

Applicant: Adam Wilford; UnitedHealth Group
Consultant: Gretchen Schroeder; Westwood Professional Services
Project: Drop-off Access Drive and Site Improvements
Location: 11030 Optum Circle, Eden Prairie
Applicable Rule(s): 4, 5, 11 and 12
Reviewer(s): Louise Heffernan; Barr Engineering Co.

General Background & Comment

The applicant proposes access drive drop-off improvements, construction of a new building entrance, and utility and site improvements at UnitedHealth Group along the west entry of the existing buildings located at 11030 Optum Circle in Eden Prairie. The 68.4-acre site includes multiple parcels under common or related ownership, and the site is comprised of buildings, surface parking lots, access drives, parking ramps, landscaping, site amenities, wetlands, and existing stormwater management facilities.

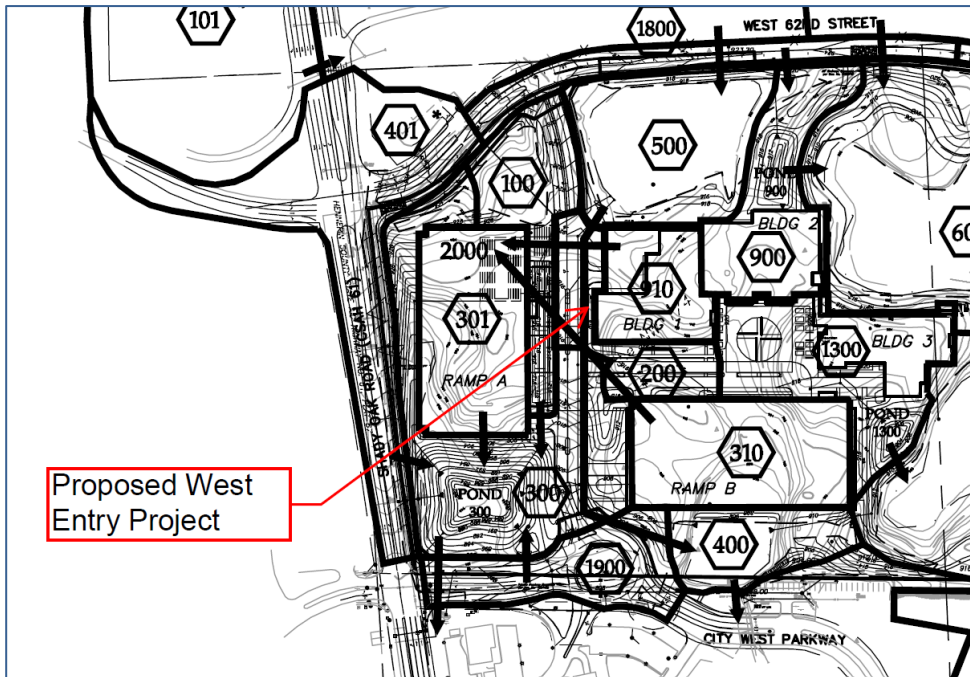
One permit has previously been issued by the NMCWD for work at the site, specifically under NMCWD Permit #2011-065. In accordance with the NMCWD rules at the time of the development, stormwater management was required for the entire site, including the 22.0 acres of post-construction impervious surface permitted under #2011-065.

The current permit application (project), Permit #2024-079, proposes to disturb 0.21 acres of the site. The relevant project information includes:

- Total Site Area: 68.4 acres
- Existing (Post 2011-project) Impervious Area: 22.0 acres
- Total Disturbed Project Area: 0.21 acres
- New (Additional) Site Impervious Area: 0.06 acres
- 0.3% increase in the site impervious area

The project area is shown on Figure 1 below.

Figure 1. Project area.



Review of the project in conformance with the plans and stormwater management plan approved and permitted under Permit #2011-065 is provided in the ***Stormwater Management*** section.

Exhibits Reviewed:

1. Permit Application received May 21, 2024.
2. Plans dated May 3, 2024 (received May 21, 2024), prepared by Westwood Professional Services.
3. Stormwater Management Narrative dated May 21, 2024, prepared by Westwood Professional Services.
4. HydroCAD Modeling Files received June 7, 2024, prepared by Westwood Professional Services.

The application with the submittal items above is complete.

4.0 Stormwater Management

NMCWD's requirements for stormwater management apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b.

The NMCWD's Rule for Redevelopment, Rule 4.2.3, states, if the proposed activity will increase the total impervious surface on the site by 50 percent or more or will disturb 50 percent or more of the existing impervious surface on the site, the stormwater criteria will apply to the entire site. Otherwise, the criteria of section 4.3 will apply only to the disturbed areas, and replaced and net additional impervious surface on the project site. Because one previous project has been permitted since Rule 4.2.5 became effective in 2008, the proposed work

under the current application is considered in aggregate with activities subject to Rule 4.2.5 Common Scheme of Development. The district's approval of Permit #2011-065 for the overall development included site grading and stormwater management, including the construction of several underground stormwater management facilities, basins, and wetlands for stormwater management. Because stormwater management is provided for the existing (post 2011-project) 22.0 acres of impervious surface, stormwater management must be provided for any new (additional) impervious surface under the current application, including the 0.06 acres of new/additional impervious surface.

Stormwater management for compliance with subsection 4.3.1 criteria for the project will be provided by the excess capacity in the existing stormwater management facilities permitted and constructed under Permit #2011-065 to provide rate control, volume retention and water quality management for the newly regulated area. Stormwater runoff from the newly regulated area will be directed from Drainage Area 200 to Infiltration System 2000 under Ramp A and then to Pond 300 as shown on Figure 1 above.

Rule 4.3.1b requires the 2-, 10-, and 100-year post development peak runoff rates be equal to or less than the existing discharge rates for the collection points where stormwater leaves the site. The applicant provided a revised HydroCAD model with the incorporation of the additional 0.06 acres of impervious surface which shows that the proposed project is in conformance with the overall stormwater management plan for the site. The NMCWD engineer agrees that rate control is provided in accordance with Rule 4.3.1b.

A retention volume of 270 cubic feet is required for 1.1 inches from the 2,791 square feet (0.06 acres) of new/additional impervious surface and 0.1 inches from the reconstructed 1,644 square feet (the NMCWD rules at the time of development were based on 1.0 inches from the regulated surface). The excess capacity in the existing facilities will provide the required 270 cubic feet of volume retention for the newly regulated surfaces. According to the Infiltration Memo dated March 1, 2013, included in the stormwater management report dated May 21, 2024, prepared by Westwood Professional Services, the existing facilities onsite have an excess capacity of 1,833 cubic yards of volume retention. Rule 4.3.1a is met.

Rule 4.3.1a (i-ii) requires pretreatment of runoff prior to discharge to an infiltration facility and drawdown of water levels within 48 hours. Compliance with these requirements for the existing systems were evaluated and provided under Permit #2011-065.

The district's water quality criteria require a 60% annual removal efficiency for total phosphorus (TP) and 90% annual removal efficiency for total suspended solids (TSS), Rule 4.3.1c. Compliance with these requirements for the existing systems was evaluated and provided under Permit #2011-065.

Rule 4.5.4d (i) requires at least three feet of separation between the bottom of an infiltration facility and groundwater. Compliance with this requirement for the existing systems was provided with Permit #2011-065.

Rule 4.3.4 states that all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a constructed facility. Additionally, Rule 4.3.4 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can

enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility. Rule 4.3.4 also states that a stormwater management facility must be constructed at an elevation that ensures no adjacent habitable building will be brought into noncompliance with a standard in subsection 4.3.4.

Compliance with this requirement for the existing systems was provided with Permit #2011-065. The revised HydroCAD model submitted indicates that the additional 0.06 acres of impervious surface result in a slight (0.01-ft) increase in the 100-year flood elevation of Pond 300. The changes do not bring the buildings into noncompliance with a standard in subsection 4.3.4. There are no new or reconstructed buildings and no new stormwater management facilities proposed from the current project.

In accordance with Rule 4.3.5, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The district’s requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 5.2.1a and b.

The erosion control plan prepared by Westwood Professional Services includes installation of perimeter erosion control (bioroll and silt fence), inlet protection, and a construction entrance.

The contractor for the project will need to designate a contact who will remain liable to the district for performance under the district’s Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e. NMCWD must be notified if the responsible individual changes during the permit term.

11.0 Fees

Fees for the project are:

Rule 4:	\$1,500
Rule 5:	\$1,500
Total Fees:	\$3,000

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 5: Perimeter Control: 300 L.F. x \$2.50/L.F. =.....	\$750
Inlet Protection: 3 x \$100 =.....	\$300
Site Restoration: 0.21 acres x \$2,500/acre =.....	\$525
Chloride Management	\$5,000
Contingency and Administration	\$725

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project will conform to Rule 5 with the fulfillment of the condition identified below. The project conforms to Rule and 4.
3. The existing stormwater management facility will provide volume retention, rate control, and water quality management in accordance with subsections 4.3.1a-c criteria.

Recommendation

Approval, contingent upon:

Compliance with the General Provisions (attached).

Financial Assurance in the amount of \$7,300; \$2,300 for erosion control and site restoration, \$5,000 for compliance with the chloride management requirements.

The applicant provides a name and contact information for the individual responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit and release of the financial assurance after the project:

The work associated with the parking lot improvements and associated drop-off improvements and site improvements at 11030 Optum Circle in Eden Prairie under the terms of Permit #2024-079 must have an impervious surface area and configuration materially consistent with the approved plans. A design that differs materially from the approved plans will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.

Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that the chloride-management plan has been provided to and approved by the District's Administrator.

