

MEMORANDUM
Comfort Lake-Forest Lake Watershed District

To: Board of Managers

Date: October 20, 2022

From: Mike Kinney

Subject: Permit 22-030 Bottem Landscaping Parking Lot

Background/Discussion

The purpose of this agenda item is for managers to review, discuss, and consider approving permit number 22-030.

Recommended Action

Proposed Motion: Manager _____ moves to approve permit application #22-030 with conditions stated in EOR's October 19, 2022, Permit Application #22-030, City of Wyoming memorandum. Seconded by Manager _____.

Attached:

Emmons & Olivier Resources' Memorandum
Emmons & Olivier Resources' Exhibit

Project	Bottem Landscaping Site Improvements	Date	10-19-2022
To	Mike Kinney	Contact Info	CLFLWD
Cc	Board of Managers	Contact Info	CLFLWD
From	Greg D. Graske, P.E.	Contact Info	EOR
Regarding	Permit Application #22-030, City of Wyoming		

Applicant

LPA LLC
 Attn: Jerry Bottem
 24103 Greenway Road
 Forest Lake, MN 55025
 Phone: 612-363-0864
 bottemlandscaping@gmail.com

Authorized Agent

Dennis Batty & Associates Group
 Attn: Dennis Batty
 22770 Imperial Avenue N
 Forest Lake, MN 55025
 Phone: 612-819-9711
 denn@dennisbatty.com

Project Purpose: The proposed project will construct two building additions along with parking lot expansion on a 1.9 acre site, resulting in 0.9 acres of total impervious cover. The project will disturb 1.3 acres.

Project Location: 24103 Greenway Road, Forest Lake. The site drains to Comfort Lake.

Applicable District Rules: 2.0, 3.0, 4.0, 9.0, 10.0

Recommendation: Approval, with issuance on receipt of the following:

1. Additional permit review deposit of \$250.
2. Execution of a maintenance instrument satisfactory to the CLFLWD addressing the ongoing operation and maintenance of the proposed stormwater management features. The proposed instrument shall be provided to the District for review prior to execution, and documentation of recording with the County must be provided before permit issuance.
3. Financial Assurance in the amount of \$2,600 for grading and alteration.
4. Financial Assurance in the amount of \$13,000 for stormwater management or demonstration that the applicant has provided the municipality with a financial assurance, specific to the stormwater facilities, of equal or greater value.

Stipulations of Permit:

5. Submittal of as-built survey for all stormwater features and pipe.

Rule 2.0: Stormwater Management

The project will consist of the construction of two new building additions, parking lot expansion, and associated stormwater facilities and utilities. The impervious area runoff will be routed to two large biofiltration basins. Pretreatment will be provided by directing runoff over grass filter strips prior to

entering the filtration basins. Runoff under existing and proposed conditions will ultimately be routed to existing roadside ditches.

For redevelopment projects, the required treatment volume of 1.1 inches of runoff from all new and reconstructed impervious surfaces must be captured and treated. Since the project is disturbing more than 50% of the site the existing impervious areas must be treated also. Infiltration is not feasible due to clay soil types. The proposed biofiltration basins requires use of the 0.65 conversion factor for treatment volume. This results in a total required treatment volume of 37,662 CF. The combination of the two underground treatment facilities provides 37,743 CF of treatment volume, therefore meeting the District volume requirements. The majority of the site impervious will be routed to the proposed treatment basins. Some minor areas on the perimeter and portions of the rooftops will sheet flow through green space where suspended solids will be removed from this runoff to the maximum extent practicable.

Construction details for the proposed biofiltration basins has been provided. The soil mix will consist of an 80-10-10 mix of sand-compost-peat to minimize the potential of phosphorous leaching. Construction sequencing notes have been provided indicated that the proposed BMPs will be built concurrently with the work authorized under this permit.

Discharge from the site reduces peak rates compared to existing conditions at all discharge locations, thereby satisfying District Rate Control requirements. A summary table of rates leaving the site is below.

Rate Control Summary

Conditions	2-year	10-year	100-year
Existing (cfs)	2.9	5.3	10.5
Proposed (cfs)	1.4	2.7	7.85

The existing and proposed building low floor elevations meet District freeboard requirements over the proposed biofiltration basins.

Rule 3.0: Erosion Control

The proposed project includes silt fence downstream of graded areas, inlet protection at all catch basins, and two rock construction entrances, revegetation specification, and an implementation schedule. A detailed Storm Water Pollution Prevention Plan (SWPPP) has also been provided.

The District may require the installation of additional sediment control best management practices at a later time, if deemed necessary based on site conditions during construction.

Rule 4.0: Lake, Stream, and Wetland Buffer Requirements

The proposed project does not trigger this rule; a subdivision was not proposed and no municipal rezoning or variance was required for this project.

Rule 5.0: Shoreline and Streambank Alterations

The proposed project does not trigger this rule; a DNR general permit applicable to owners who hold a District permit is not in effect.

Rule 6.0: Watercourse and Basin Crossings

The proposed project does not trigger this rule; no roadways, utilities, or water control structures are proposed in the bed of District waterbodies.

