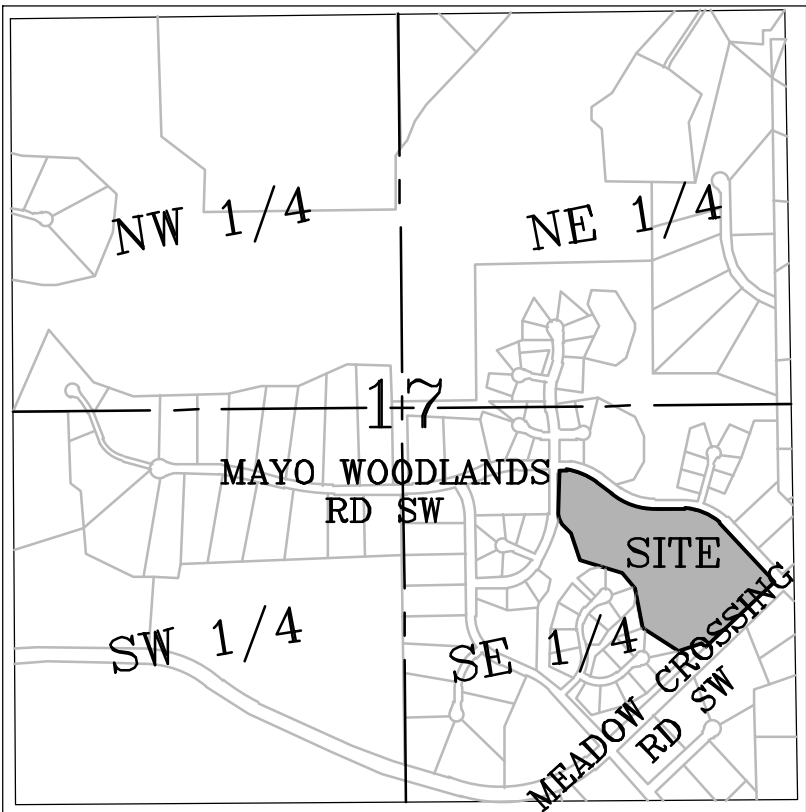
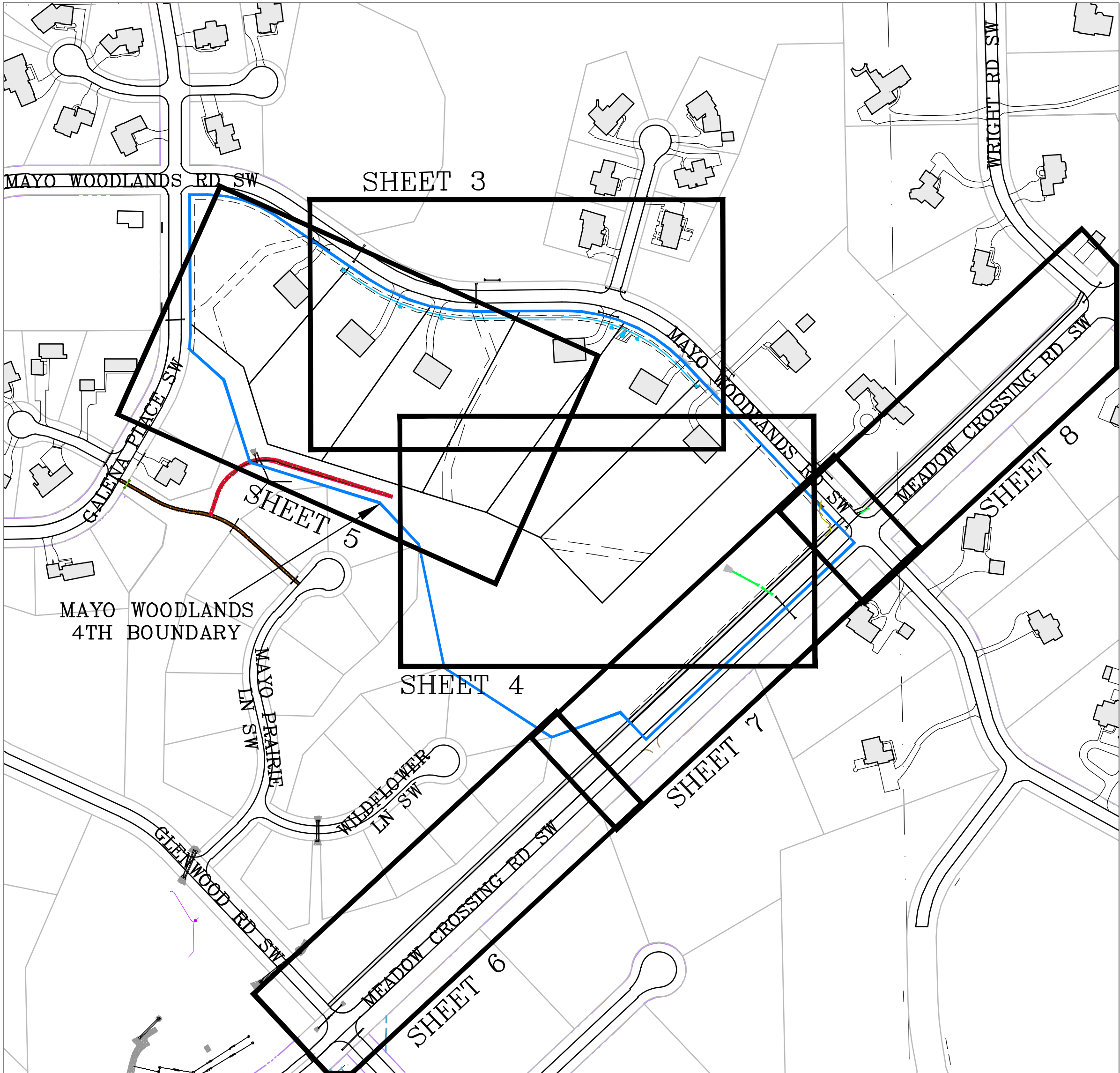


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GRADING & UTILITY PLANS FOR MAYO WOODLANDS FOURTH

SITE OVERVIEW
 "NOT TO SCALE"



VICINITY MAP
 T. 106 N., R. 14 W., SEC. 17
 "NOT TO SCALE"

SHEET INDEX

SHEET 1	TITLE SHEET, SHEET INDEX, & VICINITY MAP
SHEET 2	GENERAL NOTES & TYPICAL SECTIONS
SHEET 3	WELL & WATER DISTRIBUTION
SHEET 4-5	GRADING & EROSION CONTROL PLAN
SHEET 6-8	MEADOW CROSSING RD SW TRAIL
SHEET 9-10	CONSTRUCTION DETAILS - STANDARD PLATES & PLANS
SHEET 11-12	SWPPP

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DATE: 05/17/2023
 Prepared For:
 CLARK DEVELOPMENT, LLC
 36 WOOD LAKE DRIVE SE
 ROCHESTER, MN 55904
 FILE NO.: 22-032 MW4 GP

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G-Cubed
 14070 Hwy 52 S.E.
 Chatfield, MN 55923

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**OLMSTED COUNTY
 ROCHESTER TOWNSHIP**

**MAYO WOODLANDS FOURTH
 TITLE SHEET**

LEGEND

- GAS VALVE
- COMMUNICATIONS BOX
- ELECTRIC POLE
- LIGHT POLE
- TREE
- SIGNS
- MAJOR CONTOUR & LABEL
- MINOR CONTOUR & LABEL
- TREE LINE
- EXISTING STORM CULVERT
- PROPOSED STORM CULVERT
- FUTURE STORM CULVERT
- PROPOSED MAJOR CONTOUR & LABEL
- PROPOSED MINOR CONTOUR & LABEL
- EASEMENT LINE
- EXISTING BITUMINOUS SURFACING
- EXISTING AGGREGATE SURFACING
- EXISTING BUILDING
- PROPOSED BUILDING
- SILT FENCE (PER ROCH. STD. PLATE 7-01)
- GRADING LIMITS
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED SLOPE
- INLET PROTECTION (PER ROCH. STD. PLATE 7-05)
- PROPOSED EROSION CONTROL BLANKET (PER MNDOT 3885.1 CAT. 20)
- ROCK CONSTRUCTION ENTRANCE (PER ROCH. STD. PLATE 7-06)
- RIP RAP (PER MNDOT 3133D)
- PROPOSED WATER DISTRIBUTION LINE, WELL, SHUTOFF
- WELL SETBACK
- WOOD FIBER SEDIMENT CONTROL LOG (PER MNDOT STANDARD PLAN 5-297.405)
- SEPTIC DRAINFIELDS & SOIL BORINGS
P = PRIMARY
S = SECONDARY
- DRAINFIELD PROTECTION

GENERAL & CONSTRUCTION NOTES

- PROTECTION OF ISTS SUPPORT AREAS SHALL BE USED VIA FENCING.
- CULVERTS FOR DRIVEWAYS ARE REQUIRED FOR LOTS: 2, 3, 5, 6. CULVERTS ARE ALREADY IN-PLACE FOR LOTS 1 AND 4. (DRIVEWAY CULVERTS TO BE INSTALLED BY OTHERS). MINIMUM CULVERT SIZE SHALL BE 15".
- BUILDING PAD LOCATIONS SHOWN ARE ONLY TO REFERENCE A LOCATION THAT WORKS ON THE LOT. BUILDER SHALL DETERMINE HOUSE LOCATION, STYLE AND ELEVATIONS. IF BUILDING LOCATION IMPACTS SEPTIC SUPPORT AREAS, A NEW SEPTIC SUPPORT AREA WILL BE REQUIRED AND SHALL BE DETERMINED PRIOR TO BUILDING PERMIT OR EXCAVATION.
- CONTACT TOWNSHIP MAINTENANCE SUPERVISOR FOR DRIVEWAY INSTALLATION APPROVAL 507-250-6087, pdmcgowan@gmail.com

GOVERNING SPECIFICATIONS

- THE MOST RECENT EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SUBJECT TO ANY AMENDMENTS & THE 2020 EDITION OF THE "STANDARD UTILITIES SPECIFICATIONS" AS PER THE CITY ENGINEER'S ASSOCIATION OF MINNESOTA SHALL GOVERN, ALONG WITH ANY DESIGN CRITERIA LOCATED WITHIN THE ROCHESTER TOWNSHIP ZONING OR SUBDIVISION ORDINANCE; UNLESS SPECIFIED IN THIS PLAN.

UTILITY NOTES:

- ALL WATER LINES SHALL BE 2" DISTRIBUTION LINES UNLESS OTHERWISE SPECIFIED. ALL DISTRIBUTION LINES AND FITTINGS SHALL BE POLYETHYLENE (PE 4710) WITH A PRESSURE RATING OF ONE HUNDRED SIXTY (160) PSI. CONTRACTOR WILL STUB A LINE FROM THE VICINITY OF THE WELL TO A 2" WATER SHUTOFF THEN RUN THE 2" DISTRIBUTION LINES AS SHOWN ON THE PLAN. AT EACH LOT, THE CONTRACTOR SHALL REDUCE THE 2" LINE TO A 1.5" WATER SHUTOFF. ALL SHUTOFFS SHALL BE MARKED WITH A 4"x4" POST. INSTALL WATER SHUTOFFS 5' PAST THE TEE TO ALLOW SOME FLEXIBILITY IN THE LINE.
- THE MINIMUM REQUIRED BURY DEPTH FOR WATER MAIN AND SERVICES IS 7 FEET.

GENERAL NOTES:

1. THE PROJECT FALLS WITHIN ZONE D PER FEMA FIRM PANEL 27109C0282F WHICH MEANS THERE ARE POSSIBLE BUT UNDETERMINED FLOOD HAZARDS.
2. ALL ADJACENT LAND USES ARE RESIDENTIAL; ZONED SD AND R-1.
3. SETBACKS: THE CIRCLE AROUND THE WELL IS THE 50' SEPTIC SETBACK.

PROJECT CALCULATIONS

TOTAL PROJECT AREA: 20.78 ACRES
 6 SINGLE FAMILY RESIDENTIAL LOTS
 1 OUTLOT
 DENSITY OF LOTS: 3.46 ACRES PER LOT
 CURRENT ZONING: SD
 CURRENT LAND USE: VACANT RESIDENTIAL
 EXISTING 50' RIGHT OF WAY: 0.73 ACRES
 PROPOSED RIGHT OF WAY: 0.00 ACRES
 AREA OF OUTLOT: 7.61 ACRES
 AREA OF 6 LOTS: 12.44 ACRES
 20.78 ACRES

OWNER & DEVELOPER

CLARK DEVELOPMENT, LLC
 36 WOOD LAKE DRIVE SE
 ROCHESTER, MN 55904
 ed@smdo.com
 (507) 254-1414

ENGINEER & SURVEYOR

G-CUBED INC.
 14070 HWY 52 SE
 CHATFIELD, MN 55923
 jasonk@gggg.to
 geoffg@gggg.to

IMPAIRED WATERS WITHIN ONE MILE:

ZUMBRO RIVER, SOUTH FORK - INVERTBIO; FECAL COLIFORM; TURBIDITY

SPECIAL WATERS WITHIN ONE MILE:

