

**CITY OF LINO LAKES  
ENVIRONMENTAL BOARD MEETING**

Wednesday, August 31, 2022

6:30 p.m.

Council Chambers

**AGENDA**

1. CALL TO ORDER AND ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES: July 27, 2022
5. OPEN MIKE
6. ACTION ITEMS
  - A. 601 Apollo Drive Retail Site Plan Review
7. UPDATES
  - A. General Updates
  - B. Recycling Updates
8. ADJOURN

**CITY OF LINO LAKES  
ENVIRONMENTAL BOARD MEETING**

**DATE:** July 27, 2022  
**TIME STARTED:** 6:31 P.M.  
**TIME ENDED:** 8:19 P.M.  
**MEMBERS PRESENT:** John Sullivan, Jonathan Parsons, Ella McNulty,  
Cassie Cavegn, Alex Schwartz  
**STAFF PRESENT:** Andy Nelson, Tori Philippi

**I. CALL TO ORDER AND ROLL CALL:**

Chair Sullivan called the Lino Lakes Environmental Board meeting to order at 6:30 p.m. on July 27, 2022.

**II. PLEDGE OF ALLEGIANCE**

**III. APPROVAL OF AGENDA**

Chair Sullivan approved the agenda as presented.

**IV. APPROVAL OF MINUTES:**

Mr. Schwartz made a MOTION to approve the June 29, 2022 meeting minutes. Motion was supported by Ms. McNulty. Motion carried 5 – 0.

**V. OPEN MIKE**

Chair Sullivan declared Open Mike at 6:34 p.m.

There was no one present for Open Mike.

Open Mike was closed at 6:34 p.m.

**VI. ACTION ITEMS**

**A. Robinson Property Environmental Assessment Worksheet**

Michael Grochala, Community Development Director, and Alison Harwood, from WSB & Associates, presented the staff report.

Integrate Properties, LLC (Developer) is proposing a residential development project on approximately 158 acres abutting Main Street (CSAH 14) and Sunset Avenue (CR

53) in the northwest quadrant of the City. The property is guided for low, medium and high-density residential uses in the City's 2040 Comprehensive Plan. The Environmental Board reviewed a development concept plan for the property in January of this year.

Due to the proposed number of residential units, preparation of an Environmental Assessment Worksheet (EAW) is required by Minnesota Rules. The process operates according to rules adopted by the state's Environmental Quality Board (EQB). The EAW document is designed to provide a brief analysis and overview of the potential environmental impacts for a specific project and to help the City, referred to as the Responsible Government Unit (RGU), determine whether an Environmental Impact Statement (EIS) is necessary. The questions contained within the document are established by the EQB

#### Chair Comments

Chair Sullivan discussed the possibility of incorporating pollinator gardens and native plant species into the project.

Chair Sullivan questioned if some of the proposed housing units will have basements or if all housing units will be slab on grade.

Alison Harwood, from WSB & Associates, clarified that there will be housing units with basements.

Chair Sullivan voiced concern over with permanent wetland fill occurring on the site.

Mr. Nelson stated that developers will need to go through several layers of regulatory review with Rice Creek Watershed District, Board of Water and Soil Resources, Army Corps of Engineers, and MPCA in order to mitigate wetland impact.

#### Board Comments

Mr. Parsons asked if there will be a diverse array of boulevard trees or if every resident will receive the same species of boulevard tree.

Mr. Parsons discussed the stormwater analysis process.

#### Staff Comments

Mr. Nelson discussed the City's plan of diversifying boulevard tree species and incorporating fire adapted native oak species into open spaces.

Mr. Schwartz made a MOTION to recommend the Robinson Property Environmental Assessment Worksheet to be forwarded to the Planning and Zoning Board and City Council subject to conditions listed in the staff report. Motion was

supported by Mr. Parsons. Motion carried 5 – 0.

## VII. DISCUSSION ITEMS

### A. **Belland Farms 2<sup>nd</sup> Addition Preliminary Plat and Site Plan and Conditional Use Permit for New Horizon Academy**

Andy Nelson, Environmental Coordinator, presented the staff report.

Two (2) separate Land Use Applications were submitted. The first applicant, Rehbein Properties, submitted Belland Farms 2<sup>nd</sup> Addition Preliminary Plat to create one commercial lot. The second applicant, New Horizons Academy, submitted a Conditional Use Permit and Site Plan Review for New Horizons Academy, a children's daycare facility, to be located on Lot 1, Block 1 of the Belland Farms 2<sup>nd</sup> Addition Preliminary Plat.

The proposed New Horizons Academy project includes an extension of Rosemary Way to the west to prepare access for future development. A 0.0547 acre wetland will be impacted by the road extension. This wetland impact was mitigated for with the purchase of wetland bank credits in November of 2021.

#### Board Comments

Mr. Parsons discussed the Stormwater Pollution Prevention Plan.

Staff provided answers to Mr. Parsons' questions about the Stormwater Pollution Prevention Plan.

Chair Sullivan asked for staff clarification on portions of the staff Power Point presentation.

Mr. Nelson answered all of Chair Sullivan's questions about Staff Power Point slides.

Chair Sullivan made a MOTION to recommend the Belland Farms 2<sup>nd</sup> Addition Preliminary Plat and Site Plan and Conditional Use Permit for New Horizon Academy to be forwarded to the Planning and Zoning Board and City Council subject to conditions listed in the staff report. Motion was supported by Ms. Cavegn. Motion carried 5 – 0.

## VIII. DISCUSSION ITEMS

### A. **Kwik Trip Conditional Use Permit and Site Plan Review**

Andy Nelson, Environmental Coordinator, presented the staff report.

A Land Use Application has been submitted for a Conditional Use Permit and Site Plan Review for Kwik Trip, which will include a convenience store, a single bay carwash, and 10 fueling stations.

### Board Comments

Mr. Schwartz asked about the quality of the wetland located in the southeast portion of the site and if it contains rare native plant species.

Mr. Nelson responded that the wetland delineation report does contain information about species located on site. Staff will revisit the plant survey but did not notice any mention of rare native plant species.

Mr. Parsons asked if the existing trees will be marked and surveyed after construction to verify survival.

Mr. Nelson said that prior to construction, erosion control measures and tree protection fences will be installed and inspected to insure they have been installed to City Of Lino Lakes specifications.

Mr. Parsons asked for clarification on where the recommended trail segment would be and how it would connect to the larger trail system in the area, noting the importance of long-term planning to promote connectivity.

Mr. Nelson identified the recommended location for the trail segment heading north from Sandhill Drive.

Mr. Schwartz asked if the oil and grit chamber will require routine maintenance and if the city requires a longterm maintenance agreement.

Mr. Nelson said that the oil and grit chamber will require routine maintenance and is designed to provide access for maintenance activities and assumed that long-term maintenance was part of the applicant's plan.

Chair Sullivan mentioned deep concerns about the extensive tree removals (240 trees) associated with the project and noted the high quality of this wooded area. He also noted that only 40 new replacement trees were being provided for the 240 removals, and mentioned that saving more trees would be preferred.

Chair Sullivan noted the abundance of gas stations in the area and questioned the need for more, particularly in a location that is a gateway to the city. He also raised concerns related to additional pollution of the impaired lakes in the area from the petroleum products.

Mr. Schwartz remarked that he appreciated that the wetland would not be impacted by the project, noting the water quality benefits provided by the wetland, particularly due to the close proximity to the lake.

Mr. Schwartz asked Staff what would happen to the underground fuel tanks once the site is redeveloped and if the site would be permanently contaminated.

Staff said the State of Minnesota regulates how the fuel tanks need to be constructed, and assumed that the rules are quite stringent. He noted the separation requirement between the well and the tanks, and that the proposed project was well outside of the minimum distance requirement.

Staff said that the run off from the site will receive several levels of pretreatment before reaching Marshan Lake, and that run off coming from the site will be less contaminated than the run off coming from most sites because of this pretreatment and filtration.

Mr. Schwartz made a MOTION to recommend the Kwik Trip Conditional Use Permit and Site Plan Review to be forwarded to the Planning and Zoning Board and City Council subject to conditions listed in the staff report. Motion was supported by Mr. Parsons. Motion carried 5 – 0.

## **IX. UPDATES**

### **A. General Updates**

Mr. Nelson stated that there are no general updates.

### **B. Recycling Updates**

Ms. Philippi provided an update on this month's Recycle Saturday. The event had a total of 196 participants. 147 of the participants showed up for All Appliance Disposal and 49 participants showed up for paper shredding. There will be no event in August due to Blue Heron Days.

The Blue Heron Days parade will be held on Saturday, August 20. The City is looking for volunteers to help with collecting of trash and recyclable materials that are left on the parade route. Volunteer duties include walking at the end of the parade picking up trash and other recyclable materials. (10:45 a.m. – 12:00 p.m.) Volunteers get a free shirt and tote bag.

There was not much of an increase in organics participants during the month of July. The current total is 450 participants. An increase in participants should be expected after the next newsletter comes out in August.