Rule 7.0: Floodplain and Drainage Alterations

The proposed project does not trigger this rule; the City of Wyoming has a state-approved floodplain ordinance.

Rule 8.0: Wetland Management

The proposed project does not trigger this rule; the District is not the LGU for wetland impacts.

Rule 9.0: Fees

The fees required for the proposed project includes the Application fee of \$10 and the permit review and field inspection deposit of \$1,250 for erosion control requirements and \$3,000 for stormwater requirements for a total of \$4,260. The applicant has submitted \$4,010. An addition permit deposit of \$250 is required. The discrepancy is due the change in application for total disturbed area. The original incomplete application indicated that the site disturbance was less than one acre. The updated application and plans indicate that site disturbance will be 1.3 acres.

Rule 10.0: Financial Assurances

The financial assurances required for the proposed project are \$2,600 for grading and alteration and \$13,000 for stormwater management facilities. A financial assurance to CLFLWD for stormwater management facilities is not needed if the applicant demonstrates that the applicant has provided the municipality with a financial assurance, specific to the stormwater facilities, of equal or greater value.

Rule 11.0: Variances

The proposed project does not request a variance.

Submittals Received

The following submittals were received and reviewed as the basis for this permit application review:

1. Application, received August 19, 2022, dated August 23, 2022, prepared by Applicant.
2. Application fee of \$10, received August 19, 2022.
3. Permit review and inspection deposit of \$1,000, received August 19, 2022.
4. Additional permit review and inspection deposit of \$3,000, received September 14, 2022.
5. Aerial photo (with site plan sketch), received August 19, 2022, dated August 17, 2022, prepared by Applicant.

6. Plan Set (5-pages), received September 14, 2022, dated September 13, 2022, prepared by Larson Engineering, Inc.
7. Stormwater Calculations, received September 14, 2022, dated September 8, 2022, prepared by Larson Engineering, Inc.
8. Geotechnical Exploration Report, received September 14, 2022, dated May 6, 2022, prepared by American Engineering Testing.

EROSION CONTROL NOTES

- Owner and Contractor shall obtain MPCA-NPDES permit. Contractor shall be responsible for all fees pertaining to this permit. The SWPPP shall be kept onsite at all times.
- Install temporary erosion control measures (inlet protection, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
- Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional siltation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion. All changes shall be recorded in the SWPPP.
- All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
- The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
- All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
- All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement.
- 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. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
- Pipe outlets must be provided with energy dissipation within 24 hours of connection to surface water.
- All riprap shall be installed with a filter material or soil separation fabric and comply with the Minnesota Department of Transportation Standard Specifications.
- All storm sewers discharging into wetlands or water bodies shall outlet at or below the normal water level of the respective wetland or water body at an elevation where the downstream slope is 1 percent or flatter. The normal water level shall be the invert elevation of the outlet of the wetland or water body.
- All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.
- In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and inlets) the erosion control facilities shall be backed by stabilization structure to protect those facilities from the concentrated flows.

- Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. All inspections shall be recorded in the SWPPP.
- All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. All repairs shall be recorded in the SWPPP.
- If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.
- All soils tracked onto pavement shall be removed daily.
- All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.
- Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
- Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
- Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
- External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine idling is allowed onsite.
- All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter groundwater is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
- All permanent sedimentation basins must be restored to their design condition immediately following stabilization of the site.
- Contractor shall submit Notice of Termination for MPCA-NPDES permit within 30 days after Final Stabilization.