NO	DESCRIPTION	DATE
	CD ISSUE	5/03/2024

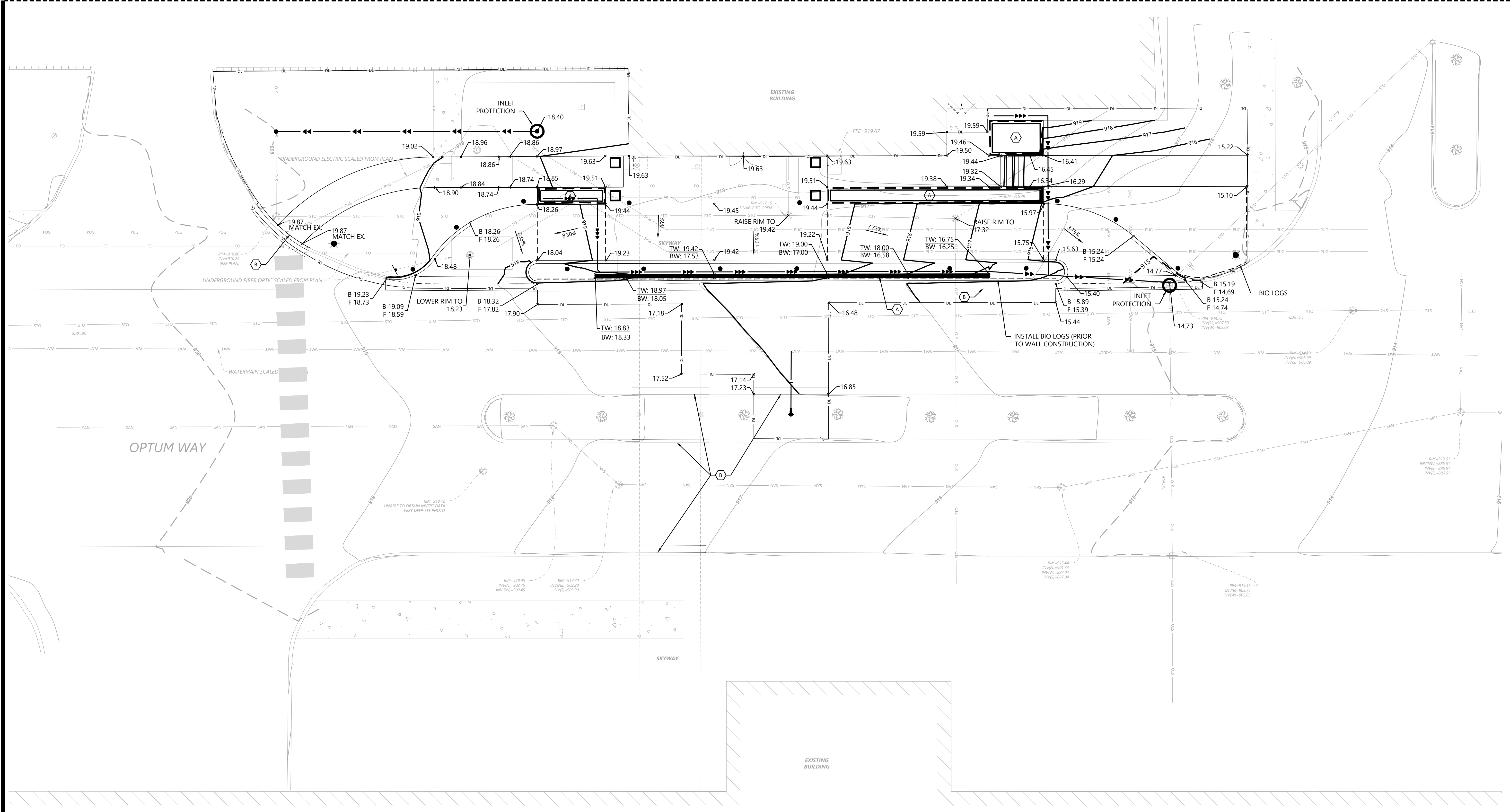
HGA NO. COMMISSION NO.

GRADING AND EROSION CONTROL PLAN

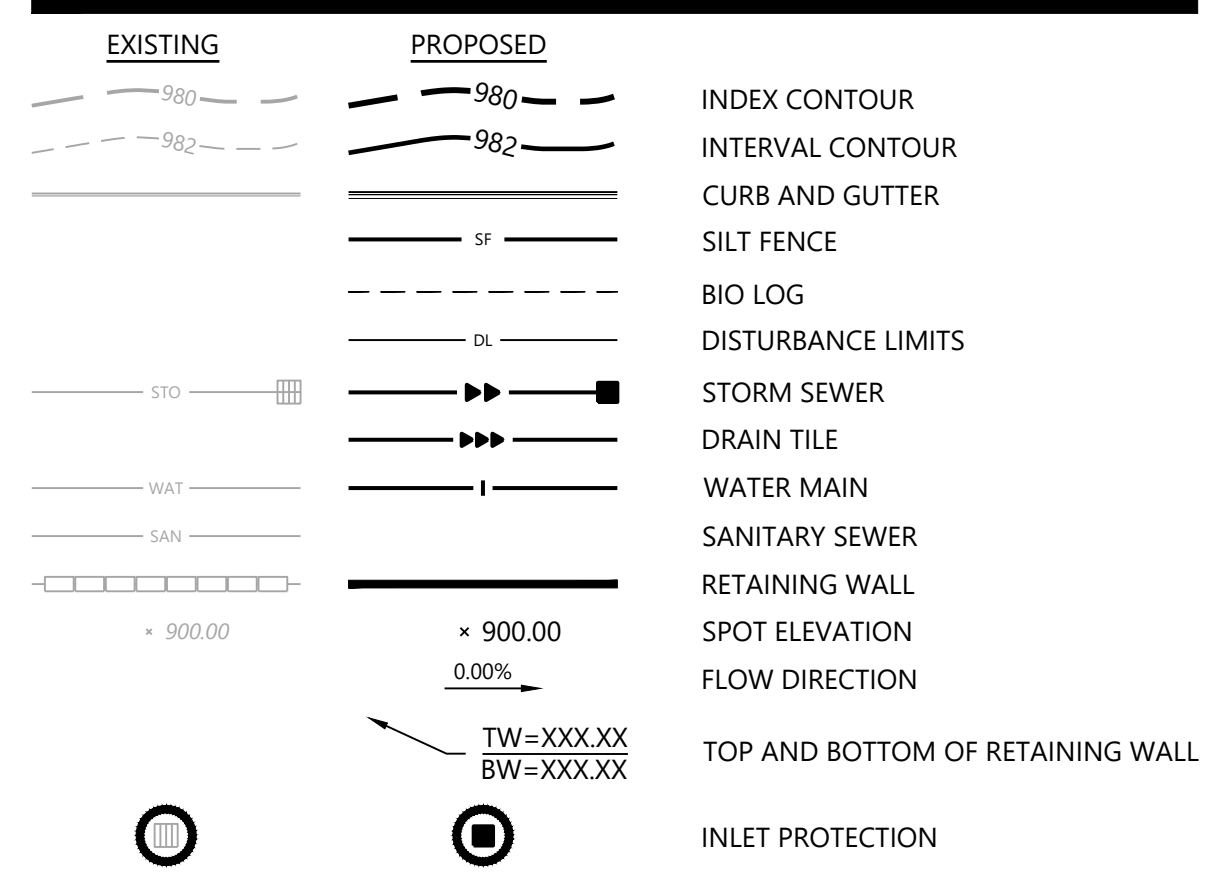
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CONSTRUCTION DOCUMENTS

C300



GRADING AND EROSION CONTROL LEGEND



GRADING NOTES

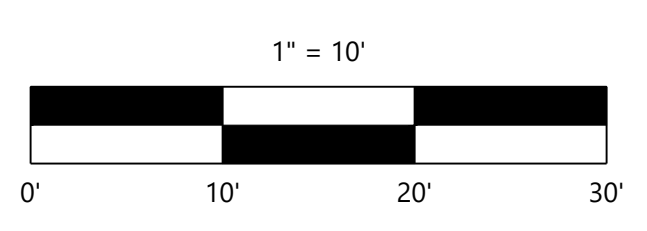
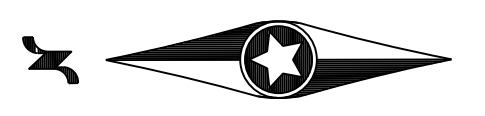
- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- EXISTING FINISHED FLOOR ELEVATION IS 919.67. THIS IS 10" BELOW ORIGINAL BUILDING CONSTRUCTION PLANS DUE TO USING A DIFFERENT SURVEY DATUM.
- CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
- ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SOD. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
- ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
- CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
- SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.**
- SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
- CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
- CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
- ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
- EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
- EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
- ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.

GENERAL EROSION CONTROL NOTES

- ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED. EXISTING SILT FENCE ON-SITE SHALL BE MAINTAINED AND/OR REMOVED AND SHALL BE CONSIDERED INCIDENTAL TO THE GRADING CONTRACT. IT IS OF EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAYBALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- EROSION AND SILTATION CONTROL (ESC): THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL THE EROSION AND SILTATION INCLUDING BUT NOT LIMITED TO: CATCH BASIN INSERTS, CONSTRUCTION ENTRANCES, EROSION CONTROL BLANKET, AND SILT FENCE. ESC SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY DIRECT THE CONTRACTOR'S METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN EVENT. AFFECTED AREAS SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. ALL TEMPORARY EROSION CONTROL SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
- ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A CONSTRUCTION ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
- ALL UNPAVED AREAS ALTERED DUE TO CONSTRUCTION ACTIVITIES MUST BE RESTORED WITH SEED AND MULCH, SOD, EROSION CONTROL BLANKET OR BE HARD SURFACE WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION.
- SITE TO BE STABILIZED PER THE LANDSCAPE PLANS.
- FOR AREAS WITH SLOPE OF 3:1 OR GREATER, RESTORATION WITH SOD OR EROSION CONTROL BLANKET IS REQUIRED.
- ALL TEMPORARY STOCKPILES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP SEDIMENT.
- THE SITE MUST BE KEPT IN A WELL-DRAINED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS REQUIRED TO INSURE PROPER DRAINAGE DURING CONSTRUCTION. LOW POINTS IN ROADWAYS OR BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.