The SCORE Reimbursement form for the county was recently submitted and Staff will be completing the Tonnage Report and 2023 Application later this week.

## **X. ADJOURNMENT**

Mr. Schwartz made a MOTION to adjourn the meeting at 8:19 p.m. Motion was supported by Ms. Cavegn. Motion carried 5 – 0.

**ENVIRONMENTAL BOARD  
AGENDA ITEM 6A**

**STAFF ORIGINATOR:** Andy Nelson, Environmental Coordinator

**MEETING DATE:** August 31<sup>st</sup>, 2022

**REQUEST:** 601 Apollo Drive Retail Site Plan Review

**APPLICANT:** Java Lino Retail, LLC.  
879 Scheffer Ave.  
St. Paul, MN 55012

**OWNER:** Java Lino Retail, LLC.  
879 Scheffer Ave.  
St. Paul, MN 55012

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**BACKGROUND**

A land use application has been submitted for a site plan review for a commercial development proposed for the parcel at 601 Apollo Drive. The parcel is currently approximately 1.32 acres of mowed vegetation.

Per the applicant’s narrative, the proposed project will consist of a 4,200 square foot dental clinic, a 2,240 square foot coffee shop, and a drive thru ATM.

This staff report is based on a review of the following documents:

- ALTA/NSPS Land Title Survey prepared by Design Tree, dated 4-18-22
- Apollo Drive Retail Civil Plan Set prepared by Design Tree, dated 7-29-22
- Landscape and Ground Cover Plans prepared by PLAN-Type, dated 8-10-22
- Marketplace Master Landscape Plan prepared by Parsons Transportation Group, Inc., dated 10-04-01
- Final Stormwater Management Study prepared by Design Tree, dated 7-29-22
- Photometric Plan prepared by Viking Electric, dated 7-28-22

## **ANALYSIS**

### **General Site Characteristics**

The applicant is proposing to develop the approximately 1.32 acre property located at the northeast corner of the intersection of Lake Drive (CSAH 23) and Apollo Drive.

The proposed project includes construction of a dental clinic, coffee shop, drive thru ATM, and trash enclosure. The plan includes extensive landscaping around the perimeters, around the buildings, and within parking lot islands. Stormwater will be managed with porous pavement best management practices before discharging to the east as occurs under the current conditions.

### **Land Cover**

Pre-settlement land cover (Marschner) was oak openings and barrens.

Current land cover (Minnesota Land Cover Classification System) on the site includes: other exposed transitional land with 0-10% impervious cover, oak forest dry subtype, and medium grass altered/non-native dominated grassland.

Land cover on the site today is mowed vegetation.

### **Rare, Unique, or Significant Resources**

The site ultimately drains to George Watch Lake, an impaired water.

There were no other rare, unique, or significant resources identified on the site or in the vicinity.

### **Soils**

The Natural Resource Conservation Service Web Soil Survey notes the following soil type on the project site:

Zimmerman fine sand, which is a Hydrologic Group A soil, non-hydric, and excessively drained. This soil is very deep with rapid permeability.

### **Stormwater Management**

A stormwater management plan has been submitted and is being reviewed by the City Engineer. The following summary review is based upon the Final Stormwater Management Study.



*Existing Conditions*

The site is currently pervious surface over sandy soils. Runoff heads to catchbasins on Marketplace Drive, then east through the stormwater system, eventually collecting in a pond just east of Target. This pond discharges to a ditch south of 35W, ultimately entering George Watch Lake which is an impaired water.

*Proposed Conditions*

The proposed conditions include creation of 0.813 acres of new impervious surface, which is divided into three drainage areas. Each drainage area will have a section of porous pavement BMP's (Best Management Practices) to manage the additional stormwater runoff.

Rice Creek Watershed District Rules require water quality treatment volume of 1.1 inches for all new impervious areas. Also, peak stormwater runoff rates for the proposed project must not exceed existing peak runoff rates for the 2-, 10-, and 100-year storm events.

Table 6 – Market Drive Place right-of-way Discharge Rate Results

Summary of Discharge Rates Existing vs. Proposed		
Storm Event	Existing	Proposed
2-Year, 24 hour	0.00 cfs	0.00 cfs
10-Year, 24 hour	0.02 cfs	0.00 cfs
100-Year, 24 hour	0.96 cfs	0.85 cfs

Table from the Final Stormwater Management Study prepared by Design Tree.

The proposed conditions seem to meet requirements. This will be reviewed in greater detail by the Engineering Department.

**Stormwater Pollution Prevention**

The Erosion Control Plan calls for inlet protections, a rock construction exit, silt fence for perimeter control, and biorolls to prevent sediment from reaching the porous paver BMP's prior to soil stabilization.

Being that this site will drain to impaired waters, George Watch Lake and Marshan Lake, stabilization of exposed soil areas must occur within 7 days after the construction activity in that area permanently ceases. This is noted in the SWPPP narrative.

### **Flood Plain**

Site does not fall within the flood management zone.

### **Wetlands**

There are no wetlands indicated on the site.

### **Alternative Urban Areawide Review (AUAR) Considerations**

The site does not fall within the 2005 I-35E Corridor AUAR environmental review boundary.

### **Drinking Water Protection**

The site is not within the Drinking Water Supply Management Area (DWSMA).

### **LANDSCAPE PLAN**

A Master Landscape Plan for the retail area bounded by Lake Street to the west, 77<sup>th</sup> Street to the north, and Apollo Drive to the south was approved with conditions in August of 2001. A revision submitted in October of 2001 incorporated the required changes and became the approved final landscape plan for the area.

The landscape plan submitted for the 601 Apollo Drive Retail project should thus be measured against the approved Master Landscape Plan from 2001, rather than strictly adhering to current ordinance.

The submitted landscape plan is an improvement upon the Master Landscape Plan in several respects.

- The 2001 plan called for 34 large tree equivalents and 29 large shrub equivalents. The current submittal calls for 47 large tree equivalents and 110 large shrub equivalents.
- The ash trees (*Fraxinus pennsylvanica*) called for on the south perimeter have been replaced with lindens (*Tilia Americana*) and sycamores (*Plantanus x acerifolia* 'Morton Circle').
- The current plan calls for additional trees on the borders shared with Lake Drive, the property to the north, and Apollo Drive. This provides buffer and screening, which will improve the aesthetics of this corner lot.
- There are more trees in the parking lot islands to provide additional canopy cover and shading of the vehicular hardscape area.
- Numerous shrubs have been added in the foundation landscape area.
- Diversity of plant species has increased significantly as compared to the 2001 landscape plan.

Landscape requirements have been met.

### **Sod and Ground Cover Standards**

All areas not otherwise improved in accordance with the approved site plans shall have a minimum depth of 4 inches of topsoil and be sodded including boulevard areas. Seed may be provided in lieu of sod in certain cases, including when the area is adjacent to natural areas or wetlands.

Mn DOT seed mix 25-131 will be used for temporary stabilization. Permanent stabilization will be sod.

### **Greenway System**

The site is not part of the Greenway System. There are existing concrete sidewalks on the east and south perimeters. The 2040 Comprehensive Plan does include proposed trail on the perimeter shared with Lake Drive, and a proposed bike lane on Lake Drive itself.

Pedestrian and bike trail easements are in place.

### **Lighting**

The purpose of the lighting requirements in the Zoning Code is to reduce light pollution, promote energy conservation, and increase night time safety, utility, security, and productivity. Lighting is reviewed by the City Planner.

Per Section 1007.043(6)(d), no light source shall exceed 1.0 foot candle onto right of way or 0.4 foot candle onto adjacent property.

Light fixtures are down lit and cutoff as required by city code. The photometric plan as shown meets requirements.

### **Recycling**

Applicant is planning to construct an enclosure that is sized to accommodate recycling and trash containers.

### **RECOMMENDATIONS**

Staff recommends that the Site Plan Review for 601 Apollo Drive Retail be forwarded to the Planning and Zoning Board and City Council with the following comments:

Environmental has no further comments or recommendations.