NONE

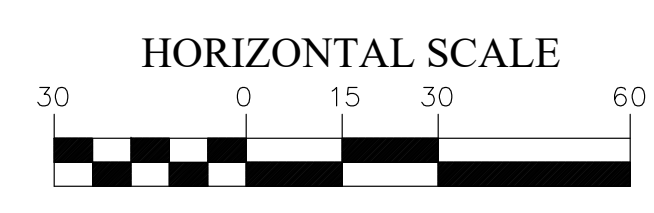
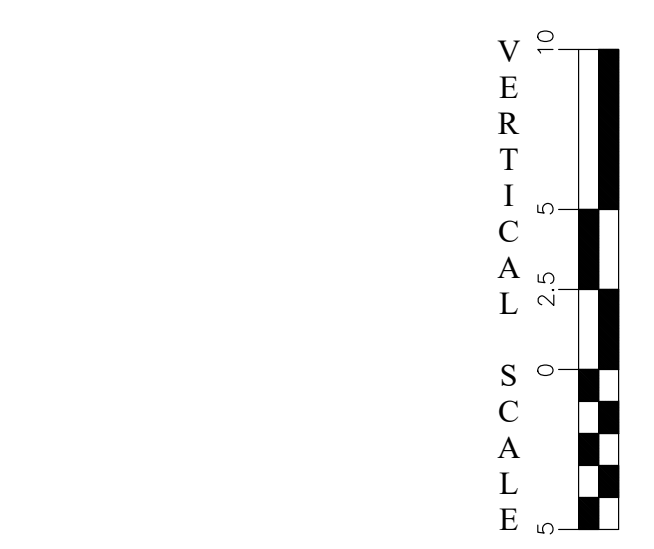
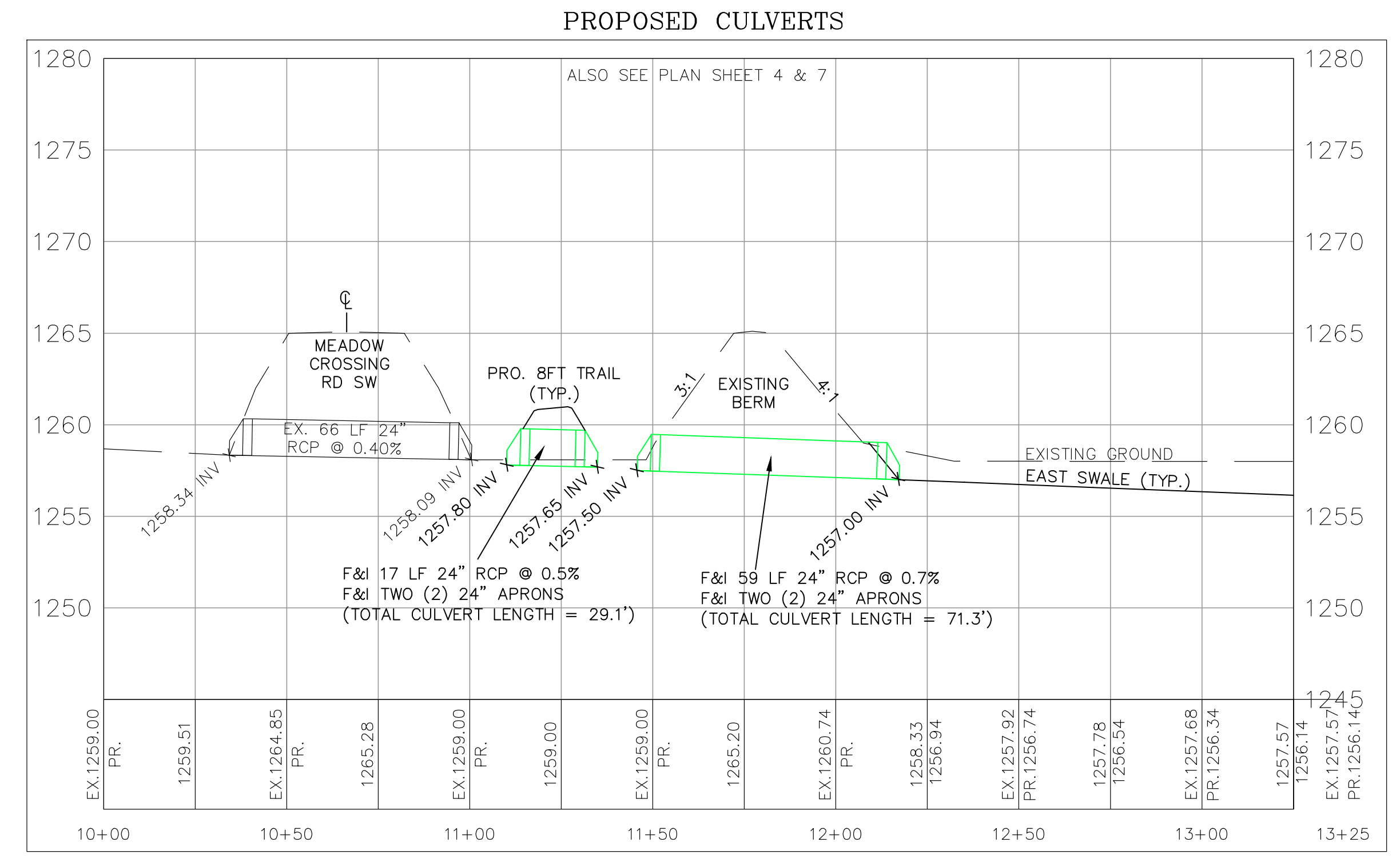
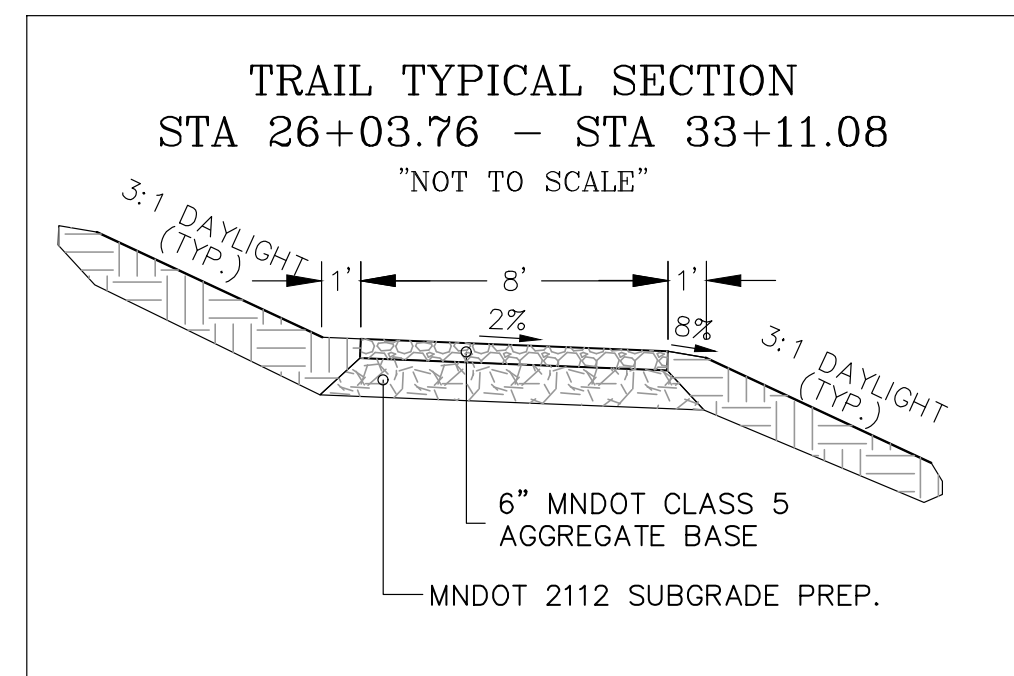
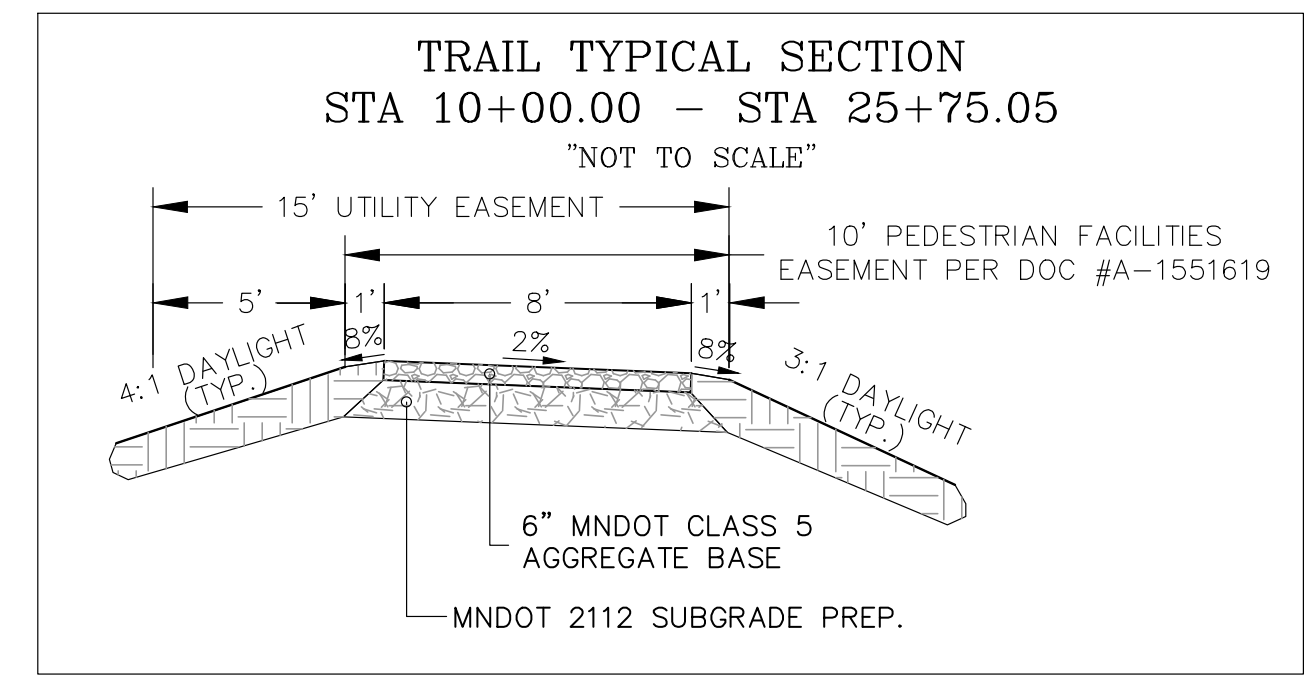
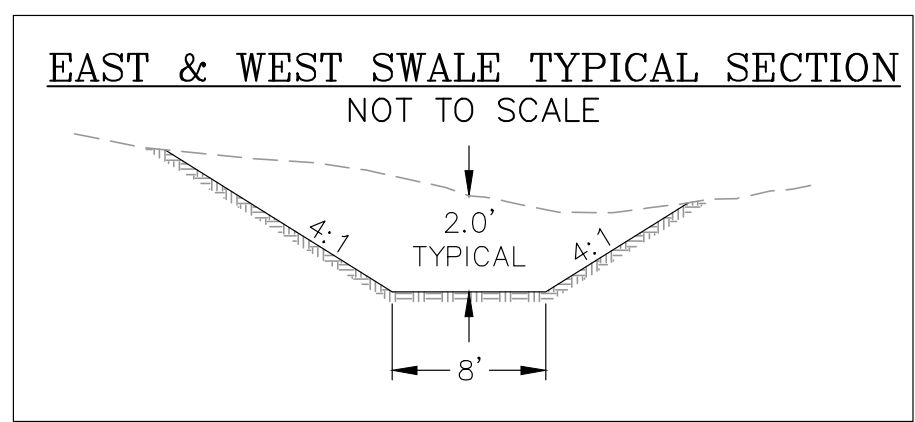
PROJECT CALCULATIONS:

TOTAL PROJECT AREA: 20.78 ACRES
 TOTAL DISTURBED AREA: 1.70 ACRES
 EXISTING IMPERVIOUS: 0.17 ACRES
 NEW IMPERVIOUS: 0.75 ACRES
 TOTAL IMPERVIOUS: 0.92 ACRES

ABBREVIATIONS DEFINED:

HP: HIGH POINT
 LP: LOW POINT
 EO: EMERGENCY OVERTFLOW

- ### GENERAL EROSION CONTROL AND CONSTRUCTION NOTES:
- 1) PLACE MACHINE SLICED SILT FENCE AS SHOWN ON THE PLANS AND WHERE DIRECTED BY THE ENGINEER, AT TOE OF FILL SLOPES AND MAINTAIN UNTIL TURF HAS BEEN WELL ESTABLISHED. (INSTALLATION OF SILT FENCE MUST TAKE PLACE PRIOR TO DISTURBING THE WATERSHED). INSTALL AND MAINTAIN INLET PROTECTION AT ALL INLETS LOCATED WITHIN THE PROJECT AND IMMEDIATELY DOWNSTREAM OF THE PROJECT.
 - 2) CONSTRUCT AND MAINTAIN TEMPORARY ROCK CONSTRUCTION ENTRANCE AT ALL CONSTRUCTION ENTRANCES USED DURING CONSTRUCTION TO CONTROL SEDIMENT FROM LEAVING SITE PER ROCHESTER STD. PLATE 7-06, CLOSE OTHER ENTRANCES WITH SILT FENCE.
 - 3) REMOVE ALL TOPSOIL AND ORGANIC MATERIAL. STOCKPILE IN APPROVED LOCATIONS ON-SITE. PROVIDE PERIMETER CONTROL AROUND ALL STOCKPILES. PROVIDE TEMPORARY COVER IF STOCKPILE WILL BE INPLACE MORE THAN 7 DAYS.
 - 4) ALL EXCAVATED MATERIAL SHALL BE PLACED ON SITE AS DIRECTED BY THE ENGINEER OR HAULED TO AN APPROVED LOCATION. ANY TEMPORARY STOCKPILES SHALL HAVE SILT FENCE INSTALLED AROUND THE DOWN SLOPE EDGE TO PREVENT DOWNSTREAM SEDIMENTATION. TEMPORARY COVER SHALL BE ESTABLISHED AFTER 7 DAYS.
 - 5) ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - 6) THE CONTRACTOR SHALL ROUTINELY INSPECT THE CONSTRUCTION SITE ONCE EVERY 7 DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED IN WRITING.
 - 7) THIS PROJECT DOES REQUIRE AN NPDES PERMIT BASED ON AREA DISTURBED BUT DOES NOT REQUIRE PERMANENT STORM WATER TREATMENT DUE TO THE INCREASE IN IMPERVIOUS SURFACING BEING LESS THAN ONE ACRE. BEST MANAGEMENT PRACTICES BEYOND WHAT MAY BE SHOWN ON THIS PLAN SHOULD BE CONSIDERED IF GRADING CAUSES EROSION NOT CONTAINED BY MEASURES SHOWN ON THIS PLAN.
 - 8) RESPREAD TOPSOIL (4" MIN.), FERTILIZE, SEED, & DISK ANCHOR MULCH ALL DISTURBED AREAS. SOD OR SEED WITH MNDOT MIXTURE 25-131 WITH THE FOLLOWING ADDITIONS:
 FERTILIZER SHALL BE 24-12-24 AND BE APPLIED AT A RATE OF 300 LBS/ACRE.
 MIXTURE 25-131 SEEDING SHALL BE APPLIED AT A RATE OF 220 LBS/ACRE.
 MIXTURE 33-261 SEEDING SHALL BE APPLIED AT A RATE OF 35 LBS/ACRES. (STORMWATER FACILITIES)
 MULCH SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE.
 *THE SEASON FOR SEEDING SHALL BE FROM APRIL 1ST - JUNE 1ST AND JULY 20TH - SEPTEMBER 20TH, AND AS DORMANT SEEDING AFTER NOV. 1ST. ONLY TEMPORARY SEEDING WILL BE ALLOWED SEPT. 20TH - NOV. 1ST) (REFERENCE MNDOT SEEDING MANUAL FOR ADDITIONAL SEEDING INFORMATION)
 - 9) TEMPORARY SEED WITH MNDOT MIX 22-111 (MAY 1ST THRU AUGUST 1ST) OR MNDOT MIX 22-112 (AUGUST 1ST THRU OCTOBER 1ST) AT A RATE OF 100LB/ACRE. INCLUDING DISK ANCHORED MULCH ON ALL SLOPES GREATER THAN 200' OR 5%.
 - 10) PER CURRENT MPCA REQUIREMENTS. CONCRETE WASHOUTS, WHICH PROHIBIT WASHOUT LIQUID AND SOLID WASTES FROM CONTACTING THE GROUND AND ENTERING THE GROUNDWATER, MAY BE; APPROVED FACILITIES OFFSITE, PORTABLE ONSITE FACILITIES, OR FACILITIES CONSTRUCTED ONSITE. ON SITE CONSTRUCTED FACILITIES SHALL HAVE A LEAK-PROOF, IMPERMEABLE LINER AND FOLLOW THE CONSTRUCTION, MAINTENANCE AND REMOVAL PROCESSES AS RECOMMENDED ON THE MPCA WEBSITE (HTTP://WWW.PCA.STATE.MN.US/PUBLICATIONS/WQ-STRM2-24.PDF).
 - 11) OWNER HAS BEEN MADE AWARE THAT THERE ARE DESIGN SLOPES LESS THAN 2% AND ACCEPTS ANY ISSUES THAT MAY RESULT FROM THIS DESIGN.
 - 12) DITCHES WITHIN 200' OF SURFACE WATER OR PROPERTY LINE STABILIZED IN 24 HOURS AFTER CONNECTION.
 - 13) SLOPES STEEPER THAN 4:1 AND 4:1 SLOPES LONGER THAN 30' ARE SEEDED AND PROTECTED WITH EROSION CONTROL BLANKETS OR SODDED AND STAKED. BLANKET CATEGORY 3N PER MNDOT 3885. SLOPES STEEPER THAN 4:1 ARE STABLE FROM LAND-SLIDING AND SURFACE EROSION.
 - 14) MINIMIZE CONSTRUCTION TRAFFIC OVER UNPAVED AREAS OF THE SITE.
 - 15) GOVERNING SPECIFICATIONS - THE MOST RECENT EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SUBJECT TO ANY AMENDMENTS & THEN 2020 EDITION OF THE "STANDARD UTILITIES SPECIFICATIONS" AS PER THE CITY ENGINEER'S ASSOCIATION OF MINNESOTA SHALL GOVERN, ALONG WITH ANY DESIGN CRITERIA LOCATED WITHIN THE OLMSTED COUNTY ZONING ORDINANCE. UNLESS OTHERWISE SPECIFIED WITHIN THIS PLAN.