GRADING KEYNOTES

- SEE LANDSCAPE PLANS FOR TOP OF PLANTER AND TOP OF WALL ELEVATIONS. TOP AND BOTTOM OF WALL ELEVATIONS SHOWN HERE INDICATE GROUND SURFACE ELEVATIONS AT EDGE OF WALL.
- MATCH EXISTING PAVED GRADE



CIVIL ENGINEER

WESTWOOD
12701 WHITEWATER DR # 300
MINNETONKA, MN 55343
952.937.5150

LANDSCAPE ARCHITECT

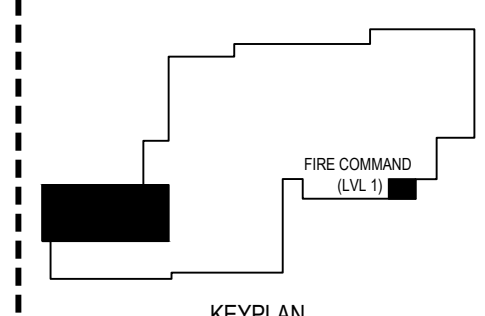
02
115 N WASHINGTON AVE #200
MINNEAPOLIS, MN 55401
612.359.9144

UNITED HEALTH GROUP - WEST ENTRY RENOVATION

6250 OPTUM WAY
EDEN PRAIRIE, MN 55344

UNITEDHEALTH GROUP[®]

Westwood



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

Gretchen Schroeder
NAME: Gretchen Schroeder
DATE: 5/03/2024 LICENSE NO: 43019

NO	DESCRIPTION	DATE
	CD ISSUE	5/03/2024

ISSUANCE HISTORY - THIS SHEET

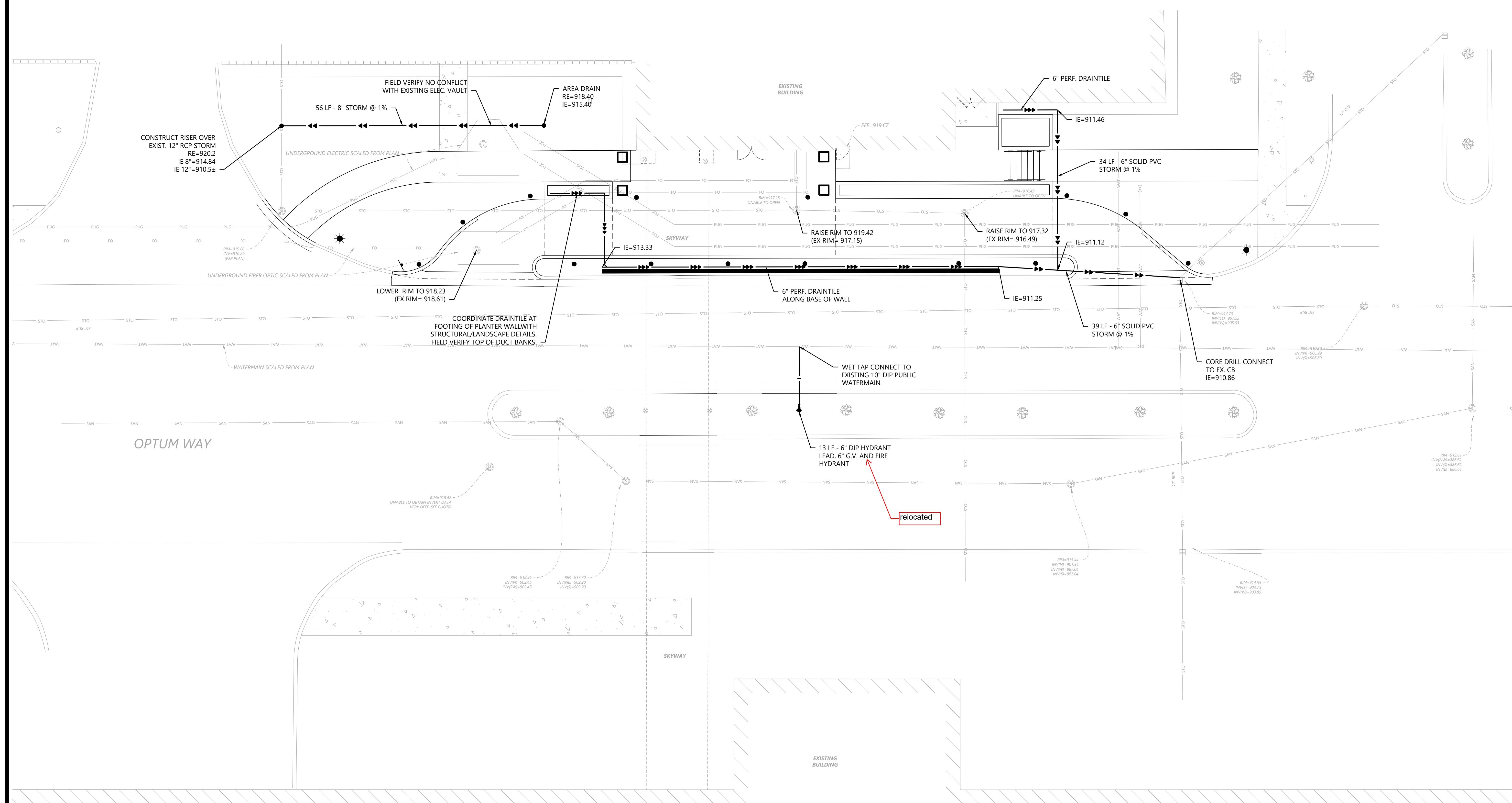
HGA NO: COMMISSION NO:

UTILITY PLAN

DATE: MAY 3, 2024

CONSTRUCTION DOCUMENTS

C500

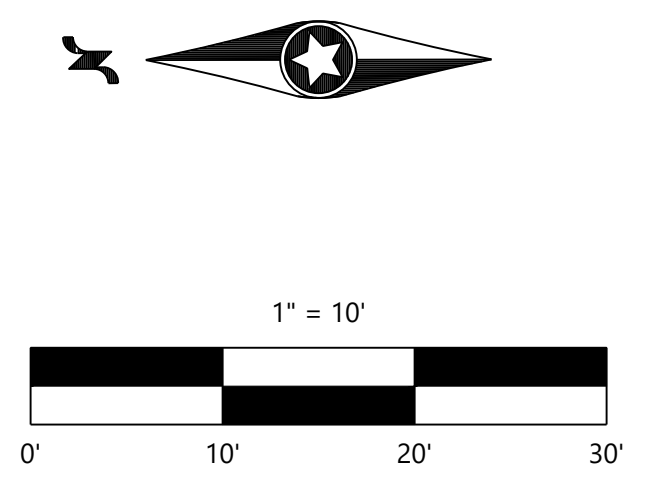


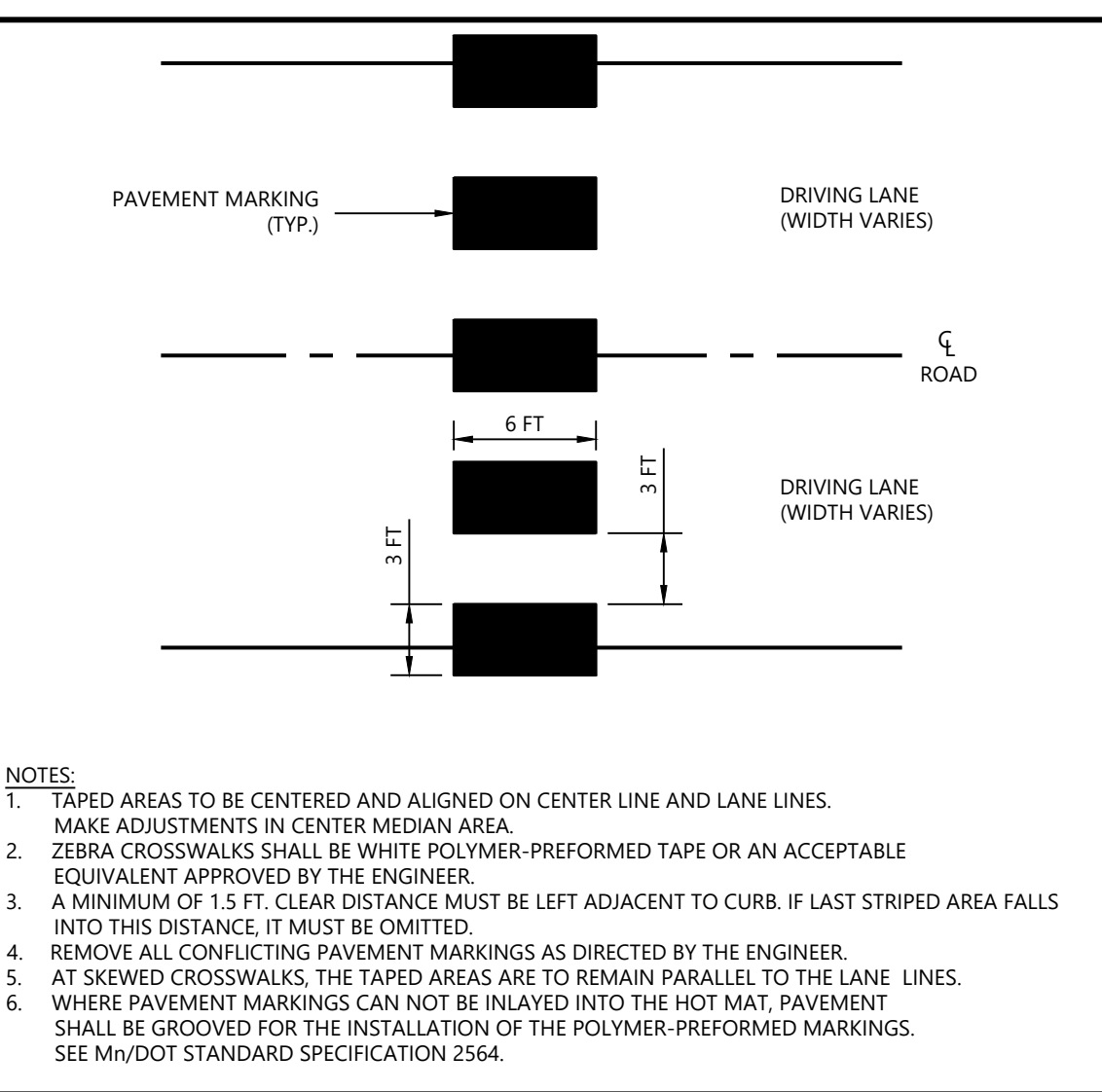