## **ATTACHMENTS**

1. 601 Apollo Drive Retail Aerial Photo
2. Site Plan (Sheet C201)
3. Grading Plan (Sheet C301)
4. Erosion Control Plan (Sheet C501)
5. SWPPP Narrative (Sheet C606)
6. Landscape Plan (Sheet L101)
7. Master Landscape Plan for Lino Lakes Marketplace
8. Master Landscape Plan zoom in for 601 Apollo Drive
9. Ground Cover Plan (Sheet L102)

# 601 Apollo Drive Retail



Address Labels

Parcels

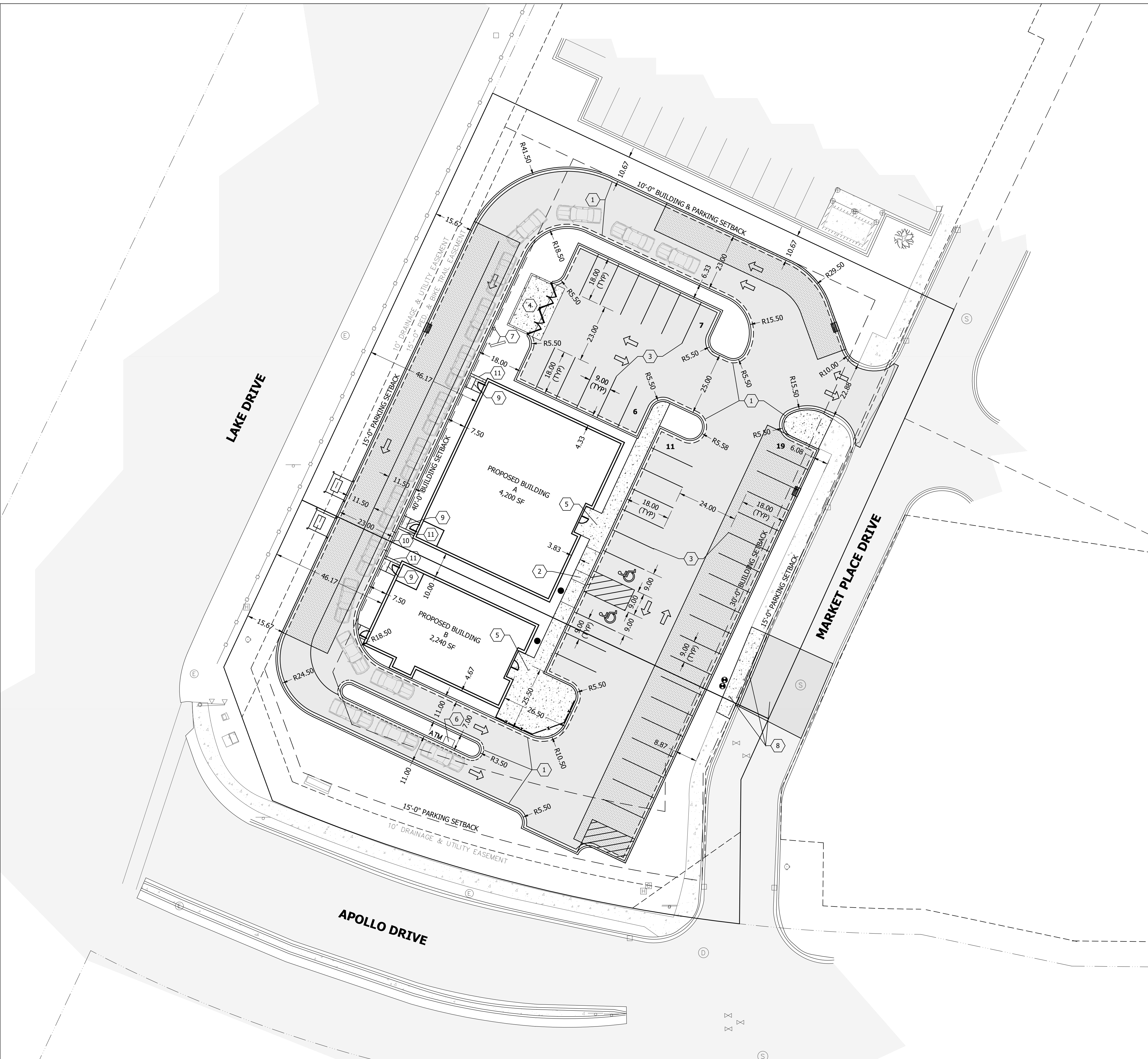
City Mask

1 in = 210 Ft



N  
August 25, 2022  
Map Powered By Datafi





**NOTES:**

1. ALL DIMENSIONS SHOWN ARE TO FLOW LINE, CENTERLINE OF FENCE, EDGE OF PAVEMENT, OR EXTERIOR FACE OF BUILDING, UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL VERIFY ALL PLAN AND DETAIL DIMENSIONS PRIOR TO CONSTRUCTION.
3. ALL INTERIOR PARKING STALL STRIPING SHALL BE 4" AND YELLOW IN COLOR.
4. ACCESSIBLE PARKING STALL STRIPING, ACCESS AISLE, AND SYMBOL SHALL BE PAINTED IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.
5. ALL CURB AND GUTTER SHALL BE B612 UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.
7. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
8. GOPHER STATE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED UTILITIES. 1-800-252-1166.

**PROPOSED SITE LEGEND**

- LIGHT DUTY BITUMINOUS PAVEMENT
- POROUS BITUMINOUS PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- CURB AND GUTTER
- TIPPED CURB AND GUTTER
- PAINTED DIRECTIONAL ARROW
- PAINTED ACCESSIBLE PARKING SYMBOL

**PROPERTY INFORMATION**

TOTAL PROPERTY AREA	1.324 AC
DISTURBED AREA	1.2 ± AC
EXISTING IMPERVIOUS AREA	0.121 AC
PROPOSED IMPERVIOUS AREA	0.934 AC
NET INCREASE IMPERVIOUS AREA	0.813 AC

**PARKING INFORMATION**

PARKING STALLS	41 STALLS
ACCESSIBLE STALLS	2 STALLS
TOTAL STALLS	43 STALLS

**KEY NOTES:**

- ① B612 CURB AND GUTTER
- ② ADA PEDESTRIAN RAMP (SEE DETAILS)
- ③ PARKING STRIPING
- ④ TRASH ENCLOSURE
- ⑤ CONCRETE SIDEWALK
- ⑥ ATM (SEE ARCHITECTURAL)
- ⑦ SITE FURNITURE (SEE ARCHITECTURAL)
- ⑧ REPLACE CONCRETE SIDEWALK, CURB, AND BITUMINOUS PAVEMENT AS NEEDED FOR UTILITY CONNECTIONS
- ⑨ 7" STEP AT STOOP EDGE
- ⑩ 8' WIDE CURB CUT
- ⑪ SPLASH BLOCK FOR ROOF DRAINS

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.

PRINTED NAME: JEREMY E. ANDERSON  
DATE: 07/29/22 LICENSE #: 44223

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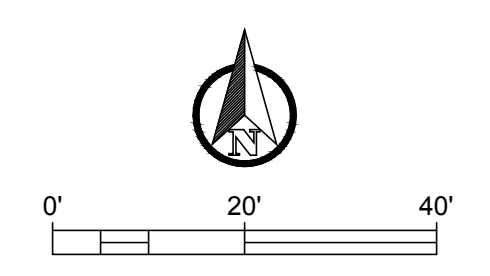
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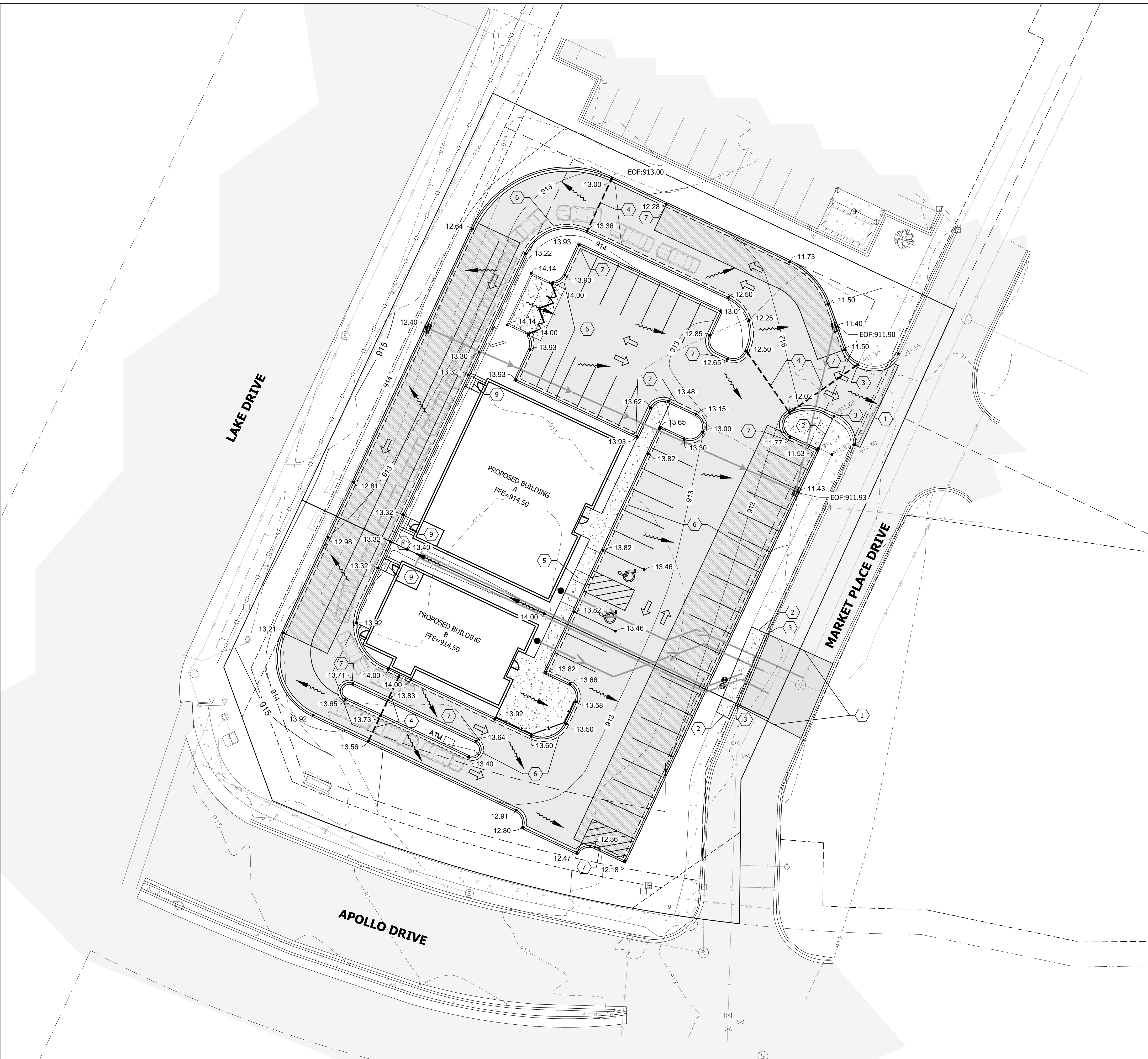
NO.	DATE	DESCRIPTION

**SITE PLAN**

DRAWING NO.

