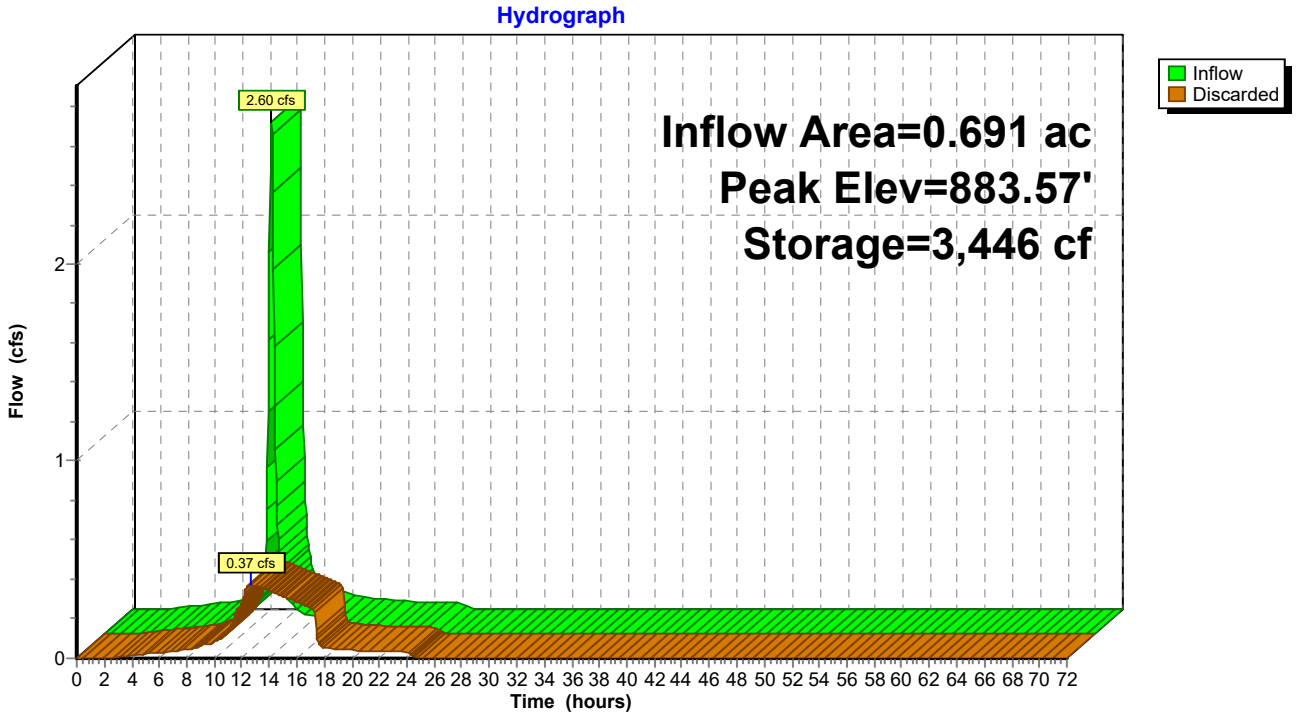
Volume	Invert	Avail.Storage	Storage Description
#1	882.00'	22,571 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
882.00	1,756	0	0
883.00	2,308	2,032	2,032
884.00	2,933	2,621	4,653
885.00	3,629	3,281	7,934
886.00	5,129	4,379	12,313
887.00	5,129	5,129	17,442
888.00	5,129	5,129	22,571

Device	Routing	Invert	Outlet Devices
#1	Discarded	882.00'	**6.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.37 cfs @ 12.70 hrs HW=883.57' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.37 cfs)

Pond 4P: Infiltration Basin



Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Existing West Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=6.94"
Tc=20.0 min CN=96 Runoff=2.60 cfs 0.219 af

Subcatchment2S: Proposed East Runoff Area=30,085 sf 0.00% Impervious Runoff Depth=6.94"
Tc=20.0 min CN=96 Runoff=4.75 cfs 0.400 af

Subcatchment3S: Existing East Runoff Area=16,475 sf 0.00% Impervious Runoff Depth=6.94"
Tc=20.0 min CN=96 Runoff=2.60 cfs 0.219 af

Pond 4P: Infiltration Basin Peak Elev=884.84' Storage=7,349 cf Inflow=4.75 cfs 0.400 af
Outflow=0.49 cfs 0.400 af

Total Runoff Area = 1.447 ac Runoff Volume = 0.837 af Average Runoff Depth = 6.94"
100.00% Pervious = 1.447 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Existing West

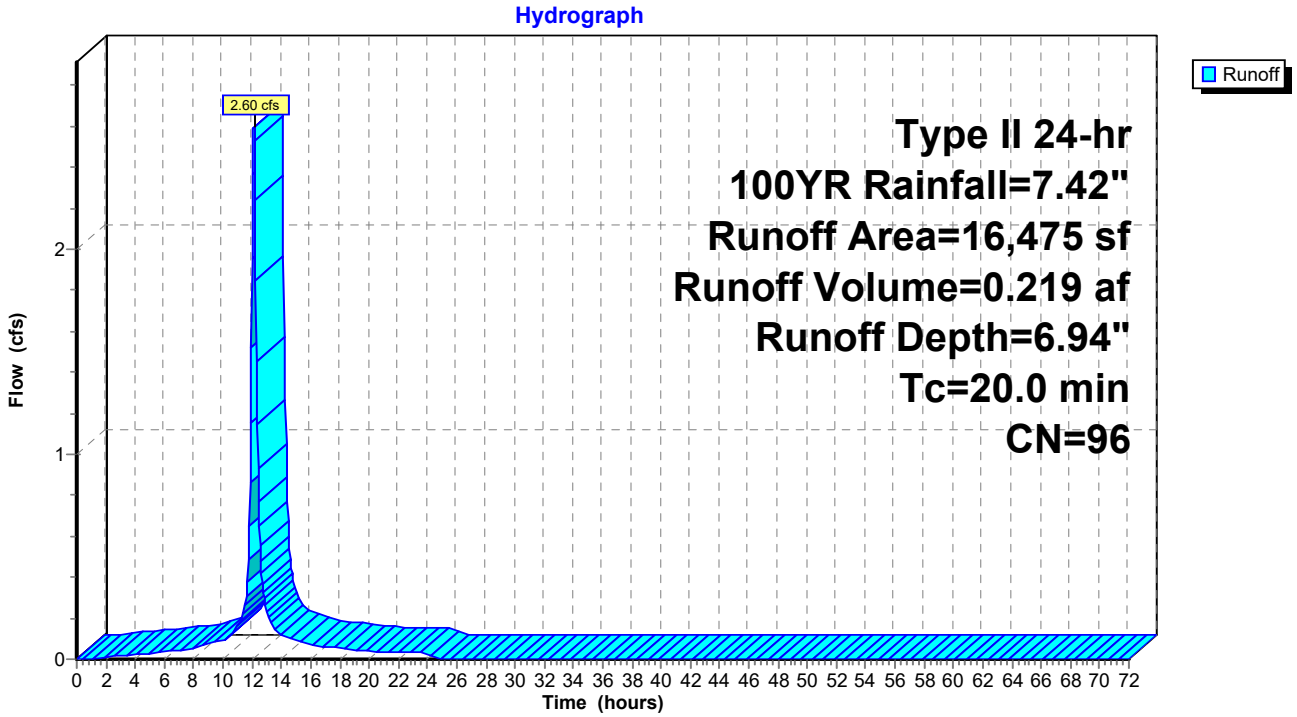
Runoff = 2.60 cfs @ 12.11 hrs, Volume= 0.219 af, Depth= 6.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100YR Rainfall=7.42"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 1S: Existing West



Summary for Subcatchment 2S: Proposed East

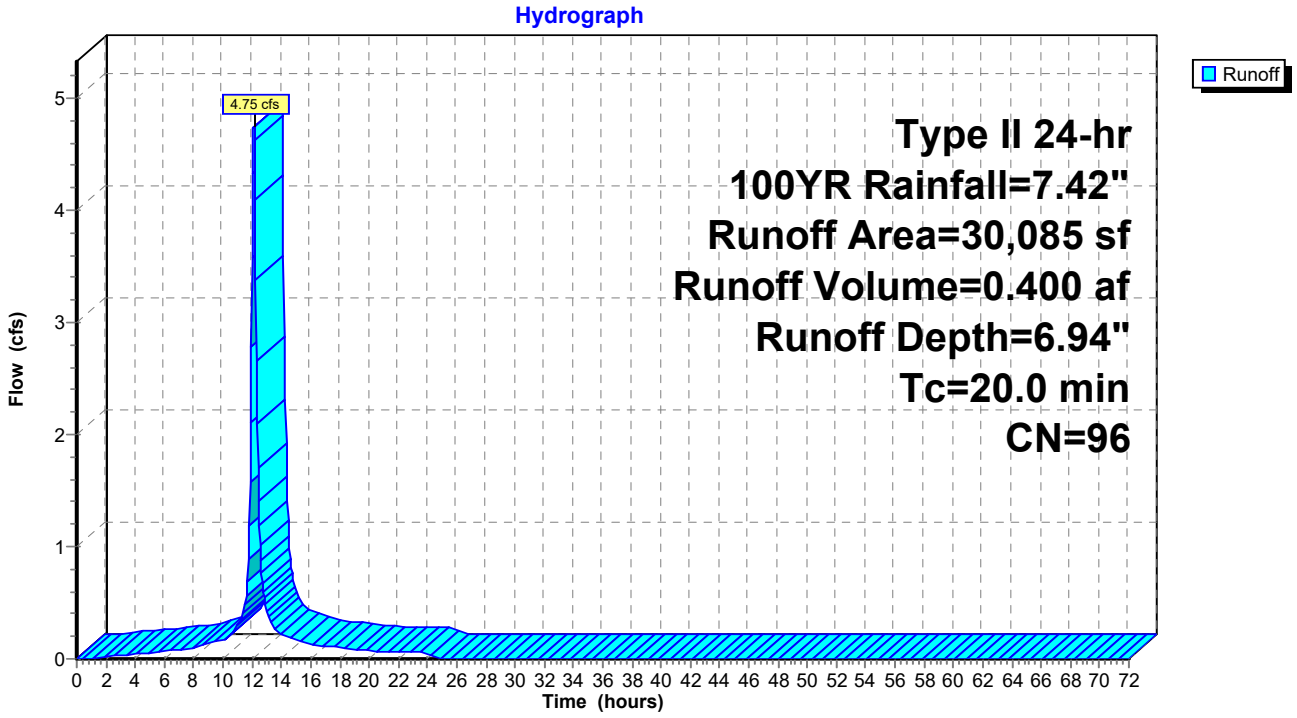
Runoff = 4.75 cfs @ 12.11 hrs, Volume= 0.400 af, Depth= 6.94"
Routed to Pond 4P : Infiltration Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100YR Rainfall=7.42"

Area (sf)	CN	Description
30,085	96	Gravel surface, HSG A
30,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 2S: Proposed East



Summary for Subcatchment 3S: Existing East

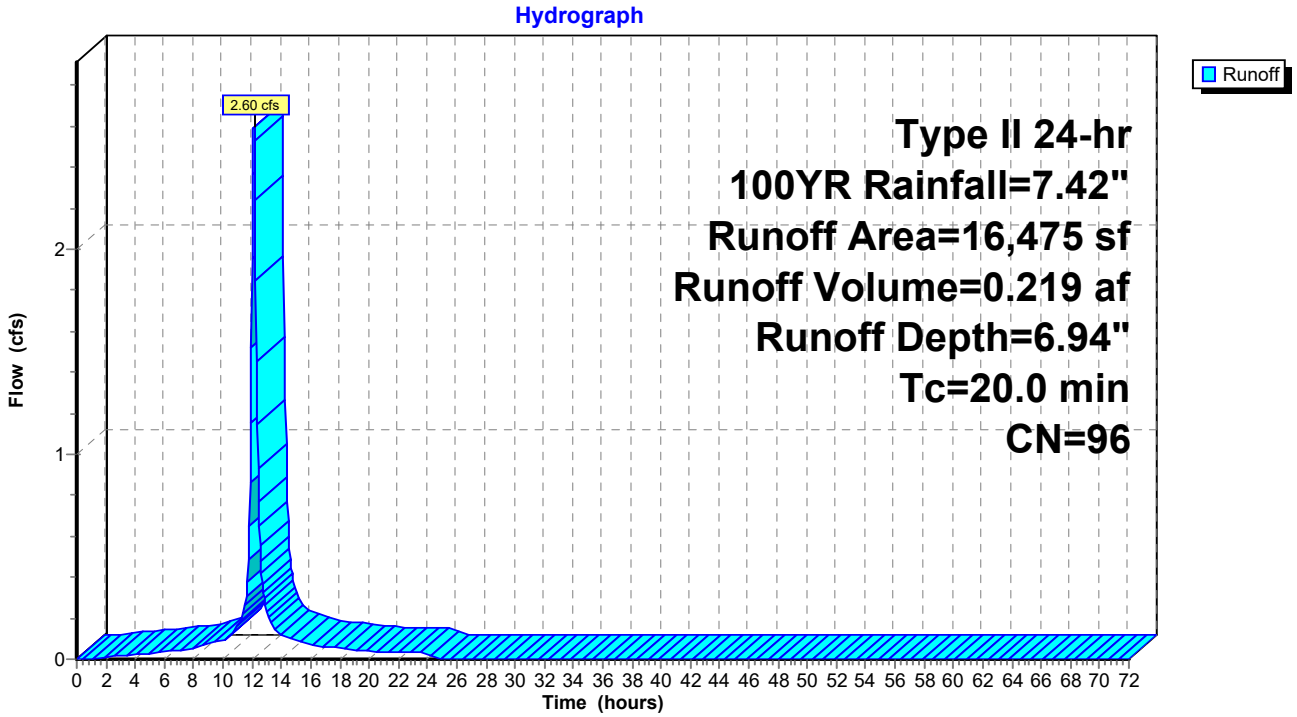
Runoff = 2.60 cfs @ 12.11 hrs, Volume= 0.219 af, Depth= 6.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type II 24-hr 100YR Rainfall=7.42"

Area (sf)	CN	Description
16,475	96	Gravel surface, HSG A
16,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 3S: Existing East



Summary for Pond 4P: Infiltration Basin

Inflow Area = 0.691 ac, 0.00% Impervious, Inflow Depth = 6.94" for 100YR event
Inflow = 4.75 cfs @ 12.11 hrs, Volume= 0.400 af
Outflow = 0.49 cfs @ 12.87 hrs, Volume= 0.400 af, Atten= 90%, Lag= 45.3 min
Discarded = 0.49 cfs @ 12.87 hrs, Volume= 0.400 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 884.84' @ 12.87 hrs Surf.Area= 3,515 sf Storage= 7,349 cf

Plug-Flow detention time= 130.0 min calculated for 0.399 af (100% of inflow)
Center-of-Mass det. time= 129.9 min (892.7 - 762.8)

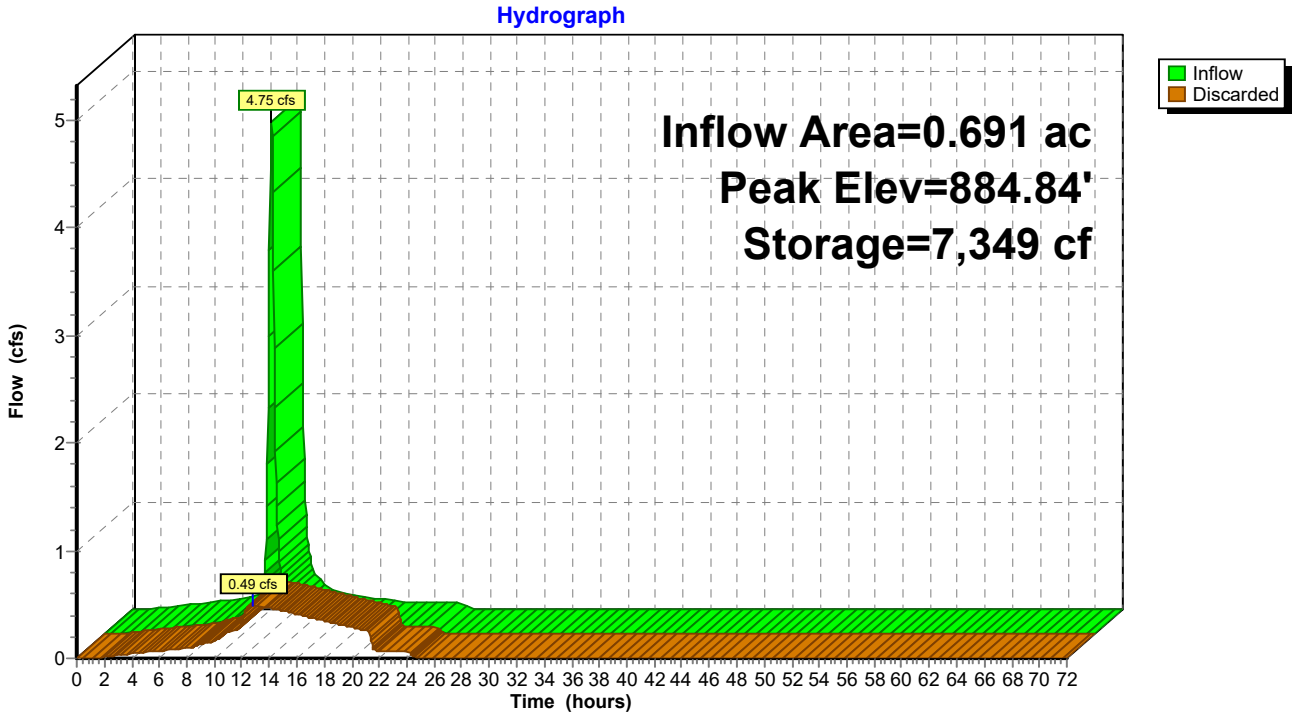
Volume	Invert	Avail.Storage	Storage Description
#1	882.00'	22,571 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
882.00	1,756	0	0
883.00	2,308	2,032	2,032
884.00	2,933	2,621	4,653
885.00	3,629	3,281	7,934
886.00	5,129	4,379	12,313
887.00	5,129	5,129	17,442
888.00	5,129	5,129	22,571

Device	Routing	Invert	Outlet Devices
#1	Discarded	882.00'	**6.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.49 cfs @ 12.87 hrs HW=884.84' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.49 cfs)