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 36 WOOD LAKE DRIVE SE
 ROCHESTER, MN 55904

FILE NO.: 22-032 MW4 GP

G-Cubed
 14070 Hwy 52 S.E.
 Chatfield, MN 55923

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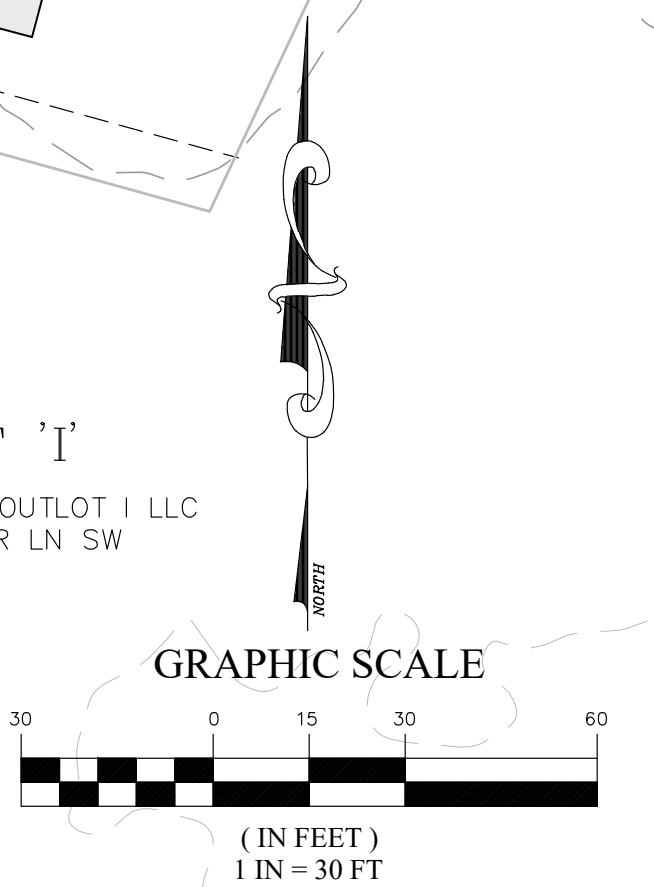
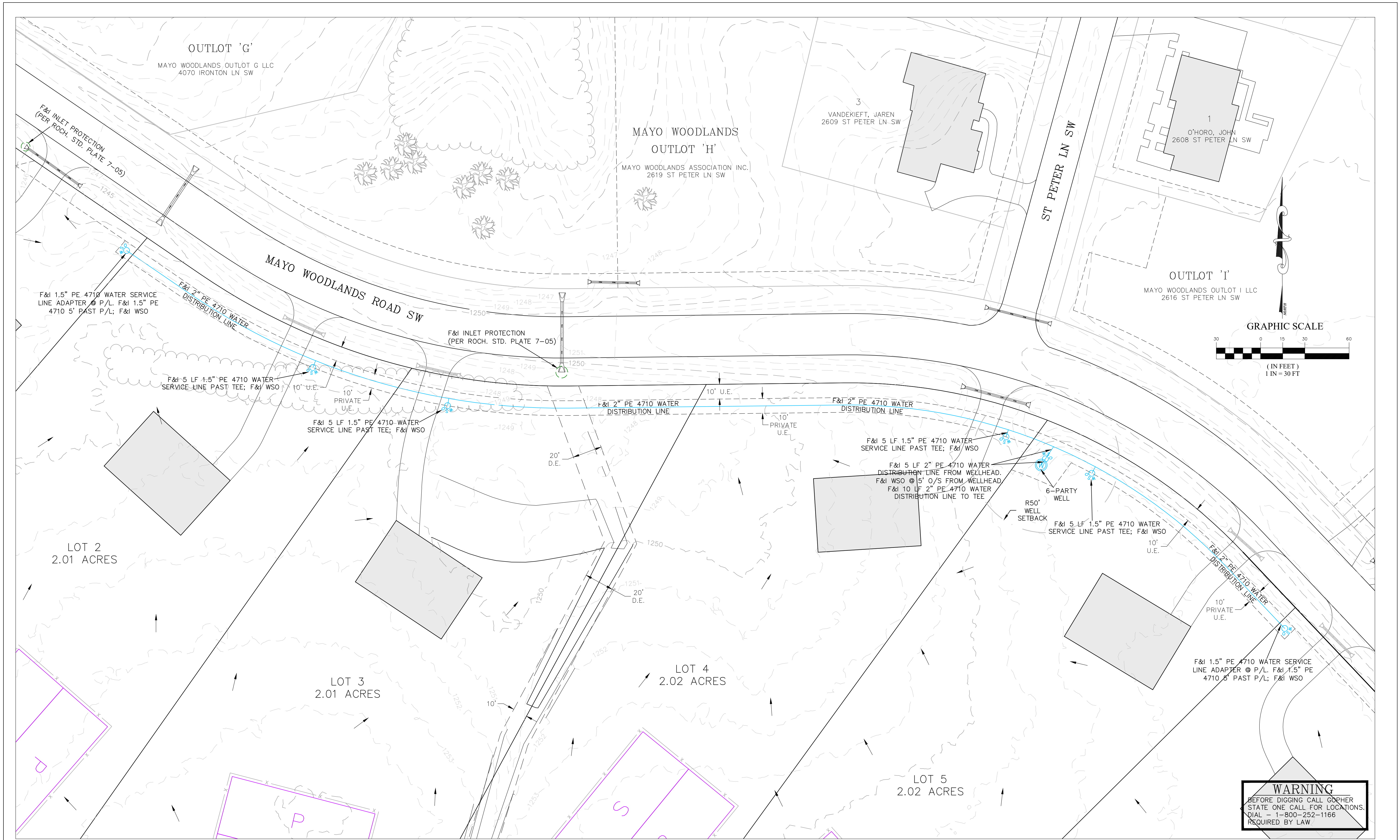
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OLMSTED COUNTY
 ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH
 GENERAL NOTES & TYPICALS



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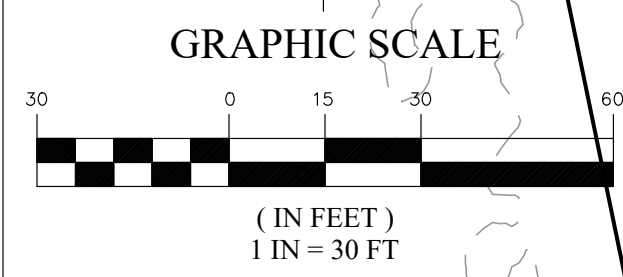
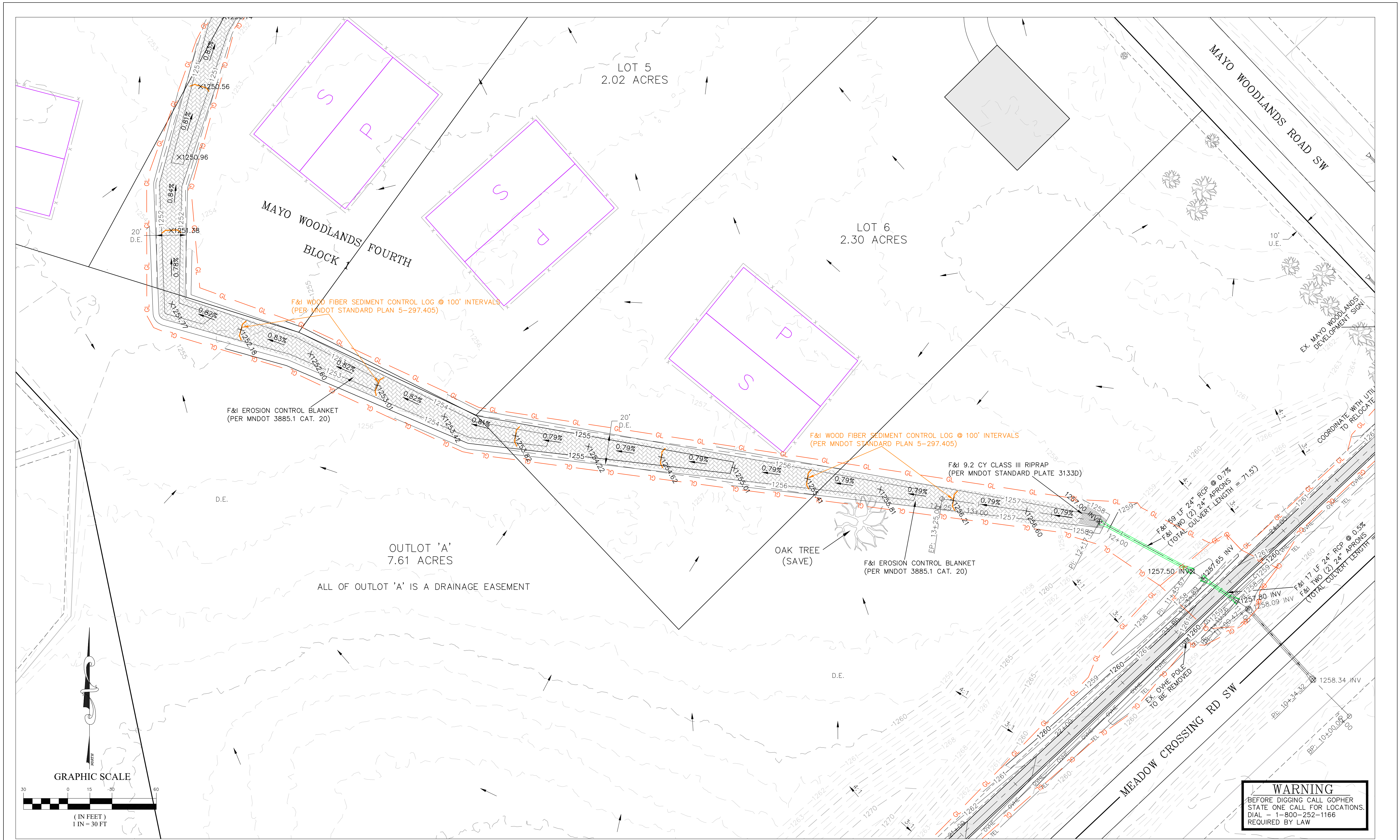
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OLMSTED COUNTY
 ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH
 WELL & WATER DISTRIBUTION

SHEET 3
 OF 12 SHEETS



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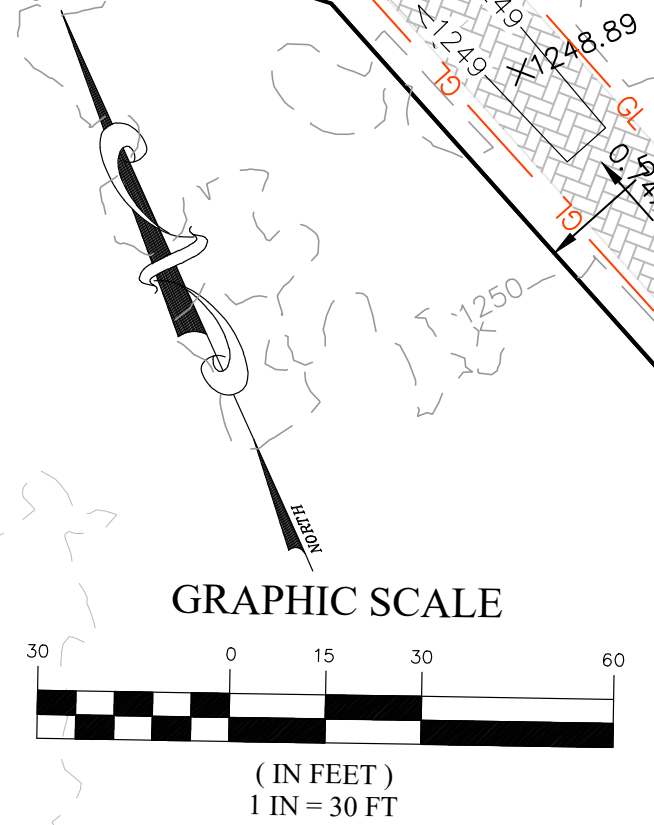
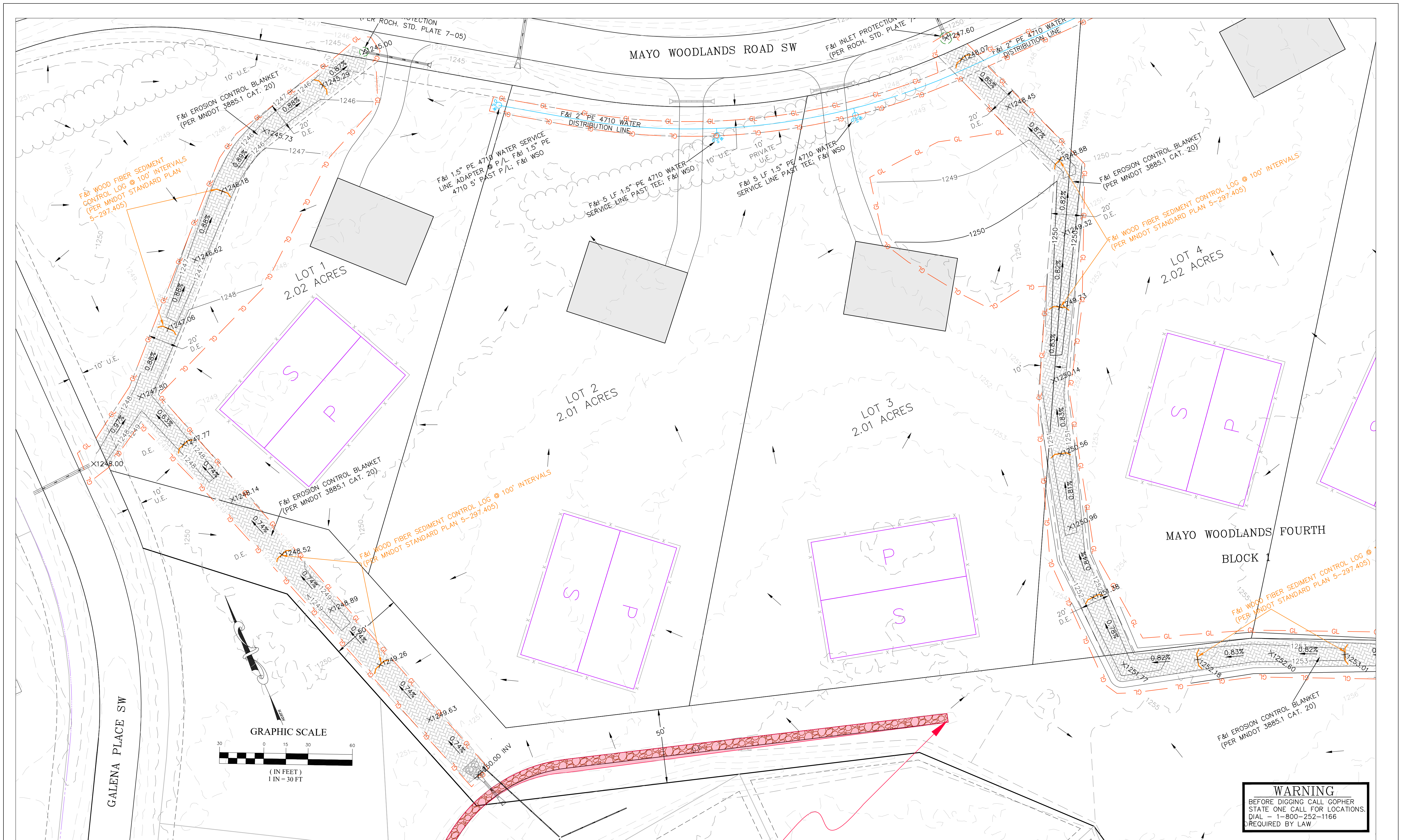
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OLMSTED COUNTY
 ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH
 GRADING & ESC. PLAN