**C201**





- NOTES:**
1. THE LOCATIONS AND ELEVATIONS OF THE EXISTING UTILITIES SHOWN HEREIN ARE APPROXIMATE. THEY HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND/ OR RECORDS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING LOCATION AND ELEVATION TO ENSURE THAT ANY EXISTING UTILITIES (SHOWN OR NOT SHOWN) ARE NOT DAMAGED DURING CONSTRUCTION.
  2. SIDEWALKS SHALL MEET ADA REQUIREMENTS, AND SHALL NOT EXCEED 2.00% CROSS SLOPE, OR 5.00% LONGITUDINAL SLOPE.
  3. CONCRETE ENTRANCES AND APPROACHES SHALL NOT EXCEED 2.00% CROSS SLOPE IN SIDEWALK AREAS.
  4. ACCESSIBLE PARKING STALLS SHALL MEET ADA REQUIREMENTS, AND SHALL NOT EXCEED 2.00% CROSS SLOPE IN ALL DIRECTIONS.
  5. PEDESTRIAN RAMPS SHALL MEET ADA REQUIREMENTS.
  6. ALL EXCESS OR WASTE MATERIAL GENERATED AS PART OF CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
  7. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS REGARDING THE DESIGN OF THE STORMWATER MANAGEMENT BMP. THE CONTRACTOR SHALL REVIEW THE STORMWATER BOOK AND COMPLY WITH ALL STATE AND LOCAL REQUIREMENTS.
  8. IN ADDITION TO THESE PLANS, A STORMWATER MANAGEMENT STUDY HAS BEEN PROVIDED. THE STORMWATER MANAGEMENT STUDY INCLUDES ADDITIONAL INFORMATION REGARDING THE DESIGN OF THE STORMWATER MANAGEMENT BMP. THE CONTRACTOR SHALL REVIEW THE STORMWATER BOOK AND COMPLY WITH ALL STATE AND LOCAL REQUIREMENTS.
  9. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
  10. INFILTRATION AREAS SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND STABILIZED. ONLY LOW IMPACT TRACK EQUIPMENT SHALL BE USED WITHIN INFILTRATION AREAS.
  11. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
  12. GOPHER STATE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED UTILITIES. 1-800-252-1166.

- GRADING LEGEND**
- = EXISTING MAJOR CONTOUR
  - - - = EXISTING MINOR CONTOUR
  - 100--- = EXISTING CONTOUR LABEL
  - = PROPOSED MAJOR CONTOUR
  - - - = PROPOSED MINOR CONTOUR
  - 100— = PROPOSED CONTOUR LABEL
  - xxx.xx = EXISTING SPOT ELEVATION\*
  - xx.xx = PROPOSED SPOT ELEVATION\*
  - > = PROPOSED SURFACE FLOW DIRECTION

\*SPOT ELEVATIONS ALONG CURB & GUTTER AND OTHER REVEALS ARE TO FLOWLINE, UNLESS OTHERWISE NOTED.

- KEY NOTES:**
- 1 MATCH INTO EXISTING BITUMINOUS PAVEMENT
  - 2 MATCH INTO EXISTING CONCRETE
  - 3 MATCH INTO EXISTING CURB & GUTTER
  - 4 GRADE BREAK
  - 5 ADA PEDESTRIAN RAMP (SEE DETAILS)
  - 6 TIPPED CURB & GUTTER
  - 7 CURB TRANSITION
  - 8 CONSTRUCT 8" CURB CUT
  - 9 7" STEP AT STOOP EDGE

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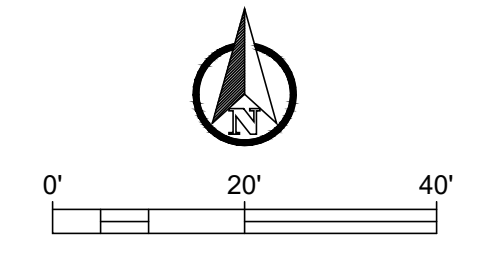
DRAWN BY: RJK  
CHECKED BY: JEA