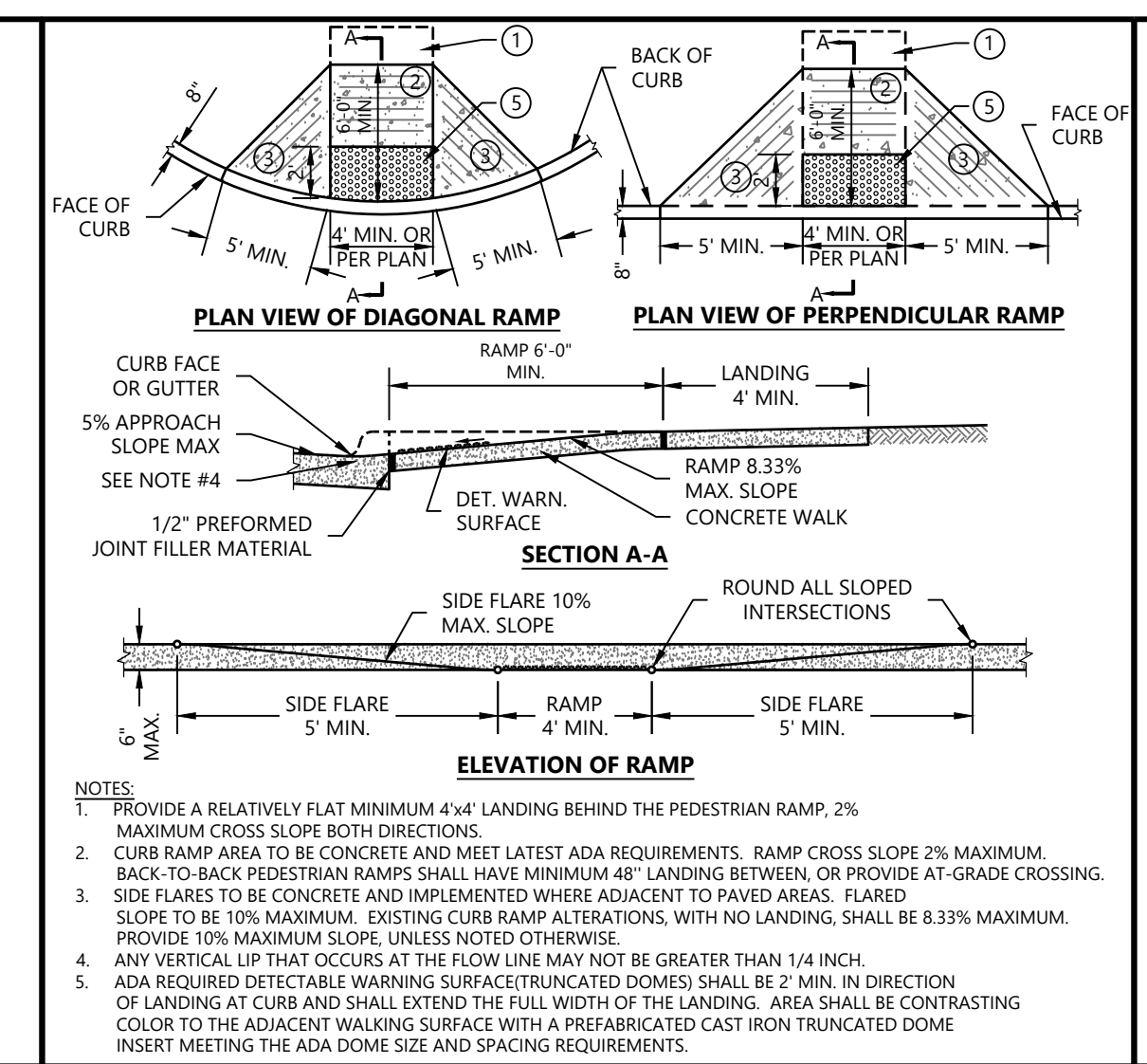
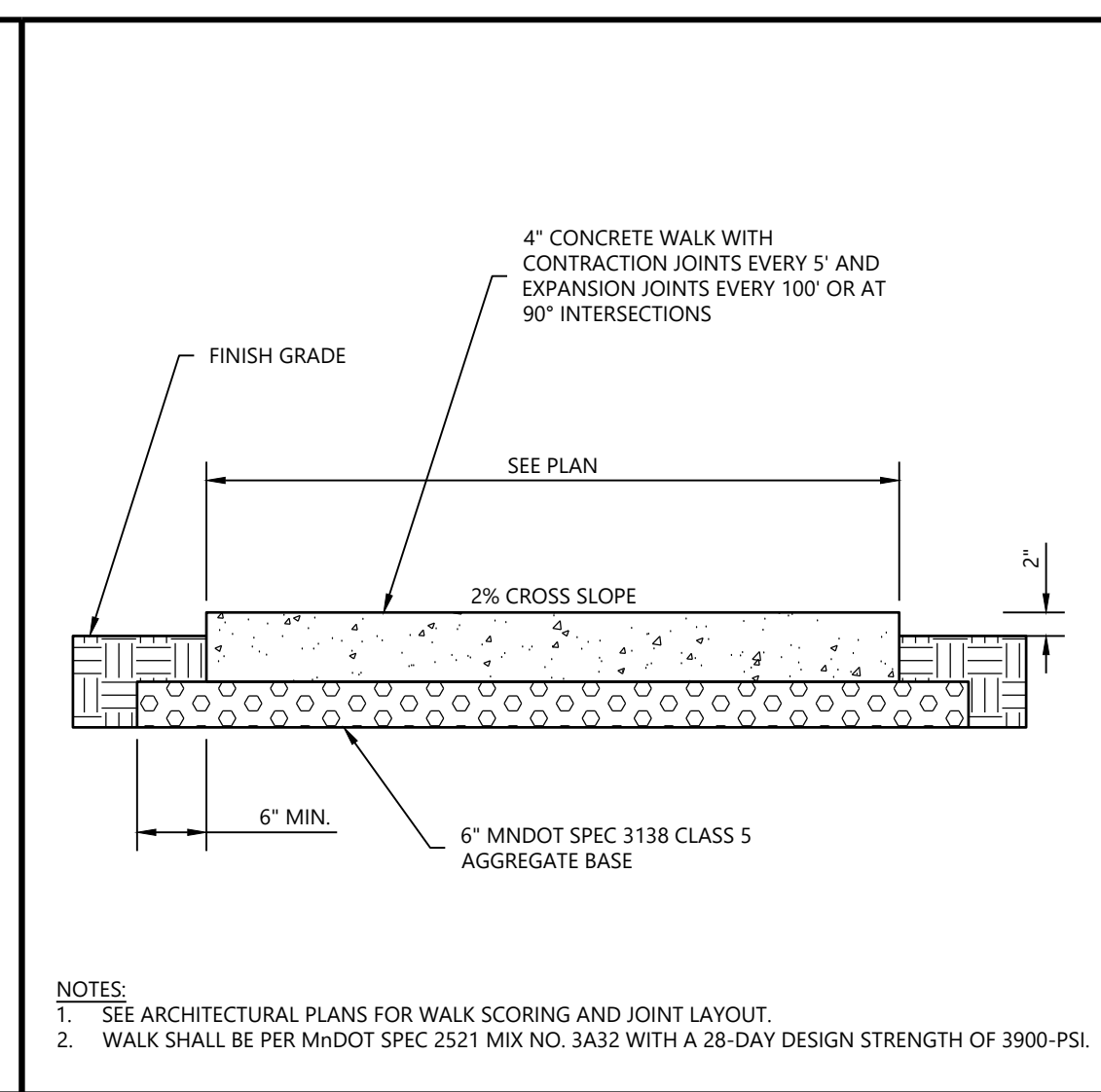
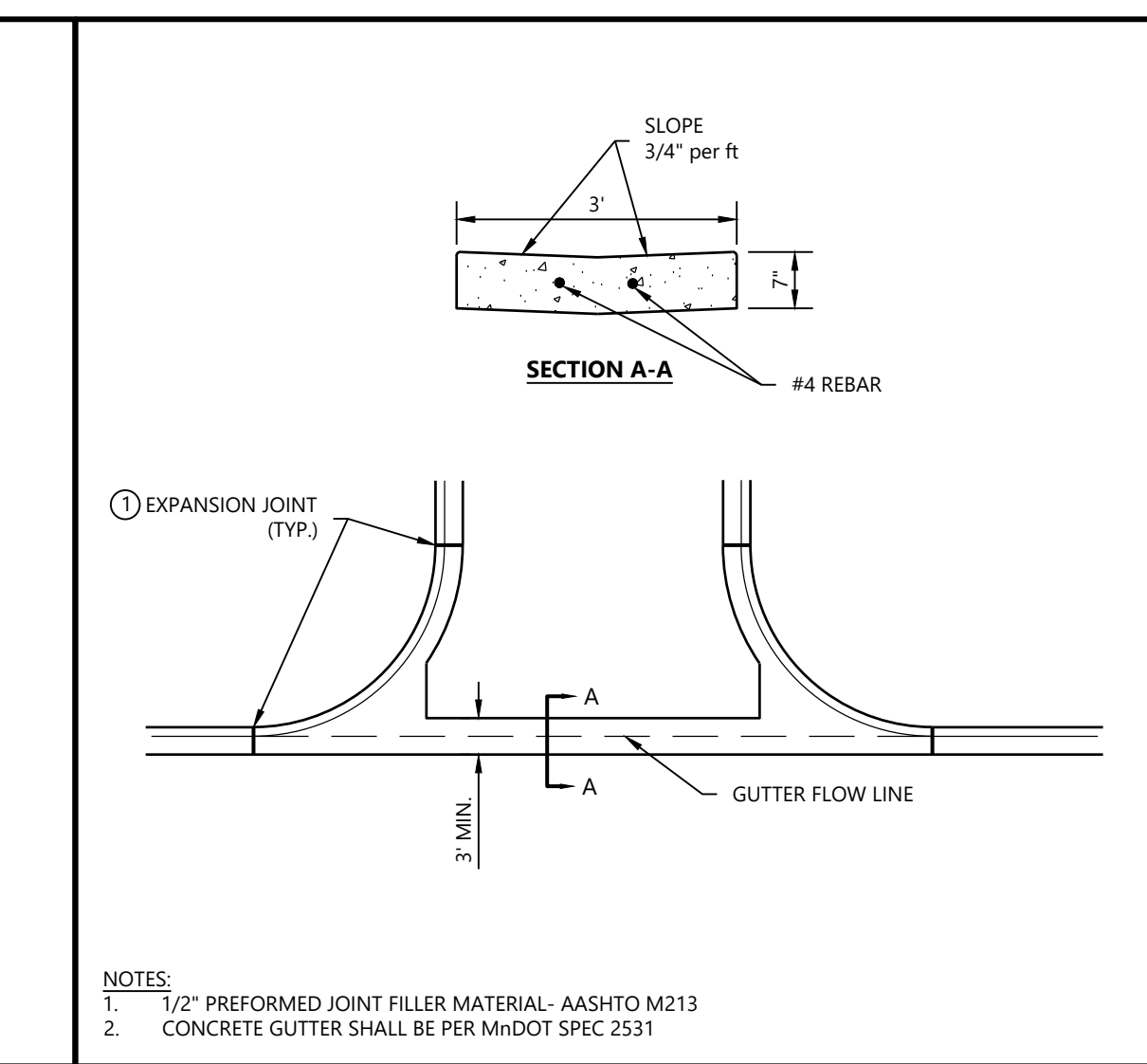
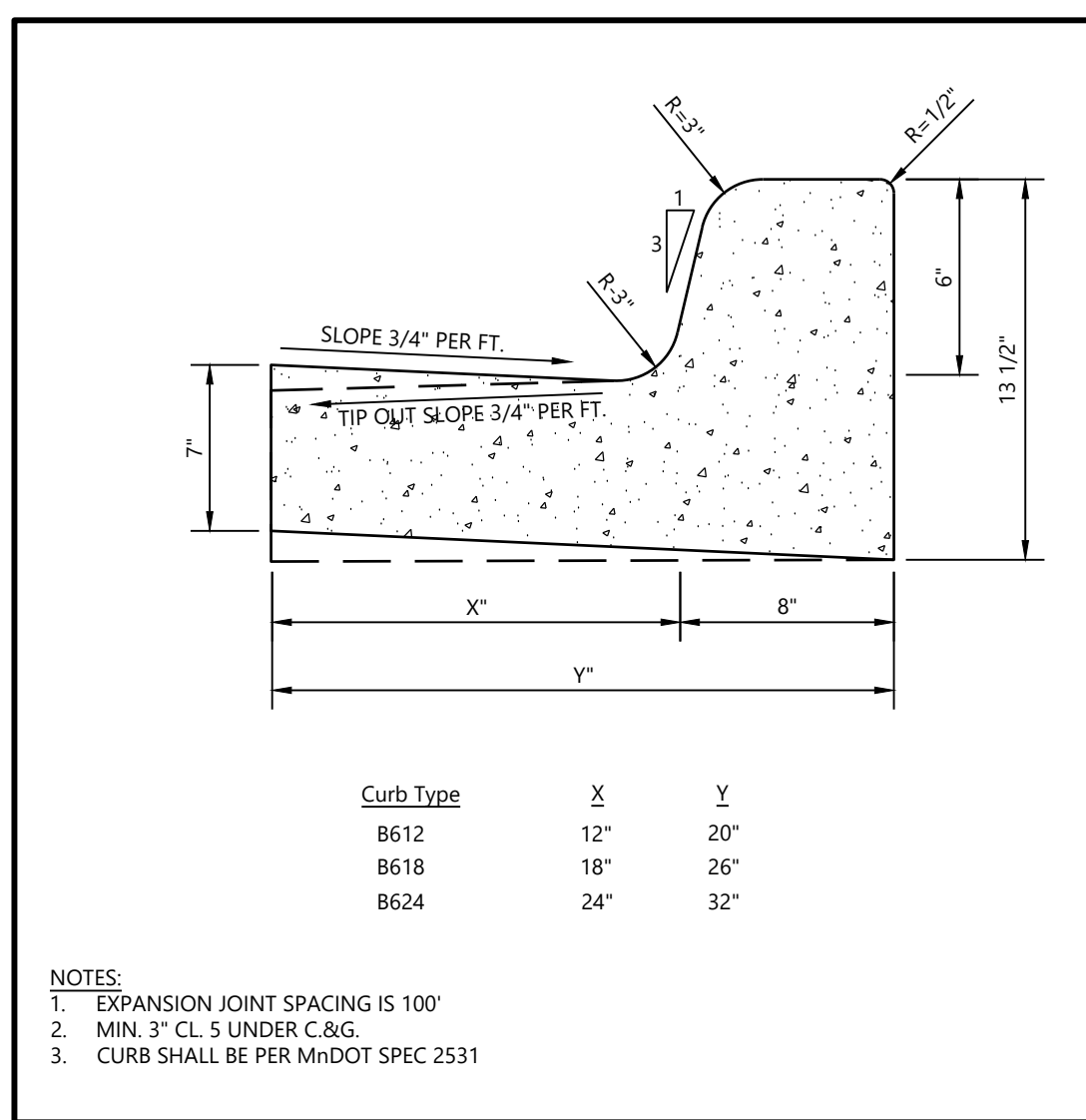
UTILITY LEGEND