SHEET 4
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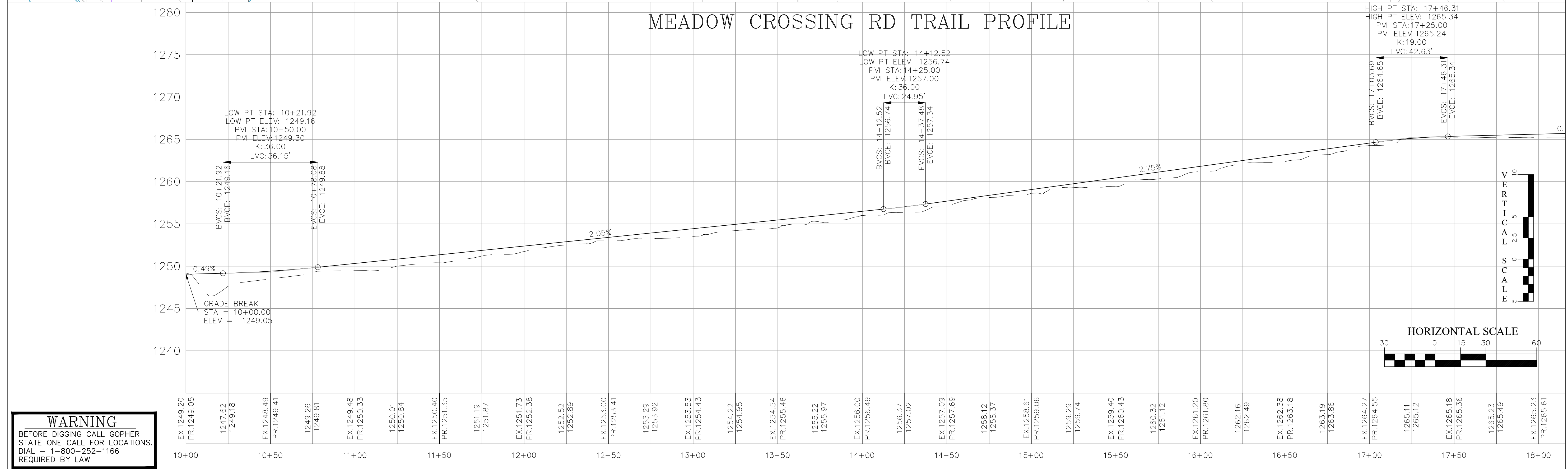
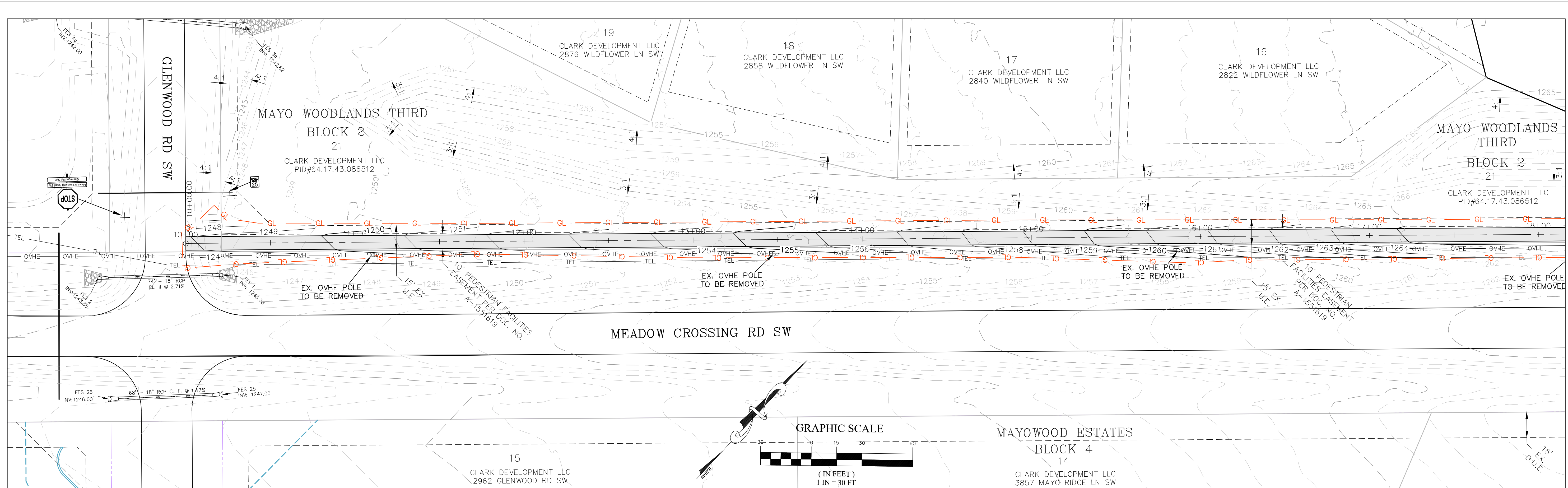
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OLMSTED COUNTY ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH GRADING & ESC. PLAN
SHEET 5 OF 12 SHEETS



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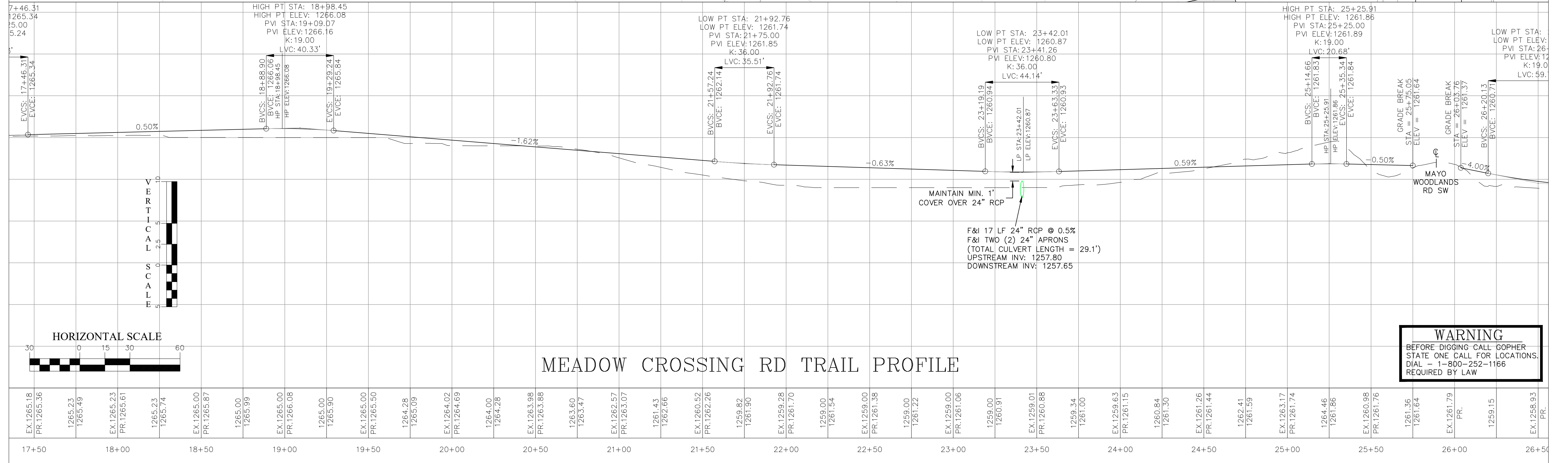
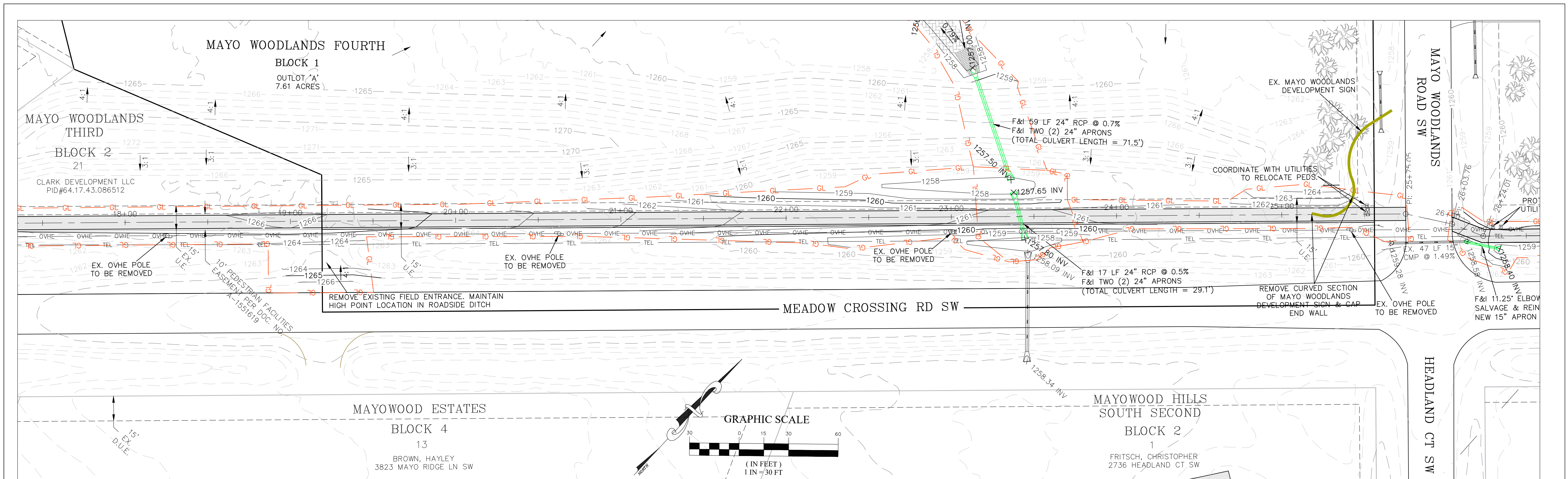
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**OLMSTED COUNTY
 ROCHESTER TOWNSHIP**

**MAYO WOODLANDS FOURTH
 MEADOW CROSSING RD TRAIL**

**SHEET 6
 OF 12 SHEETS**



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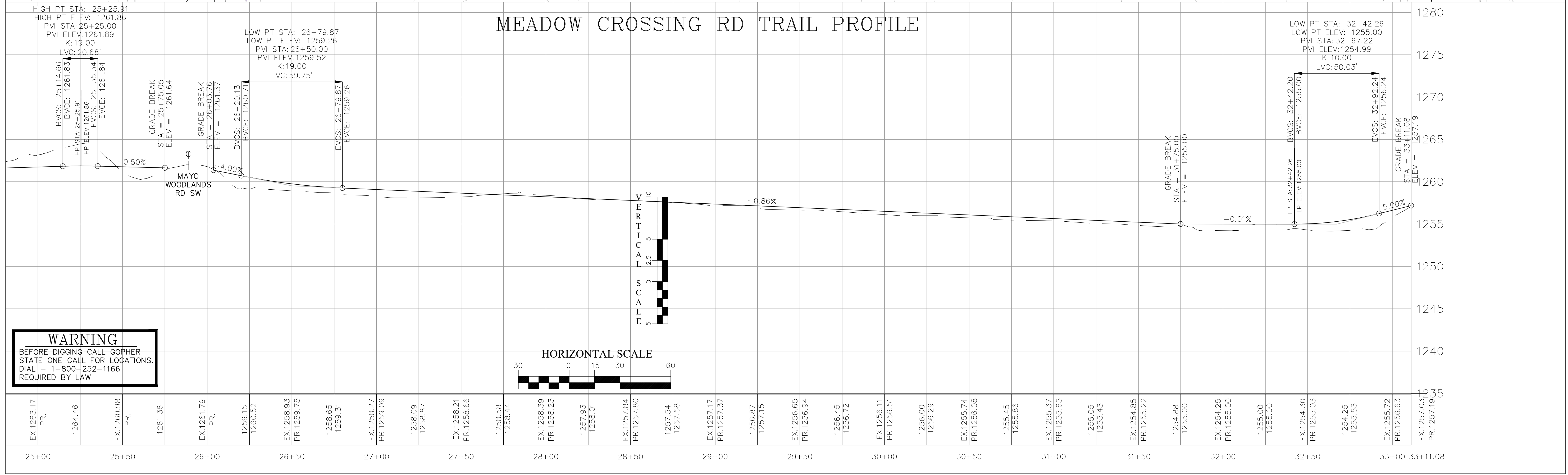
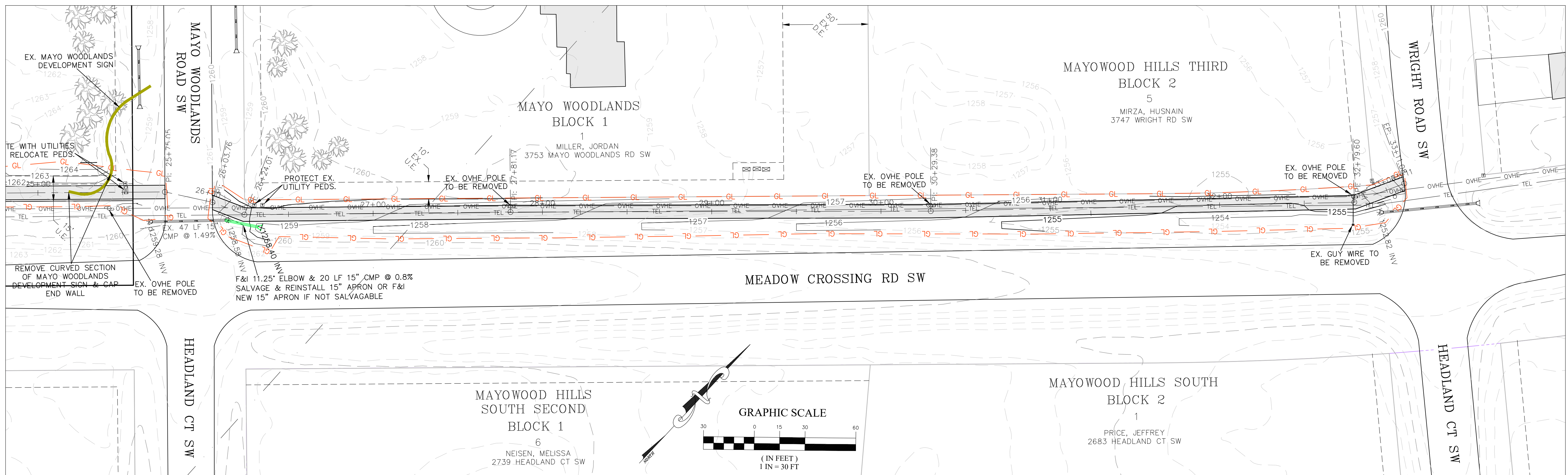
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**OLMSTED COUNTY
ROCHESTER TOWNSHIP**

**MAYO WOODLANDS FOURTH
MEADOW CROSSING RD TRAIL**

**SHEET 7
OF 12 SHEETS**

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DATE: 05/17/23
REG. NO.: 21940