Pond 4P: Infiltration Basin



NOAA Atlas 14, Volume 8, Version 2
Location name: Inver Grove Heights, Minnesota, USA*
Latitude: 44.7979°, Longitude: -93.0641°
Elevation: 888 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.355** (0.274-0.459)	**0.421** (0.326-0.546)	**0.535** (0.412-0.696)	**0.635** (0.487-0.831)	**0.781** (0.582-1.07)	**0.899** (0.654-1.25)	**1.02** (0.720-1.46)	**1.15** (0.780-1.70)	**1.33** (0.869-2.04)	**1.48** (0.936-2.29)
10-min	**0.520** (0.402-0.673)	**0.617** (0.477-0.800)	**0.784** (0.604-1.02)	**0.930** (0.713-1.22)	**1.14** (0.852-1.57)	**1.32** (0.958-1.83)	**1.50** (1.05-2.14)	**1.69** (1.14-2.50)	**1.95** (1.27-2.98)	**2.16** (1.37-3.35)
15-min	**0.634** (0.490-0.820)	**0.752** (0.581-0.975)	**0.956** (0.736-1.24)	**1.14** (0.869-1.48)	**1.39** (1.04-1.91)	**1.60** (1.17-2.23)	**1.82** (1.28-2.61)	**2.06** (1.39-3.04)	**2.38** (1.55-3.64)	**2.64** (1.67-4.08)
30-min	**0.884** (0.684-1.14)	**1.05** (0.814-1.36)	**1.35** (1.04-1.75)	**1.60** (1.23-2.10)	**1.98** (1.48-2.72)	**2.29** (1.66-3.18)	**2.61** (1.84-3.74)	**2.95** (2.00-4.37)	**3.43** (2.23-5.24)	**3.80** (2.41-5.89)
60-min	**1.16** (0.894-1.50)	**1.37** (1.06-1.77)	**1.75** (1.35-2.28)	**2.12** (1.62-2.76)	**2.67** (2.01-3.71)	**3.15** (2.31-4.43)	**3.68** (2.60-5.31)	**4.25** (2.89-6.33)	**5.07** (3.32-7.79)	**5.74** (3.64-8.89)
2-hr	**1.43** (1.11-1.83)	**1.68** (1.31-2.16)	**2.16** (1.68-2.78)	**2.63** (2.03-3.40)	**3.37** (2.57-4.67)	**4.02** (2.98-5.62)	**4.74** (3.39-6.82)	**5.54** (3.81-8.21)	**6.71** (4.44-10.2)	**7.68** (4.92-11.8)
3-hr	**1.60** (1.26-2.04)	**1.87** (1.46-2.39)	**2.40** (1.88-3.08)	**2.94** (2.29-3.79)	**3.83** (2.95-5.31)	**4.62** (3.45-6.46)	**5.51** (3.98-7.92)	**6.52** (4.52-9.64)	**8.00** (5.33-12.2)	**9.23** (5.95-14.1)
6-hr	**1.89** (1.49-2.39)	**2.18** (1.72-2.76)	**2.79** (2.20-3.55)	**3.43** (2.69-4.38)	**4.50** (3.51-6.22)	**5.47** (4.13-7.60)	**6.57** (4.80-9.38)	**7.82** (5.48-11.5)	**9.68** (6.53-14.6)	**11.2** (7.32-17.0)
12-hr	**2.13** (1.70-2.66)	**2.48** (1.97-3.10)	**3.16** (2.51-3.98)	**3.85** (3.04-4.87)	**4.96** (3.88-6.73)	**5.95** (4.52-8.14)	**7.05** (5.18-9.92)	**8.28** (5.85-12.0)	**10.1** (6.87-15.1)	**11.6** (7.64-17.4)
24-hr	**2.46** (1.98-3.05)	**2.78** (2.24-3.46)	**3.45** (2.77-4.30)	**4.14** (3.30-5.18)	**5.26** (4.16-7.08)	**6.28** (4.82-8.52)	**7.42** (5.51-10.4)	**8.71** (6.22-12.5)	**10.6** (7.30-15.7)	**12.2** (8.12-18.1)
2-day	**2.85** (2.31-3.50)	**3.16** (2.56-3.88)	**3.80** (3.08-4.69)	**4.48** (3.60-5.55)	**5.60** (4.48-7.47)	**6.63** (5.14-8.92)	**7.80** (5.85-10.8)	**9.12** (6.58-13.0)	**11.1** (7.71-16.3)	**12.7** (8.56-18.8)
3-day	**3.13** (2.55-3.82)	**3.43** (2.80-4.19)	**4.07** (3.31-4.99)	**4.74** (3.84-5.85)	**5.88** (4.72-7.78)	**6.91** (5.39-9.24)	**8.09** (6.11-11.1)	**9.43** (6.85-13.4)	**11.4** (8.00-16.7)	**13.1** (8.86-19.2)
4-day	**3.35** (2.75-4.08)	**3.67** (3.00-4.46)	**4.33** (3.53-5.28)	**5.01** (4.07-6.15)	**6.15** (4.96-8.09)	**7.19** (5.63-9.55)	**8.37** (6.34-11.4)	**9.70** (7.07-13.7)	**11.7** (8.21-17.0)	**13.4** (9.07-19.5)
7-day	**3.89** (3.21-4.69)	**4.29** (3.54-5.18)	**5.06** (4.16-6.13)	**5.81** (4.75-7.08)	**6.99** (5.63-9.02)	**8.03** (6.30-10.5)	**9.17** (6.98-12.4)	**10.4** (7.65-14.5)	**12.3** (8.69-17.6)	**13.8** (9.47-20.0)
10-day	**4.38** (3.63-5.26)	**4.87** (4.03-5.85)	**5.75** (4.75-6.93)	**6.55** (5.38-7.94)	**7.78** (6.27-9.92)	**8.82** (6.94-11.4)	**9.94** (7.58-13.2)	**11.2** (8.19-15.4)	**12.9** (9.13-18.3)	**14.3** (9.85-20.6)
20-day	**5.93** (4.96-7.05)	**6.62** (5.53-7.87)	**7.76** (6.47-9.26)	**8.73** (7.24-10.5)	**10.1** (8.14-12.6)	**11.2** (8.82-14.2)	**12.3** (9.40-16.0)	**13.4** (9.89-18.1)	**14.9** (10.6-20.9)	**16.1** (11.2-23.0)
30-day	**7.31** (6.15-8.64)	**8.16** (6.86-9.65)	**9.52** (7.98-11.3)	**10.6** (8.86-12.7)	**12.1** (9.80-14.9)	**13.3** (10.5-16.6)	**14.4** (11.0-18.6)	**15.5** (11.5-20.7)	**16.9** (12.1-23.4)	**18.0** (12.6-25.5)
45-day	**9.14** (7.73-10.7)	**10.2** (8.61-12.0)	**11.8** (9.98-14.0)	**13.1** (11.0-15.6)	**14.8** (12.0-18.1)	**16.1** (12.8-20.0)	**17.2** (13.3-22.1)	**18.3** (13.6-24.3)	**19.7** (14.1-27.0)	**20.6** (14.5-29.0)
60-day	**10.7** (9.12-12.6)	**12.0** (10.2-14.0)	**13.9** (11.8-16.3)	**15.4** (12.9-18.2)	**17.3** (14.0-20.9)	**18.6** (14.8-22.9)	**19.8** (15.3-25.2)	**20.9** (15.6-27.5)	**22.2** (16.0-30.2)	**23.0** (16.3-32.3)

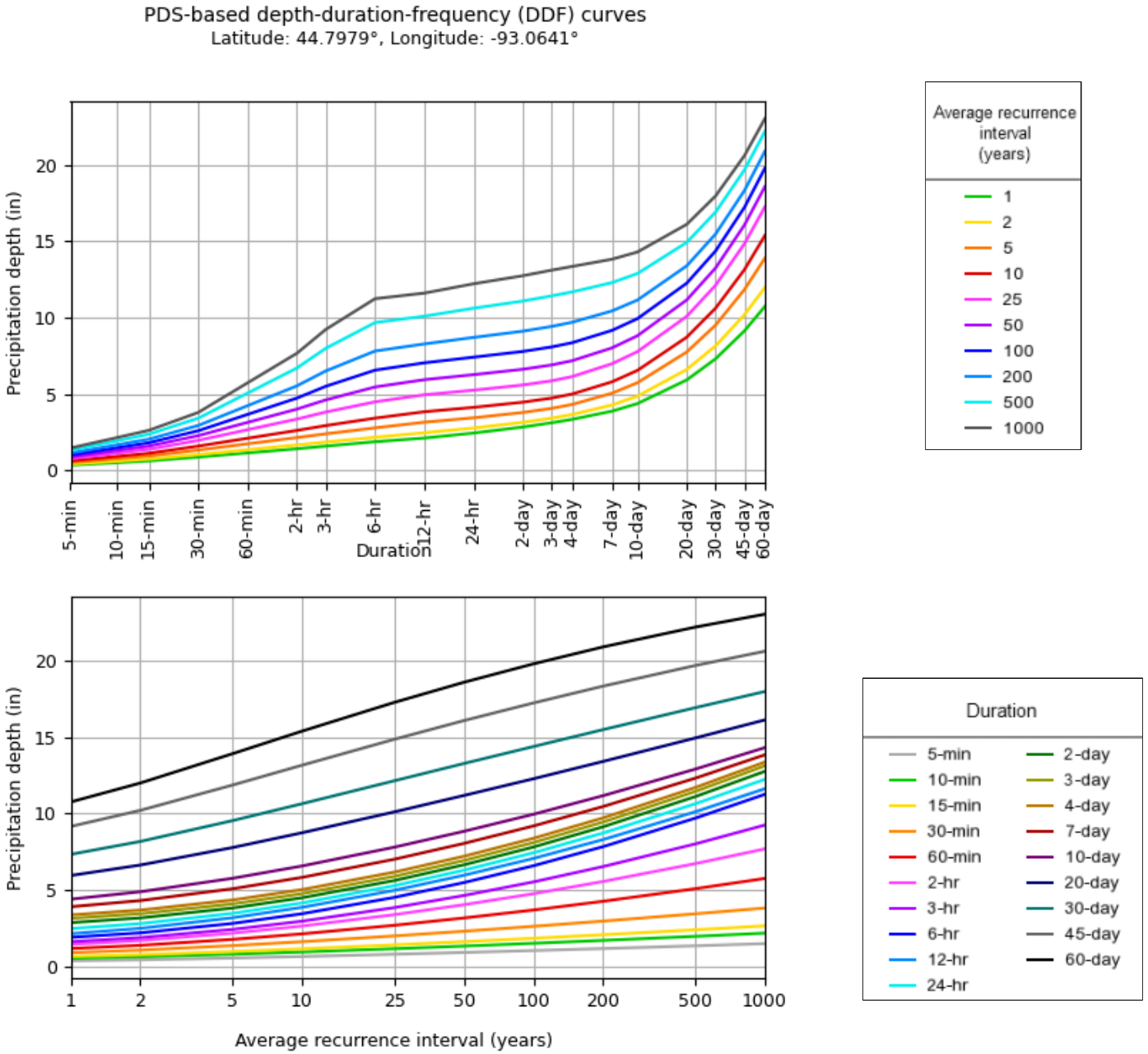
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical



NOAA Atlas 14, Volume 8, Version 2

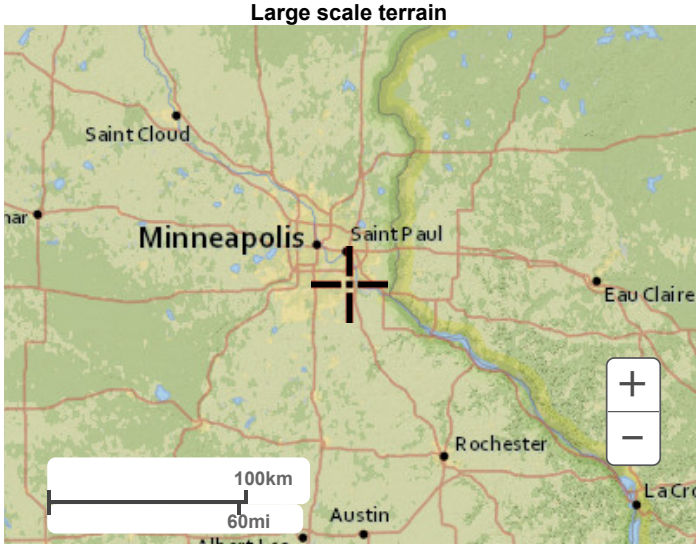
Created (GMT): Tue Jun 25 21:51:38 2024

Back to Top

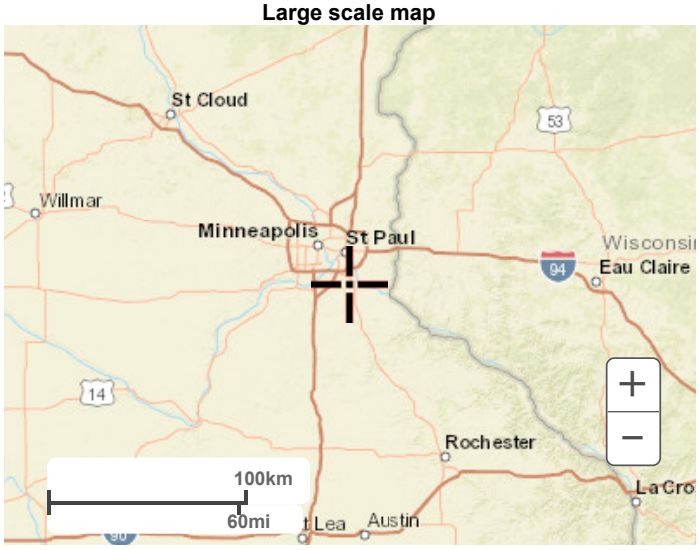
Maps & aerials

Small scale terrain

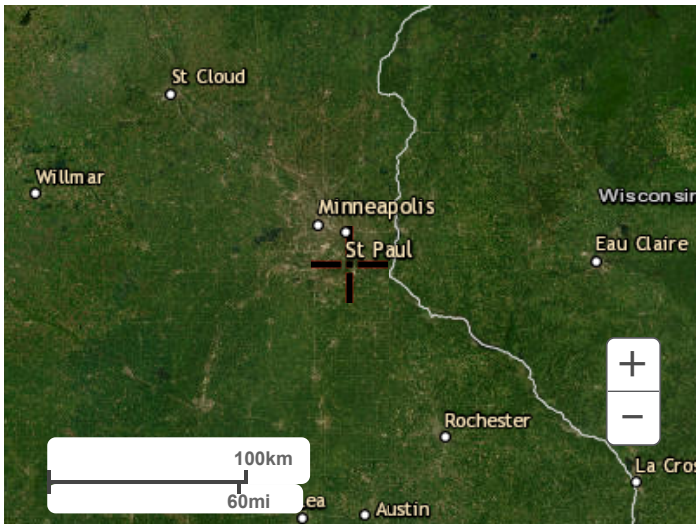
Large scale terrain



Large scale map



Large scale aerial



Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

AMERICAN
ENGINEERING TESTING

June 21, 2024

Ms. Jill Anderson
Transmission Line Senior Engineer
Ulteig
3350 38th Ave S
Fargo, ND 58104

Cc: Timothy Rogers; Timothy.G.Rodgers@xcelenergy.com

Re: Soil Infiltration Capacity Assessment
Xcel Lines 5580-5581 – UMP-IVG; Rosemount, MN
WO# 110729734
AET Project No. P-0029751

Dear Ms. Anderson:

This letter presents the results of our assessment of the soil infiltration rate(s) based on soil borings performed near the existing Xcel Substation in Rosemount, Minnesota under Xcel WO# 110729734. We understand Xcel Energy Services (Xcel) will be expanding the existing Rosemount Substation which will require additional site grading. In order to better manage surface water run-off from this development area, Xcel will be constructing a small infiltration basin to capture and infiltrate stormwater. Ulteig has requested American Engineering and Testing (AET) to assess soil infiltration rates (Hydraulic Conductivity) in the vicinity of the planned stormwater infiltration basin based on recent soil borings we performed at the project site.

Background

AET performed three Standard Penetration Test (SPT) borings (SB-1-Sub, SB-2-Sub, and SB-3-Sub) near the existing Xcel Rosemount Substation on April 22nd and 24th, 2024 as part of the Xcel Lines 5580-5581 – UMP-IVG project (WO#110729734). The attached Figure 1 shows the approximate soil boring locations. The borings were drilled to depths of about 51 feet. A copy of the draft boring logs are attached to this letter. In summary, at the boring locations, we found 1 to 2 feet of surficial fill or topsoil underlain by mostly coarse alluvial Sand (SP) and Sand with Silt (SP-SM) with varying amounts of gravel extending to the maximum depth of the borings, about 51 feet. The relative density of the sand deposits based on SPT blow counts (N-values) ranged from loose to medium dense. We did not observe groundwater in the borings during or after drilling.

This document shall not be reproduced, except in full, without written approval from American Engineering Testing, Inc.

AMERICAN ENGINEERING TESTING

Estimate Soil Infiltration rate

We estimated subsoil hydraulic conductivity based on soil samples collected from Borings SB-1-Sub, SB-2-Sub, and SB-3-Sub at a depth of about 2 feet from their grain size distribution using the Kozeny-Carman Equation. The result from this test is provided below in Table 1.0. It should be noted that no correction or safety factors have been applied to these values, including infiltration degradation with time or reduced flow due to high groundwater table.

Table 1.0 – Kozeny-Carman Equation Estimated Hydraulic Conductivity

Boring No.	Approximate Depth (feet)	USCS Soil Type	Approximate Hydraulic Conductivity (Estimated Infiltration Rate (inches/hour)
SB-1-SUB	2	SP	31
SB-2-SUB	2	SP	21
SB-3-SUB	2	SP-SM	18

The average hydraulic conductivity for the three samples is 23 inches/hour. If you need any further information regarding soil infiltration, please contact me.

Sincerely,

American Engineering Testing, Inc.

John Starke, PE
Senior Geotechnical Engineer
Phone: 651-659-1335
Email: jstarke@amengtest.com

Attachments:
Figure 1
Boring Logs
Lab Test Results

This document shall not be reproduced, except in full, without written approval from American Engineering Testing, Inc.

AMERICAN ENGINEERING TESTING	**Project:**	Xcel Lines 5580-5581 – UMP-IVG Rosemount, MN		**AET Report No.:** P-0029751
	Subject:	Approximate Soil Boring Locations		**Date:** 6/21/2024
	Scale: Shown	**Prepared By:** JOS	**Checked By:** JOS	**Figure 1**

AMERICAN ENGINEERING TESTING

SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-1-Sub (p. 1 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

Surface Elevation **885.7**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	DEN	LL	PL	%-#200
1	SANDY LEAN CLAY, trace roots, dark brown to brown, soft (CL)	TOPSOIL OR FILL	3	M	SS	14	35				
3	SAND, a little gravel, fine to medium grained, light brown, moist, loose (SP)	COARSE ALLUVIUM	8	M	SS	10					2
5			9	M	SS	18					
8			7	M	SS	18					
10			9	M	SS	20					
13			7	M	SS	16					
15			9	M	SS	14					
20			8	M	SS	16					
25			9	M	SS	14					

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-49½' 3.25" HSA	**4/24/24**	**10:36**	**51.0**	**49.5**	**51.0**		**None**
BORING COMPLETED: **4/24/24**							
DR: **TA** LG: **DK** Rig: **96**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP P-0029751 - AET GEO LINE 5580 IVG-UMP CIRCUIT 1.GPJ AET+CPT+WELL.GDT 6/20/24

AMERICAN
ENGINEERING TESTING

SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-1-Sub (p. 2 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	DEN	LL	PL	%-#200
27	SAND, a little gravel, fine to medium grained, light brown, moist, loose (SP) *(continued)*	COARSE ALLUVIUM *(continued)*									
28											
29	SAND WITH GRAVEL, medium to fine grained, light brown, moist, medium dense (SP)										
30			14	M	SS	12					
31											
32											
33	SAND, a little gravel, fine to medium grained, light brown, moist, medium dense (SP)										
34											
35			17	M	SS	16					
36											
37											
38											
39											
40			14	M	SS	12					
41											
42											
43	SAND WITH GRAVEL, medium to fine grained, light brown, moist, medium dense (SP)										
44											
45			15	M	SS	10					
46											
47											
48											
49											
50			19	M	SS	8					
51	**END OF BORING**										

AET_CORP P-0029751 - AET GEO LINE 5580 IVG-UMP CIRCUIT 1.GPJ AET+CPT+WELL.GDT 6/20/24

AMERICAN ENGINEERING TESTING

SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-2-Sub (p. 1 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

Surface Elevation **887.0**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	DEN	LL	PL	%-#200
1	FILL, mixture of silty sand and clayey sand, brown	FILL	4	M	SS	16	9				
2	SAND, a little gravel, fine to medium grained, light brown, moist, loose (SP)	COARSE ALLUVIUM									
3			5	M	SS	18					3
5			7	M	SS	18					
8			10	M	SS	20					
9	SAND, medium to fine grained, light brown, moist, medium dense to loose (SP)										
10			11	M	SS	20					
13	SAND, fine grained, light brown, moist, loose, lenses of fine silt sand (SP)		10	M	SS	22					
15			8	M	SS	16					
18	SAND, a little gravel, medium to fine grained, light brown, moist, loose to medium dense (SP)										
20			10	M	SS	16					
25			11	M	SS	14					