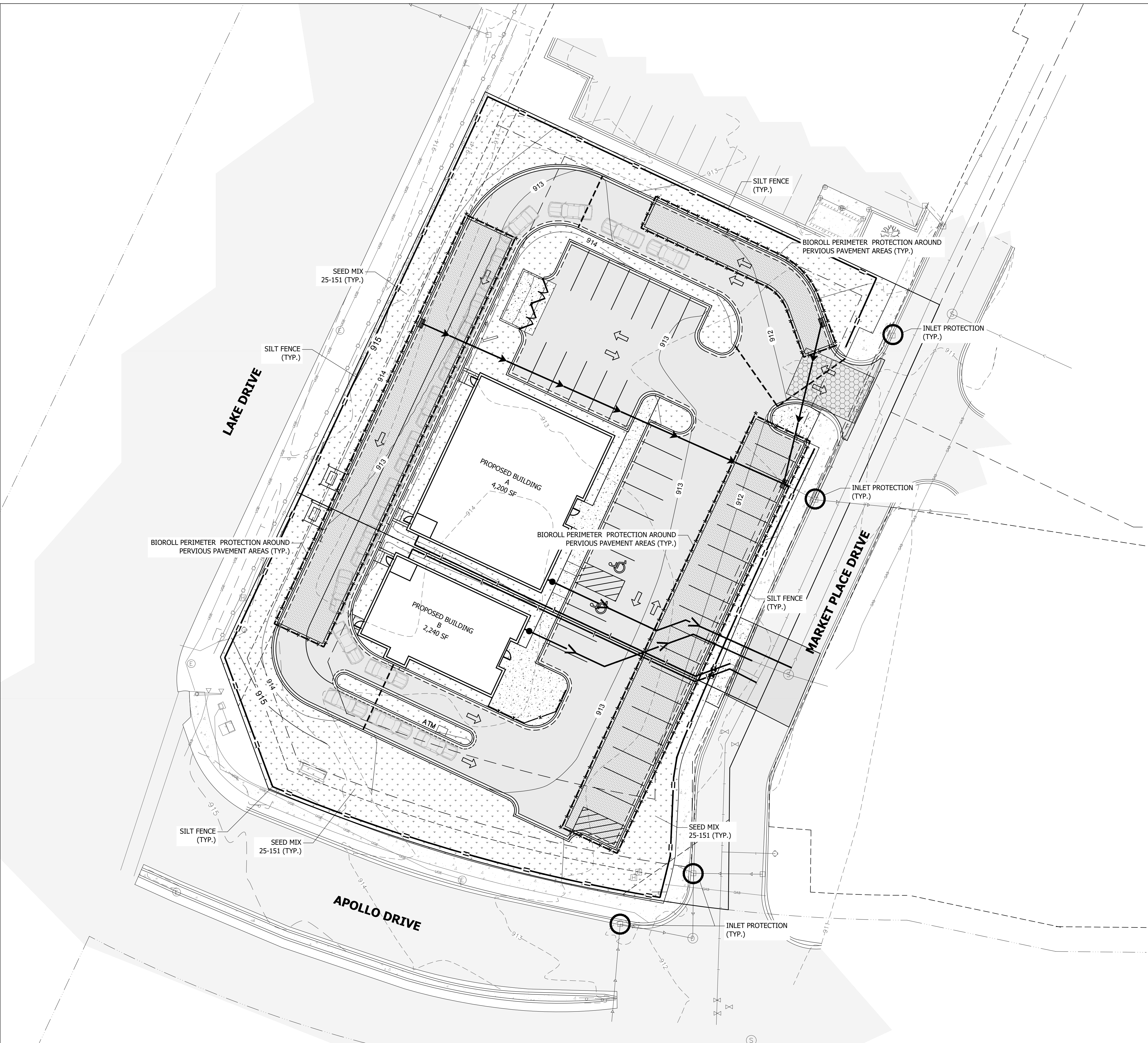
PROJECT NO.: 10921005

NO.	DATE	DESCRIPTION

**GRADING PLAN**

DRAWING NO.  
**C301**





**NOTES:**

1. ALL DISTURBED AREAS SHALL BE FINAL GRADED AND PERMANENTLY STABILIZED WITH THE SEED MIX IDENTIFIED ON PLANS.
2. THE SITE MUST BE STABILIZED PER THE REQUIREMENTS OF THE MPCA, NPDES, MNDOT, AND CITY.
3. INLET PROTECTION SHALL BE PROVIDED ON ALL CATCH BASINS AND INLETS DOWN GRADIENT OF CONSTRUCTION ACTIVITY.
4. PROVIDE SILT FENCE PERIMETER CONTROL DOWN GRADIENT OF ALL CONSTRUCTION ACTIVITY AND TEMPORARY STOCKPILES.
5. TEMPORARY STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
6. NO OFFSITE VEHICLE TRACKING IS PERMITTED. STREETS SHALL BE CLEANED AND SWEEPED WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS.
7. REFER TO THE SWPPP AND THE CITY OF LINO LAKES EROSION CONTROL REQUIREMENTS FOR FURTHER EROSION CONTROL SEQUENCING.
8. IN ADDITION TO THESE PLANS, A STORMWATER MANAGEMENT STUDY HAS BEEN PROVIDED. THE STORMWATER MANAGEMENT STUDY INCLUDES ADDITIONAL INFORMATION REGARDING THE DESIGN OF THE STORMWATER MANAGEMENT BMP. THE CONTRACTOR SHALL REVIEW THE STORMWATER BOOK AND COMPLY WITH ALL STATE AND LOCAL REQUIREMENTS.
9. WHEN INSTALLING END-OF-LINE FLARED END SECTIONS, BRING THE SILT FENCE UP & OVER THE FLARED END SECTIONS & COVER DISTURBED AREAS WITH RIP RAP. THE UPSTREAM FLARED END SECTIONS SHALL HAVE WOOD FIBER BLANKET INSTALLED ON THE DISTURBED SOILS.
10. INFILTRATION AREAS SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND STABILIZED. ONLY LOW IMPACT TRACK EQUIPMENT SHALL BE USED WITHIN INFILTRATION AREAS.
11. GOPHER STATE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED UTILITIES. 1-800-252-1166.

**EROSION CONTROL QUANTITIES:**

	STABILIZED CONSTRUCTION EXIT	(1 EA)
	SILT FENCE	(870 LF)
	BIOROLL	(1,040 LF)
	MNDOT SEED MIX 25-151	(0.40 AC)
	INLET PROTECTION	(4 EA)

NOTE: QUANTITIES SHOWN ARE FOR SWPPP PLAN, AND ARE NOT FOR BIDDING PURPOSES.

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PRINTED NAME: JEREMY E. ANDERSON  
DATE: 07/29/22 LICENSE #: 44223

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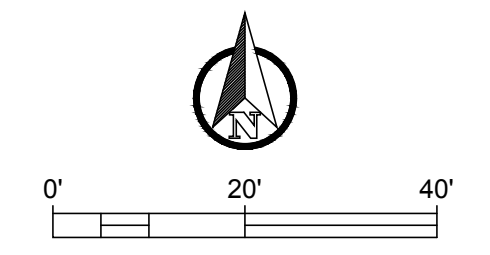
PROJECT NO.: 10921005

NO.	DATE	DESCRIPTION

**EROSION  
CONTROL PLAN**

DRAWING NO.

**C501**







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 SIGNATURE: *Joseph L. Scheffler*  
 JOSEPH L. SCHEFFLER

License #: 55597  
 Date: 08-10-2022

PROJECT MANAGER

LOUIE

DRAWN BY

J + L

PROJECT NAME

APOLLO DRIVE  
 RETAIL

LINO LAKES  
 MINNESOTA

ISSUE LOG

08-10-2022 REVIEW

PROJECT NUMBER  
 22-08-01

SHEET TITLE

**LANDSCAPE  
 PLAN**

SHEET NUMBER

**L101**

**LANDSCAPE REQUIREMENTS**

- CANOPY COVER SF REQUIRED = 40% OF VEHICULAR HARDSCAPE SF
  - 27,347 SF VEHICULAR SF = 10,939 SF OF CANOPY COVER REQUIRED
  - 12,000 SF CANOPY COVER PROVIDED
- FOUNDATION PLANTINGS = 2 LARGE TREES & 6 LARGE SHRUBS PER 100 LF OF STREET FACING FOUNDATION
  - 354 LF FOUNDATION = 7 LARGE TREES & 21 LARGE SHRUBS REQUIRED
  - 1 LARGE & 9 MEDIUM TREES PROVIDED (7 TOTAL) - 9 MEDIUM ADDED TO NORTH OPEN SPACE AREA
  - 15 LARGE & 23 MEDIUM SHRUBS PROVIDED (30.34 LARGE SHRUBS)
- OPEN SPACE PLANTINGS = 2 LARGE TREES & 3 LARGE SHRUBS PER 2,000 SF OPEN SPACE
  - 13,149 SF OPEN SPACE = 13 LARGE TREES & 20 LARGE SHRUBS REQUIRED
  - 7 LARGE & 9 MEDIUM TREES PROVIDED (13 TREES TOTAL)
  - 35 MEDIUM SHRUBS PROVIDED (23.34 LARGE SHRUBS)
- BUFFER YARD = 30" TALL CONTINUOUS BUFFER BETWEEN SIDEWALK AND PUBLIC ROW & 1 LARGE TREE FOR EVERY 50 FT OF BUFFER
  - 640 LF OF BUFFER = 13 TREES REQUIRED
  - 13 TREES PROVIDED & BUFFER

**NOTES:**

- OBTAIN ALL NECESSARY PERMITS FOR PLANTING IN ALL R.O.W. AND VERIFY ALL UTILITIES WHICH MAY EFFECT THEIR WORK.
- COMPLETE WORK PER OWNERS CONSTRUCTION SCHEDULE AND COORDINATE WORK WITH OTHERS ON SITE.
- ALL PLANT MATERIALS TO BE GUARANTEED ONE (1) FULL YEAR FROM THE COMPLETION AND ACCEPTANCE BY OWNER, WITH ONE TIME REPLACEMENT AT APPROPRIATE TIME
- REPLACEMENT TOPSOIL (WHEN REQUIRED) SHOULD BE CLEAN, FREE OF DEBRIS, ROCKS AND WEEDS.
- VERIFY TOPSOIL DEPTH AND NOTIFY OWNER OF ANY DEFICIENCY.
- SOD TO BE A KENTUCKY BLUEGRASS SEED VARIETY. NO GUARANTEE ON SOD EXCEPT SOD THAT IS NOT ACCEPTABLE AT TIME OF COMPLETION. STAKE SOD ON SLOPES 3:1 AND GREATER.
- WHERE EXISTING HARDSCAPE AREAS ARE TO BE REPLACED WITH LANDSCAPING, PROVISIONS SHOULD BE TAKEN TO COORDINATE EXCAVATION OF SUBSOIL TO A DEPTH OF 6" WITH GRADING CONTRACTOR. REPLACE WITH COMPACTED TOPSOIL. ALL AREAS TO BE LANDSCAPED AND SODDED SHALL BE GRADED SMOOTH AND EVEN.
- SOD ALL AREAS WHICH ARE DISTURBED BY CONSTRUCTION INCLUDING ALL R.O.W. AND ADJACENT PROPERTIES.
- PROVIDE BLANKET ON ALL SEEDED AREAS THAT ARE SLOPED. MULCH APPLICATION FOR ALL OTHER SEEDED AREAS SHALL BE HYDROMULCH OR DISCED STRAW DEPENDING ON SEED TYPE.
- INSTALL BLACK VINYL EDGING AROUND ALL PLANTING BEDS AS SHOWN ON PLAN.
- MULCH TO BE FINELY SHREDDED, UNDYED, HARDWOOD ORGANIC MULCH INSTALLED TO 4" DEPTH.
  - NO WEED FABRIC BARRIER BENEATH ORGANIC MULCHES.
  - NO EDGING AROUND TREES OUTSIDE OF SHRUB BEDS.
- ROCK MULCH SHALL BE 1-1/2" DIAMETER BUFF LIMESTONE ROCK INSTALLED TO 3" DEPTH WITH APPROVED WEED FABRIC BARRIER.
- INSTALL IRRIGATION SYSTEM PER IRRIGATION PLAN. IRRIGATION DESIGN SHOULD ENCOMPASS ALL LANDSCAPE AREAS WITH SOD AND PLANTINGS. R.O.W. TO BE IRRIGATED FROM SPRINKLER HEADS LOCATED WITHIN PROPERTY BOUNDARY. MINIMIZE OVER SPRAY.
- COORDINATE INSTALLATION OF ALL PVC SLEEVES UNDER DRIVE AREAS WITH GENERAL CONTRACTOR.
- CLEAN ALL PAVEMENT AREAS AFTER ALL LANDSCAPE INSTALLATION IS COMPLETE AND ACCEPTED BY OWNER, DAILY CLEANING TO BE COMPLETED IF REQUIRED BY THE MUNICIPALITY.