DATE: 05/17/2023
Prepared For:
CLARK DEVELOPMENT, LLC
36 WOOD LAKE DRIVE SE
ROCHESTER, MN 55904

FILE NO.: 22-032 MW4 GP

G-Cubed
14070 Hwy 52 S.E.
Chatfield, MN 55923

ENGINEERING SURVEYING PLANNING
Ph. 507-867-1666
Fax 507-867-1665
www.gcg.to

DESIGNED: JWK
DRAWN: JWK
CHECKED: GGG

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8' TRAIL WIDTH	JWK	5/17/23

**OLMSTED COUNTY
ROCHESTER TOWNSHIP**

**MAYO WOODLANDS FOURTH
MEADOW CROSSING RD TRAIL**

**SHEET 8
OF 12 SHEETS**

TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS

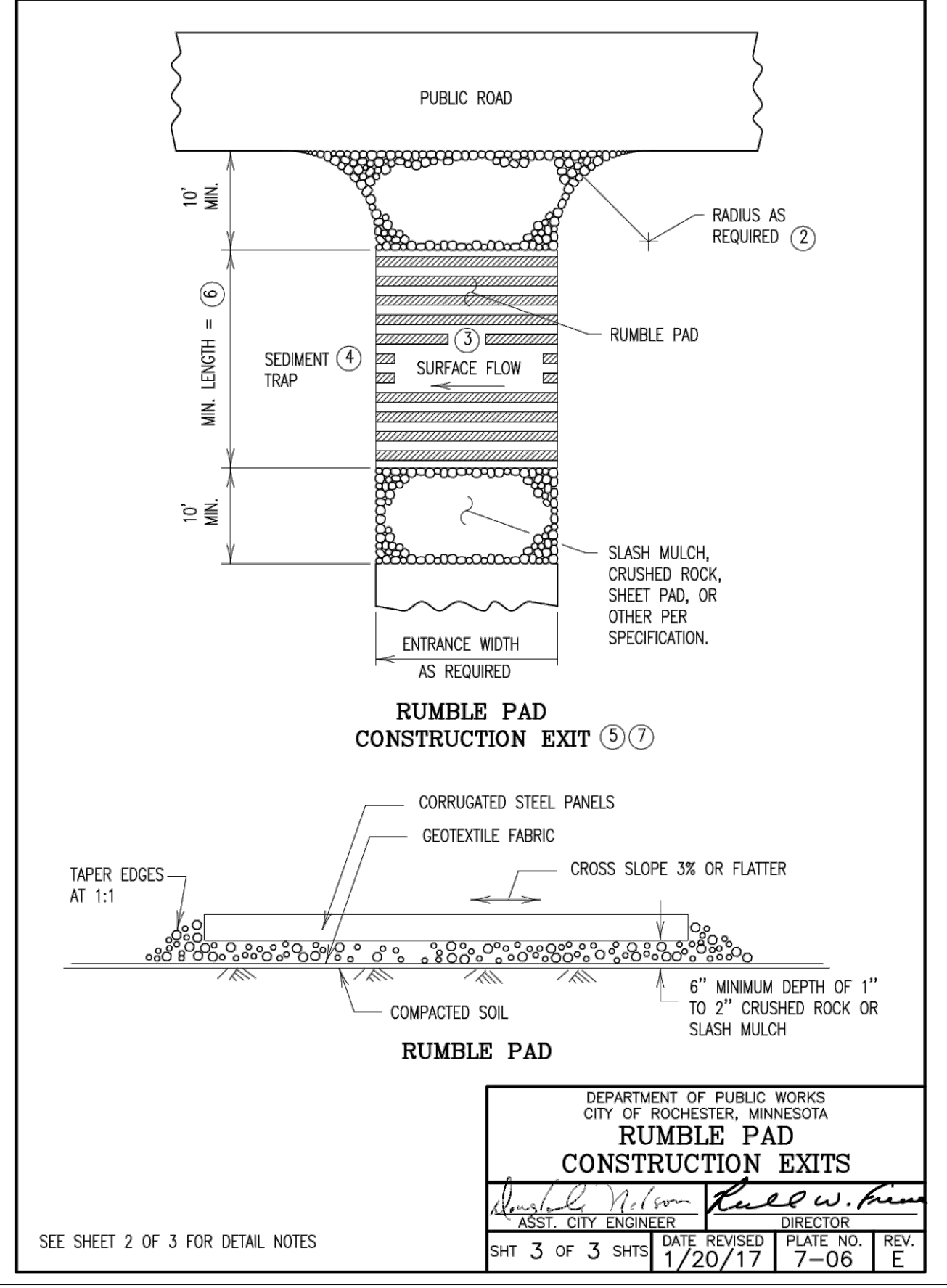
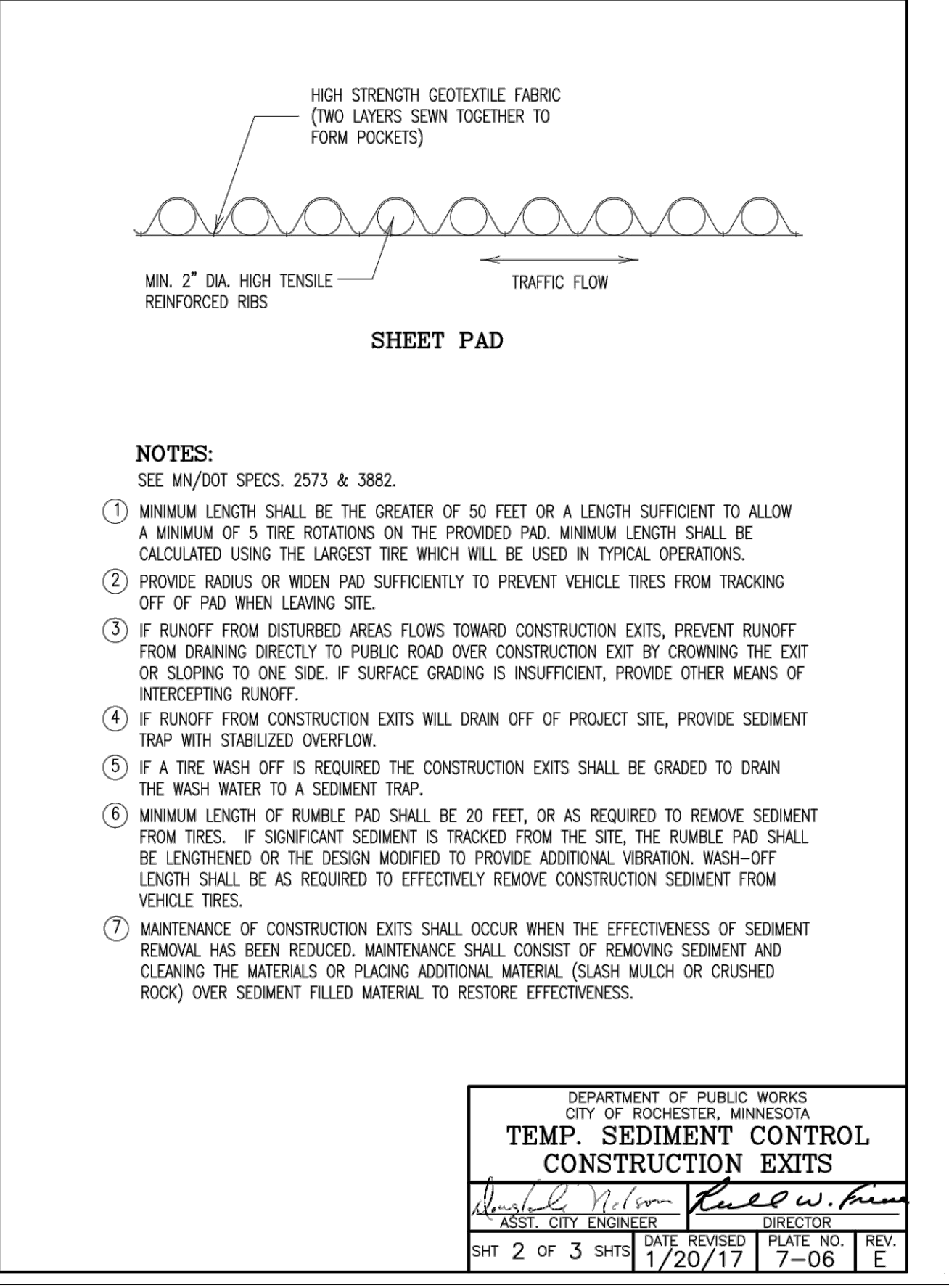
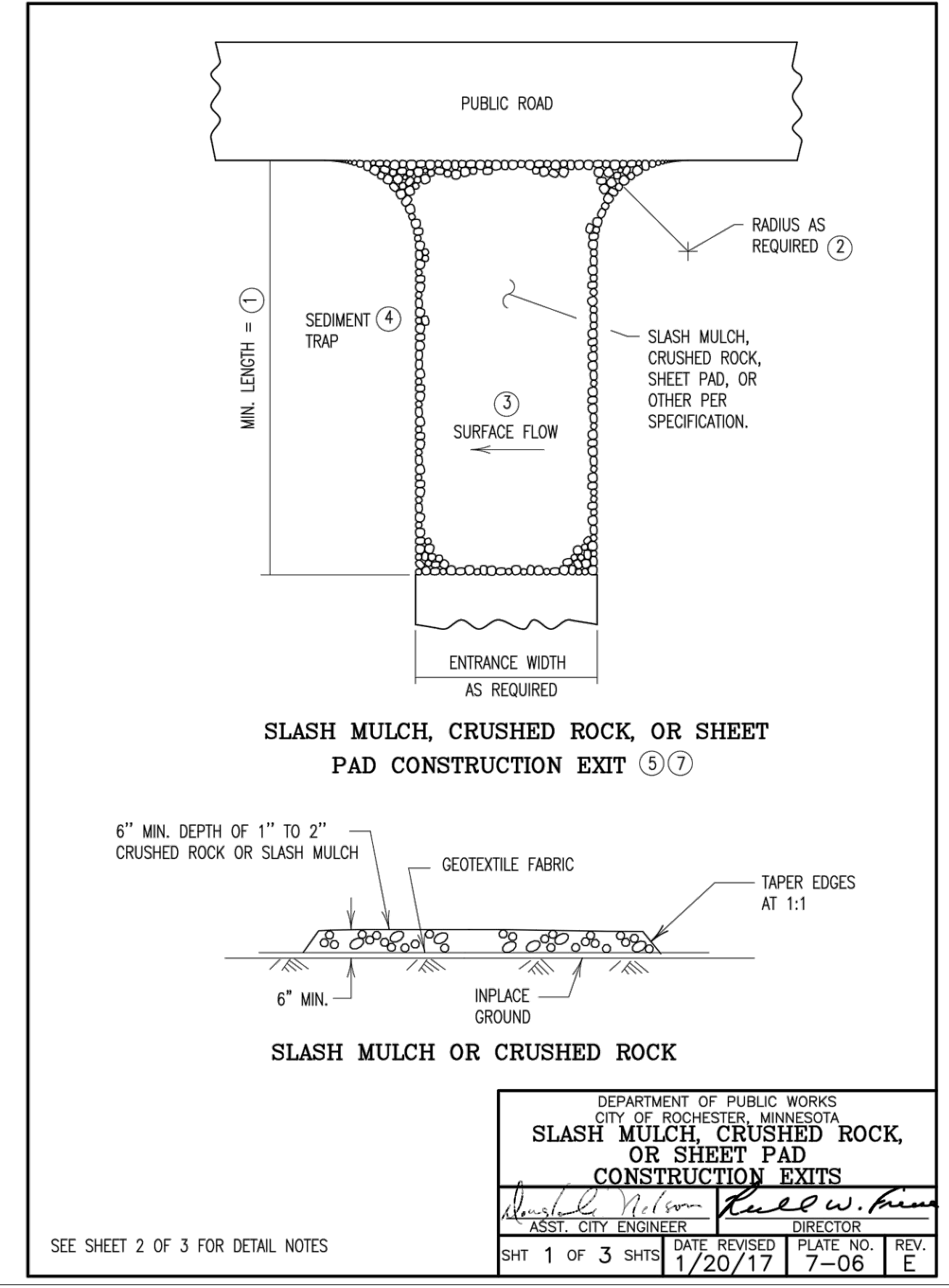
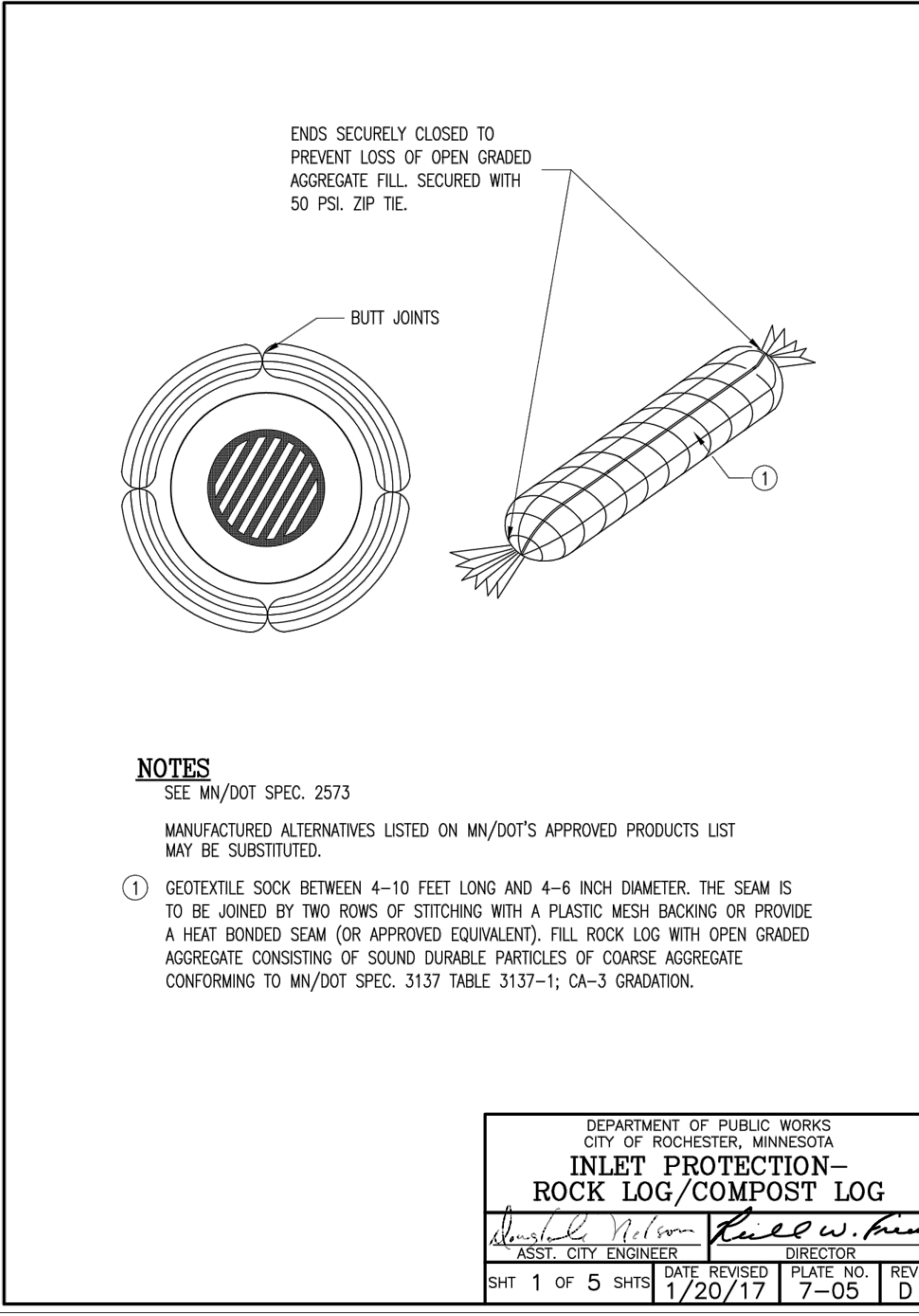
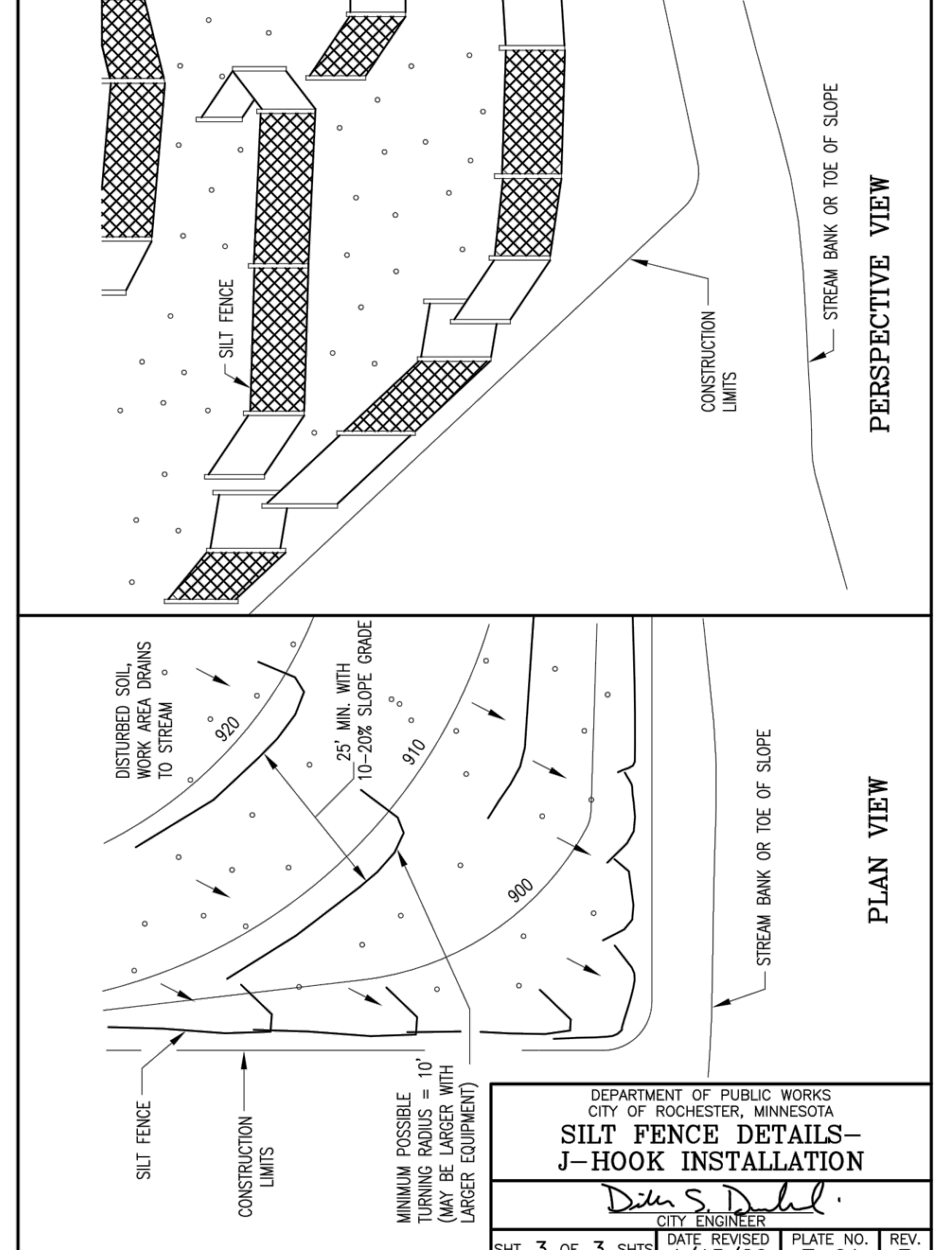
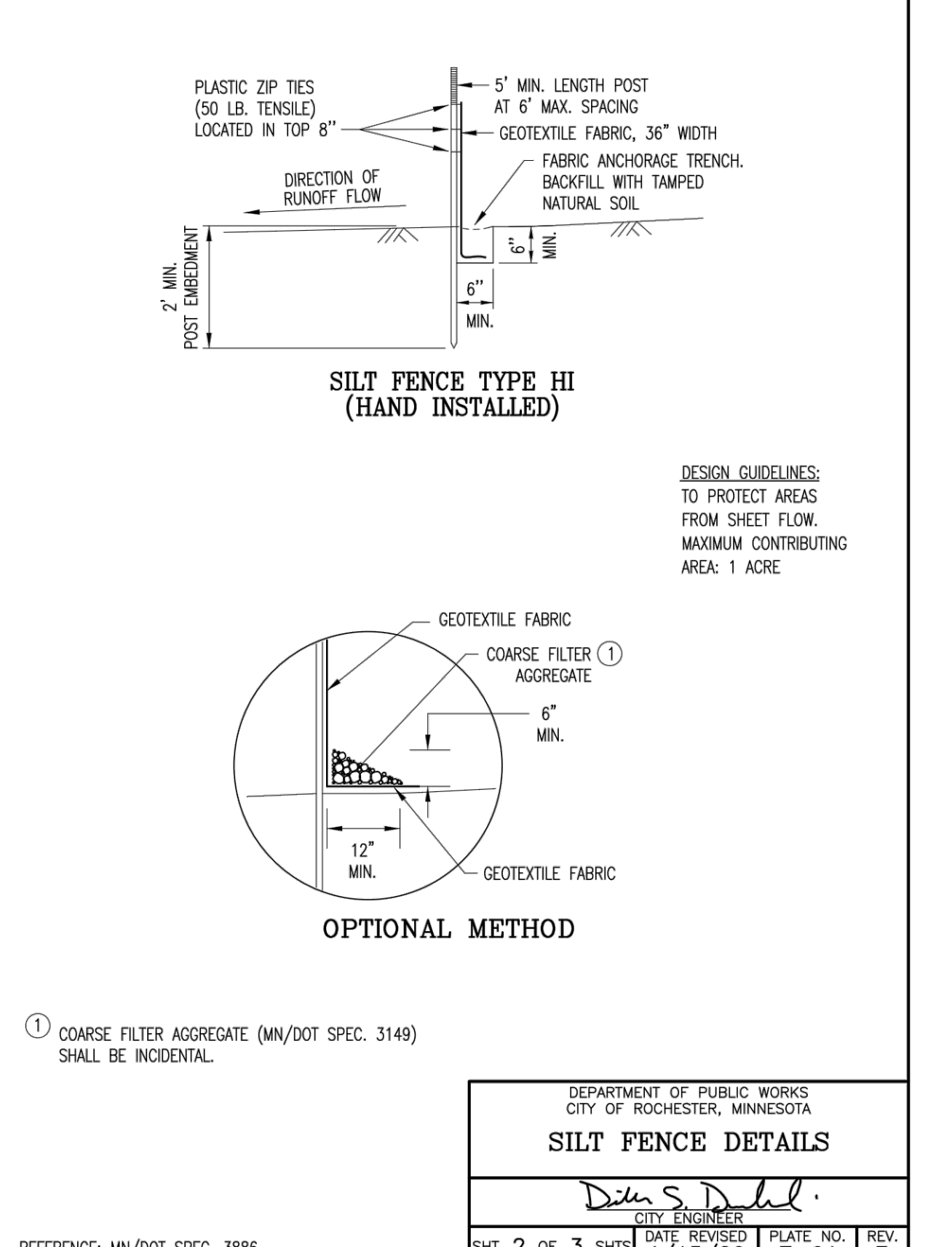
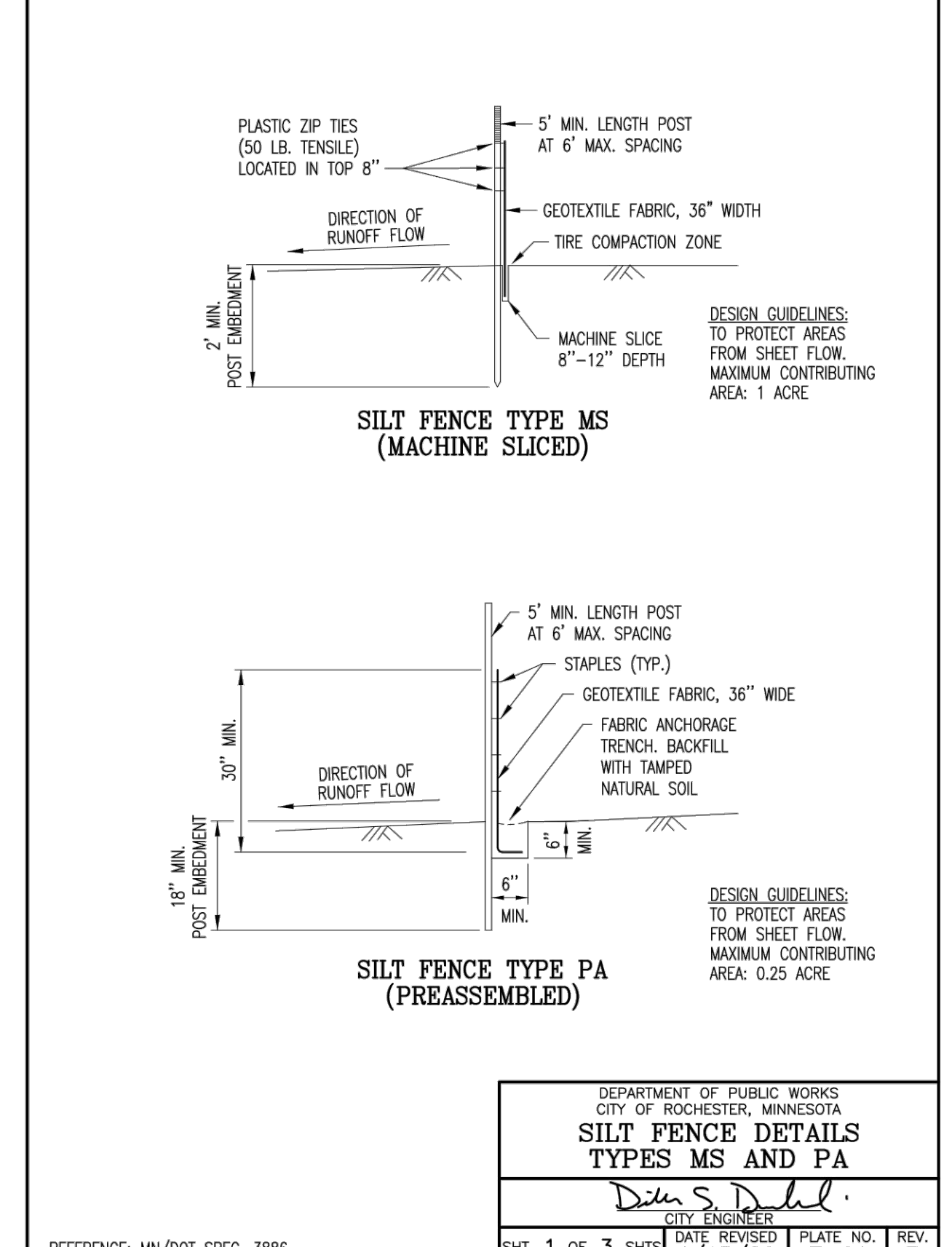
DIA. OF ROUND PIPE (FT.)	L (FT.)	CLASS II d ₅₀ = 6"				CLASS III d ₅₀ = 9"				CLASS IV d ₅₀ = 12"			
		GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP	GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP	GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP
12	8	16.9	0.2	3.0	19.6	0.3	4.4	22.6	0.3	5.9			
15	8	18.0	0.2	3.2	20.8	0.3	4.8	24.9	0.4	6.4			
18	10	22.4	0.3	4.3	26.5	0.4	6.4	29.0	0.5	8.5			
21	10	24.1	0.4	4.7	27.4	0.4	7.1	30.9	0.7	9.4			
24	12	29.7	0.5	6.2	33.4	0.8	9.2	37.3	1.0	12.3			
27	12	31.4	0.6	6.6	35.2	0.9	9.9	39.2	1.2	13.2			
30	14	37.4	0.8	8.2	41.8	1.1	12.3	46.0	1.5	16.4			
36	16	45.9	1.1	10.6	50.5	1.6	15.8	55.4	2.1	21.1			
42	18	52.8	1.2	12.5	57.8	1.7	18.7	63.0	2.3	24.9			
48	20	61.1	1.5	14.8	66.5	2.2	22.2	72.0	2.9	29.6			