DEPTH: DRILLING METHOD

0-49½' 3.25" HSA

BORING COMPLETED: **4/22/24**

DR: **TA** LG: **DK** Rig: **96**

WATER LEVEL MEASUREMENTS

DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
4/22/24	**1:05**	**51.0**	**49.5**	**50.2**		**None**

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP P-0029751 - AET GEO LINE 5580 IVG-UMP CIRCUIT 1.GPJ AET+CPT+WELL.GDT 6/20/24

AMERICAN ENGINEERING TESTING

SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-2-Sub (p. 2 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
27	SAND, a little gravel, medium to fine grained, light brown, moist, loose to medium dense (SP) *(continued)*	COARSE ALLUVIUM *(continued)*									
28											
29											
30			13	M	SS	16					
31											
32											
33											
34											
35	SILT, brown, wet, medium dense (ML)	FINE ALLUVIUM	12	W	SS	18	26				
36											
37											
38											
39											
40	SAND, fine to medium grained, light brown, moist, medium dense (SP)	COARSE ALLUVIUM	19	M	SS	20					
41											
42											
43	SAND WITH GRAVEL, medium to fine grained, light brown, moist, medium dense (SP)										
44											
45			23	M	SS	14					
46											
47											
48											
49											
50			30	M	SS	12					
51	**END OF BORING**										

AMERICAN ENGINEERING TESTING

SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-3-Sub (p. 1 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

Surface Elevation **887.8**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	DEN	LL	PL	%-#200
1	FILL, mostly clayey sand, trace roots, dark brown to brown	FILL	5	M	SS	16	16				
3	SAND, a little gravel, fine to medium grained, brown to light brown, moist, very loose to loose (SP)	COARSE ALLUVIUM	3	M	SS	14					11
5			5	M	SS	12					
7	SAND, a little gravel, fine to medium grained, light brown, moist, medium dense to loose, lens of silt at about 35' (SP)		11	M	SS	16					
10			12	M	SS	14					
13			7	M	SS	20					
15			5	M	SS	16					
20			5	M	SS	18					
25			11	M	SS	14					

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-49½' 3.25" HSA	**4/22/24**	**9:00**	**51.0**	**49.5**	**51.0**		**None**
BORING COMPLETED: **4/22/24**							
DR: **TA** LG: **DK** Rig: **96**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP P-0029751 - AET GEO LINE 5580 IVG-UMP CIRCUIT 1.GPJ AET+CPT+WELL.GDT 6/20/24

AMERICAN ENGINEERING TESTING

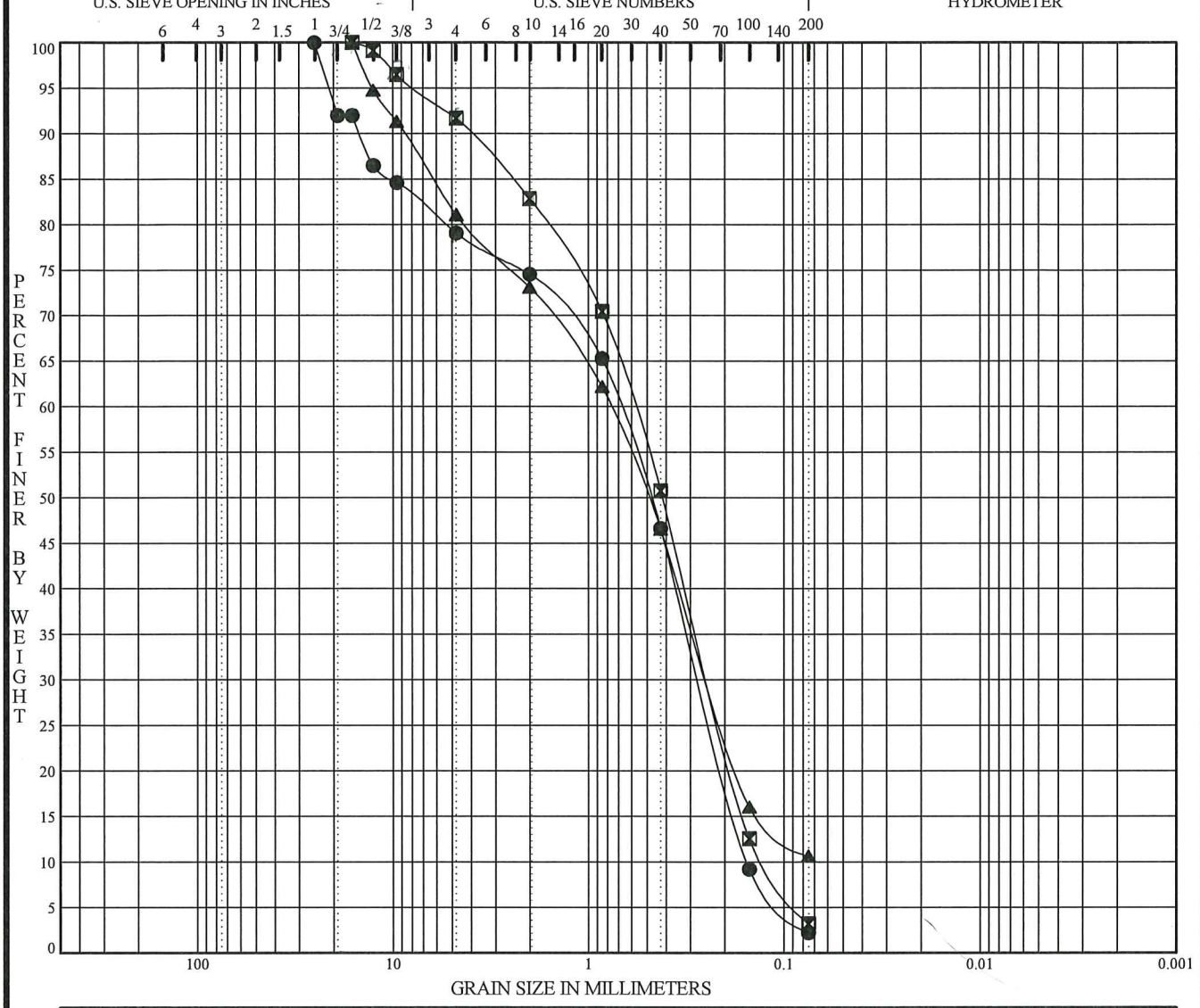
SUBSURFACE BORING LOG

AET No: **P-29751** Log of Boring No. **SB-3-Sub (p. 2 of 2)**

Project: **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
27	SAND, a little gravel, fine to medium grained, light brown, moist, medium dense to loose, lens of silt at about 35' (SP) *(continued)*	COARSE ALLUVIUM *(continued)*									
28											
29											
30			10	M	SS	14					
31											
32											
33											
34											
35			21	M	SS	12					
36											
37											
38											
39											
40	SAND, fine grained, moist, medium dense, lenses of sand with silt (SP)	MIXED ALLUVIUM	20	M	SS	20					
41											
42											
43											
44											
45	SAND WITH GRAVEL, medium grained, brown, moist, medium dense (SP)	COARSE ALLUVIUM	18	M	SS	12					
46											
47											
48											
49											
50			18	M	SS	8					
51	**END OF BORING**										

AET_CORP P-0029751 - AET GEO LINE 5580 IVG-UMP CIRCUIT 1.GPJ AET+CPT+WELL.GDT 6/20/24



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	MC%	LL	PL	PI	Cc	Cu
● **SB-1-Sub**	**2.0'**	**POORLY GRADED SAND with GRAVEL**					**0.67**	**4.6**
⊠ **SB-2-Sub**	**2.0'**	**POORLY GRADED SAND**					**0.80**	**4.7**
▲ **SB-3-Sub**	**2.0'**	**Sand with Silt with gravel**					**1.10**	**11.2**

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **SB-1-Sub**	**2.0'**	**25.00**	**0.70**	**0.268**	**0.1533**	**20.9**	**76.8**	**2.2**	
⊠ **SB-2-Sub**	**2.0'**	**16.00**	**0.59**	**0.241**	**0.1242**	**8.3**	**88.5**	**3.2**	
▲ **SB-3-Sub**	**2.0'**	**16.00**	**0.77**	**0.242**		**18.9**	**70.4**	**10.6**	

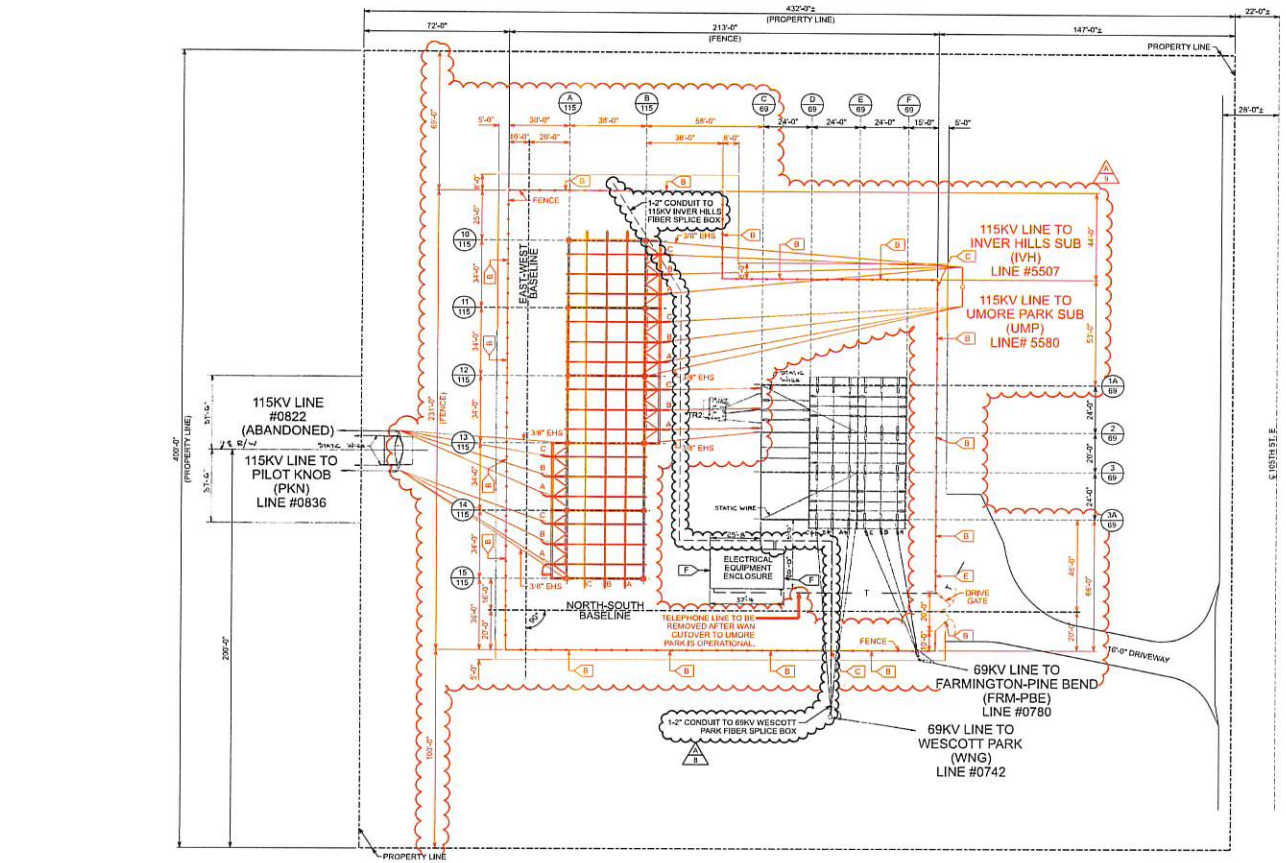
PROJECT **Envis - Lines 0742, 5578, 5579, 5580, IVG Sub; Rosemount, MN**

AET JOB NO. **P-29751**

DATE **4/22/24**

American Engineering Testing
550 Cleveland Avenue North
St. Paul, MN 55114
Telephone: (651) 659-9001
Fax: (651) 659-1347

GRADATION CURVES



FIELD NOTES:
1. INSTALL 1-2" CONDUITS WITH MAXCELL INNERDUCT FROM EEE TO RESPECTIVE OPGW SPLICE BOX.
2. SINGLE 2" CONDUIT WILL RUN FROM EEE UP TO THE INVER HILLS 115KV LINE AND WESCOTT PARK 69KV LINE.
3. UNDERGROUND CAUTION SIGN - SGN053 TO BE INSTALLED BOTH INSIDE AND OUTSIDE OF EEE ENTRY AND ON BOTH SIDES OF SUBSTATION FENCE (CONDUIT ROUTE ENDS).
4. GPS LOCATION MARKERS TO BE INSTALLED FOR FIBER LOCATING IN FIELD AT EVERY 10' DISTANCE.

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR II FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS (NH-71191, NH-71724, NH-72129) FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

FOR GENERAL NOTES PRIOR TO 2016 SEE REV "AL"

LEGEND

- M-1 — INDICATES CONCRETE MARKER FOR U.G. CABLE RUNS. (SEE LATEST REVISON OF PHY DETAIL NL-2-11)
- INDICATES A YELLOW CONCRETE FILLED BOLLARD (SGN123).
- A — OLD FENCE SIGN WORDED "WARNING, HAZARDOUS VOLTAGES INSIDE, KEEP OUT, CAN SHOCK BURN OR CAUSE DEATH". (THIS SIGN CAN NO LONGER BE ORDERED)
- B — FENCE WARNING SIGN (SGN055), PER ENG & DSGN STD ED 4.10.01.
- C — BURIED CABLE SIGN (SGN062), PER ENG & DSGN STD ED 4.10.06.
- D — BURIED CABLE SIGN (SGN062), MOUNTED ON POST (BY FIELD).
- E — SUBSTATION IDENTIFICATION SIGN (SGN040), PER ENG & DSGN STD ED 4.10.02 (TOP) ADDRESS SIGN (SGN038) PER ENG & DSGN STD ED 4.10.03 (BOTTOM). THE TOP SIGN MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND LOCATED ADJACENT TO WALK OR DRIVE GATES.
- — T — INDICATES PHONE CABLE

PRELIMINARY
NOT FOR CONSTRUCTION

CONSTRUCTION NOTE:
FOR EQUIPMENT BEING REMOVED
SEE REMOVAL DRAWING

0 30' 60' 90' 120' 150'
SCALE IN FEET
1" = 30'

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THE REPRODUCIBLE IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SHARS.

MATERIAL INFORMATION. DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY®

INVER GROVE SUBSTATION — IVG
GENERAL ARRANGEMENT
SUBSTATION ADDRESS: 2015 105TH ST E

Xcel Energy® | NH-71191 | SCALE: 1"=30'-0" | REV: 9

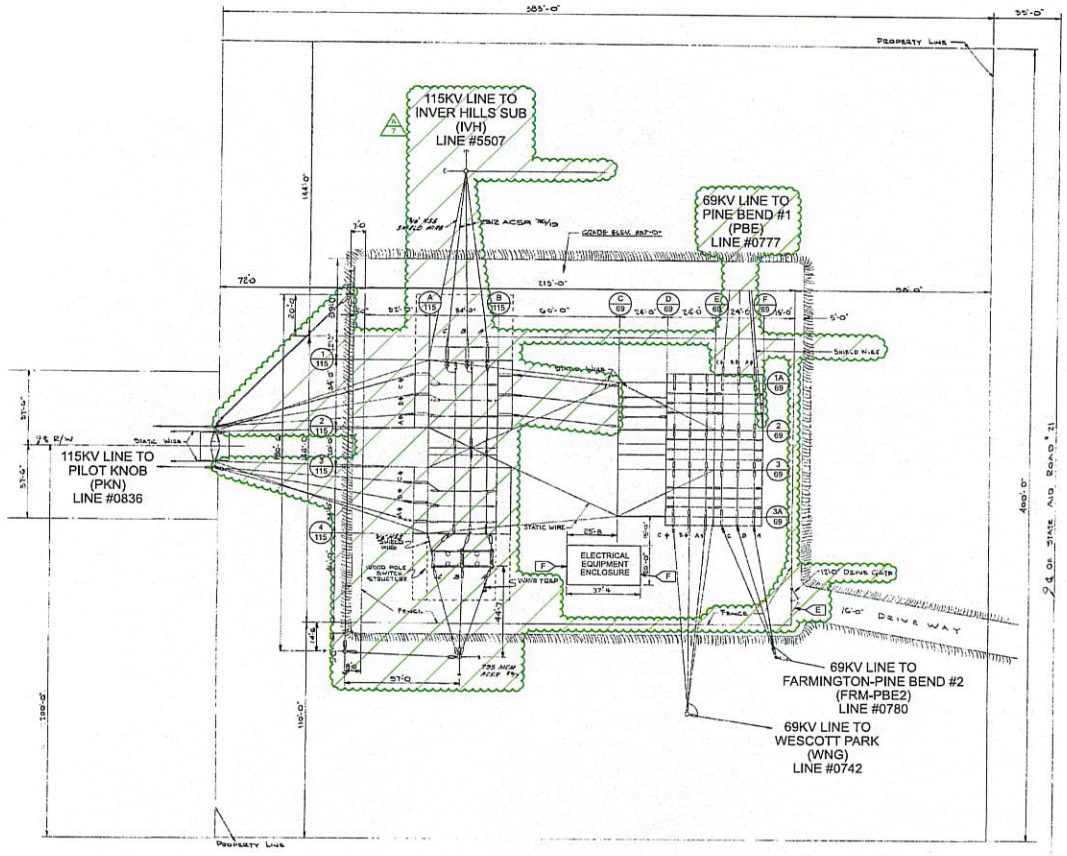
REV	DATE	WBS #	REVISION DESCRIPTION
AA	10/26/2023	A.0001210.0045.001.002	IFR - LEBANON HILLS SUBSTATION COMPONENTS
AA	01/04/2021	A.0001646.0350.001.002	IFR - SITE - SVG - NEW FABLED TIS-UKV TRT

REV	DATE	WBS #	REVISION DESCRIPTION
YA	10/17/2022	A.0000784.0228.001.002	IFC - INVER GROVE REPLACE 4P6 AND 4P9 BAR
YA	09/05/2023	A.0000784.0228.001.002	IFR - INVER GROVE REPLACE 4P6 AND 4P9 BAR

REV	DATE	WBS #	REVISION DESCRIPTION
MA	11/20/2023	A.0001320.152.001.002	IFC - INVER GROVE - PRIVATE COMM NETWORK
MA	07/24/2024	A.0001955.010.001.002	IFC - INVER GROVE SUB UPGRADES

NH-71191-1305

10/6/2024 10:32:34 AM



PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR II FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS (NH-71191, NH-71724, NH-72129) FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

FOR GENERAL NOTES PRIOR TO 2016 SEE REV "AL"

LEGEND

- (A) OLD FENCE SIGN WORDED "WARNING, HAZARDOUS VOLTAGES INSIDE, KEEP OUT, CAN SHOCK BURN OR CAUSE DEATH". (THIS SIGN CAN NO LONGER BE ORDERED)
- (B) FENCE WARNING SIGN (SGN055), PER ENG & DSGN STD ED 4.10.01.
- (C) BURIED CABLE SIGN (SGN062), PER ENG & DSGN STD ED 4.10.06.
- (D) BURIED CABLE SIGN (SGN062), MOUNTED ON POST (BY FIELD).
- (E) SUBSTATION IDENTIFICATION SIGN (SGN040), PER ENG & DSGN STD ED 4.10.02 (TOP) ADDRESS SIGN (SGN038) PER ENG & DSGN STD ED 4.10.03 (BOTTOM). THE TOP SIGN MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND LOCATED ADJACENT TO WALK OR DRIVE GATES.