**LANDSCAPE PLANT LEGEND**

**DECIDUOUS TREES**

SY	4	<b>EXCLAMATION! SYCAMORE</b> <i>Platanus x acerifolia 'Morton Circle'</i>	2.5" CAL.	B&B	60'H x 45'W
CH	4	<b>COMMON HACKBERRY</b> <i>Celtis occidentalis</i>	2.5" CAL.	B&B	50'H x 50'W
NM	5	<b>NORTHWOOD MAPLE</b> <i>Acer rubrum 'Northwood'</i>	2.5" CAL.	B&B	50'H x 35'W
SL	4	<b>SKYLINE HONEYLOCUST</b> <i>Gleditsia tricanthos var. inermis 'Skycole'</i>	2.5" CAL.	B&B	50'H x 30'W
BL	7	<b>BOULEVARD LINDEN</b> <i>Tilia americana 'Boulevard'</i>	2.5" CAL.	B&B	50'H x 25'W

**EVERGREEN TREES**

SP	7	<b>SCOTCH PINE</b> <i>Pinus sylvestris</i>	6' HT	B&B	40'H x 30'W
LP	9	<b>LIMBER NORTHERN BLUE PINE</b> <i>Pinus flexilis 'Northern Blue'</i>	6' HT	B&B	25'H x 10'W
SS	9	<b>SWISS STONE ALGONQUIN PILLAR</b> <i>Pinus cembra 'Algonquin Pillar'</i>	6' HT	B&B	25'H x 10'W
SJ	7	<b>SPARTAN JUNIPER</b> <i>Juniperus chinensis 'Spartan'</i>	4' HT	B&B	15'H x 4'W

**SHRUBS**

AJ	15	<b>AMBER JUBILEE NINEBARK</b> <i>Physocarpus opulifolius 'Jefam'</i>	#2 CONT. POT	6'H x 4'W
AM	10	<b>AUTUMN MAGIC CHOKEBERRY</b> <i>Aronia melanocarpa 'Autumn Magic'</i>	#2 CONT. POT	4'H x 4'W
MJ	57	<b>MANEY JUNIPER</b> <i>Juniperus chinensis 'Maney'</i>	#2 CONT. POT	5'H x 6'W
AF	76	<b>ARCTIC FIRE DOGWOOD</b> <i>Cornus stolonifera 'Farrow'</i>	#2 CONT. POT	5'H x 4'W
GL	15	<b>GRO-LOW FRAGRANT SUMAC</b> <i>Rhus aromatica 'Gro-Low'</i>	#2 CONT. POT	2'H x 8'W

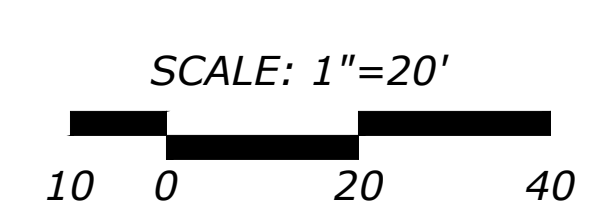
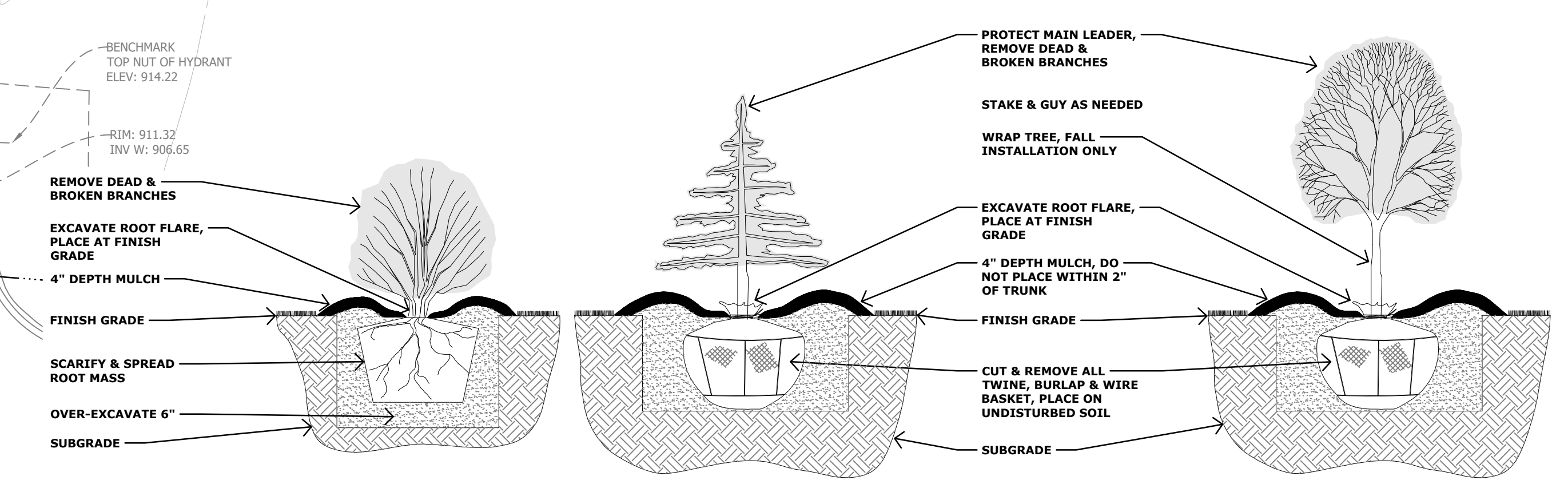
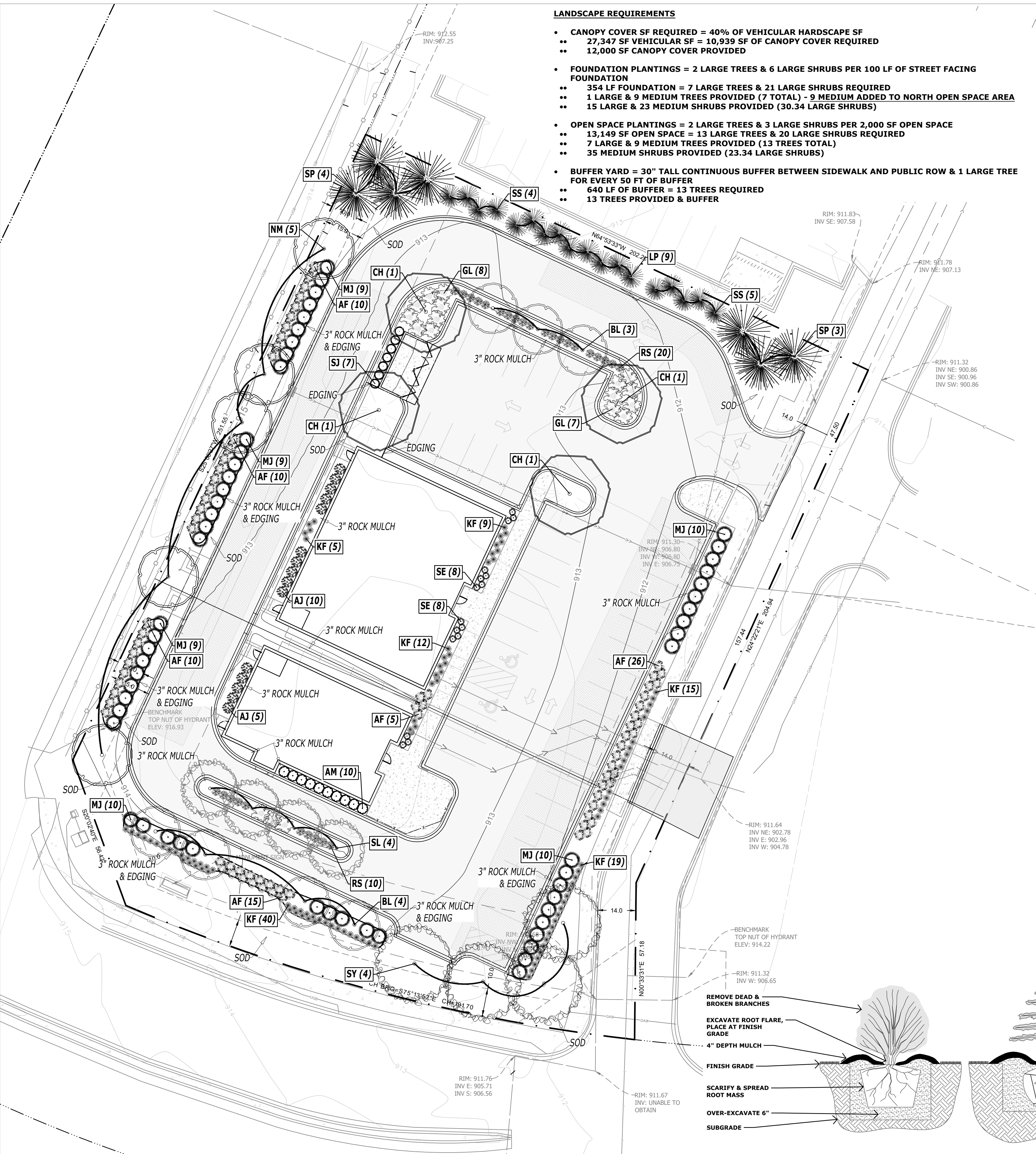
**PERENNIALS**