EXISTING	PROPOSED	DESCRIPTION
- - - - -	- - - - -	PROPERTY LINE
- - - - -	- - - - -	EASEMENT LINE
- - - - -	- - - - -	CURB AND GUTTER
- - - - -	- - - - -	SANITARY SEWER
- - - - -	- - - - -	STORM SEWER
- - - - -	- - - - -	WATER MAIN
- - - - -	- - - - -	HYDRANT
- - - - -	- - - - -	GAS
- - - - -	- - - - -	UNDERGROUND ELECTRIC
- - - - -	- - - - -	OVERHEAD ELECTRIC
- - - - -	- - - - -	UNDERGROUND TELEPHONE
- - - - -	- - - - -	OVERHEAD TELEPHONE
- - - - -	- - - - -	TELEPHONE FIBER OPTIC
- - - - -	- - - - -	CABLE TELEVISION
- - - - -	- - - - -	DRAIN TILE
- - - - -	- - - - -	GATE VALVE
- - - - -	- - - - -	FLARED END SECTION (WITH RIPRAP)
- - - - -	- - - - -	LIGHT POLE

GENERAL UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
- ALL SANITARY SEWER, STORM SEWER AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING CODE, AND IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF DOORWAYS, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY CONNECTION LOCATIONS.
- ALL PRIVATE LARGE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE LOCAL JURISDICTION AND MINNESOTA PLUMBING CODE. ALL SMALL / DRY UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS, AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
- A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ALL WATER LINE CROSSINGS WITH SANITARY SEWER OR STORM SEWER AND WATER LINES SHALL CROSS ABOVE ANY SEWER. IF THIS IS NOT ACHIEVABLE, SANITARY AND STORM SEWER SHALL BE CONSTRUCTED OF A MATERIAL APPROVED FOR USE WITHIN A BUILDING AND AS LISTED IN TABLE 701.2 OF THE MINNESOTA PLUMBING CODE. THE WATER LINE SHALL NOT HAVE JOINTS OR CONNECTION WITHIN 10-FEET OF THE CROSSING. INSULATE CROSSINGS WITH STORM SEWER.
- DUCTILE IRON WATER LINES SHALL BE CLASS 52, PER AWWA C115 OR C151. COPPER WATER LINES SHALL BE TYPE K PER ASTM 888. PVC WATER LINES SHALL BE PER AWWA C900 AND INSTALLED PER AWWA C605 IF ALLOWED BY CITY.
- ALL WATER LINES SHALL HAVE 8" MINIMUM COVER. INSULATE WATER MAIN IF LESS THAN 8' OF COVER. INSULATION SHALL BE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
- STORM SEWER PIPE:
 - HDPE STORM PIPE 4- TO 10- INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF AASHTO M252. FITTINGS SHALL BE PER ASTM D3212 AND INSTALLED PER ASTM D2321.
 - PVC STORM SEWER PIPE AND FITTINGS SHALL BE SCHEDULE 40 PIPE PER ASTM D2665 AND INSTALLED PER ASTM D2321.
- ALL NONCONDUCTIVE PIPE SHALL BE INSTALLED WITH A LOCATE (TRACER) WIRE PER MINNESOTA PLUMBING CODE 604.10.1.