PRELIMINARY
NOT FOR CONSTRUCTION

SCALE IN FEET
1" = 30'

REV	DATE	WBS #	REVISION DESCRIPTION
7A	12/15/2022	A20/1800.010.001.002	IFC - INVER GROVE SUB UPGRADES

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION FOR DRAWING REFERENCE AND REVISION INFORMATION SEE PHYSICAL INDEX SHEET

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MARK/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOB(S) FOR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SHARS.
INTERNAL INFORMATION DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY®

INVER GROVE SUBSTATION

IVG

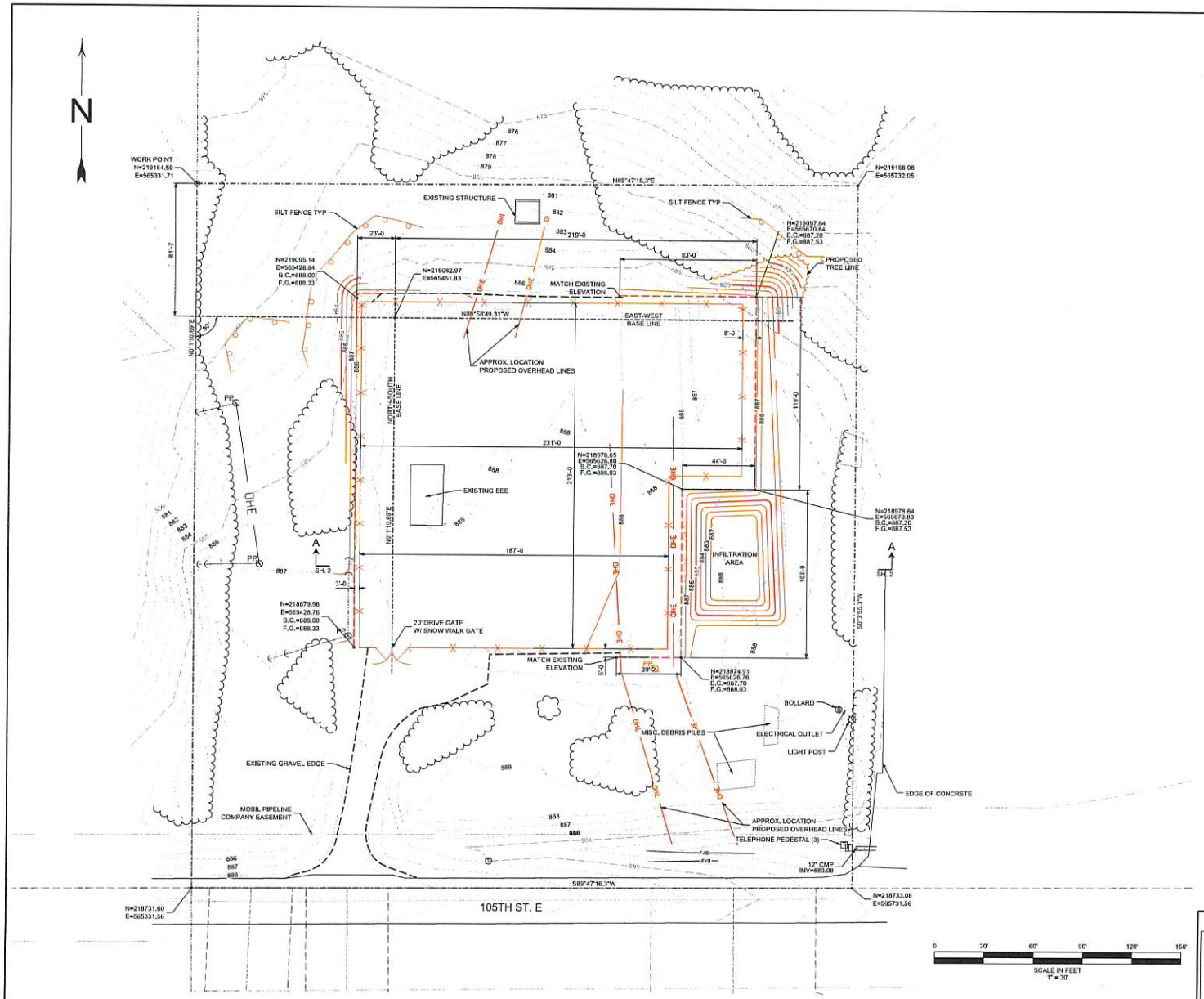
REMOVAL DRAWING - PHYSICAL

SUBSTATION ADDRESS: 2015 105TH ST E

Xcel Energy® | NH-71191-R | SCALE: 1"=30'-0" | REV: 7

12/6/2022 9:43:13 AM

NH-71191-R1.DGN



HORIZONTAL DATUM:
NAD83 DAKOTA COUNTY U.S. SURVEY FEET

VERTICAL DATUM:
ELEVATIONS ON NAVD88 ADJUSTMENT

GENERAL NOTES

1. LOCATION OF BENCH MARK FOR GRADE ELEVATION IS TO BE SET PRIOR TO GRADING CONSTRUCTION.
2. CONTOURS AT ONE FOOT INTERVALS.
3. ELEVATIONS INDICATED IN SUBSTATION GRADED AREA ARE TOP OF BASE MATERIAL.
4. CONTOURS OUTSIDE OF THE SUBSTATION GRADED AREA INDICATE THE TOP OF FINISHED TOPSOIL.
5. FINISHED GRADE IN SUBSTATION GRADED AREA IS 4 INCHES HIGHER THAN THE ROUGH GRADE ELEVATION. FINISHED GRADE CONSISTS OF 4 INCHES OF CRUSHED ROCK PROVIDED AND INSTALLED BY XCEL ENERGY.
6. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC, 31 22 00 "SPECIFICATION FOR CONSTRUCTION OF GRADING", REV, 6,2, DATED 11/8/2022
7. EROSION CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH XCEL ENERGY SPEC, 31 25 00 "NSP-STD-EROSION CONTROL", REV, 1,1, DATED 10/11/2021.
8. EXCESS SOIL FROM GRADING EXCAVATION TO BE PROPERLY DISPOSED OF OFF-SITE OR UTILIZED IN LANDSCAPING ACTIVITIES AND IN NO CASE SHALL IT AFFECT OVERALL SITE DRAINAGE.

CONSTRUCTION SEQUENCE

1. INSTALL SILT FENCE.
2. CLEARING AND GRUBBING.
3. GRADE DIVERSION BERMS AND DIVERSION SWALES.
4. APPLY TEMPORARY SEED (IF NECESSARY).
5. COMPLETE MASS GRADING.
6. SEED AND MULCH/BLANKET.

MAINTENANCE

1. MAINTENANCE SHALL BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
2. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED THROUGH SCRAPING OR DRESSING WITH ADDITIONAL AGGREGATE.
3. REMOVE ANY DEBRIS THAT MAY BE TRACKED OFF-SITE DAILY.

AFTER MASS GRADING IS COMPLETED

1. SEED AND BLANKET.

AFTER VEGETATION IS ESTABLISHED

1. REMOVE SILT FENCE.

LEGEND

- BASELINE
- PROPERTY LINE
- SECTION LINE
- RIGHT OF WAY
- ROADWAY CENTERLINE
- EDGE OF PAVEMENT
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED CONTOUR
- EXISTING MINOR CONTOURS
- GRAVEL BASE EDGE
- OHE — OVERHEAD ELECTRIC
- F/O — FIBER OPTIC LINE
- EXISTING TREE LINE
- EXISTING FLOW ARROW
- WORK POINT
- TELEPHONE PEDESTAL
- LIGHT POLE
- POWERPOLE
- POWER POLE ANCHOR
- SOIL BORING LOCATIONS
- SILT FENCE

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OPS) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION. FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
DATE 5/31/2024 REG. NO. 43382
BRIAN D. ROBIDEAU

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS FOR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS OUTLINED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SHARS.
INTERNAL INFORMATION DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION
IVG

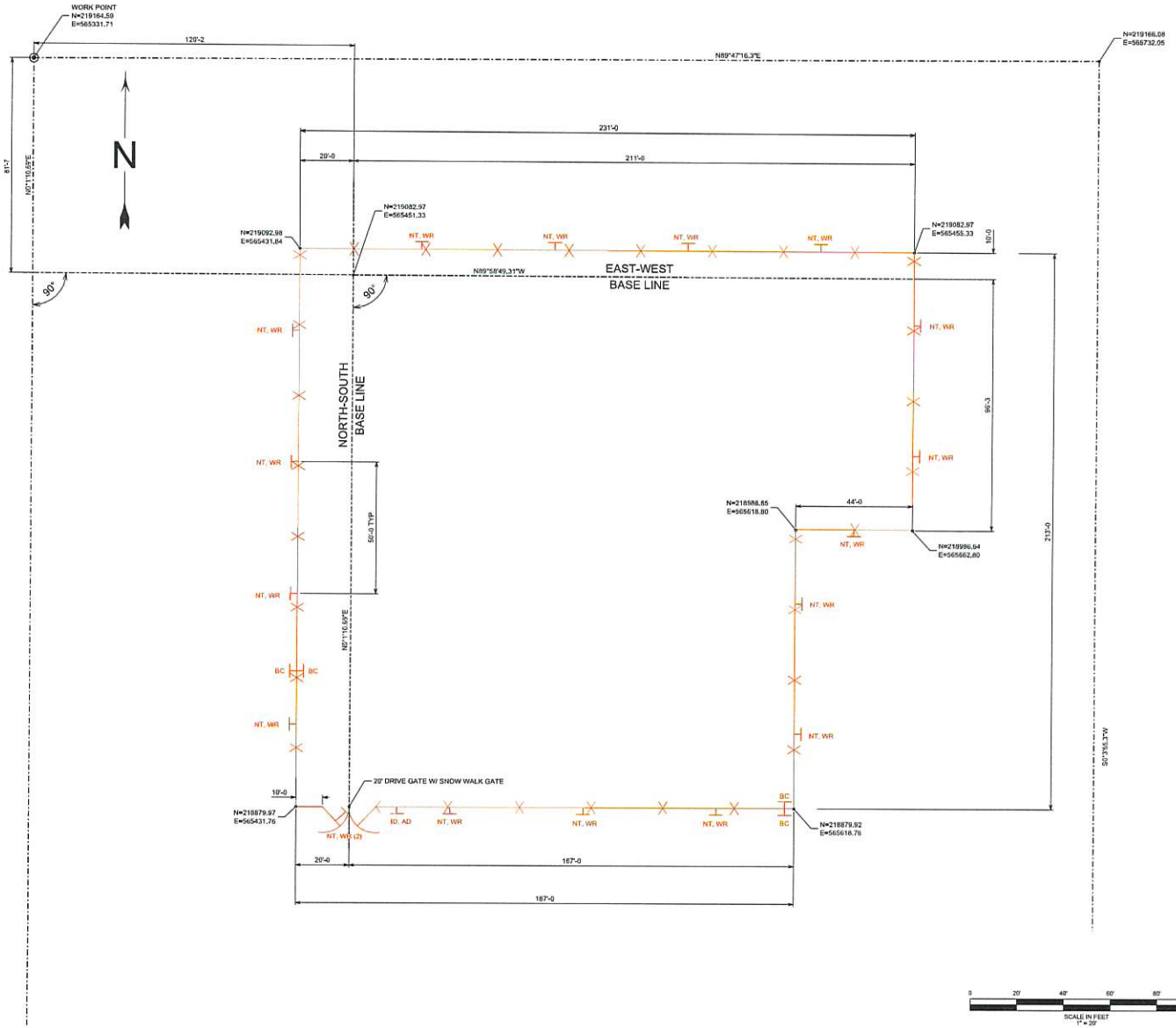
CONTOUR AND GRADING LAYOUT

GRADING PLAN

Xcel Energy® | NH-301246-1 | SCALE 1"=30'-0" | REV 0

REV	DATE	WBS #	REVISION DESCRIPTION
0A	5/31/2024	A.0001865.010.001.002	IFC - INVER GROVE SUB UPGRADES

5/31/2024 2:23:50 PM



FENCE SIGN SCHEDULE

QTY. REQ'D	QTY.	CALL OUT	XP#	DESCRIPTION	MOUNTING LOCATION
1		AD	SGN035	911 ADDRESS SIGNS	MOUNTED BELOW SUBSTATION IDENTIFICATION SIGN.
4		BC	SGN012	BURIED CABLE SIGN (EX: CONTROL, FIBER, HG VOLTAGE, PHONE)	MOUNTED ON EACH SIDE OF FENCE, BACK TO BACK AND APPROXIMATELY 3'-0" FROM GRADE TO TOP OF SIGNS.
1		ID	SGN040	SUBSTATION IDENTIFICATION SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND LOCATED ADJACENT DRIVE GATES.
18		NT	SGN075	NO TRESPASSING SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN, NO MORE THAN 50' APART AND NO MORE THAN 20' FROM ANY CORNER. SIGN SHALL BE PLACED ADJACENT TO THE WARNING SIGN. ONE SIGN SHOULD BE PLACED ON THE INSIDE & OUTSIDE OF EACH GATE.
18		WR	SGN052	WARNING SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN, NO MORE THAN 50' APART AND NO MORE THAN 20' FROM ANY CORNER SIGN SHALL BE PLACED ADJACENT TO THE NO TRESPASSING SIGN. ONE SIGN SHOULD BE PLACED ON THE INSIDE & OUTSIDE OF EACH GATE.

FOR PROJECT WBS# A.0001985.010.001.002 — IN PLACE

NH-301247-1.DGN

HORIZONTAL DATUM:

NAD83 DAKOTA COUNTY U.S. SURVEY FEET

VERTICAL DATUM:

ELEVATIONS ON NAVD88 ADJUSTMENT

NOTE

1. ENGINEERING AND DESIGN TO ORDER NEW FENCE SIGNS TO REPLACE ALL OLD AND OUT OF DATE SIGNS AS NECESSARY.

LEGEND

- PROPOSED CHAIN LINK FENCE
- EXISTING CHAIN LINK FENCE
- INDICATES APPROXIMATE SIGN LOCATION

GENERAL NOTES

1. FENCE - 10'-0" HIGH CHAIN LINK FABRIC w/ 1" MESH.
2. FENCE DESIGNED FOR: LC#1 90 MPH WIND, NO ICE ENGINEERING CALCS NX-272398
3. FENCE FABRIC TO BE 9 GAUGE, 1" GALVANIZED DIAMOND MESH CHAIN LINK STYLE.
4. ALL GATE CONNECTIONS ARE WELDED.
5. ALL GATES DESIGNED TO OPEN OUTWARD.
6. PIPE OR TENSION BAR INSTALLED TO FILL GAP BETWEEN THE GATE POST & GATE.
7. ALL PIPE MATERIAL IS SCH. 40.
8. CORNER POST SHALL BE 4" O.D., GATE POST SHALL BE 6⅝" O.D., AND INTERMEDIATE LINE POSTS SHALL BE 2⅞" O.D @ A MAX SPACING OF 6'-0" O.C.
9. 18" WIDE GALVANIZED SHEET METAL (24-28 GAUGE) TO DETER ANIMALS CLIMBING OVER FENCE, ATTACHED TO TOP RAIL & FABRIC WITH GALVANIZED OR ALUMINUM WIRE.

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OP'S) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS NH-301245, NH-71724, NH-72129 FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION. FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE 5/31/2024 REG. NO. 43382
BRIAN D. ROBIDEAU

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SHARE.
INTERNAL INFORMATION. DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY®

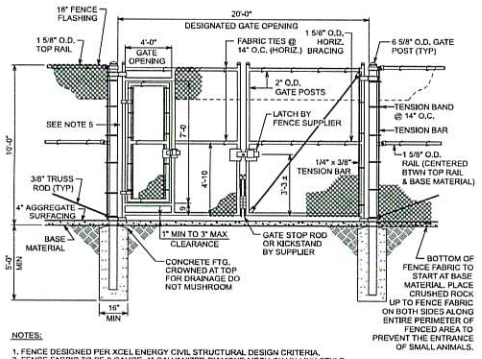
INVER GROVE SUBSTATION — IVG

FENCE LAYOUT
FENCE PLAN

Xcel Energy® | NH-301247-1 | SCALE 1"=20'-0" | REV 0

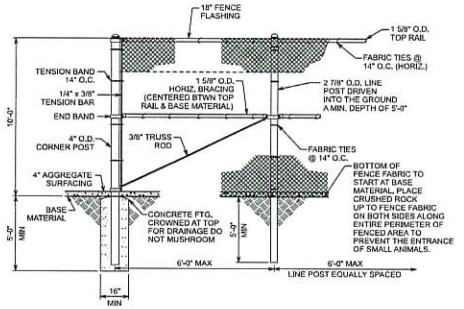
REV	DATE	WBS #	REVISION DESCRIPTION
IA	5/31/2024	A.0001985.010.001.002	IFC - INVER GROVE SUB UPGRADES

4/29/2024 1:13:55 PM



NOTES:

1. FENCE DESIGNED PER XCEL ENERGY CIVIL STRUCTURAL DESIGN CRITERIA.
2. FENCE FABRIC TO BE 9 GAUGE, 1" GALVANIZED DIAMOND MESH CHAIN LINK STYLE.
3. FENCE FABRIC SHALL BE TWISTED BARBED SELVAGE AT THE TOP AND BOTTOM.
4. ALL GATE CONNECTIONS ARE WELDED.
5. PIPE OR TENSION BAR INSTALLED TO FILL GAP BETWEEN THE GATE POST & GATE.
6. FENCE FLASHING TO BE 24 GA W/ 1" HEM TOP & BOTTOM MOUNTED OUTSIDE OF FENCE ON TOP.
7. ATTACH FLASHING TO TOP RAIL WITH 12 GAUGE STEEL TIES AND TO THE FABRIC WITH 9 GAUGE STEEL HOG RINGS, 6 PLACES PER 10' SHEET. USE 2 TECH 5 SCREWS WITH WASHERS AT EACH POST.
8. ALL PIPE MATERIAL IS SCH. 40.
9. ENGINEERING DESIGN CALCULATION REFERENCE FOR 10' CHAIN LINK FENCE: NX-272391



NOTES:

1. FENCE DESIGNED PER XCEL ENERGY CIVIL STRUCTURAL DESIGN CRITERIA.
2. FENCE FABRIC TO BE 9 GAUGE, 1" GALVANIZED DIAMOND MESH CHAIN LINK STYLE.
3. FENCE FABRIC SHALL BE TWISTED BARBED SELVAGE AT THE TOP AND BOTTOM.
4. FENCE FLASHING TO BE 24 GA W/ 1" HEM TOP & BOTTOM MOUNTED OUTSIDE OF FENCE ON TOP.
5. ATTACH FLASHING TO TOP RAIL WITH 12 GAUGE STEEL TIES AND TO THE FABRIC WITH 9 GAUGE STEEL HOG RINGS, 6 PLACES PER 10' SHEET. USE 2 TECH 5 SCREWS WITH WASHERS AT EACH POST.
6. ALL PIPE MATERIAL IS SCH. 40.
7. ENGINEERING DESIGN CALCULATION REFERENCE FOR 10' CHAIN LINK FENCE: NX-272391

TYPICAL FENCE SIGN

SIGN SPACED EVERY 40' AROUND PERIMETER

PRE-EXCAVATION PROCEDURE

1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM (CHRIS COTTON - SUPERVISOR FIELD OPS) AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
3. SEE REFERENCE DRAWINGS (NH-20524, NH-10028, NH-20529) FOR KNOWN UNDERGROUND UTILITIES.
4. REFER TO CONSTRUCTION SPECIFICATION (NSP-STD-CIVIL AND PHYSICAL SUBSTATION CONSTRUCTION SPECIFICATIONS) FOR ADDITIONAL LOCATE INFORMATION.
5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
DATE 5/31/2024 REG. NO. 43392
BRIAN D. ROBIDEAU

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THE IMPROVEMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND TRAINS.