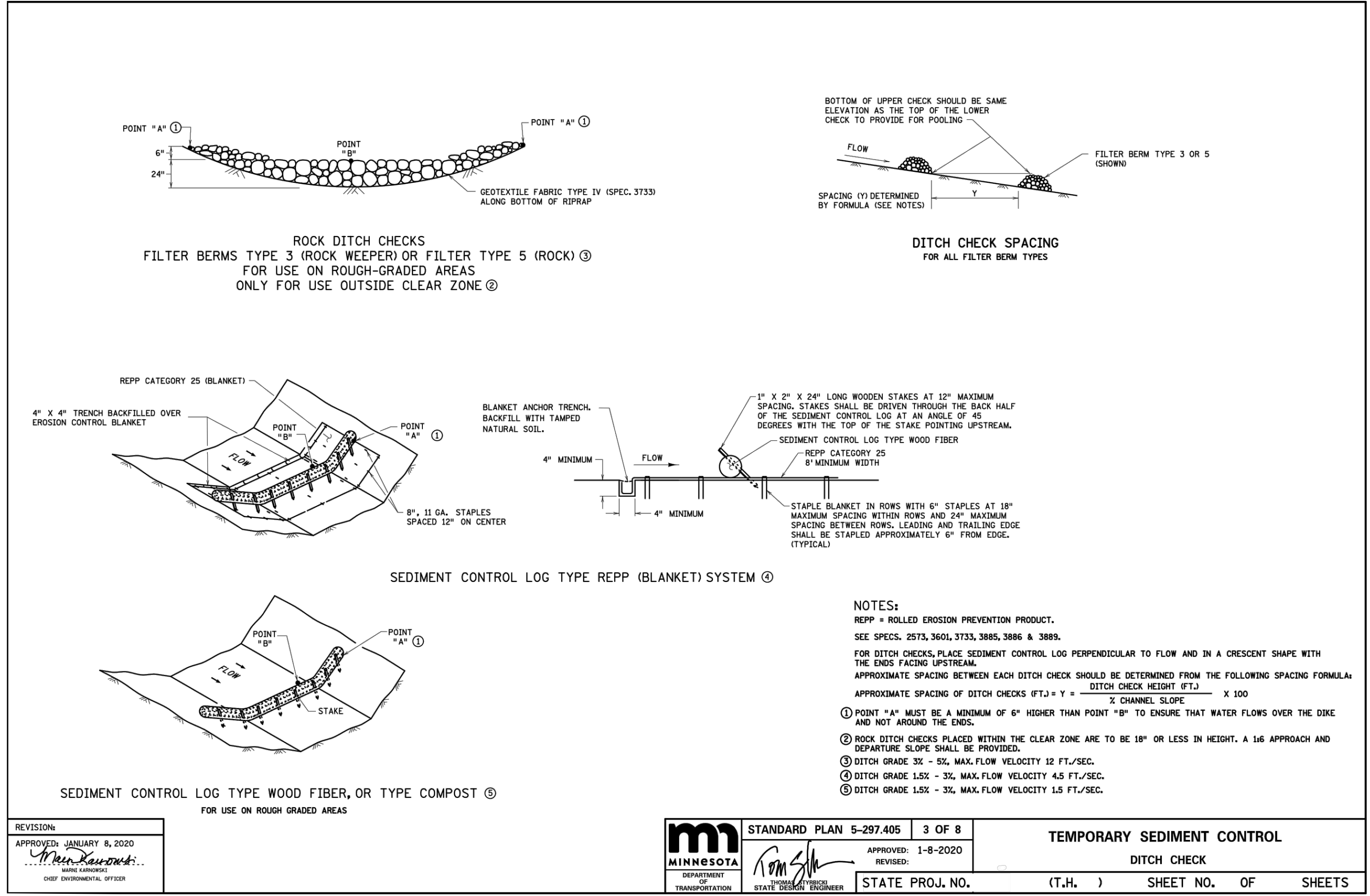
TABLE OF QUANTITIES
RIPRAP AT RCP-A OUTLETS

SPAN OF PIPE ARCH (FT.)	L (FT.)	CLASS II d ₅₀ = 6"				CLASS III d ₅₀ = 9"				CLASS IV d ₅₀ = 12"			
		GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP	GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP	GRANULAR FILTER UNDER APRON	12" FILTER DEPTH RIPRAP	18" FILTER DEPTH RIPRAP	24" FILTER DEPTH RIPRAP
22	10	22.4	0.2	4.1	25.4	0.4	6.1	29.0	0.5	8.1			
28	12	29.5	0.5	5.7	33.2	0.7	8.5	37.1	0.9	11.3			
36	14	37.3	0.8	7.9	41.5	1.1	11.2	45.8	1.5	14.9			
43	16	45.9	1.1	9.5	50.5	1.6	14.3	55.3	2.1	19.0			
51	18	52.5	1.2	11.3	57.5	1.7	16.9	62.7	2.3	22.0			
58	20	59.9	1.3	13.2	65.2	1.9	19.8	70.7	2.5	26.4			

NOTES:
 1. REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS WILL BE DESIGNATED IN THE PLANS.
 2. PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.
 3. FOR PIPES GREATER THAN OR EQUAL TO 30", USE 1.5".
 4. GEOTEXTILE FILTER, SPEC. 3733, SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIPRAP, GRANULAR FILTER MATERIALS.
 5. DIMENSION E IS GIVEN ON STANDARD PLATES 3100 AND 3100.
 6. GRANULAR FILTER, SPEC. 3600, MAY BE USED AS A CUSHION LAYER. PLACE FILTER PER SPEC. 2511. THE CUSHION LAYER IS INCIDENTAL.
 7. GRANULAR FILTER OR RIPRAP, SPEC. 3600, TO EXTEND UNDER ENTIRE OPEN PORTION OF PIPE APRON. DEPTH OF MATERIAL UNDER APRON SHALL MATCH RIPRAP DEPTH. WHEN USING RIPRAP INCREASE RIPRAP QUANTITY ACCORDINGLY AND PLACE A 2" LAYER OF 1/2" CRUSHED ROCK UNDER THE APRON TO AID IN GRADING FOR APRON PLACEMENT. CRUSHED ROCK IS INCIDENTAL.