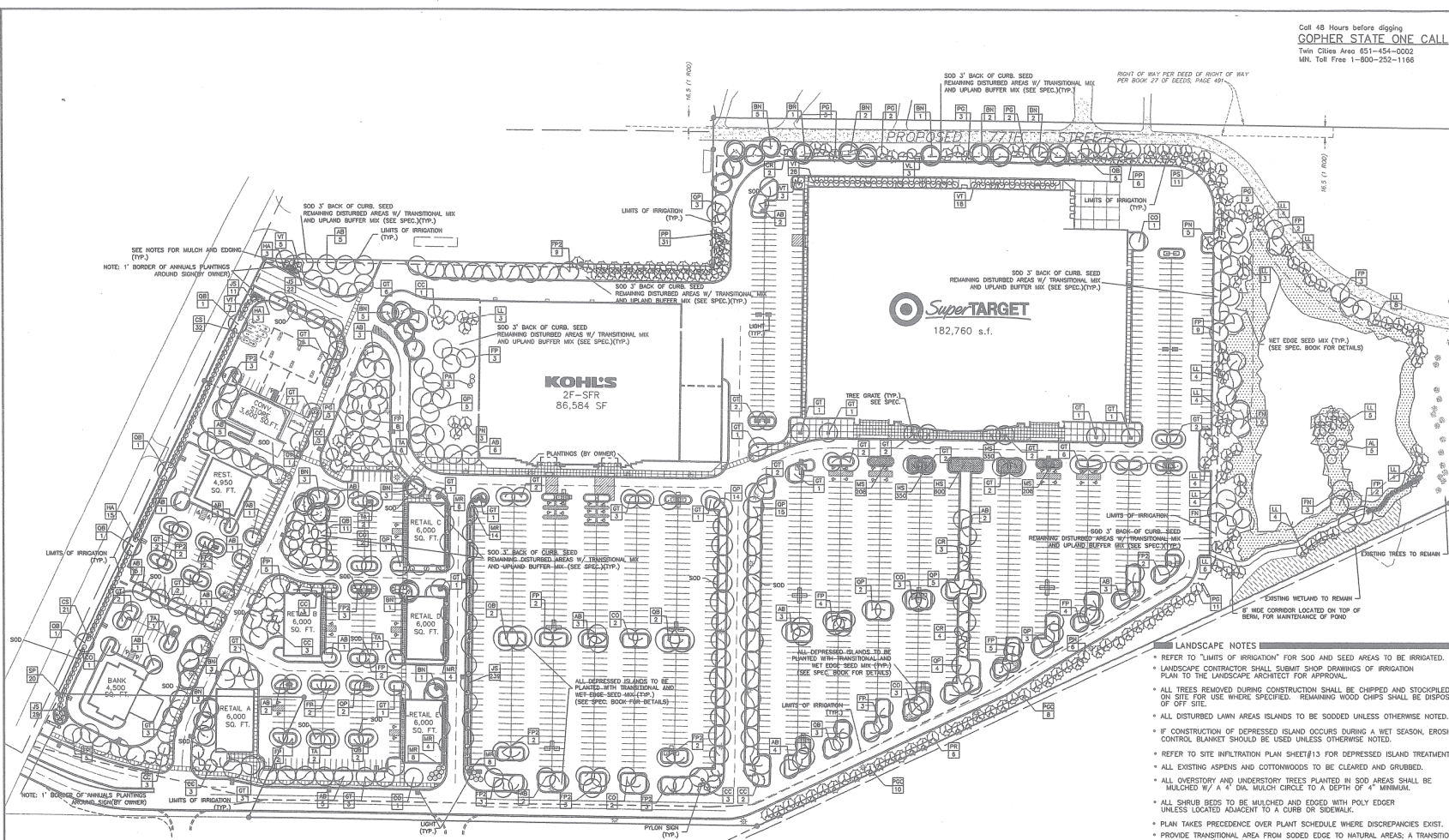
RS	30	<b>RUSSIAN SAGE</b> <i>Salvia yangii</i>	#1 CONT. POT	4'H x 3'W
SE	16	<b>AUTUMN FIRE</b> <i>Sedum x 'Autumn Fire'</i>	#1 CONT. POT	1.5'H x 2'W

**ORNAMENTAL GRASSES**

KF	100	<b>KARL FORESTER FEATHER REED GRASS</b> <i>Calamagrostis x acutiflora 'Karl Forester'</i>	#1 CONT. POT	4'H x 3'W
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EDGING - --- LF  
 ROCK MULCH - --- CY  
 MULCH (TREES/SHRUBS OUTSIDE OF BEDS) - --- CY





**PLANT SCHEDULE**

**DECIDUOUS TREES / SHRUBS**

CODE	QTY	COMMON NAME/LATIN NAME	SIZE	ROOT	REMARKS
AL	5	ALLEGETHUS SERVICEBERRY	1.5'	B&B	CLUMP FORM
AB	57	AMALANCHIER LAUREL	CAL	B&B	STRAIGHT LEADER
BN	32	AMERICAN BLAZE MAPLE	10	B&B	CLUMP FORM
BN	32	ASER FRENCHMAN X AULNIA BLAZE	10	B&B	CLUMP FORM
CC	23	ARJUNIA INDICA	HT	B&B	STRAIGHT LEADER
CC	23	FRONTLASS COCKSPUR HAWTHORN	HT	B&B	STRAIGHT LEADER
CC	23	CATAWBA CRUIS-SMALL VAR. INERMIS	HT	B&B	STRAIGHT LEADER
CO	15	COMMON HAWTHORN	HT	B&B	STRAIGHT LEADER
CR	9	GRAY DOGWOOD (TREE FORM)	1.5'	B&B	STRAIGHT LEADER
CS	53	CONYVA SACROSCA	10	B&B	CLUMP FORM
CS	53	SANTAL DOGWOOD	24	POT	FULL FORM
FP	61	GREEN ASH	HT	B&B	STRAIGHT LEADER
FP	61	FRAXINUS PENNSYLVANICA	HT	B&B	STRAIGHT LEADER
FP	34	MARSHALL'S SEEDLESS ASH	HT	B&B	STRAIGHT LEADER
FN	2	BLACK ASH	HT	B&B	STRAIGHT LEADER
GT	69	SKYLINE HORNSTODUST	HT	B&B	STRAIGHT LEADER
LL	52	LANCASHIRE SKYLINE	HT	B&B	STRAIGHT LEADER
LP	20	LEAFY LARONIA	HT	POT	FULL FORM
LP	20	MISSISSIPPI LARONIA	HT	POT	FULL FORM

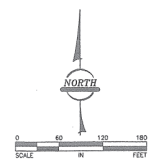
**DECIDUOUS TREES / SHRUBS / ORNAMENTAL GRASSES**

CODE	QTY	COMMON NAME/LATIN NAME	SIZE	ROOT	REMARKS
VI	3	NANNYBERRY VIRGINIANUM	24"	POT	FULL FORM
PA	3	VERNAL INDIGO	HT	B&B	STRAIGHT LEADER
VI	61	AMERICAN PLUM	HT	B&B	STRAIGHT LEADER
VI	61	PRUNUS AMERICANA	HT	B&B	STRAIGHT LEADER
OB	28	AMERICAN CRANBERRY	HT	B&B	STRAIGHT LEADER
OB	28	AMERICAN CRANBERRY	HT	B&B	STRAIGHT LEADER
MR	30	RED HARRON CRAB	HT	B&B	STRAIGHT LEADER
TA	12	IRISAND LINDEN	HT	B&B	STRAIGHT LEADER
HA	21	ANNABELLE HYDRANGEA	24"	POT	FULL FORM
HS	1200	HELEODORON SAPPHIRE	HT	POT	SPACED 2' ON CENTER
MS	416	POINSETTIA CROSS	HT	POT	SPACED 2' ON CENTER