INTERNAL INFORMATION. DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION — IVG
FENCE LAYOUT
FENCE DETAILS

Xcel Energy® | NH-301247-2 | SCALE NONE | REV 0

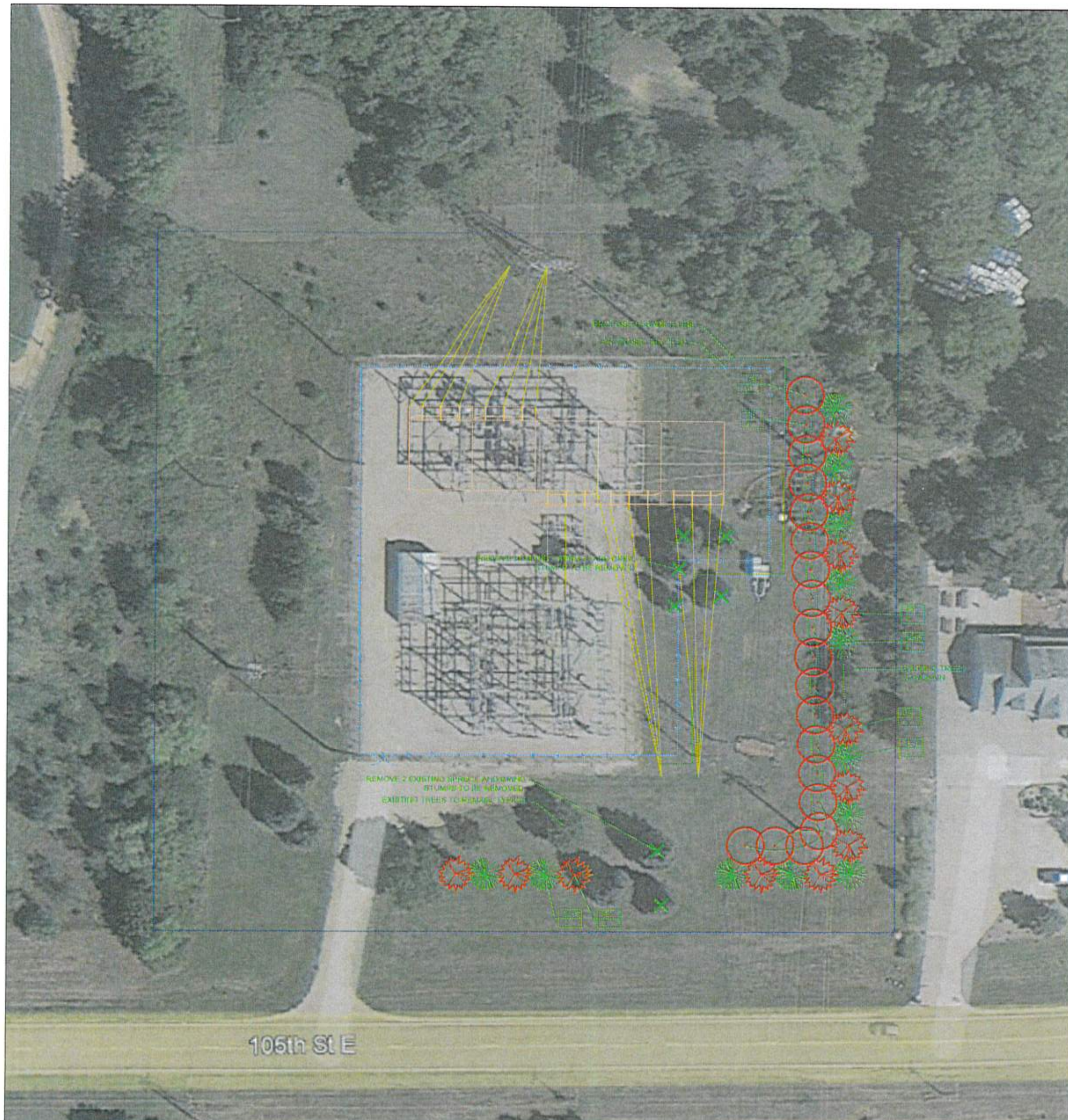
REV	DATE	WBS #	REVISION DESCRIPTION

REV	DATE	WBS #	REVISION DESCRIPTION

REV	DATE	WBS #	REVISION DESCRIPTION
0A	5/31/2024	A.0001855.0101.001.002	IFC - INVER GROVE SUB UPGRADES

NH-301247-2.DWG

4/25/2024 1:55:37 PM



LANDSCAPE NOTES

1. CONTRACTOR SHALL COORDINATE PLANT INSTALLATIONS WITH THE OWNERS REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.

2. ALL QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR IS TO VERIFY ALL QUANTITIES. SHOULD ANY QUANTITIES DISCREPANCIES BE NOTED, THE PLAN LAYOUTS SHALL COVERN.

3. PERFORM PLANTING ACTIVITIES ONLY DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH LOCAL PLANTING PRACTICES . DO NOT INSTALL PLANT MATERIAL WHEN THE AMBIENT TEMPERATURES MAY BE BELOW 35' F OR RISE ABOVE 90' F. DO NOT INSTALL PLANT MATERIAL WHEN WIND SPEEDS EXCEED 30 MPH.

   SPRING PLANTING DATES: APRIL 15 – JUNE 15. FALL PLANTING DATES: SEPTEMBER 15 – OCTOBER 15. WEATHER CONDITIONS MAY ALLOW FOR THE PLANTING OF THE PLANT MATERIALS TO OCCUR OUTSIDE OF THESE PLANTING DATES. WRITTEN APPROVAL FROM THE OWNERS REPRESENTATIVE SHALL BE REQUIRED IN ALL SUCH INSTANCES.

4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO INSTALLATIONS.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ANY SOIL CONDITIONS THAT MAY PREVENT POSITIVE PLANT GROWTH. THE CONTRACTOR SHALL PROVIDE ALL SOIL AMENDMENTS NEEDED FOR THE PLANTING AREAS. IF ANY SOIL AMENDMENTS ARE NEEDED FOR THE PROJECT, AN ITEMIZED LIST OF PROPOSED AMENDMENTS ALONG WITH ALL NECESSARY PRODUCT CERTIFICATES SHALL BE SUBMITTED TO THE OWNERS REPRESENTATIVE PRIOR TO USE OR INSTALLATION. ALL COSTS ASSOCIATED WITH PREPARATIONS OF PLANTING AREAS SHALL BE INCLUDED IN THE PRICE BID FOR PLANT MATERIALS.

6. CONTRACTOR SHALL COMPLY WITH SIZE AND GRADING STANDARDS OF THE LATEST EDITION OF 'AMERICAN STANDARD FOR NURSERY STOCK'. ANY PLANT MATERIAL WHICH DOES NOT MEET THE SPECIFIED MINIMUM SIZE SHALL BE REJECTED. IF THE CONTRACTOR IS UNABLE TO LOCATE PLANT MATERIAL IN THE SPECIFIED SIZES, NEGOTIATION FOR UNIT PRICE ADJUSTMENT AND/OR SUBSTITUTION SHALL BE CONCLUDED PRIOR TO SHIPMENT FROM SOURCE.

7. ALL PLANT MATERIALS SHALL BE NURSERY-GROWN UNDER CLIMATIC CONDITIONS FOUND AT THE SITE FOR A MINIMUM OF ONE-YEAR PRIOR TO THE CONTRACT DATE. PLANT MATERIALS SHALL BE VIGOROUS AND HEALTHY, AND TRUE TO NAME.

   PLANT MATERIALS THAT LACK PROPER PROPORTIONS, HAVE SERIOUS INJURIES THE THE BARK OR ROOTS, BROKEN BRANCHES, QUESTIONABLE DISFIGURATION, SHRIVELED AND/OR DRY ROOTS, BROKEN ROOTBALLS, INSECT PESTS, DISEASES, OR WHICH ARE NOT FOUND TO COMPLY WITH THE SPECIFICATIONS IN ANY WAY WILL BE REJECTED. TREES WITH BROKEN LEADERS OR NO UPRIGHT, DOMINANT LEADERS WILL BE REJECTED.

8. CONTRACTOR SHALL LAY OUT PLANT MATERIAL PER PLAN AND FACE TO GIVE BEST APPEARANCE OR RELATION TO ADJACENT PLANTS, STRUCTURES, OR VIEWS. CONTRACTOR SHALL OBTAIN APPROVAL PRIOR TO PLANTING. NOTIFY THE OWNER'S REPRESENTATIVE OF START OF PRELIMINARY WORK AND APPROXIMATE TIMELINE AT LEAST THREE DAYS IN ADVANCE TO ALLOW FOR INSPECTION. THE OWNER'S REPRESENTATIVE SHALL INSPECT THE PLANT MATERIALS PRIOR TO INSTALLATION. ANY PLANT MATERIAL INSTALLED PRIOR TO INSPECTION CAN BE REJECTED AND IF SO MUST BE REMOVED BY THE CONTRACTOR FROM THE SITE WITHIN 24 HOURS ION BY THE OWNERS REPRESENTATIVE.

9. TREE PITS SHOULD BE HAND DUG OR ROTO-TILLED AND AT LEAST TWO (2) FEET WIDER THAN THE ROOTBALL. SHRUB AREAS SHOULD BE ROT-TILLED. THE SIDES AND BOTTOM OF PLANTING PITS SHALL BE SCARIFIED PRIOR TO PLACING TO REMOVE GLAZING EFFECTS CAUSED BY DIGGING.

   THE CONTRACTOR SHALL KANT MATERIAL IN THE PLANTING PIT TO PROPER GRADE AND ALIGNMENT. THE PLANTS SHALL BE SET UPRIGHT, PLUMB AND FACED TO GIVE BEST APPEARANCE OR RELATIONSHIP TO EACH OTHER OR ADJACENT STRUCTURES. SET TREE WITH FIRST FLARE ROOT (1) TO TWO (2) INCHES ABOVE ADJACENT GRADE. ROOTBALL TO REST ON UNDISTURBED SUBGRADE. PRUNE ADVANTAGEOUS AND FIBEROUS ROOTS GROWING ABOVE THE ROOT FLARE. REMOVE ALL CONTAINERS/BURLAP/TWINE/WIRES/ETC. STRAIGHTEN AND FLARE AND FIBEROUS ROOTS IN THE PLANTING PIT THAT HAD BEEN GROWING ALONG ANY CONTAINER EDGES. SCORE SIDES OF THE ROOTBALL PRIOR TO BACKFILL. GENTLY PACK BACKFILL USING WATER TO SETTLE SOIL AROUND ROOTBALL.

   THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PLANTS IN A PLUMB POSITION THROUGHOUT THE WARRANTY AND MAINTENANCE PERIOD. ANY PLANT FOUND PLANTED TOO DEEP SHALL BE RAISED AT THE CONTRACTORS EXPENSE.

10. THE CONTRACTORS SHALL ENSURE PROPER DRAINAGE AND PREVENT ANY POOLING OF WATER AROUND PLANT MATERIAL TRUCKS AND STEMS UTILIZING TOPSOIL.

    TOPSOIL SHALL BE A FERTILE LOAM SOIL, FRIABLE, UNIFORM IN TEXTURE, AND FREE FROM ANY STONES, LUMPS, CLODS, PLANTS, STICKS, WOOD, RHIZOMES, OR OTHER EXTRANEOUS MATERIAL. REMOVE STONE LARGER THAN ONE (1) INCH IN DIAMETER. BREAK UP ALL LUMPS OR CLODS BEFORE BACKFILLING.

    THE AREA SHALL BE SMOOTH-GRADED AND THE SURFACE LEFT IN AN EVEN AND PROPERLY COMPACTED CONDITION TO PREVENT, INSOFAR AS PRACTICAL, THE FORMATION OF LOW SPOTS OR POCKETS WHERE WATER WILL STAND.

11. ALL NEWLY PLANTED TREES SHALL BE STAKED AND GUYED IMMEDIATELY AFTER INSTALLATION. DRIVE STAKES INTO UNDISTURBED SOIL SO THEY SUPPORT THE TREES AND ARE FIRM. SET GUYS SUFFICIENTLY TIGHT AND HORIZONTAL TO TRANSFER SUPPORT FROM THE STAKE TO THE TREE. PROTECT THE TREE BARK FROM GUYING WITH NYLON FABRIC STRAPS. STAKING TO BE ALIGNED AND WITHIN MULCH AREA FOR EASE IF MOWING AND MAINTENANCE PURPOSES. ADJUST STAKING AS NECESSARY DURING THE WARRANTY AND MAINTENANCE PERIOD.

    LEAVE STAKES IN PLACE FOR APPROXIMATELY ONE (1) YEAR. COORDINATE WITH THE OWNER'S REPRESENTATIVE TO ADDRESS SITE SPECIFIC TIMELINES TO REMOVE THE TREE STAKING. ALL STAKES AND ASSOCIATED HARDWARE REMOVED AT APPROXIMATELY ONE (1) YEAR WILL BECOME THE PROPERTY OF THE CONTRACTOR. IF CERTAIN LOCATIONS REQUIRE EXTENDED STAKING, AS DETERMINED BY THE OWNER'S REPRESENTATIVE, LEAVE THE STAKING IN THOSE LOCATIONS WHICH THEN BECOME THE PROPERTY OF THE SITE OWNER. INCLUDE ALL COSTS ASSOCIATED WITH THE PLANT STAKING AND STAKING REMOVALS IN THE BID PRICE FOR THE PLANT MATERIALS.

12. ALL PLANTING AREA SHALL BE COMPLETELY WEED-FREE AT THE TIME OF MULCH INSTALLATIONS. MULCH AREAS IMMEDIATELY AFTER PLANT INSTALLATION TO AVOID OPEN SOIL WEED GROWTH PROBLEMS. MULCH MATERIALS SHALL BE FREE OF ALL FOREIGN DEBRIS.

13. INSTALL 4" DIAMETER BY 3' HEIGHT CORRUGATED PLASTIC (PE) TREE TRUNK PROTECT ON ALL DECIDUOUS TREES. TRIM BRANCHES OF TREES THAT HINDER THE INSTALLATION OF THE TREE TRUNK PROTECTION.

14. MULCH TO BE 3" DEPTH SHREDDED CEDAR WOOD MULCH.

15. MULCH SHALL BE KEPT SIX (6) INCHES AWAY FROM TRUNKS AND STEMS. TREES SHALL A MINIMUM OF SIX (6) FOOT DIAMETER MULCH RING IF NOT PLANTED IN MASS TREE/SHRUB BED. PLACE AND MAINTAIN A UNIFORM, MINIMUM THREE (3) INCH MULCH DEPTH UNLESS SOIL MOISTURE AT SITE LIMITS POTENTIAL SURVIVABILITY. IF CONDITIONS ARE SUCH THAT AN ADJUSTMENT TO THE MULCH DEPTH IS NECESSARY TO MAINTAIN HEALTHY PLANT MATERIALS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING TO OBTAIN WRITTEN APPROVAL FOR ANY CHANGES TO THE PLANS OR SPECIFICATIONS.

16. THOROUGHLY WATER MULCHED AREAS TO A SOIL DEPTH OF AT LEAST SIX (6) INCHES. ALL PLANT MATERIALS SHALL BE WATERED WITHIN TWO (2) HOURS OF INSTALLATION. THE CONTRACTOR SHALL REPAIR ALL MULCH LOSS AND EROSION FROM WATER DAMAGE IMMEDIATELY. CONTRACTOR SHALL MAINTAIN MULCH DEPTH DURING THE MAINTENANCE PERIOD WITH A FINAL APPLICATION WITHIN ONE (1) WEED PRIOR TO THE MAINTENANCE PERIOD COMPLETION DATE.

17. UTILIZE TREE WATERING BAGS ON THE PROJECT AND RE-FILL WEEKLY DURING THE 1-YEAR MAINTENANCE PERIOD. CONTRACTOR TO SUBMIT MANUFACTURER'S INFORMATION TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. CONTRACTOR TO REMOVE THE WATERING BAGS DURING THE WINTER SEASON AND REPLACE THEM AGAIN THE FOLLOWING SPRING. WATER BAGS TO BECOME THE PROPERTY OF PROPERTY OWNER UPON CLOSEOUT OF THE PROJECT. INCLUDE ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING THE TREE WATERING BAGS IN THE BID PRICE FOR THE PLANT MATERIAL.

18. CONTRACTOR SHALL CLEAN UP ENTIRE AREA OF WORK FOLLOWING PLANTING OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY TURF AREAS DISTURBED BY PLANT INSTALLATIONS AS WELL AS AREAS DISTURBED DURING PLANT MAINTENANCE OPERATIONS. ANY RESTORATION NECESSARY SHALL BE INCLUDED IN THE BID COST OF THE PROJECT. RESTORATION OF TURF AREAS SHALL BE AS SPECIFIED IN THE PROJECT PLANS.

19. UPON COMPLETION OF INSTALLATION OF ALL PLANT MATERIALS, THE OWNER'S REPRESENTATIVE WILL MAKE AN INSPECTION OF ALL PLANT MATERIALS AND PLANTING AREAS FOR ACCEPTABILITY. ANY ESTABLISHMENT PROCEDURES THAT HAVE NOT BEEN PERFORMED SHALL BE BROUGHT TO THE CONTRACTOR'S ATTENTION FOR IMMEDIATE CORRECTION. UPON THE COMPLETION OF ANY PROCEDURE CORRECTIONS, A LETTER OF INITIAL ACCEPTANCE SHALL BE PROVIDED BY THE OWNER'S REPRESENTATIVE ESTABLISHING THE WARRANTY AND MAINTENANCE TIMELINE FOR THE PROJECT. ALL PLANTS SHALL BE SUBJECTED TO A WRITTEN WARRANTY AND MAINTENANCE PERIOD WHICH SHALL COMMENCE UPON THE DATE OF INITIAL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. THE WARRANTY AND MAINTENANCE PERIOD SHALL BE FOR ONE (1) FULL YEAR. PLANTING BEDS AND TREE RINGS SHALL BE CLEARED OF WEEDS A MINIMUM OF ONCE PER MONTH DURING THE WARRANTY AND MAINTENANCE PERIOD.

20. THE ESTABLISHMENT PROCEDURES THROUGH THE EXTNT SHALL INCLUDE ADDITIONAL PRUNING, PROTECTIVE MEASURES AGAINST PESTS AND DISEASES (INCLUDING RABBIT AND/OR RODENT PROTECTION). WATERING WEEKLY AND AS OFTEN AS REQUIRED BY NECESSITY OR DIRECTED BY THE OWNER'S REPRESENTATIVE, CULTIVATING, REPLACING MULCH, KEEPING THE STAKES FIRM AND GUYS ADJUSTED, WEEDING WITH A PRE-EMERGENT WEED CONTROL OR OTHER PRE-APPROVED MEANS, AND OTHER ESTABLISHMENT PROCEDURES AS DEEMED NECESSARY BY THE OWNERS REPRESENTATIVE INCLUDING THE REMOVAL OF ANY DEAD PLANT MATERIAL FROM THE PROJECT. THE CONTRACTOR SHALL REPLACE ANY TREE OR SHRUB WHICH DIES OR PARTIALLY DIES TO THE POINT THAT THE MAIN LEADER HAS DIED BACK OR THERE IS 25 PERCENT OR MORE OF THE CROWN DEAD. REPLACEMENT PLANTING SHALL OCCUR AT A MINIMUM ONCE IN THE SPRING AND ONCE IN THE FALL PRIOR TO THE COMPLETION OF THE WARRANTY AND MAINTENACNE TIMELINE.

    THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ANY MAINTENANCE NOTICES FROM THE CITY PER THE LANDSCAPE ORDINANCE DURING THE WARRANTY AND MAINTENANCE PERIOD.

21. THE OWNER'S REPRESENTATIVE SHALL PERFORM AN INSPECTION APPROXIMATELY ONE WEEK PRIOR TO THE COMPLETION OF THE WARRANTY AND MAINTENANCE. THE CONTRACTOR SHALL BE NOTIFIED OF ANY MAINTENANCE ISSUES THAT MUST BE ADDRESSED. ONCE ANY ISSUES ARE CORRECTED, A LETTER OF FINAL ACCEPTANCE SHALL BE PROVIDED BY THE OWNER'S REPRESENTATIVE.