APPROVED DECEMBER 9, 2013
 STATE OF MINNESOTA
 DEPARTMENT OF TRANSPORTATION
 SPECIFICATION REFERENCE NO. 3100 3600 3733 2511
 STANDARD PLATE NO. 3133D





REVISION:
 APPROVED: JANUARY 8, 2020
Wendy Rawns...
 WENDY RAWNSBOROUGH
 CHIEF ENVIRONMENTAL OFFICER

	STANDARD PLAN 5-297.405	3 OF 8	TEMPORARY SEDIMENT CONTROL DITCH CHECK
	APPROVED: 1-8-2020	REVISED:	
STATE PROJ. NO.	(T.H.)	SHEET NO.	OF SHEETS

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OLMSTED COUNTY
 ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH
 MNDOT STANDARD PLAN

SHEET 10
 OF 12 SHEETS

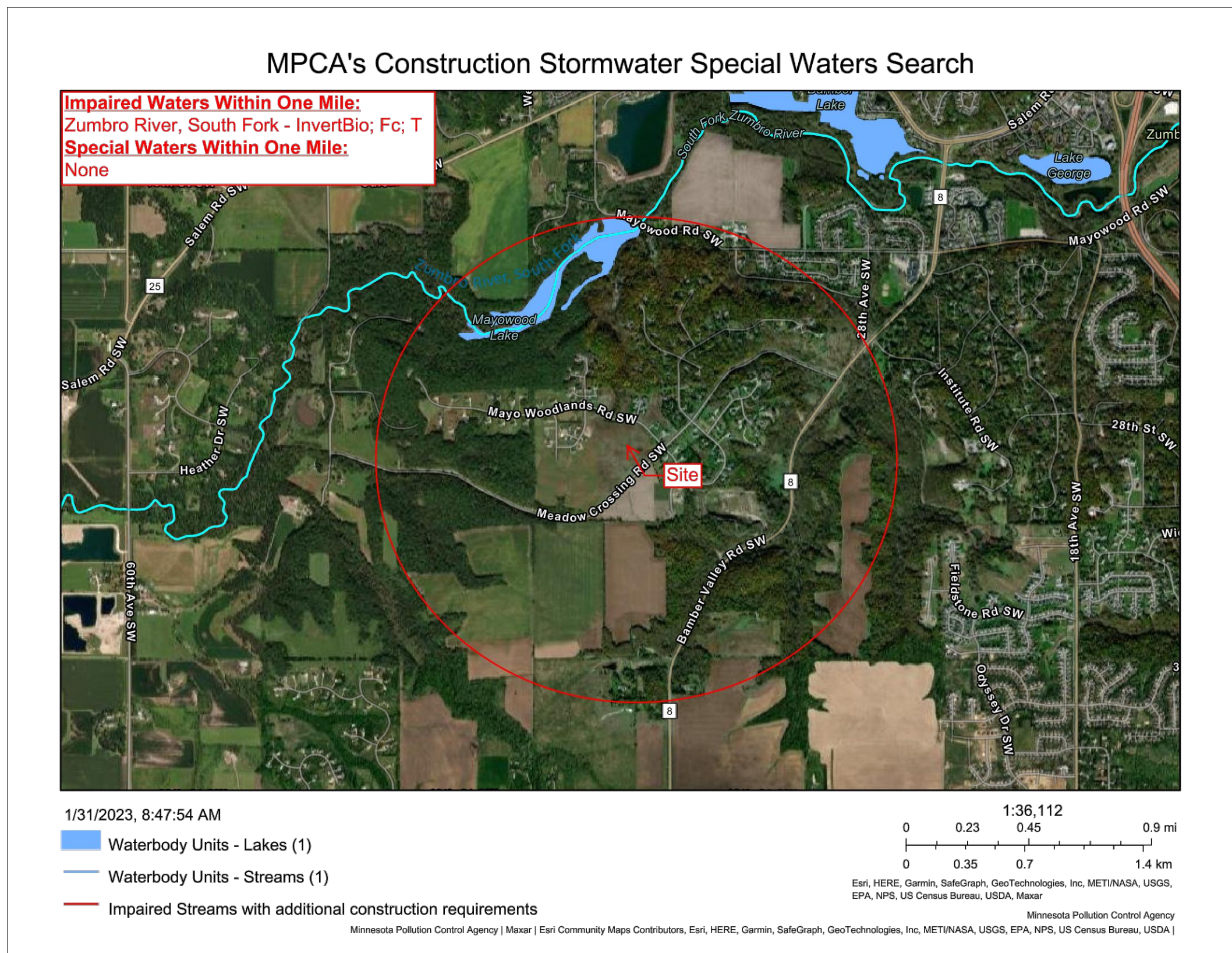
I. GENERAL CONSTRUCTION ACTIVITY INFORMATION:

- A. PROJECT NAME: MAYO WOODLANDS FOURTH
- B. DESCRIBE THE PROJECT LOCATION (ADDRESS/CITY OR TOWNSHIP/COUNTY/LATITUDE/LONGITUDE):
 ADDRESS OR DESCRIBE AREA: SEC. 17 - T106N - R14W; PID#64.17.41.086146
 CITY OR TOWNSHIP: ROCHESTER TOWNSHIP STATE: MN ZIP CODE: 55902
 LATITUDE/LONGITUDE OF APPROXIMATE CENTROID OF PROJECT: 43°58'59.00"N | 92°31'18.08"W
- C. DESCRIBE THE CONSTRUCTION ACTIVITY (TYPE OF CONSTRUCTION, PHASES, TIMELINES, POTENTIAL FOR DISCHARGE OF SEDIMENT AND OTHER POLLUTANTS, ETC.):
 THIS PROJECT IS FOR THE DEVELOPMENT OF MAYO WOODLANDS FOURTH SUBDIVISION. SIX (6) SINGLE FAMILY RESIDENTIAL LOTS ALONG WITH ONE (1) OUTLOTS WILL BE PLATTED. THIS PROJECT WILL BE COMPLETED IN ONE PHASE DURING THE SPRING/SUMMER 2023, BARRING APPROVALS AT THE TOWNSHIP AND COUNTY LEVELS. THE POTENTIAL FOR DISCHARGE OF SEDIMENT AND OTHER POLLUTANTS IS MINIMAL PROVIDED THE GRADING AND EROSION CONTROL PLAN PREPARED FOR THE PROJECT IS ADHERED TO.
- D. NUMBER OF TOTAL ACRES TO BE DISTURBED: 1.70 ACRES
- E. PRE-CONSTRUCTION ACRES OF IMPERVIOUS SURFACE: 0.17 ACRES
- F. POST-CONSTRUCTION ACRES OF IMPERVIOUS SURFACE: 0.92 ACRES
- G. TOTAL NEW IMPERVIOUS SURFACE AREAS: 0.75 ACRES

II. RECEIVING WATERS:

- A. LIST ALL WATERS WITHIN ONE MILE (NEAREST STRAIGHT-LINE DISTANCE) THAT ARE LIKELY TO RECEIVE STORMWATER RUNOFF FROM THE PROJECT SITE BOTH DURING OR AFTER CONSTRUCTION.

WATER BODY ID	NAME OF WATER BODY	TYPE	SPECIAL WATER?	IMPAIRED WATER?
---	ZUMBRU RIVER, SOUTH FORK	RIVER	NO	YES



III. PROJECT PLANS & SPECIFICATIONS:

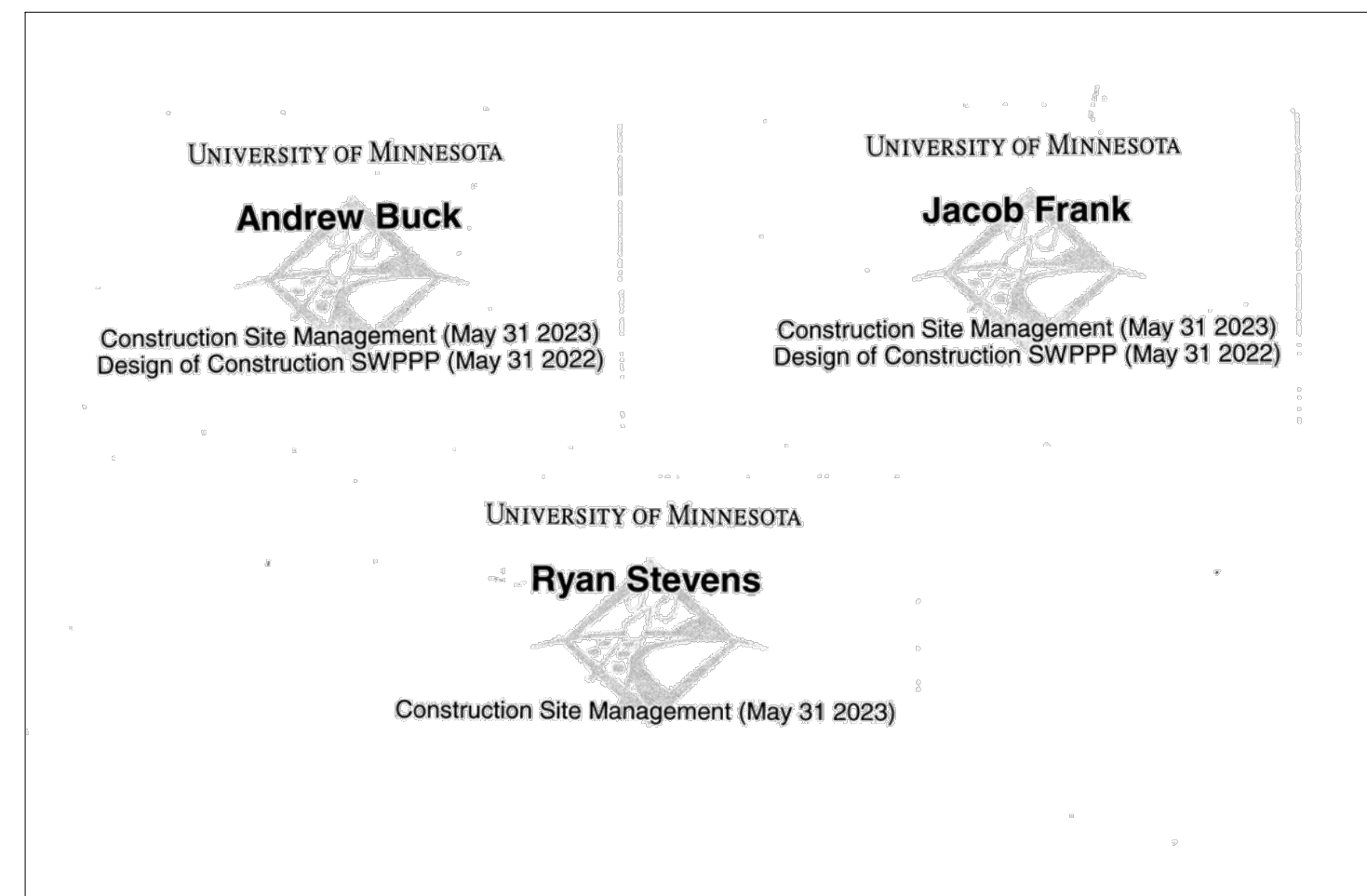
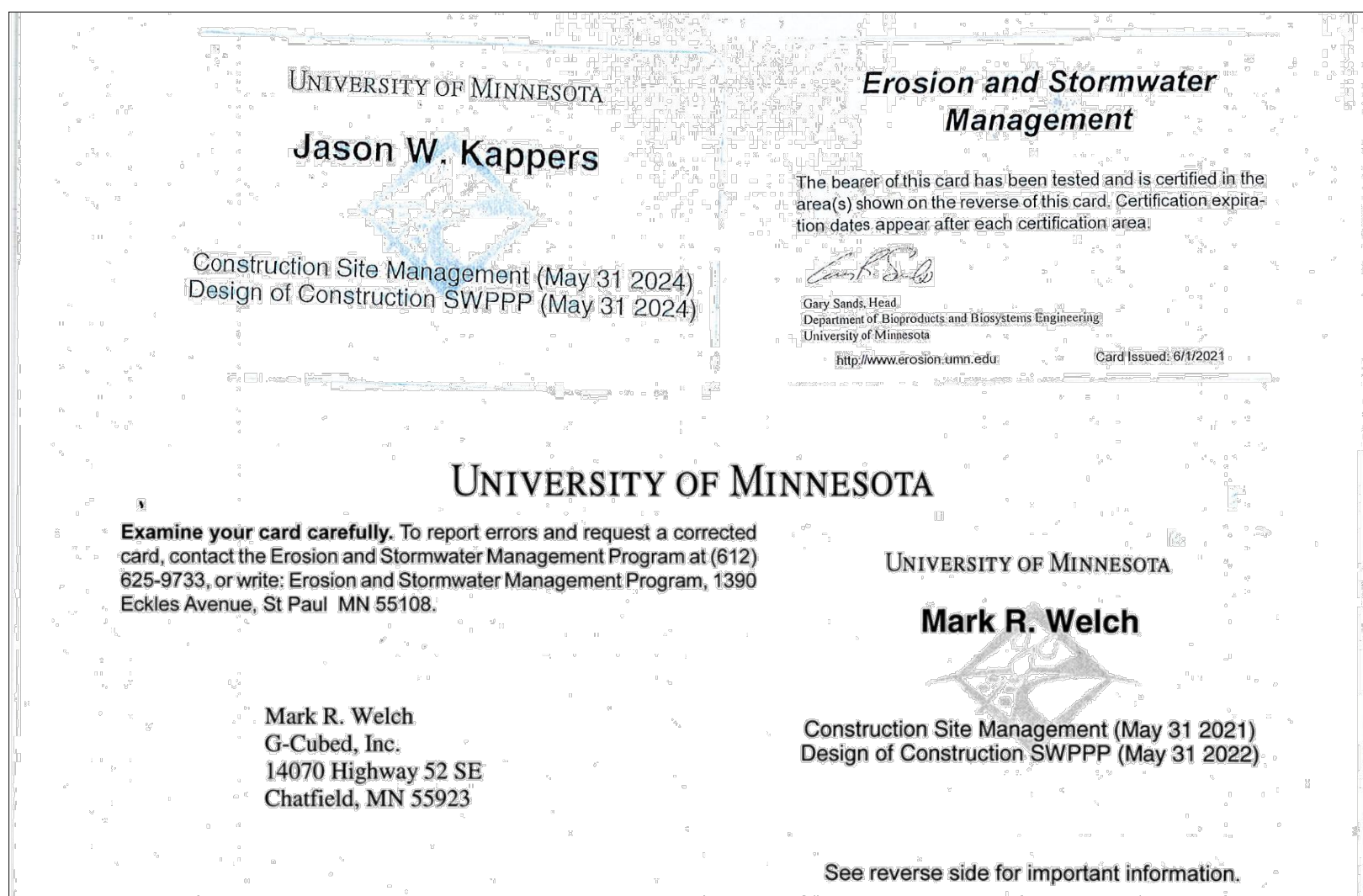
- A. GRADING & UTILITY PLANS, SPECIFICATIONS, AS WELL AS A DRAINAGE REPORT HAVE BEEN PREPARED FOR THIS PROJECT. THIS SWPPP SHALL BE A PART OF THE PLANS AND ON-SITE WITH THE CONTRACTOR DURING ACTIVE CONSTRUCTION. THE DRAINAGE REPORT INCLUDES ALL STORMWATER CALCULATIONS FOR COMPLIANCE WITH THE NPDES PERMIT AND ARE AVAILABLE AT THE OFFICE OF THE ENGINEER. JASON KAPPERS OF G-CUBED MAY BE CONTACTED VIA EMAIL FOR ELECTRONIC COPIES OF THE PLANS, SPECIFICATIONS AND DRAINAGE REPORT (jasonk@ggg.to).