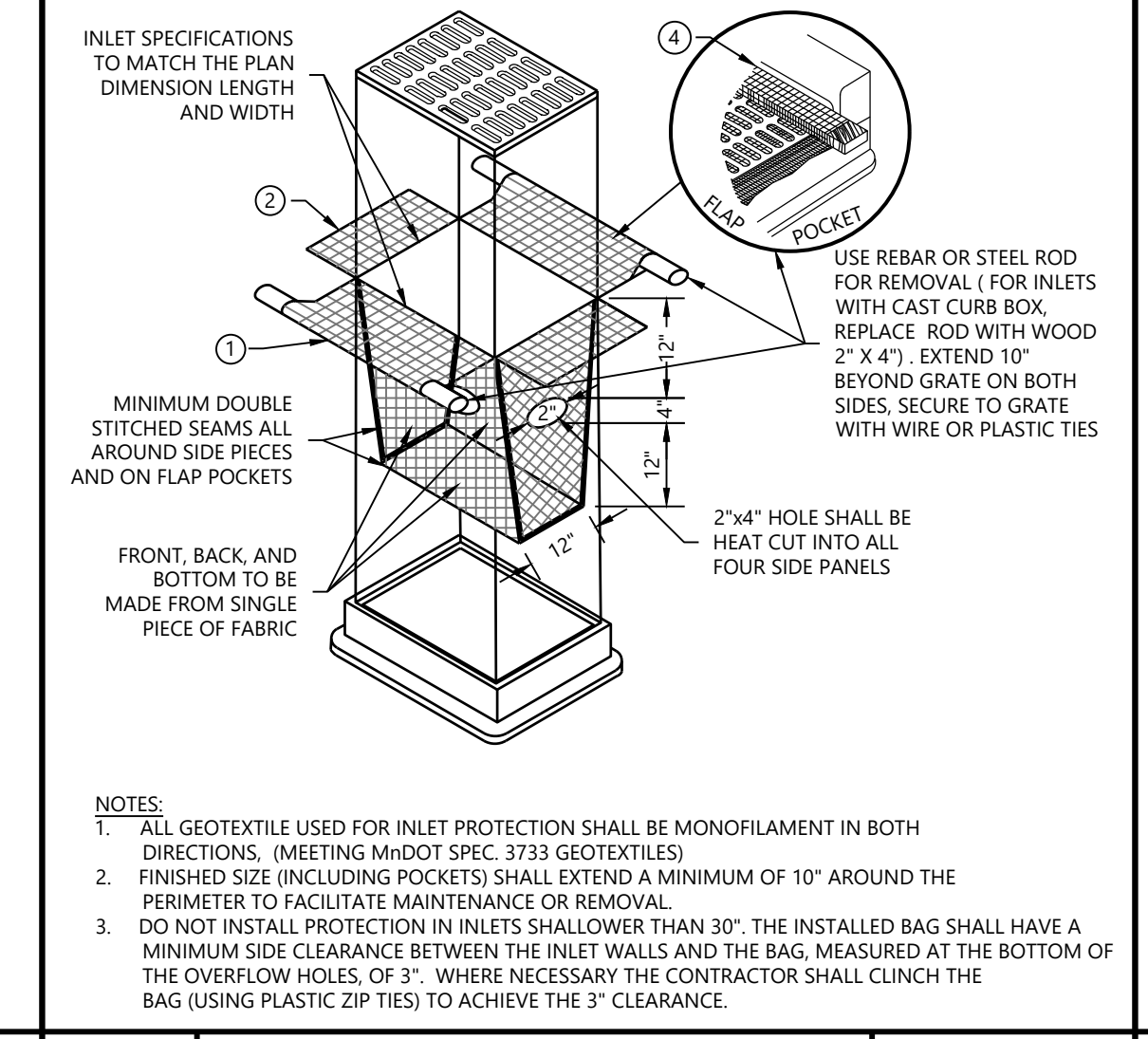
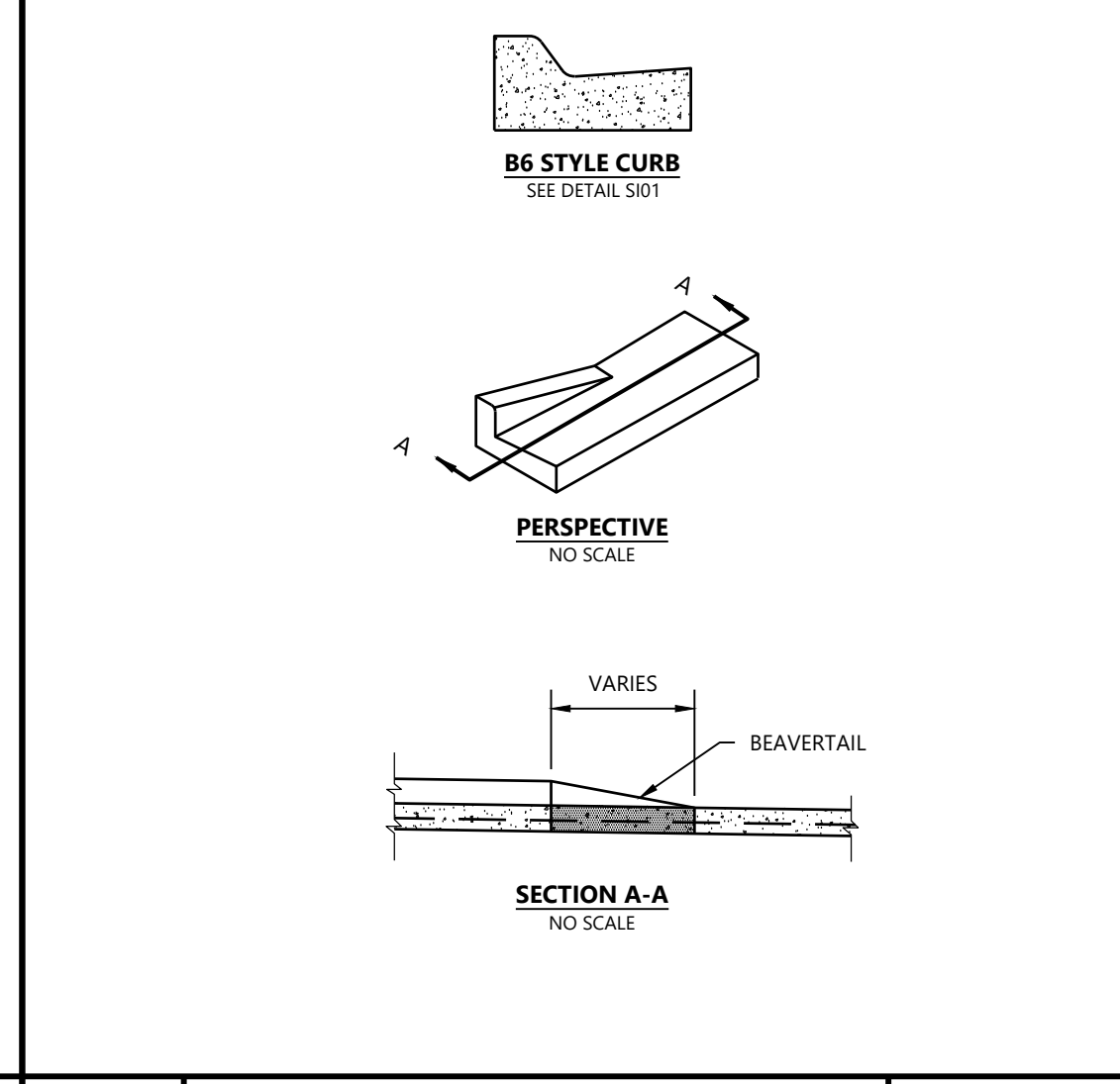
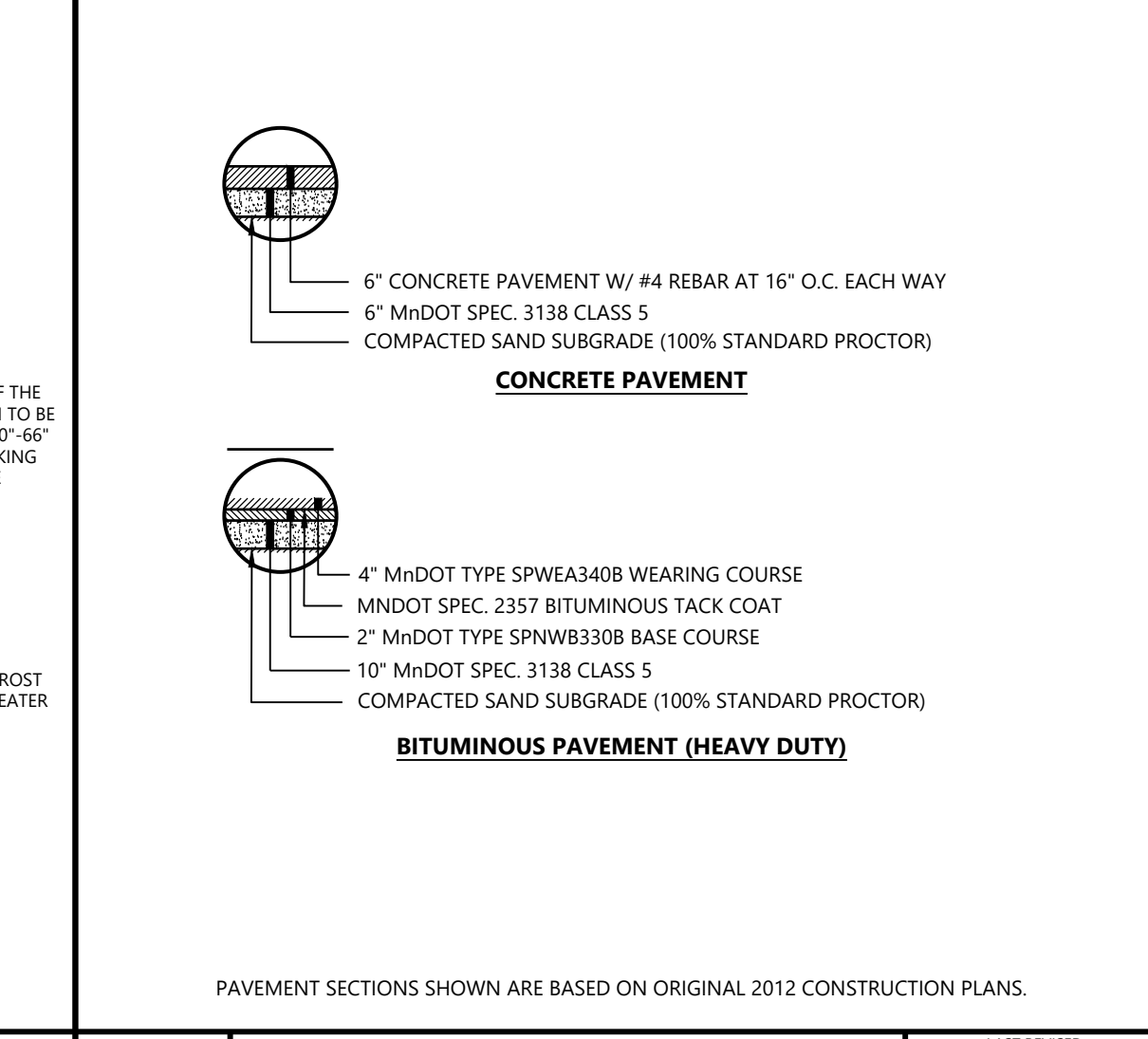
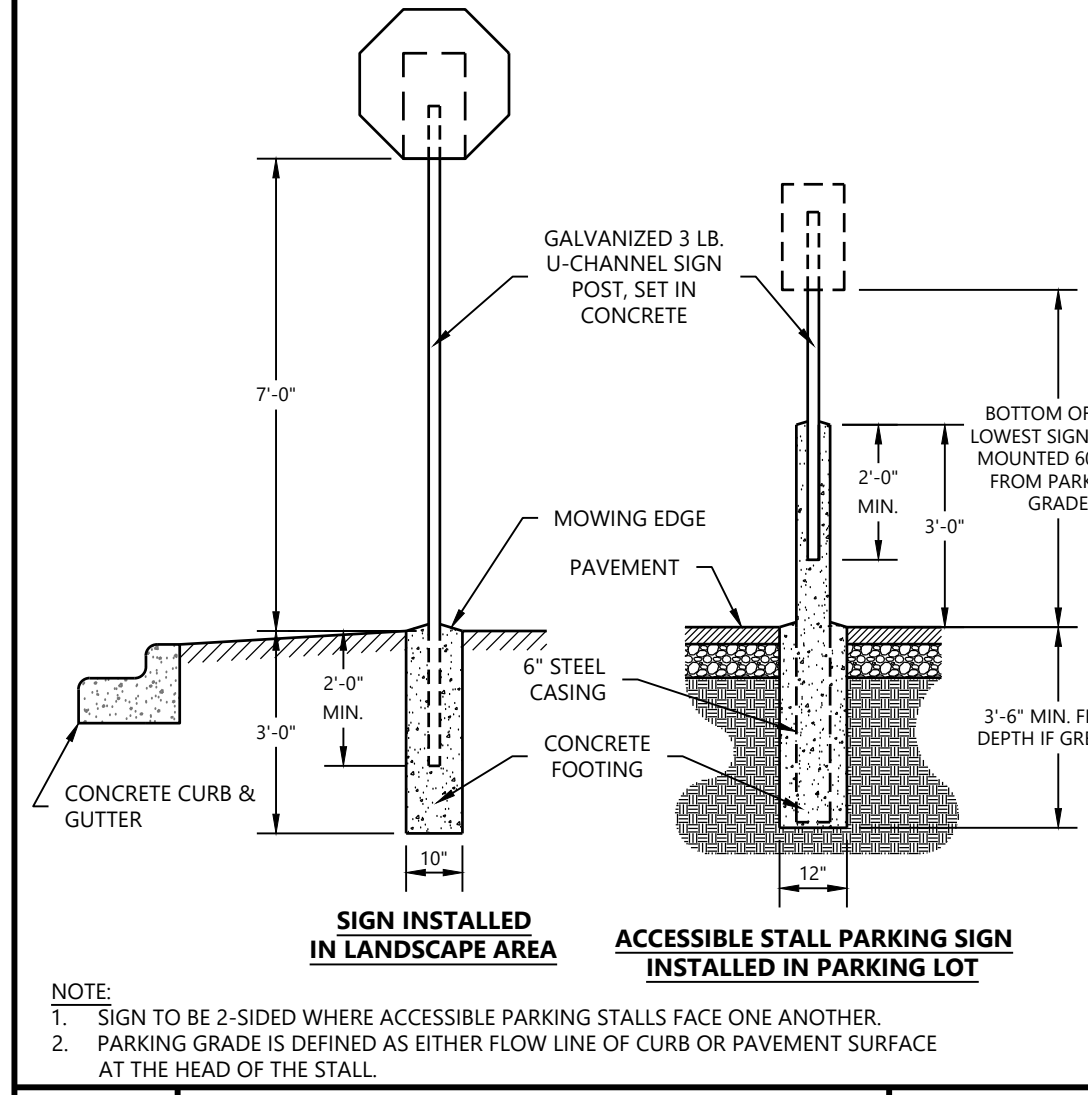
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Westwood CONCRETE CROSS GUTTER LAST REVISED: 08/15/17 S108