SYMBOL	COMMON NAME	SCIENTIFIC NAME	MATURE SIZE (Height X Width)	SIZE AND TYPE	QTY.
PP	PONDEROSA PINE	Pinus PONDEROSA	70' X 30'	4' Height	12
BHS	BLACK HILLS SPRUCE	Picea glauca densata	45' X 30'	4' Height	12
HCL	HARVEST GOLD LINDEN	Tilia x Mongolica 'Harvest Gold'	30–40' X 25–30'	2" Caliper	10
PE	PATRIOT ELM	Ulmus 'Patriot'	50' X 35'	2" Caliper	9

N
W E
S

(SCALE 1" = 30')
0 15' 30' 60'

811

Know what's below.
Call before you dig.

REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION
								0	06/02/23	A.0001665.010.001.002	IFP - INVER GROVE SUB UPGRADES

ISSUED BY ENGINEERING DEPT FOR: PERMITTING

THIS IMPROCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SFARS.

INTERNAL INFORMATION DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

INVER GROVE SUBSTATION IVG
PLANTING PLAN
SUBSTATION ADDRESS: 2015 105TH ST E

Xcel Energy NH-71191-1 SCALE 1"=30' REV 0

Agenda Item 4.D.

Planning Commission Report

MEETING DATE:	July 16, 2024
CASE NO:	24-19CS
APPLICANT:	RJ Ryan Construction
PROPERTY OWNER:	Saxon IGH, LLC / Inver Grove Hyunai
REQUEST:	Preliminary and Final Plat to consolidate two parcels, Conditional Use Permit Amendment for an expansion of the automobile and off-highway vehicle sales lot and Vacation of certain Easements.
LOCATION:	1290 50th Street East
COMPREHENSIVE PLAN:	RC, Regional Commercial
ZONING:	B-3, General Business
STAFF CONTACT:	Heather Botten, 651.450.2569

ACTION REQUESTED

The applicant is requesting the following:

- Preliminary and Final Plat for a one lot subdivision to be known as Whitaker 2nd Addition.
- Conditional Use Permit Amendment to expand the existing automobile and off-highway vehicle sales lot by adding a new building and other site improvements.
- Vacation of certain Easements on the property.

BACKGROUND

The applicant is requesting a Conditional Use Permit Amendment to add a 13,900 gross square foot building plus parking and stormwater improvements on the site. The site currently consists of one lot and one outlot. The parcels are proposed to be platted into a one lot subdivision. With the platting of the parcels, vacation of an existing internal Drainage & Utility Easement is proposed along with vacating an old Roadway Easement.

EVALUATION OF REQUEST

The following land uses, zoning districts, and comprehensive plan designations surround the subject property:

North	Volkswagen Dealership	Zoned: B-3, General Business	Guided: RC, Regional Commercial
East	Toyota and Nissan Dealerships	Zoned: B-3, General Business	Guided: RC, Regional Commercial

South	Highway / Right-of-Way		
West	Ford Dealership / Right-of-Way	Zoned: B-3, General Business	Guided: RC, Regional Commercial

PRELIMINARY AND FINAL PLAT REVIEW

Lots and Blocks.

The new plat is a replat of Lot 1, Block 1, and Outlot A, Whitaker Addition, consisting of one lot subdivision to be known as Lot 1, Block 1, Whitaker 2nd Addition. The proposed lot meets lot width requirements for the B-3, General Business District.

Park Dedication.

At the time the property was originally platted in 1997, park dedication was collected with a building permit. The subdivision ordinance has changed requiring contribution to be paid at the time of plat. Therefore, a cash contribution is required for the existing Outlot based on 3.82 acres x $7,000 per acre for a total of $26,740.00. This fee is paid at the time of plat release for recording. Park dedication is not required for existing Lot 1 as this would have been paid at the time of site development.

MnDOT Review.

The plat has been sent to MnDOT for review. No comments have been received from MnDOT to date. A standard condition of approval of plat is subject to any MnDOT comments.

Development Contract.

A development contract will be required to address site improvements and storm ponds. The developer is required to enter into a contract with the City addressing the improvements and construction on site. A letter of credit equal to 125% of the cost of these improvements is required before permits are issued. This requirement assures the City that these improvements will be constructed to the satisfaction of the City.

VACATION OF EASEMENTS REVIEW

The original plat of Witaker Addition provided a perimeter drainage and utility easement between Lot 1 and the Outlot. With the platting of the two parcels, the internal drainage and utility easement will be vacated with new perimeter easements dedicated on the plat. There is also an old roadway easement that runs through the two parcels that is proposed to be vacated as access to the parcels is from 50th Street. Engineering has reviewed the stormwater plan and is agreeable to the vacation and dedication of the easements.

SITE PLAN REVIEW

Setbacks.

The proposed building and parking lot improvements comply with setback requirements.

Parking Lot.

Customer parking must be marked and shall not contain vehicle inventory. No employee, customer, or inventory parking shall be allowed on the street or in the right-of-way.

Access.

Access to the site is not changing; there is one access off 50th Street along the north side of the property.

Landscaping.
Landscaping requirements require a total of 48 overstory trees or the equivalent to be planted on the property. The applicant has provided a landscape plan which demonstrates a mixture of existing trees and the planting of new trees and shrubs that comply with landscape requirements.

Trash.
No changes are proposed to the trash enclosure. If the trash containers are stored outside they will have to be screened from view, complying with section 10-15-9D of the City Code.

Lighting.
There are no changes proposed to the existing site lighting. All lighting shall comply with Section 10-15-5 Light, Glare, and Heat of the City Code.

Exterior Building Materials.
The proposed building would consist of painted precast concrete panels on all four sides. The building complies with the exterior material standards.

Mechanical Unit Screening.
All rooftop and ground mounted mechanical equipment must be screened from view. This condition would apply to all new rooftop equipment.

Signage.
There are no new signs proposed with this request. All signs must comply with section 10-15E of the City Code. A building permit is required for any new signs or changes to the existing signs.

Fire Marshal Review.
All plans shall be subject to the review and approval of the City Fire Marshal for fire lane designation and the signage or marking of the fire lanes at the time of building.

Engineering.
Engineering has reviewed the plans and has been working with the applicant on stormwater and grading requirements. The applicant shall continue to work with the City to secure final approval of the construction drawings.

<u>GENERAL CONDITIONAL USE PERMIT REVIEW.</u>
This section reviews the plans against the CUP criteria in the Zoning Ordinance (Section 10-3A).

1. *The use is consistent with the goals, policies and plans of the City Comprehensive Plan, including future land uses, utilities, streets and parks.*

The use is consistent with the goals, policies, and plans of the Comprehensive Plan. The future land use of this parcel is Regional Commercial and automobile sales is consistent with the uses envisioned in this district.

2. *The use is consistent with the City Code, especially the Zoning Ordinance and the intent of the specific Zoning District in which the use is located.*

The property is zoned commercial. The land use of auto sales is consistent with the intent of the B-3, General Business zoning district.

3. *The use would not be materially injurious to existing or planned properties or improvements in the vicinity.*

The proposed addition would not have a detrimental effect on public improvements in the vicinity of the property.

4. *The use does not have an undue adverse impact on existing or planned City facilities and services, including streets, utilities, parks, police and fire, and the reasonable ability of the City to provide such services in an orderly, timely manner.*

The proposed improvements do not appear to have any negative effects on City facilities or services. Engineering, Fire, and Inspections would all review and approve plans for City Code compliance prior to the issuance of any building permits.

5. The use is generally compatible with existing and future uses of surrounding properties, including:

i. Aesthetics/Exterior Appearance

The proposed building would be constructed with similar materials as the existing building.

ii. Noise

The proposed addition would not generate noises that are inconsistent with the B-3, General Business zoning district.

iii. Fencing, Landscaping, and Buffering

No fencing is proposed, and landscaping would meet the City's requirements.

6. *The property is appropriate for the use considering: size and shape; topography, vegetation, and other natural and physical features; access, traffic volumes and flows; utilities; parking; setbacks; lot coverage and other zoning requirements; emergency access, fire lanes, hydrants, and other fire and building code requirements.*

Access to the site is not changing. Fire and Inspections would review and approve plans for code compliance prior to the issuance of any building permits.

7. *The use does not have an undue adverse impact on the public health, safety or welfare.*

This use does not appear to have any negative effects on public health, safety or welfare.

8. *The use does not have an undue adverse impact on the environment, including, but not limited to, surface water, groundwater and air quality.*

The proposed property improvements will comply with the City's stormwater treatment requirements.

ALTERNATIVES

A. Approval. If the Planning Commission finds the request(s) to be acceptable, the Commission should recommend approval of the request(s) with at least the following conditions:

- Approval of the **Preliminary and Final Plat** of Whitaker 2nd Addition subject to the following conditions:

  1. The Final Plat and accompanying plans shall be in substantial conformance with the plan set listed in the approved Development Contract.
  2. Developer shall execute a Development Contract and any other related agreements subject to any revisions as may be required by the City Engineer and City Attorney, which shall be recorded with Dakota County prior to any work commencing on the site.
  3. A Park Dedication Fee equal to $26,740 ($7,000 x 3.82) shall be paid to the City prior to release of the Final Plat.

4. The plat shall be subject to any comments received by MnDOT.

- Approval of the **Vacation** of certain Drainage and Utility Easements over Lot 1, Block 1, and Outlot A, Whitaker Addition and the Easement for roadway purposes over Lot 1, Block 1, and Outlot A, Whitaker Addition, subject to the following conditions:

  1. The Final Plat shall dedicate all necessary Easements with the new plat of Whitaker 2nd Addition.

- Approval of a **Conditional Use Permit Amendment** for the expansion of an automobile and off-highway vehicle sales lot subject to the following conditions:

  1. The site shall be developed in substantial conformance with the plat and plan set on file with the Planning Department except as may be modified by the conditions below.
  2. The City Code Enforcement Officer, or other designee, shall be granted right of access to the property at all reasonable times to ensure compliance with the conditions of this permit.
  3. All signage shall be in conformance with the sign regulations of the City.
  4. All display pennants, flags, searchlights, balloons, and other similar devices shall be limited to no more than 10 days per calendar year. Use of such devices shall require a sign permit.
  5. No employee or customer parking shall be allowed on 50th Street East.
  6. Customer and employee parking shall be clearly signed, and no display vehicles shall be allowed in this area. No car display, vehicle inventory, or employee parking shall be allowed on public streets, street boulevards, or landscaped areas on the dealership property.
  7. All final development plans shall be subject to the review and approval of the City Fire Marshal.
  8. The developer shall meet the conditions outlined in the City Engineers review memo and any subsequent correspondence.
  9. Final site, grading, stormwater management, and erosion control plans shall be approved by the City Engineer.
  10. A stormwater analysis and stormwater management plan shall be done by a registered engineer. Prior to construction, the Developer and Owner shall enter into a Development Contract and any other agreements related thereto with the City.
  11. Any new rooftop or ground mounted equipment shall be substantially screened from view as seen from a reasonable viewing perspective.
  12. Landscaping shall meet the requirements of Section 10-15-11 of the City Code. No landscaping is allowed in the right-of-way.
  13. Resolution No.'s _____ shall become null and void and shall be replaced by the terms of this Conditional Use Permit.

B. Denial. If the Planning Commission does not favor the proposed application, the above request should be recommended for denial. With a recommendation for denial, findings or the basis for the denial should be given.

RECOMMENDATION

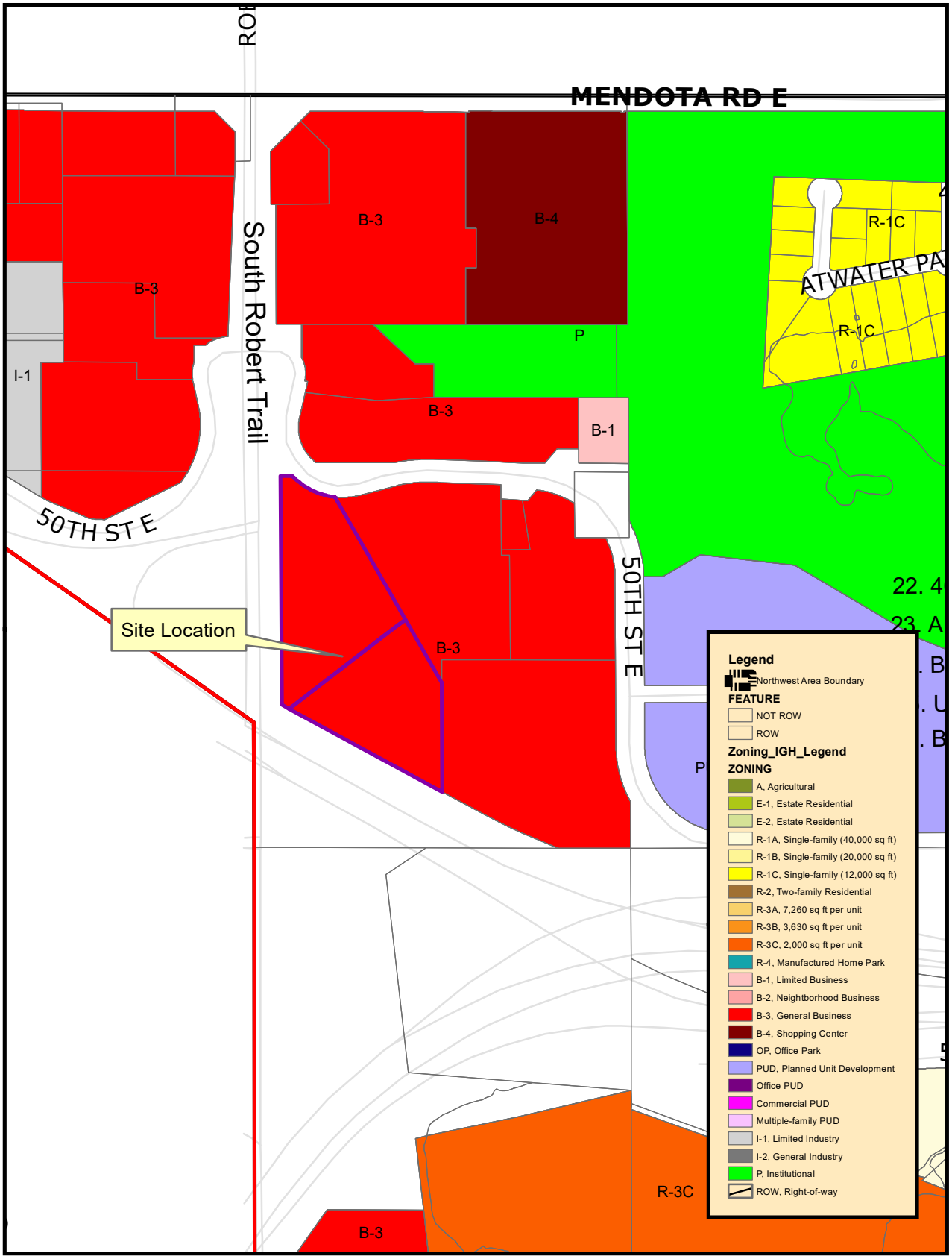
Based on the information in the preceding report and the conditions listed in Alternative A, staff is recommending approval of the request as proposed.

ATTACHMENTS

1. Zoning and Location Map
2. Narrative

3. Preliminary Plat
4. Final Plat
5. Easement Vacation Sketch
6. Grading, Drainage & Erosion Control Plan
7. Landscape Plan
8. Elevation Plan

1290 50th Street
Case No. 24-19CS



THIS DRAWING IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, INFORMATION AND DATA LOCATED IN VARIOUS CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. THE CITY OF INVER GROVE HEIGHTS IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED
Map produced by the City of Inver Grove Heights GIS Dept.
Copyright© City of Inver Grove Heights 2020

Exhibit A
Zoning and Location Map

INVER GROVE HYUNDAI PLAT DESCRIPTION:

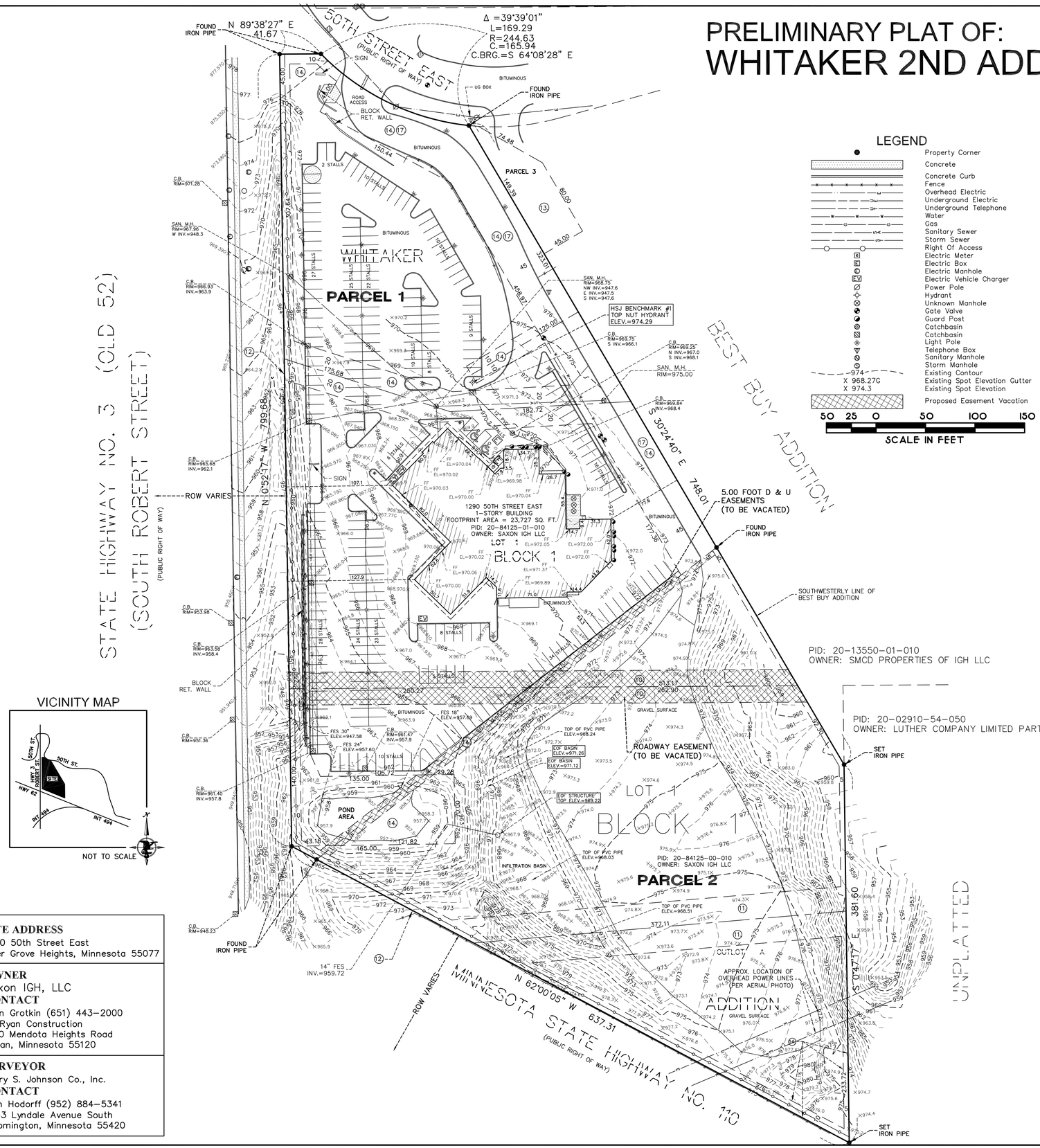
Lot 1, Block 1, Whitaker Addition, Dakota, County, Minnesota.
AND
Outlot A, Whitaker Addition, Dakota County, Minnesota.

Abstract Property

NARRATIVE

We are looking to combine the two pieces for property at 1290 50th Street East, Inver Grove Heights, Mn, for Jack Saxton and Inver Grove Hyundai, for building a new service building and adjoining parking lots.