**EVERGREEN TREES / SHRUBS**

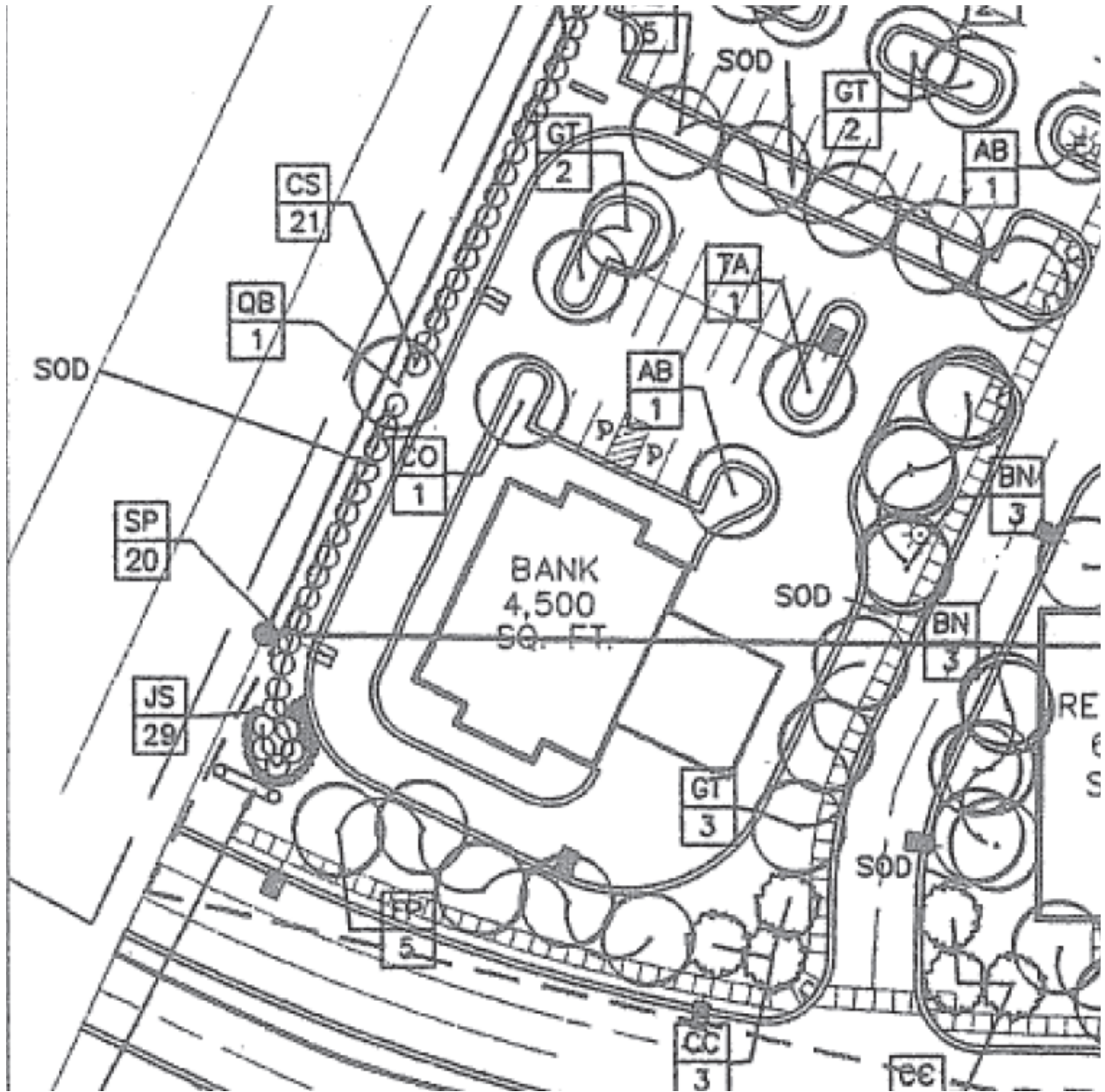
CODE	QTY	COMMON NAME/LATIN NAME	SIZE	ROOT	REMARKS
PD	29	BLACK HILLS SPRUCE	6'	B&B	FULL FORM
PN	14	AUSTRIAN PINE	HT	B&B	FULL FORM
PP	37	COLORADO SPRUCE	HT	B&B	FULL FORM
PK	11	WHITE PINE	HT	B&B	FULL FORM
JK	301	SEA OLEA JUNIPER	HT	POT	FULL FORM
PG	18	BLUE SPICE SPRUCE	6'	B&B	SINGLE LEADER
PR	6	NORWAY SPRUCE	6'	B&B	SINGLE LEADER

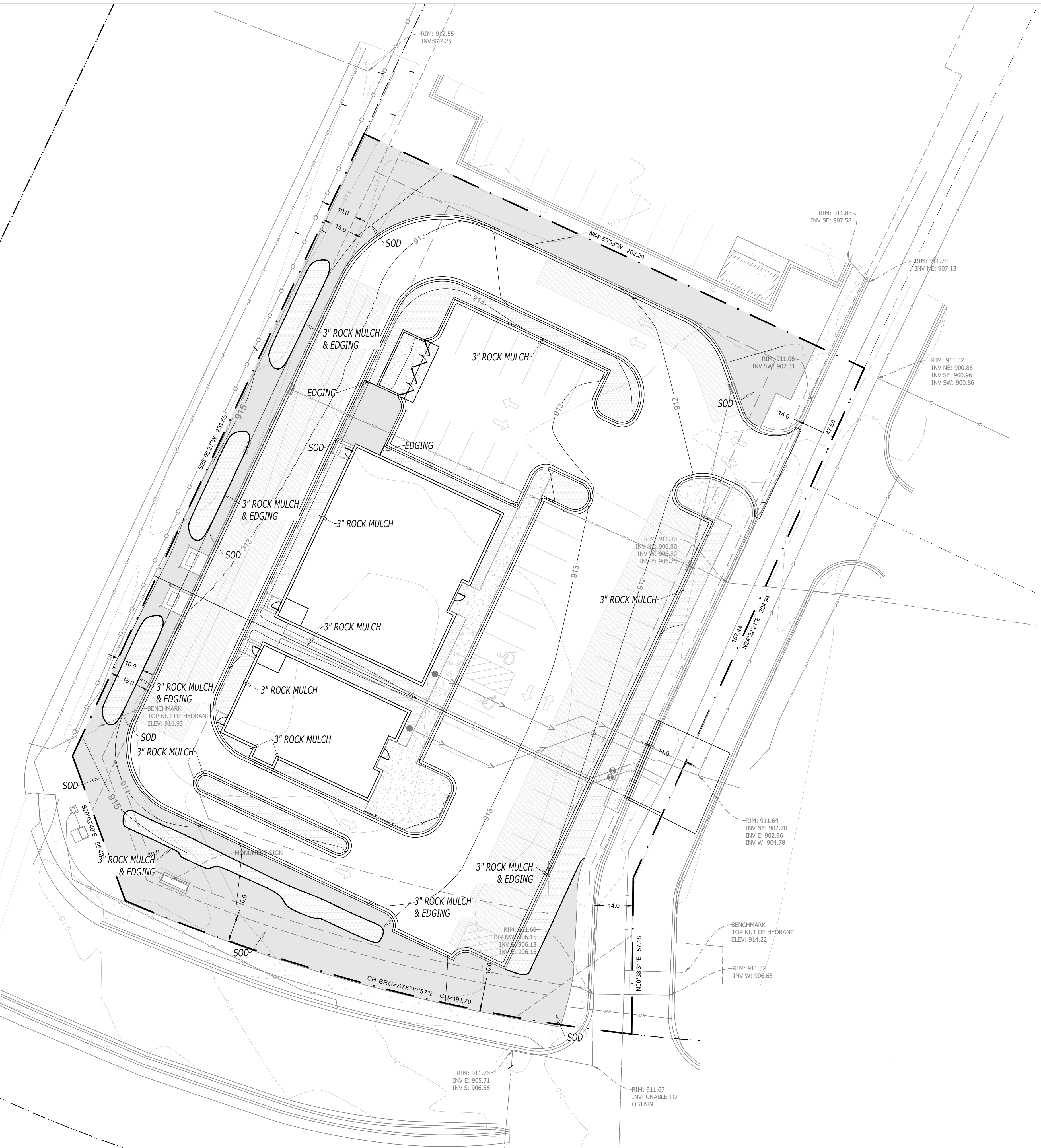
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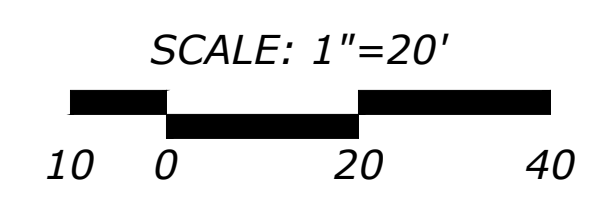
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Close up of 601 Apollo Drive parcel from Master Landscape Plan for Lino Lakes Marketplace, dated 10-04-21.





EDGING - --- LF  
 ROCK MULCH - --- CY  
 MULCH (TREES/SHRUBS OUTSIDE OF BEDS) - 3 CY



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 SIGNATURE: *Joseph L. Scheffler*  
 JOSEPH L. SCHEFFLER

License #: 55597  
 Date: 08-10-2022

PROJECT MANAGER  
 LOUIE  
 DRAWN BY  
 J + L

PROJECT NAME  
 APOLLO DRIVE  
 RETAIL

LINO LAKES  
 MINNESOTA

ISSUE LOG  
 08-10-2022 REVIEW

PROJECT NUMBER  
 22-08-01

SHEET TITLE  
**GROUND  
 COVER  
 PLAN**

SHEET NUMBER  
**L102**