CONSTRUCTION SEQUENCING NOTES

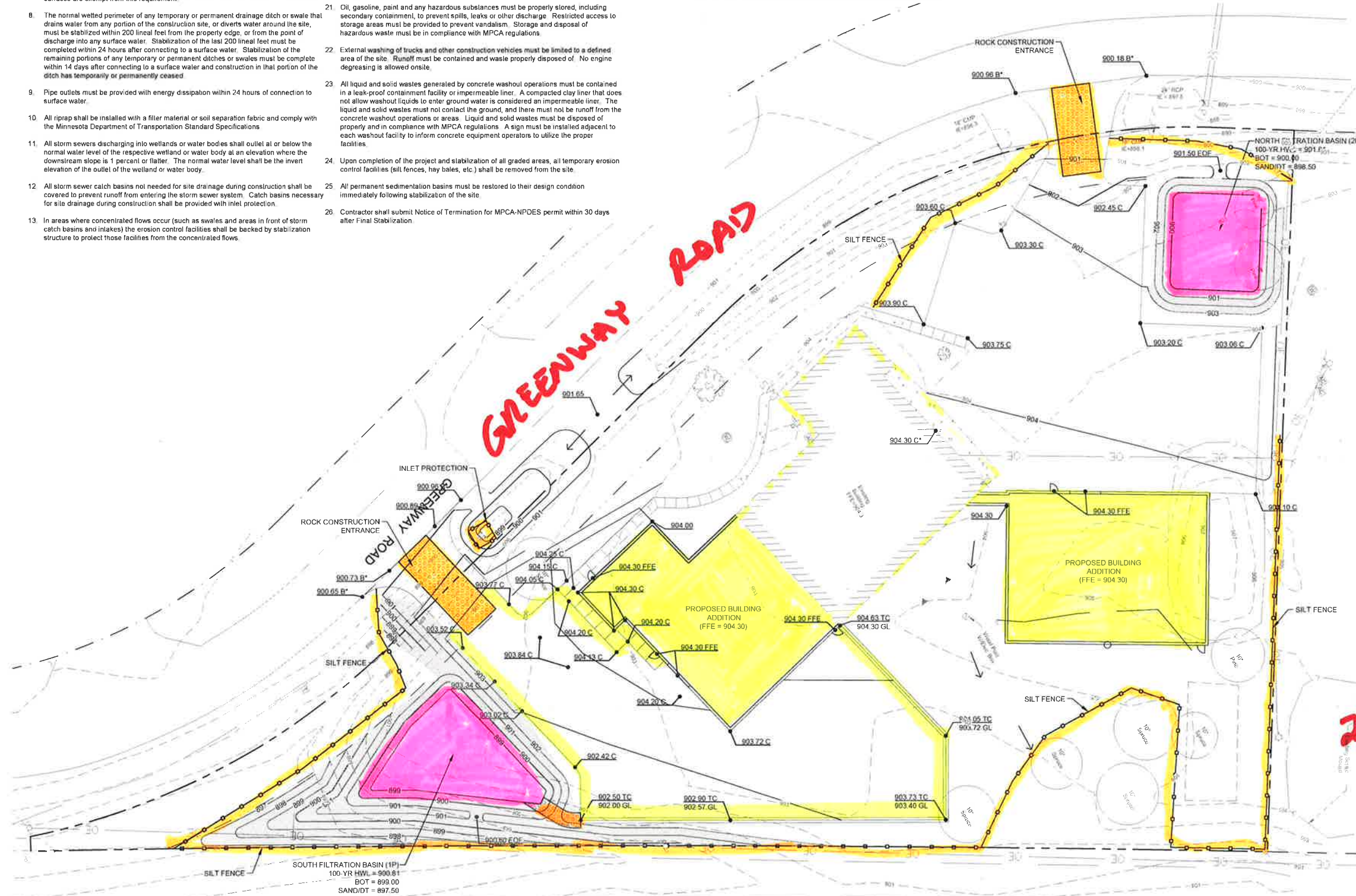
- Stormwater management facilities required for compliance with CLFLWD Rule 2.0 will be constructed concurrent with the work authorized by the permit. The District may use financial assurances in accordance with Rule 10.0 to provide for the timely completion of the facilities or to complete their construction if the approved schedule is not met.
- Install temporary erosion control measures prior to beginning any excavation or demolition work at the site.
- Begin grading of site and construction of ponds and parking lots. Filtration basins to be temporarily graded to 2' above finished bottom elevation, to be used as temporary sediment basins.
- Finalize grades and stabilize all areas disturbed by grading and construction.
- Site is fully stabilized with established vegetation.
- Cleanout of temporary ponds and final grading, stabilization, and planting of filtration basins. Final grading of filtration basins at this point in the construction sequence will include excavation to in-situ soils at specified elevation and backfilling with planting media.
- Filtration basins to be marked and silt fence to be installed around the upland edge of each basin.
- Remove all temporary erosion and sediment control measures after site and basins are fully stabilized and all construction in the contributing drainage areas is complete.

GRADING NOTES

- Tree protection consisting of snow fence or safety fence installed at the dip line shall be in place prior to beginning any grading or demolition work at the site.
- All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
- Grades shown in paved areas represent finish elevation.
- Restore all disturbed areas with 6" of good quality topsoil and seed.
- All construction shall be performed in accordance with state and local standard specifications for construction.

SYMBOL LEGEND

	EXISTING CONTOURS
	PROPOSED CONTOURS - MAJOR INTERVAL
	PROPOSED CONTOURS - MINOR INTERVAL
	GRADE BREAK LINE
	GRADE SLOPE
	SILT FENCE
	RIP-RAP / ROCK CONST. ENTRANCE
	EROSION CONTROL BLANKET AND SEED
	INLET PROTECTION
	CONCRETE WASHOUT STATION
SPOT ABBREVIATIONS:	
TC	TOP OF CURB
GL	GUTTER LINE
B	BITUMINOUS
C	CONCRETE
EO	EMERGENCY OVERFLOW
TW	TOP OF WALL
BW	BOTTOM OF WALL (FB)
(*)	EXISTING TO BE VERIFIED



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PLOT DATE:
10.18.2022
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I hereby certify that this plan, specifications 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.

T.J. Rose, P.E.
Date: 10/18/22 Reg. No.

PRELIMINARY NOT FOR CONSTRUCTION

ADDITION TO
BOTTEM
LANDSCAPING
BUILDING
24108 GREENWAY RD
FOREST LAKE, MN
55025

GRADING AND EROSION CONTROL PLAN

C300