PRELIMINARY PLAT OF:
WHITAKER 2ND ADDITION



LEGEND

- Property Corner
- Concrete
- Concrete Curb
- Fence
- Overhead Electric
- Underground Electric
- Underground Telephone
- Water
- Gas
- Sanitary Sewer
- Storm Sewer
- Right Of Access
- Electric Meter
- Electric Box
- Electric Manhole
- Electric Vehicle Charger
- Power Pole
- Hydrant
- Unknown Manhole
- Gate Valve
- Guard Post
- Catchbasin
- Catchbasin
- Light Pole
- Telephone Box
- Sanitary Manhole
- Storm Manhole
- Existing Contour (974)
- Existing Spot Elevation Gutter (X 968.27G)
- Existing Spot Elevation (X 974.3)
- Proposed Easement Vacation

50 25 0 50 100 150
SCALE IN FEET

VICINITY MAP

EXISTING LEGAL DESCRIPTION:

Parcel 1:
Lot 1, Block 1, Whitaker Addition, according to the recorded plat thereof, Dakota, County, Minnesota.

Parcel 2:
Outlot A, Whitaker Addition, according to the recorded plat thereof, Dakota County, Minnesota.

Abstract Property.

Parcel 3:
Non-exclusive driveway easement as contained in the Declaration of Driveway
Easement dated June 24, 1994, recorded July 15, 1994, as Document No. 1229201.

TO BE PLATTED AS:

Lot 1, Block 1, WHITAKER 2ND ADDITION, Dakota County, Minnesota.

SUBDIVISION SUMMARY:

The total number of Lots is equal to 1.
The total site area is 377,809 square feet.

PROPOSED AREA:

Site Area Lot 1, Block 1, WHITAKER 2ND ADDITION equals 377,809 square feet = 8.673 acres.

NOTES CORRESPONDING TO EASEMENTS:

(10) Easement for roadway purposes as evidenced by Book 60 of Deeds, Page 600. (AS SHOWN ON SURVEY)

(11) Easement for electric transmission line purposes, in favor of Northern States Power company, as created in document dated January 31, 1923, recorded February 2, 1923, as Document No. 98284 in Book 32 of Misc. Records, Page 350; as amended by the Assignment and Assumption of Easements dated December 29, 2000, recorded August 23, 2001, as Document No. 1805118. (AS SHOWN ON SURVEY)

(12) The right of access to State Highway No. 3 (South Robert Street) and Minnesota State Highway No. 10 has been taken by State of Minnesota as evidenced by the Final Certificate recorded in Book 62 of Misc. Records, Page 3, and by Quit Claim Deed dated May 18, 1994, recorded June 20, 1994, as Document No. 1223810. (AS SHOWN ON SURVEY)

(13) Terms and conditions of the Declaration of Driveway Easement dated June 24, 1994, recorded July 15, 1994, as Document No. 1229201. (AS SHOWN ON SURVEY)

(14) Easements for utility and drainage purposes as shown on the recorded plat of Whitaker Addition recorded as Document No. 1450476. (AS SHOWN ON SURVEY)

15. Terms and conditions of the Resolution dated June 23, 1997, recorded October 14, 1997, as Document No. 1450477. (NON-SURVEY MATTER)

16. Terms and conditions of the Development Contract dated August 28, 1997, recorded October 14, 1997, as Document No. 1450478. (NON-SURVEY MATTER)

(17) Easement for ingress and egress purposes, together with any incidental rights, as contained in the Perpetual Easement, dated August 28, 1997, recorded October 14, 1997, as Document No. 1450479. (AS SHOWN ON SURVEY)

18. Terms and conditions of the Resolution dated June 23, 1996, recorded November 19, 1996, as Document No. 1457197. (NON-SURVEY MATTER)

19. Terms and conditions of the Resolution dated June 23, 1996, recorded November 19, 1996, as Document No. 1457198. (NON-SURVEY MATTER)

22. Terms and conditions of the Resolution dated April 11, 2011, recorded May 3, 2011, as Document No. 2798673. (NON-SURVEY MATTER)

23. Affidavit regarding Storage Tanks dated December 16, 2010, recorded December 22, 2010, as Document No. 2774208. (NON-SURVEY MATTER)

STATEMENT OF POTENTIAL ENCROACHMENTS:

There are no visible above ground encroachments over or across any property lines of subject property.

GENERAL NOTES:

1. The bearing system used is based on the plat of BEST BUY ADDITION.

2. The location of the underground utilities shown hereon, if any, are approximate only. PURSUANT TO MSA 216D CONTACT GOPHER STATE ONE CALL AT (612) 454-0002 PRIOR TO ANY EXCAVATION.

3. Subject property is identified as being in "Zone X, Other Areas" on Flood Insurance Rate Map No., 27037C0040E, effective date December 2, 2011.

4. Site area = 377,809 square feet = 8.673 acres.

5. There are a total of 277 striped parking stalls on said property, of which there are 2 designated as handicap.

6. All field measurements matched recorded dimensions within the precision requirements of ALTA/NSPS specifications.

7. This survey was made on the ground and in accordance with the Minimum Standard Detail Requirements for Land Title Surveys as adopted by ALTA and NSPS.

8. There is no observable evidence of cemeteries in the field or of record.

9. The surveyor was not provided zoning information by the client pursuant to Table A Item(s) 6a or 6b.

10. No current title work was furnished for the preparation of this survey. I have relied upon the supporting documents and the Commitment for Title Insurance issued by First American Title Insurance Company, having an effective date of April 10, 2017 and bearing file number NCS-844957-MPLS. Legal description, recorded or unrecorded easements and encumbrances are subject to revision upon receipt of current title work.

11. There is no visible above ground evidence of earth moving work, building construction or building additions within recent months.

12. There is no observable evidence of recent street or sidewalk construction or repairs.

13. There are no visible markings denoting wetlands as delineated by appropriate authorities.

14. There are no easements or servitudes of record or any observed during the field inspection that benefit subject property pursuant to Table A Item 19 except as shown.

15. Subject property has direct access to and from 50th Street East, a public right of way.

16. Elevation datum is based on NAVD 88 data.
HSJ Benchmark #1 is located Top Nut Hydrant (AS SHOWN ON SURVEY)
Elevation = 974.29

SITE ADDRESS 1290 50th Street East Inver Grove Heights, Minnesota 55077	
OWNER Saxon IGH, LLC **CONTACT** John Grotkin (651) 443-2000 RJ Ryan Construction 1100 Mendota Heights Road Eagan, Minnesota 55120	
SURVEYOR Harry S. Johnson Co., Inc. **CONTACT** Tom Hodorff (952) 884-5341 9063 Lyndale Avenue South Bloomington, Minnesota 55420	

N

SCALE: 1 INCH = 50 FEET

[redacted]

REVISIONS

Date:

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota

Thomas E. Hodorff, L.S.
Minnesota Reg. No. 23677

Date: June 7, 2024

PRELIMINARY PLAT OF WHITAKER 2ND ADDITION

For:

RJ RYAN CONSTRUCTION

SITE:

INVER GROVE HYUNDAI

10290 50TH STREET EAST
INVER GROVE HEIGHTS, MINNESOTA

DAKOTA COUNTY

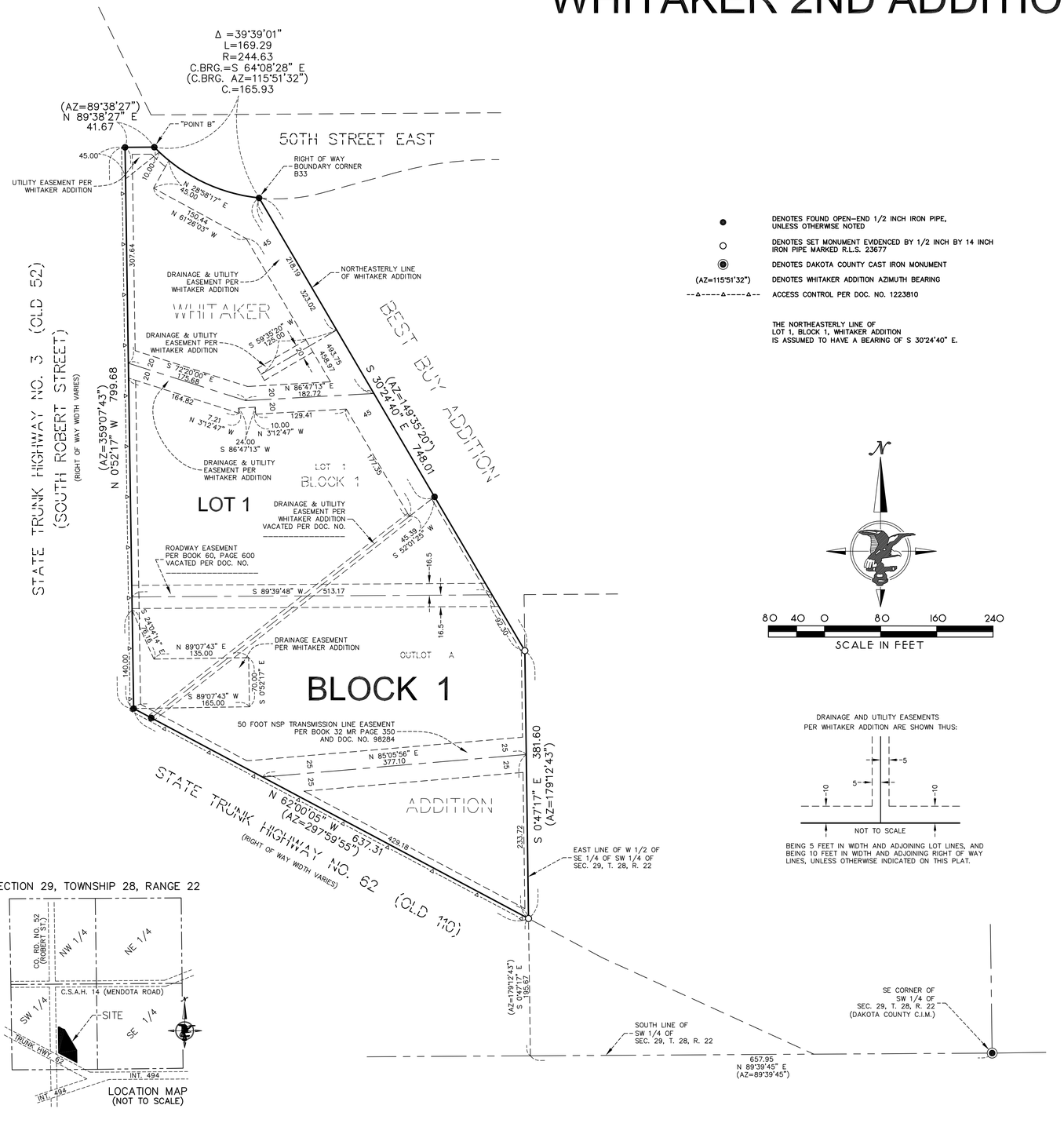
HARRY S. JOHNSON CO., INC.
LAND SURVEYORS
9063 Lyndale Avenue South
Bloomington, MN. 55437
Tele. 952-884-5341 Fax 952-884-5344
www.hsjsurveyors.com

Book 669	File No. 2024-235
Page 76	W.O. Number 2024235
CAD Technician CT	
Sheet No.	1 OF 1

CAD File: 2024235.DWG
Path: J:\2024235\DWG\

OFFICIAL PLAT

WHITAKER 2ND ADDITION



● DENOTES FOUND OPEN-END 1/2 INCH IRON PIPE, UNLESS OTHERWISE NOTED

○ DENOTES SET MONUMENT EVIDENCED BY 1/2 INCH BY 14 INCH IRON PIPE MARKED R.L.S. 23677

◉ DENOTES DAKOTA COUNTY CAST IRON MONUMENT

(AZ=115°51'32") DENOTES WHITAKER ADDITION AZIMUTH BEARING

--▲----▲----▲-- ACCESS CONTROL PER DOC. NO. 1223810

THE NORTHEASTERLY LINE OF LOT 1, BLOCK 1, WHITAKER ADDITION IS ASSUMED TO HAVE A BEARING OF S 30°24'40" E.

DRAINAGE AND UTILITY EASEMENTS PER WHITAKER ADDITION ARE SHOWN THUS:

BEING 5 FEET IN WIDTH AND ADJOINING LOT LINES, AND BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, UNLESS OTHERWISE INDICATED ON THIS PLAT.

SECTION 29, TOWNSHIP 28, RANGE 22

LOCATION MAP (NOT TO SCALE)

KNOW ALL BY THESE PRESENTS: That Saxon IGH, LLC, a Minnesota limited liability company, fee owner, of the following described property:

Lot 1, Block 1, Whitaker Addition, Dakota, County, Minnesota.

And

Outlot A, Whitaker Addition, Dakota County, Minnesota.

Has caused the same to be surveyed and platted as WHITAKER 2ND ADDITION.
[TO BE REMOVED IF NONE ADDED] and does hereby dedicate to the public for public use the drainage and utility easements as created by this plat.

In witness whereof, said Saxon IGH, LLC, a Minnesota limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 20___.

Signed: Saxon IGH, LLC

_____ Its: _____

STATE OF _____

COUNTY OF _____

The instrument was acknowledged before me on _____, by _____, its _____ of Saxon IGH, LLC, a Minnesota limited liability company, on behalf of the company.

_____ _____
Signature Printed Name
Notary Public, _____ County, Minnesota
My Commission Expires _____

SURVEYORS CERTIFICATE

I Thomas E. Hodorff do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on the plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20___.

_____
Thomas E. Hodorff, Licensed Land Surveyor,
Minnesota License No. 23677

STATE OF MINNESOTA

COUNTY OF _____

This instrument was acknowledged before me on _____, By Thomas E. Hodorff.

_____ _____
Signature Printed Name
Notary Public, _____ County, Minnesota
My Commission Expires _____

CITY PLANNING COMMISSION, CITY OF INVER GROVE HEIGHTS, COUNTY OF DAKOTA, STATE OF MINNESOTA

Approved by the City Planning Commission of the City of Inver Grove Heights, Minnesota, this _____ day of _____, 20___.

Signed: _____ Chair _____ Secretary

CITY COUNCIL, CITY OF INVER GROVE HEIGHTS, COUNTY OF DAKOTA, STATE OF MINNESOTA

This plat was approved by the City Council of the City of Inver Grove Heights, Minnesota, this _____ day of _____, 20___, and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subd. 2.

Signed: _____ Mayor _____ City Clerk

COUNTY SURVEYOR, COUNTY OF DAKOTA, STATE OF MINNESOTA

I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this ___ day of _____, 20___.

By: _____
Todd B. Tollefson
Dakota County Surveyor

DEPARTMENT OF PROPERTY TAXATION AND RECORDS, COUNTY OF DAKOTA, STATE OF MINNESOTA

Pursuant to Minnesota Statutes 505.021, Subd. 9, taxes payable in the year 20___ on the land hereinbefore described have been paid.

Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this _____ day of _____, 20___.

By: _____
Amy A. Koethe, Director,
Department of Property Taxation and Records

COUNTY RECORDER, COUNTY OF DAKOTA, STATE OF MINNESOTA

I hereby certify that this plat of WHITAKER 2ND ADDITION was filed in the Office of the County Recorder for public record on this _____ day of _____, 20___ at ___ o'clock ___ M. and was duly filed in Book _____ of Plats, Page _____, as

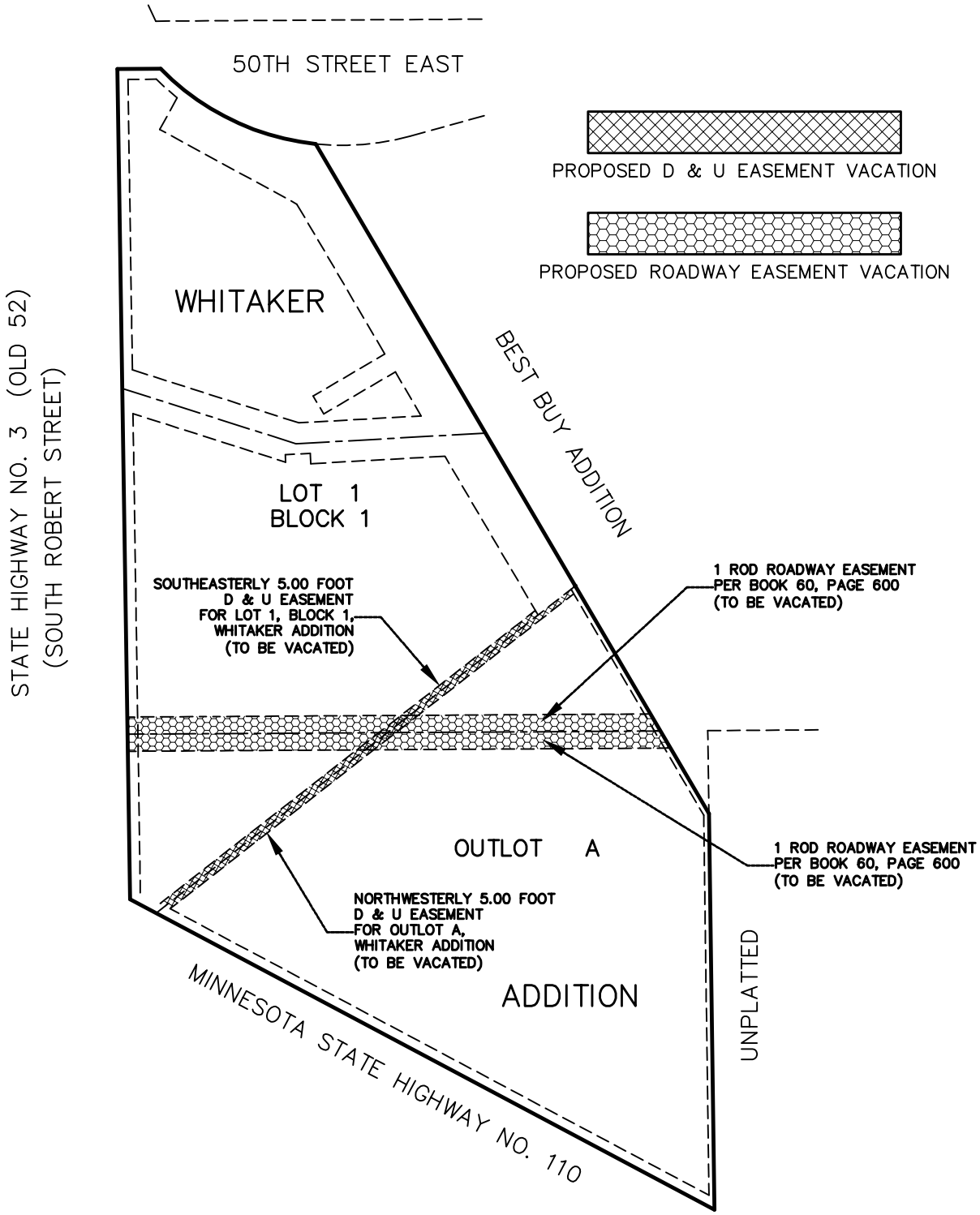
Document No. _____.

By: _____
Amy A. Koethe, Dakota County Recorder

HARRY S. JOHNSON LAND SURVEYORS

HARRY S. JOHNSON
LAND SURVEYORS
9063 Lyndale Ave. So. Bloomington, MN. 55420
phone: 952–884–5341 fax: 952–884–5344

Sketch
for
RJ Ryan Construction



General Notes:
1. Bearings shown based on the plat of WHITAKER ADDITION.