Westwood PRIVATE CONCRETE SIDEWALK LAST REVISED: 08/15/17 S109

Westwood PEDESTRIAN CURB RAMP LAST REVISED: 08/15/17 S102A

Westwood CROSS WALK STRIPING LAST REVISED: 08/15/17 S111



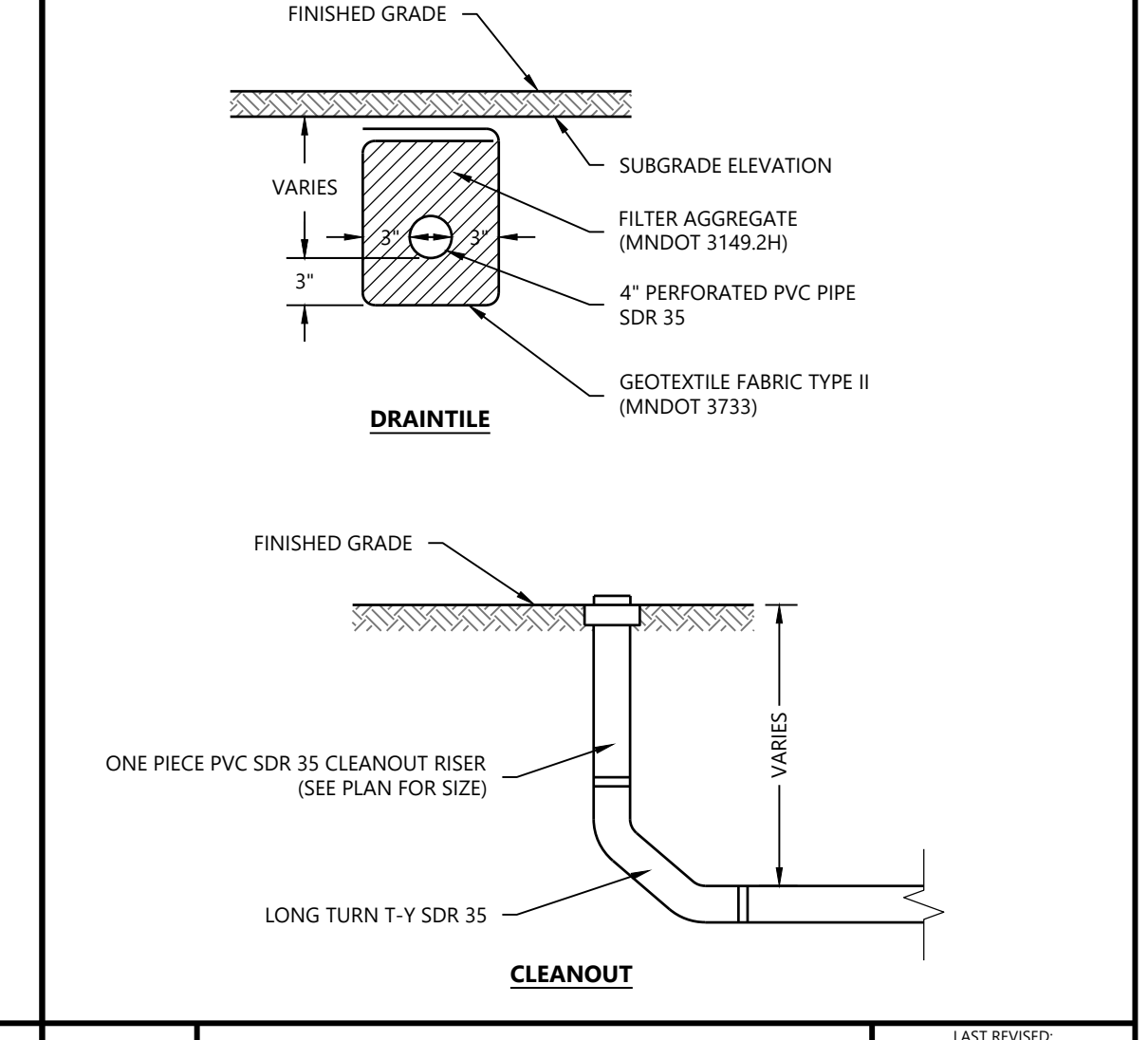
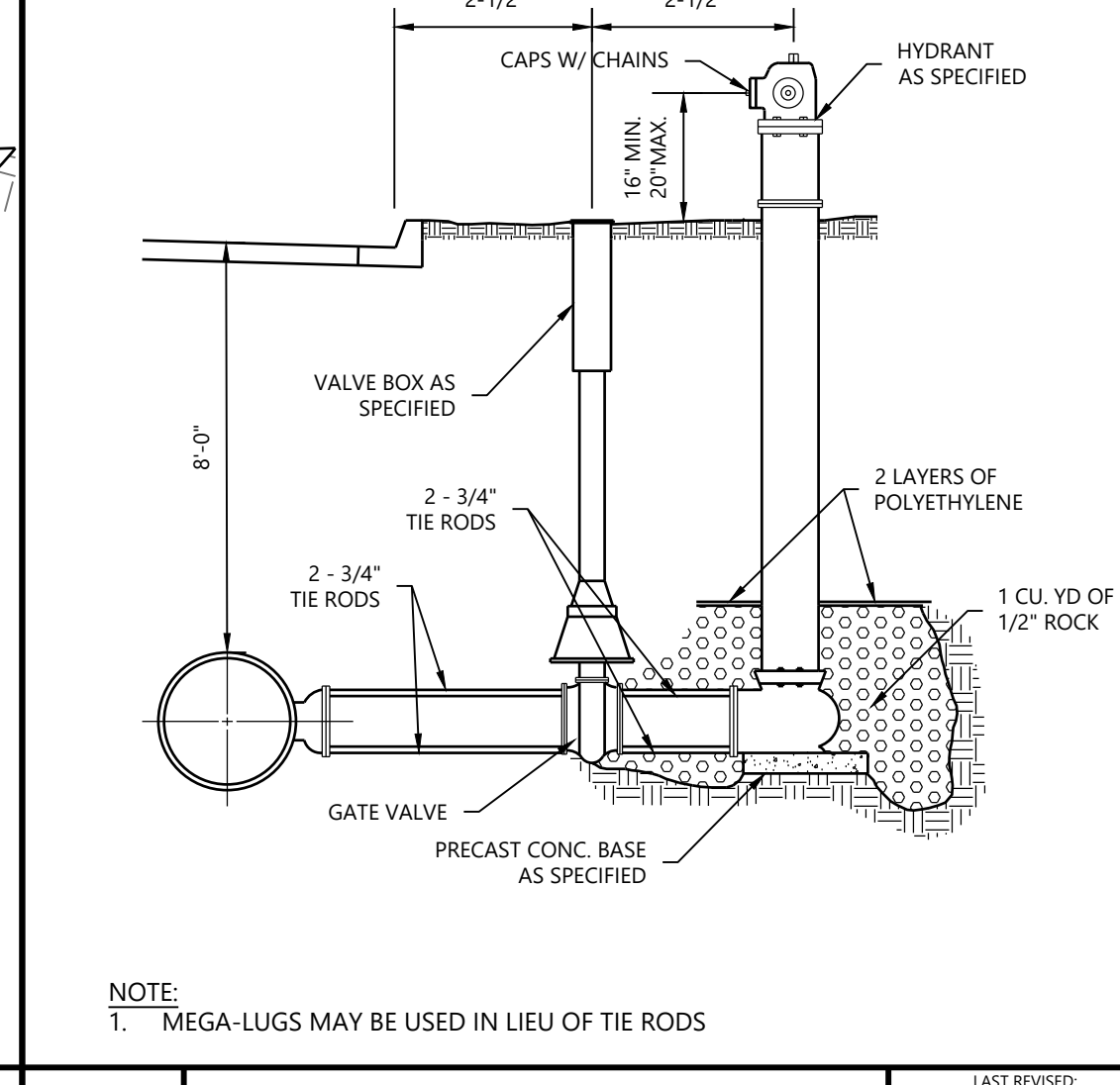
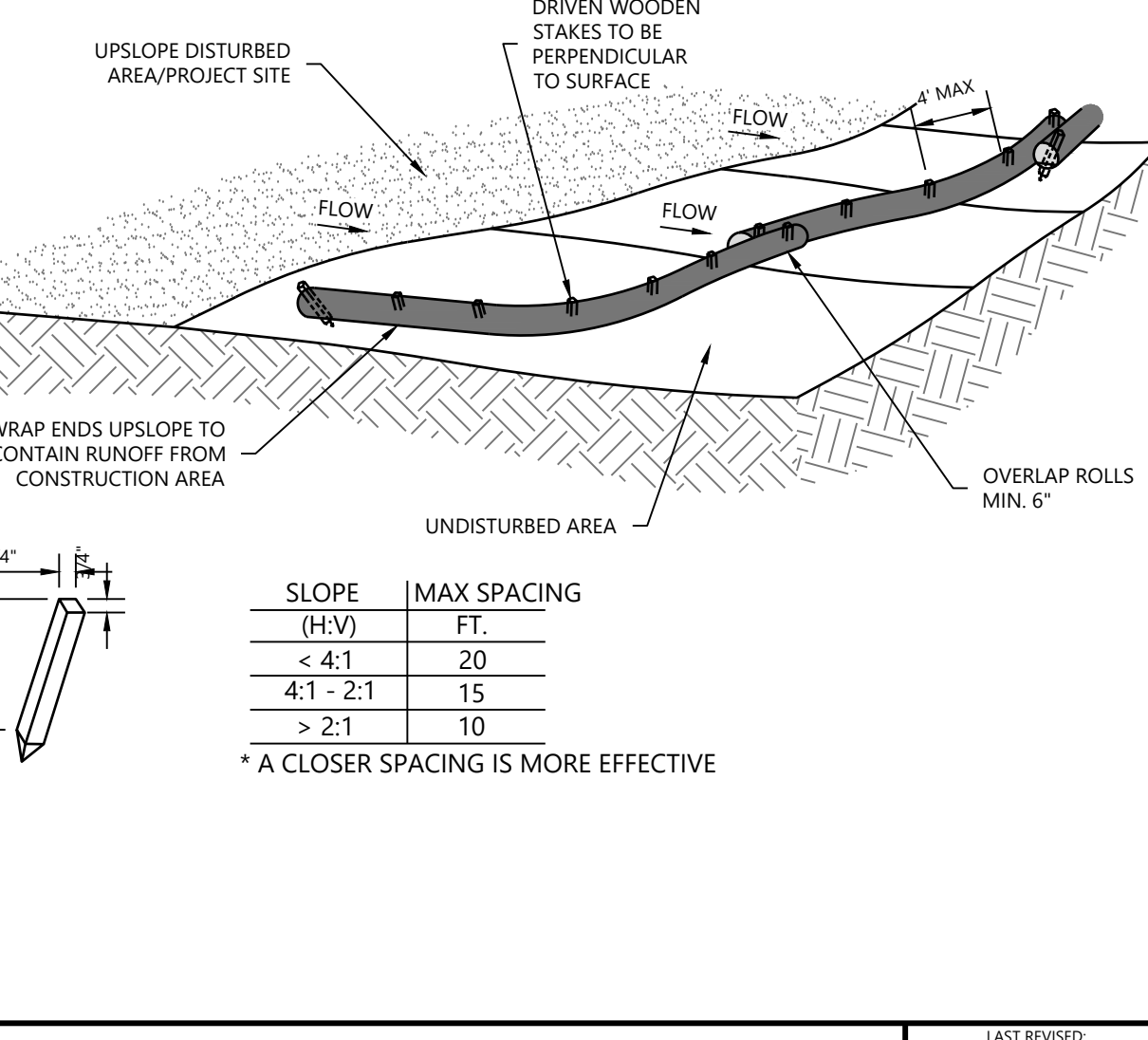
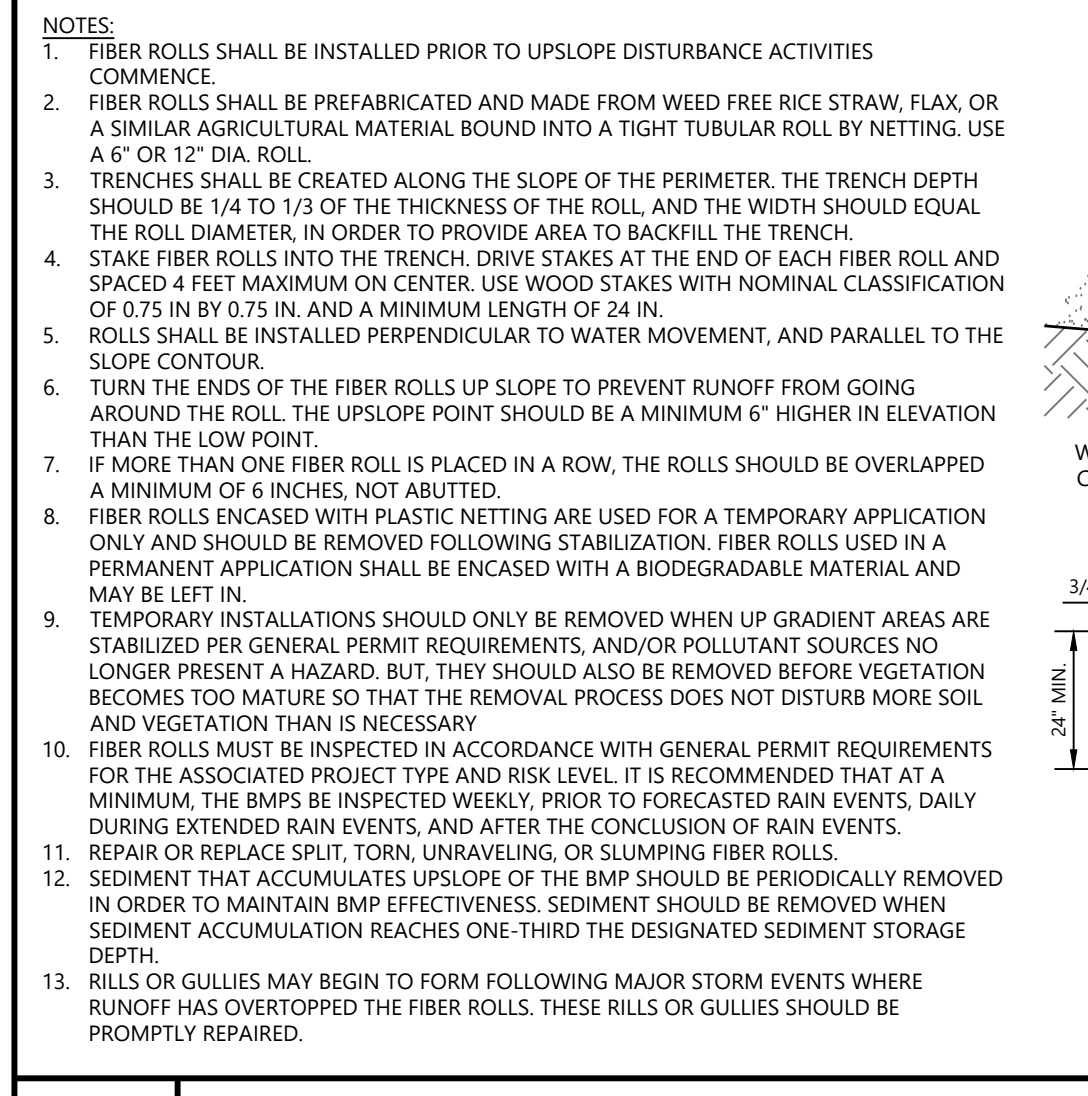
Westwood ROAD DRAIN CG-23 "WIMCO" CURB INLET PROTECTION LAST REVISED: 08/15/17 GD12

Westwood SIGN POST INSTALLATION LAST REVISED: 11/06/20 S114A

Westwood PAVEMENT SECTIONS LAST REVISED: 08/15/17 S119

Westwood TRANSITION CURB LAST REVISED: 08/15/17 S131

Westwood STORM DRAIN FILTER BAG INSERT LAST REVISED: 08/15/17 GD10



Westwood PERFORATED DRAINTILE LAST REVISED: 08/15/17 ST06

Westwood TYPICAL FIBER ROLLS FOR PERIMETER CONTROL OF CONSTRUCTION AREA LIMIT LAST REVISED: 08/15/17 GD42

Westwood FIRE HYDRANT LAST REVISED: 08/15/17 WM01

Westwood PERFORATED DRAINTILE LAST REVISED: 08/15/17 ST06

UNITED HEALTH GROUP - WEST ENTRY RENOVATION
6200 OPTUM WAY
EDEN PRAIRIE, MN 55344

UNITEDHEALTH GROUP
Westwood
KEYPLAN
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
Name: Gretchen Schroeder
DATE: 5/03/2024 LICENSE NO. 43019

NO	DESCRIPTION	DATE
1	CD ISSUE	5/03/2024

HGA NO. COMMISSION NO.
CIVIL DETAILS
DATE: MAY 3, 2024
CONSTRUCTION DOCUMENTS
C600