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

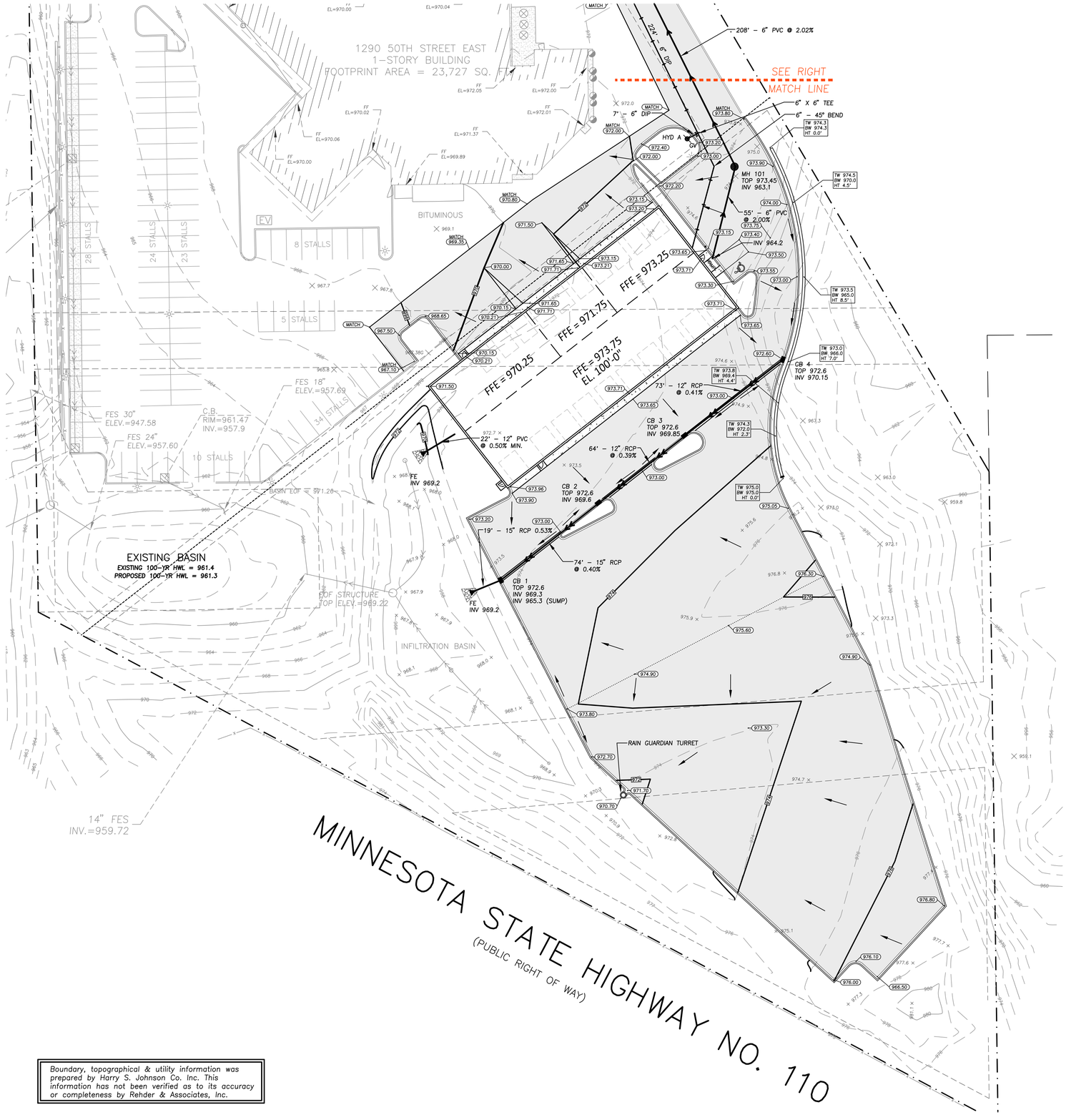
Date: July 12, 2024

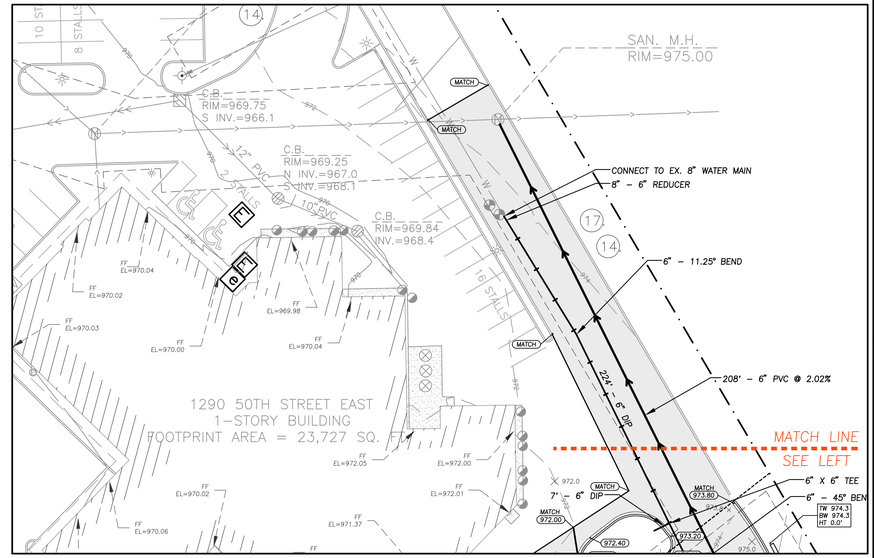
Thomas E. Hodorff, L.S. MN Reg. No. 23677

N

SCALE: 1" = 150'

HSJ WO: 2024235.DWG





GRADING NOTES

1 – *All elevations shown are to final surfaces.*
2 – *Contractor is responsible for obtaining a National Pollutant Discharge Elimination System (NPDES) General Storm Water Permit for Construction Activity before construction begins.*

EROSION CONTROL NOTES

1 – *Contractor is responsible for all notifications and inspections required by General Storm Water Permit.*
2 – *All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.*
3 – *Sweep paved public streets as necessary where construction sediment has been deposited.*
4 – *Each area disturbed by construction shall be restored per the specifications within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.*
5 – *Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.*
6 – *The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water.*
7 – *All pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.*
8 – *Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.*

PROGRESS PRINT
6-4-24

LEGEND

- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- PROPOSED CATCH BASIN
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED CONCRETE
- PROPOSED STD. DUTY BITUMINOUS
- PROPOSED HEAVY DUTY BITUMINOUS
- PROPOSED CONTOUR (1050)
- PROPOSED ELEVATION (1023.54)
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)
- CONSTRUCTION LIMITS
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- LOT LINE
- BUILDING/PARKING SETBACK LINE
- SOIL BORING
- DRAINAGE ARROW
- W — EXISTING WATERMAIN
- S — EXISTING SANITARY SEWER
- ST — EXISTING STORM SEWER
- G — EXISTING BURIED GAS LINE
- E — EXISTING BURIED ELECTRIC LINE
- T — EXISTING BURIED TELEPHONE LINE
- TV — EXISTING BURIED TELEVISION LINE
- 980 — EXISTING CONTOUR
- × 995.50 EXISTING ELEVATION

N

0 15 30 60 90
Scale in Feet

Boundary, topographical & utility information was prepared by Harry S. Johnson Co. Inc. This information has not been verified as to its accuracy or completeness by Rehder & Associates, Inc.

REHDER & ASSOCIATES, INC.
Civil Engineers & Land Surveyors
3440 Federal Drive, Suite 110
Eagan, MN 55122
Phone: 651-452-5051
www.rehder.com

PROJECT NO.: 001-XXXX.XXX DRAWING FILE: XXXXXXX.DWG

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

PRELIMINARY

Name _____ Date _____ Reg. No. _____

Issued
XXXXXXX

GRADING, DRAINAGE, & EROSION CONTROL PLAN
IGH HYUNDAI
CITY OF INVER GROVE HEIGHTS

SHEET NUMBER
C3

SOUTH ROBERT STREET

N 0°52'17" W 799.68

1290 50TH STREET EAST
1-STORY BUILDING

S 30°24'40" E 748.01

ROCK MULCH BED

ROCK MULCH BED

PROPOSED BUILDING

RETAINING WALL AS REQUIRED

EXISTING TREE LINE

ROCK MULCH BED

EXISTING TREE CLUSTER TO REMAIN

EXISTING PONDING

EXISTING INFILTRATION

SEED

SOD

EXISTING TREE LINE

50'-0" TRANSMISION LINE EASEMENT

EXISTING TREE LINE

S 0°47'17" E 381.60

MINNESOTA STATE HIGHWAY NO. 110

N 62°00'05" W 637.31

NORTH

1 L1 LANDSCAPE PLAN
SCALE: 1" = 30'-0"

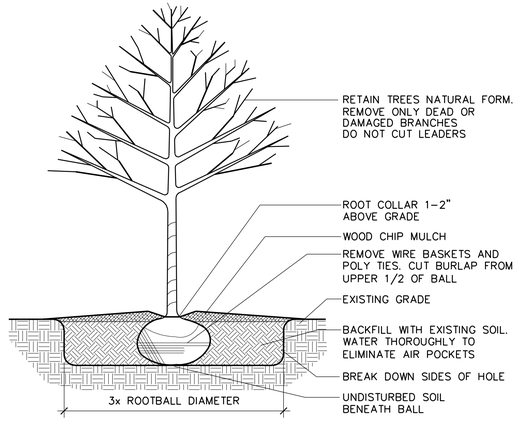
PLANTING SCHEDULE						
QTY.	KEY	COMMON NAME	BOTANICAL NAME	SIZE	MTHD	REMARKS
3	IH	IMPERIAL HONEYLOCUST	GLEDITSIA TRICANTHOS	2.5" CAL.	BB	
7	CT	COFFEE TREE	GYMNOCLADUS DIOICUS	2.5" CAL.	BB	
3	SO	SWAMP WHITE OAK	QUERCUS BICOLOR	2.5" CAL.	BB	
3	SD	SNOWDRIFT CRAB	MALUS SNOWDRIFT	1.5" CAL.	BB	
6	BH	BLACK HILLS SPRUCE	PICEA GLAUCA DENSATA	6' TALL	BB	
3	WP	WHITE PINE	PINUS STROBUS	6' TALL	BB	
10	BB	COMPACT BURNING BUSH	EUONYMUS ALATUS 'COMPACTA'	18"-24" TALL	CONT.	
15	GS	GOLDMOUND SPIREA	SPIREA X BUMALDA 'GOLDMOUND'	18"-24" TALL	CONT.	

LANDSCAPE NOTES:

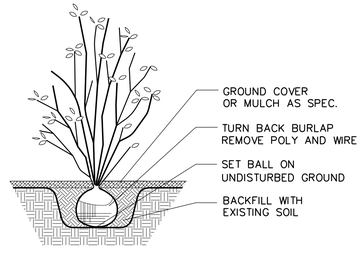
1. SEED/SOD AREAS AS SHOWN ON THE PLAN.
2. SEE PLAN FOR PLANTINGS LOCATED IN ROCK MULCH BED. ROCK MULCH BEDS SEPARATED FROM SOD BY BLACK VINYL EDGER. OTHER PLANTINGS TO HAVE WOOD MULCH RING TO PREVENT WEED GROWTH AND CONSERVE WATER.
3. UNDERGROUND IRRIGATION SYSTEM TO BE PROVIDED FOR ALL FOUNDATION PLANTINGS AND TURF AREAS. PROVIDE MOISTURE SENSOR. IRRIGATION DESIGN BY CONTRACTOR.
4. SEE PLAN FOR EXISTING TREES TO BE SAVED

LANDSCAPE REQUIREMENT

1. 1756 FT SITE PERIM AT 1/50 = 35 TREES REQUIRED
   9 EVERGN + 3 ORNAM. (1.5) + 15 (2.5) SHRUBS
   14 UNITS PROVIDED
   (21 UNITS ASSUMED FOR EXISTING TREES ON SITE)
2. 129 STALLS AT 1/10 STALLS = 13 TREES REQUIRED
   13 DECID + 10 SHRUBS (1.5)
   14.5 UNITS PROVIDED



3 L1 TREE PLANTING DETAIL
SCALE: NOT TO SCALE



2 L1 SHRUB PLANTING DETAIL
SCALE: NOT TO SCALE

LAMPERT ARCHITECTS
420 Summit Avenue
St. Paul, MN 55102
Phone:763.755.1211 Fax:763.757.2849
lampert@lampert-arch.com

RJRyan Construction, Inc.
Commercial Design and Construction
1100 Mendota Heights Road
Mendota Heights, MN 55120
Ph: 651-681-0200
Fax: 651-681-0235

REPAIR GARAGE FOR HYUNDAI AND FORD

Inver Grove Heights, MN

Copyright 2024
Leonard Lampert Architects Inc.

Project Designer: JAMES B
Drawn By: JRB
Checked By: LL
Revisions

6/7/24	FINAL REVIEW
6/11/24	ISSUE FOR PERMIT

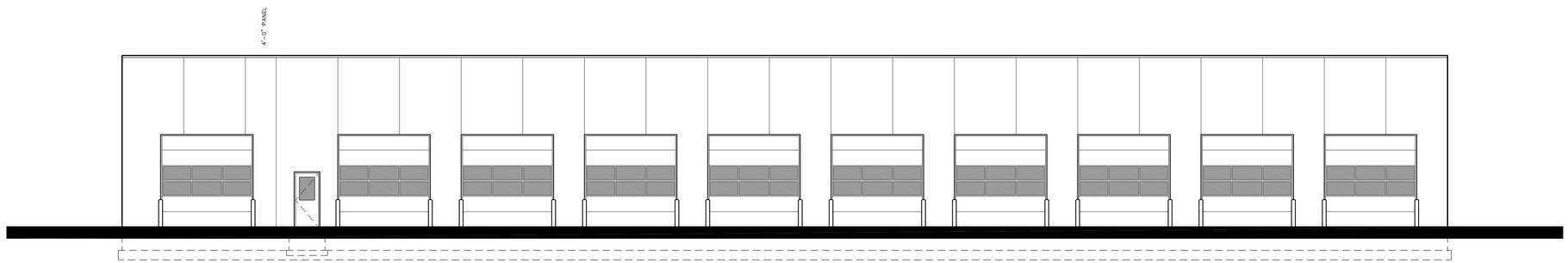
LANDSCAPE PLAN

Sheet Number

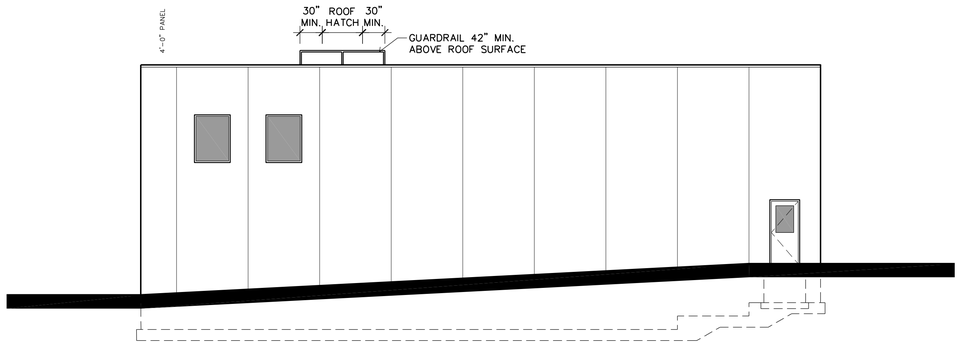
L1

Project No. 240313-1

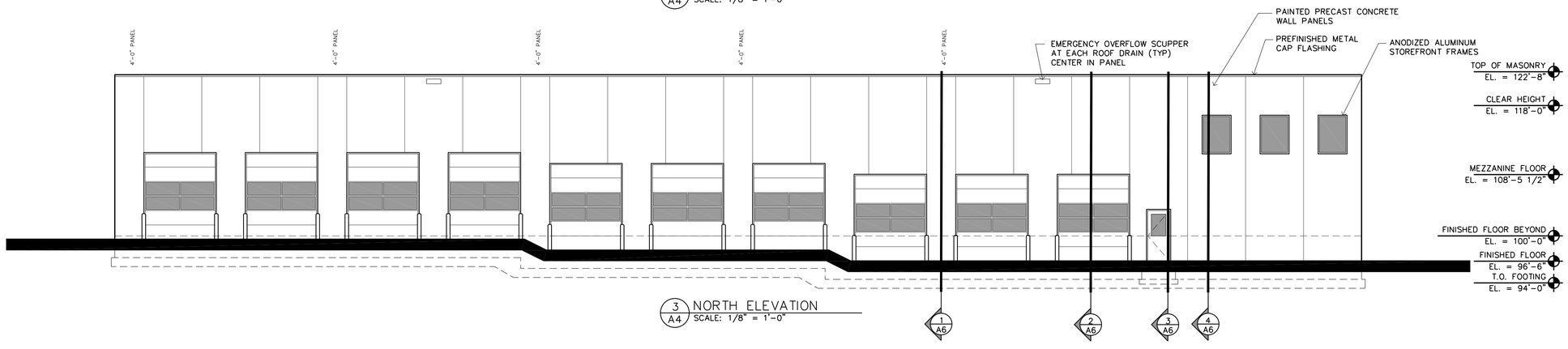
Filename: INVER GROVE HYUNDAI REPAIR GARAGE\INVER GROVE HYUNDAI REPAIR GARAGE-L1



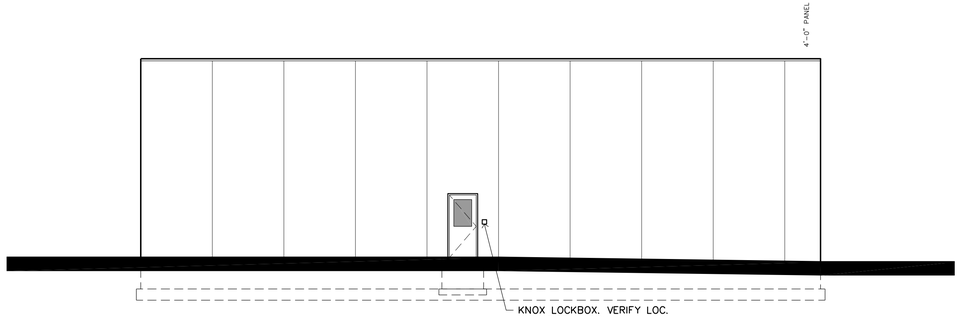
1 A4 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



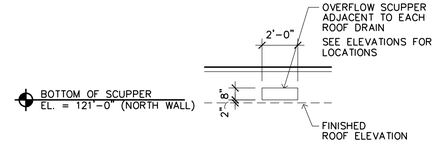
2 A4 WEST ELEVATION
SCALE: 1/8" = 1'-0"



3 A4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



4 A4 EAST ELEVATION
SCALE: 1/8" = 1'-0"



NOTE: OVERFLOW SCUPPER IS SIZED ACCORDING TO IBC 1502.2.3
VERIFY WITH THE PLUMBING DESIGNER AND INT'L PLUMBING CODE

5 A4 OVERFLOW SCUPPER DETAIL
SCALE: 1/4" = 1'-0"

Filename: INVER GROVE HYUNDAI REPAIR GARAGE\INVER GROVE HYUNDAI REPAIR GARAGE-A4

LAMPERT ARCHITECTS
420 Summit Avenue
St. Paul, MN 55102
Phone:763.755.1211 Fax:763.757.2849
lampert@lampert-arch.com

ARCHITECT CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE
LEONARD LAMPERT
PRINT NAME
13669
LIC. NO.
04/19/24
DATE

PRELIMINARY
NOT FOR CONSTRUCTION

RJRyan Construction, Inc.
Commercial Design and Construction
1100 Mendota Heights Road, Mendota Heights, MN 55120
Ph: 651-681-0200 Fax: 651-681-0235

REPAIR GARAGE FOR HYUNDAI AND FORD
Inver Grove Heights, MN

Copyright 2024
Leonard Lampert Architects Inc.

Project Designer: JAMES B
Drawn By: JRB
Checked By: LL

Revisions

4/19/24	PRELIMINARY
5/17/24	PROGRESS SET
6/7/24	FINAL REVIEW

BULIDING ELEVATIONS

Sheet Number

A4

Project No. 240313-1