IV. TEMPORARY EROSION PREVENTION PRACTICES:

- A. DESCRIBE THE TEMPORARY EROSION PREVENTION BMPs EXPECTED TO BE IMPLEMENTED ON THIS SITE DURING CONSTRUCTION:
- METHODS OF TEMPORARILY STABILIZING SOILS AND SOIL STOCKPILES:**
SOILS SHALL BE TEMPORARILY STABILIZED USING DISC ANCHORED MULCH, EROSION CONTROL BLANKET OR AN APPROVED EQUIVALENT. SOIL STOCKPILES SHALL BE TEMPORARILY STABILIZED USING SIMILAR MEASURES, BUT COULD ALSO INCLUDE PLASTIC SHEETING OR TARP.
 - METHODS TO BE USED FOR STABILIZATION OF DITCH AND SWALE WETTED PERIMETERS:**
ALL DITCH/SWALE WETTED PERIMETERS SHALL BE LINED WITH EROSION CONTROL BLANKET. ROCK CHECKS MAY ALSO BE USED AS A REDUNDANT BMP SHOULD EROSION CONDITIONS BE PRESENT AND WARRANT THEIR INSTALLATION.
 - METHODS TO BE USED FOR ENERGY DISSIPATION AT PIPE OUTLETS:**
RIP RAP SHOULD BE UTILIZED AT ALL PIPE OUTLETS AND BE INSTALLED WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER OR PROPERTY EDGE. RIP RAP SHOULD FOLLOW STANDARD INSTALLATION PRACTICES TO ENSURE UNDERMINING OF PIPE OUTLETS AND WASHOUTS DO NOT OCCUR.
 - METHODS TO BE USED TO PROMOTE INFILTRATION AND SEDIMENT REMOVAL ON THE SITE PRIOR TO OFFSITE DISCHARGE, UNLESS INFEASIBLE:**
CONSTRUCTION SHOULD BE PHASED SUCH THAT ONLY PORTIONS OF THE SITE THAT NEED TO BE DISTURBED ARE DISTURBED AND THAT CONSTRUCTION VEHICLES AND EQUIPMENT MINIMIZE TRAVEL OVER GREENSPACE AREAS. NON-COMPACTED SOILS AND DIRECTING STORMWATER FLOW TO VEGETATED AREAS ARE BMPs IN THEMSELVES AS BOTH PROMOTE INFILTRATION OF STORMWATER INTO SOIL.
- B. **DESCRIBE TIMELINES TO BE IMPLEMENTED AT THIS SITE FOR COMPLETING THE INSTALLATION OF THE EROSION PREVENTION BMPs LISTED IN I, II, III, AND IV.**
 PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES ON-SITE. ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED IN CONJUNCTION WITH PERIMETER CONTROLS TO ENSURE TRACKING ON PUBLIC ROADWAYS IS MINIMIZED OR NON-EXISTENT. ONCE THE SITE IS DEVELOPED AS SHOWN ON THE PLANS, THE SLOPES SHALL BE SEEDED, FERTILIZED AND BLANKETED IMMEDIATELY UPON FINISHING GRADING. STABILIZATION SHALL BE COMPLETE WITHIN 14 CALENDAR DAYS. ONCE FLATTER AREAS ARE GRADED, THEY SHOULD BE SEEDED AND HAVE MULCH DISC ANCHORED WITH STABILIZATION ALSO BEING COMPLETE WITHIN 14 CALENDAR DAYS. INLET PROTECTION SHALL BE USED AT ALL NEW INLETS WITHIN THE PROJECT AS THEY ARE INSTALLED TO KEEP SEDIMENT TRANSPORT MINIMIZED.
- C. **DESCRIBE ADDITIONAL EROSION PREVENTION MEASURES THAT WILL BE IMPLEMENTED AT THE SITE DURING CONSTRUCTION:**
 DEVELOPMENT SHOULD BE PHASED SUCH THAT ONLY ACTIVE AREAS ARE DISTURBED TO PREVENT ANY EROSION ISSUES. PROPER CONSTRUCTION PHASING IS IMPORTANT IN THAT IT GREATLY REDUCES THE POTENTIAL FOR SEDIMENT TO TRAVEL OFF-SITE. ADDITIONALLY, ALL AREAS THAT ARE PROPOSED GREENSPACE/VEGETATIVE SHOULD BE KNOWN BY THE CONTRACTOR SUCH THAT CONSTRUCTION EQUIPMENT AND VEHICLES MINIMIZE SOIL COMPACTION OVER THOSE AREAS.

V. TEMPORARY SEDIMENT CONTROL PRACTICES:

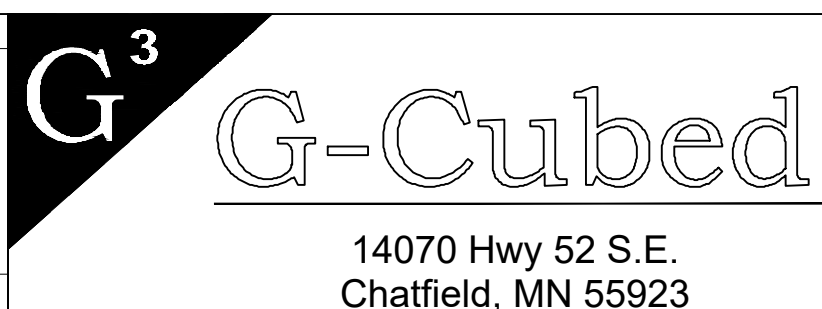
- A. DESCRIBE THE METHODS OF SEDIMENT CONTROL BMPs TO BE IMPLEMENTED AT THIS SITE DURING CONSTRUCTION TO MINIMIZE SEDIMENT IMPACTS TO SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS.
- METHODS TO BE USED FOR DOWN-GRADIENT PERIMETER CONTROL:**
DOWN-GRADIENT PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UP-GRADIENT LAND DISTURBING ACTIVITY AND SHALL REMAIN IN-PLACE UNTIL PERMANENT COVER IS ESTABLISHED.
 - METHODS TO BE USED TO CONTAIN SOIL STOCKPILES:**
SILT FENCE, BIOROLLS OR APPROVED EQUIVALENT SHALL BE INSTALLED AT THE BASE OF STOCKPILES ON THE DOWN-GRADIENT PERIMETER. REDUNDANT BMPs SUCH AS PLASTIC SHEETING OR TARP COULD ALSO BE USED IF THE SOIL STOCKPILE(S) ARE HIGHLY ERODABLE.
 - METHODS TO BE USED FOR STORM DRAIN INLET PROTECTION:**
INLET BAGS, INLET BOXES OR APPROVED ALTERNATIVES SHALL BE USED FOR STORM DRAIN INLET PROTECTION.
 - METHODS TO MINIMIZE VEHICLE TRACKING AT CONSTRUCTION EXITS AND STREET SWEEPING ACTIVITIES:**
ROCK CONSTRUCTION PADS SHOULD BE INSTALLED AT ALL ENTRANCES TO THE SITE TO MITIGATE OR HALT THE TRACKING OF SEDIMENT ON PUBLIC ROADWAYS. IF SEDIMENT IS TRACKED ONTO PUBLIC ROADWAYS, THEY SHOULD BE SWEEPED WITHIN ONE (1) CALENDAR DAY OF DISCOVERY.
 - IF APPLICABLE, ADDITIONAL SEDIMENT CONTROLS TO BE INSTALLED TO KEEP RUNOFF AWAY FROM PLANNED INFILTRATION OR FILTRATION AREAS WHEN EXCAVATED PRIOR TO FINAL STABILIZATION OF THE CONTRIBUTING DRAINAGE AREA.**
N/A
 - DESCRIBE METHODS TO BE USED TO MINIMIZE SOIL COMPACTION AND PRESERVE TOP SOIL (UNLESS INFEASIBLE) AT THIS SITE:**
THE CONTRACTOR SHOULD BE MADE AWARE AND UNDERSTAND WHERE THE AREAS OF PROPOSED GREENSPACE/VEGETATIVE COVER ARE LOCATED AND LIMIT THEIR TRAVEL OVER THESE AREAS TO MINIMIZE SOIL COMPACTION.
 - DESCRIBE PLANS TO PRESERVE A 50-FOOT NATURAL BUFFER BETWEEN THE PROJECT'S SOIL DISTURBANCE AND A SURFACE WATER OR PLANS FOR REDUNDANT SEDIMENT CONTROLS IF A BUFFER IS INFEASIBLE:**
N/A
 - DESCRIBE PLANS FOR USE OF SEDIMENTATION TREATMENT CHEMICALS:**
N/A; SEDIMENTATION TREATMENT CHEMICALS ARE STRICTLY PROHIBITED ON-SITE.
 - IS THE PROJECT REQUIRED TO INSTALL A TEMPORARY SEDIMENT BASIN DUE TO 10 OR MORE ACRES DRAINING TO A COMMON LOCATION OR 5 ACRES OR MORE IF THE SITE IS WITHIN 1 MILE OF A SPECIAL OR IMPAIRED WATER?**
NO
IF YES, DESCRIBE HOW THE BASIN WILL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION 14 [OF THE NPDES PERMIT].
 - WILL THE PROJECT INCLUDE DEWATERING, BASIN DRAINING?**
N/A
 - WILL THE PROJECT INCLUDE USE OF FILTERS FOR BACKWASH WATER?**
NO
- VI. **PERMANENT STORMWATER MANAGEMENT SYSTEM:**
- A. **WILL THE PROJECT RESULT IN ONE ACRE OR MORE OF NEW IMPERVIOUS SURFACES OR RESULT IN ONE ACRE OR MORE OF NEW IMPERVIOUS IN TOTAL IF THE PROJECT IS PART OF A LARGER PLAN OF DEVELOPMENT?**
 THE PROJECT IS PART OF A COMMON PLAN OF DEVELOPMENT, THUS PERMANENT STORMWATER TREATMENT IS REQUIRED FOR ALL NEW IMPERVIOUS INTRODUCED TO THE SITE.
- B. **IF YES, A WATER QUALITY VOLUME OF ONE INCH OF RUNOFF FROM THE CUMULATIVE NEW IMPERVIOUS SURFACES MUST BE RETAINED ON-SITE (SEE SECTION 15 OF THE PERMIT) THROUGH INFILTRATION UNLESS PROHIBITED DUE TO ONE OF THE REASONS IN ITEM 16.14 THROUGH ITEM 16.21. IF INFILTRATION IS PROHIBITED, IDENTIFY OTHER METHODS OF STORMWATER TREATMENT USED (e.g., FILTRATION SYSTEM, WET SEDIMENTATION BASIN, REGIONAL PONDING, OR EQUIVALENT METHOD):**
 THE PROPOSED VEGETATED SWALES SERVE AS VOLUME REDUCTION BMPs. SECTION 4.3 OF THE DRAINAGE REPORT ADDRESSES WATER QUALITY VOLUME AND TREATMENT OF THE 0.75 ACRES OF NEW IMPERVIOUS INTRODUCED.
- C. **ATTACHED DESIGN PARAMETERS FOR THE PLANNED PERMANENT STORMWATER MANAGEMENT SYSTEM, INCLUDING VOLUME CALCULATIONS, DISCHARGE RATE CALCULATION, CONSTRUCTION DETAILS INCLUDING BASIN DEPTH, OUTLET CONFIGURATIONS, LOCATION, DESIGN OF PRE-TREATMENT DEVICES AND TIMING FOR INSTALLATION.**
 REFER TO THE ATTACHED SECTIONS 4.3 AND 4.4 OF THE DRAINAGE REPORT FOR MAYO WOODLANDS FOURTH.
- VII. **INSPECTION & MAINTENANCE ACTIVITIES**
- A. **IDENTIFY THE TRAINED INDIVIDUAL(S) RESPONSIBLE FOR INSTALLING, SUPERVISING, REPAIRING, INSPECTING, AND MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL BMPs AT THE SITE.**
 G-CUBED, INC.:
 JASON KAPPERS, MARK WELCH, JACOB FRANK, ANDREW BUCK, RYAN STEVENS
 CONTRACTOR: _____
- B. **ATTACH TRAINING DOCUMENTATION FOR EACH INDIVIDUAL (SEE BELOW):**



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OLMSTED COUNTY ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH SWPPP

VII. INSPECTION & MAINTENANCE ACTIVITIES (CONTINUED):

C. DESCRIBE PROCEDURES TO ROUTINELY INSPECT THE CONSTRUCTION SITE, INCLUDING:

1. **A DESCRIPTION OF RECORD-KEEPING REQUIREMENTS AND CONTENT: (SEE ITEM 11.11):**
 RECORD-KEEPING REQUIREMENTS SHALL ADHERE TO SECTION 11.11 OF THE NPDES PERMIT:
 SECTION 11.11
 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:
 - a. DATE AND TIME OF INSPECTIONS; AND
 - b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
 - c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND
 - d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND
 - e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/8 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ON-SITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF THE SITE LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND
 - f. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (i.e. COLOR, ODOR, SETTLED OR UNSETTLED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND
 - g. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS [MINN. R. 7090].

2. **FREQUENCY OF INSPECTIONS (SEE ITEM 11.2 AND ITEM 11.10 OF THE PERMIT):**
 FREQUENCY OF INSPECTIONS SHALL ADHERE TO SECTIONS 11.2 AND 11.10 OF THE NPDES PERMIT:
 SECTION 11.2
 PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.b, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/8 INCH IN 24 HOURS. [MINN. R. 7090]

- SECTION 11.10
 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE AS DESCRIBED IN 11.2 AS FOLLOWS:
 - a. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE; OR
 - b. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE; INSPECTIONS MAY BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT; OR
 - c. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. [MINN. R. 7090]

3. **AREAS TO BE INSPECTED AND MAINTAINED (SEE ITEM 11.3 THROUGH 11.6 OF THE PERMIT):**
 AREAS TO BE INSPECTED AND MAINTAINED SHALL ADHERE TO SECTIONS 11.3 THROUGH 11.6 OF THE NPDES PERMIT:

- SECTION 11.3
 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPs. [MINN. R. 7090]
 - SECTION 11.4
 PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THIS AREA. [MINN. R. 7090]

SECTION 11.5
 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENTS DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS. [MINN. R. 7090]

SECTION 11.6
 PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. [MINN. R. 7090]

VIII. POLLUTION PREVENTION MANAGEMENT MEASURES:

- A. **DESCRIBE PRACTICES FOR STORAGE OF BUILDING PRODUCTS AND LANDSCAPE MATERIALS WITH A POTENTIAL TO LEACH POLLUTANTS TO MINIMIZE EXPOSURE TO STORMWATER:**
 BUILDING PRODUCTS AND LANDSCAPE MATERIALS WITH A POTENTIAL TO LEACH POLLUTANTS SHALL BE PLACED UNDER COVER (i.e. PLASTIC SHEETING OR TEMPORARY ROOFS) OR BE PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
- B. **DESCRIBE PRACTICES FOR STORAGE OF PESTICIDES, FERTILIZERS, AND TREATMENT CHEMICALS:**
 PESTICIDES, FERTILIZERS, AND TREATMENT CHEMICALS SHOULD ALSO BE PLACED UNDER COVER (i.e. PLASTIC SHEETING OR TEMPORARY ROOFS) OR BE PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
- C. **DESCRIBE PRACTICES FOR STORAGE AND DISPOSAL OF HAZARDOUS MATERIALS OR TOXIC WASTE (e.g., OIL, FUEL, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVE, ADDITIVES, CURING COMPOUNDS, AND ACIDS) ACCORDING TO MINN. R. CH. 7045, INCLUDING SECONDARY CONTAINMENT IF APPLICABLE:**
 HAZARDOUS MATERIALS AND TOXIC WASTE SHALL BE STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. DISPOSAL OF HAZARDOUS MATERIALS AND TOXIC WASTE SHALL BE AT APPROVED FACILITIES OR OTHERWISE APPROVED BY THE LGU.
- D. **DESCRIBE COLLECTION, STORAGE AND DISPOSAL OF SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035:**
 PER MINN. R. 7035.08, SUBP. 1, THE OWNER AND OCCUPANT OF ANY PREMISES, BUSINESS ESTABLISHMENT, OR INDUSTRY AND/OR THE REFUSE COLLECTION SERVICE ARE RESPONSIBLE FOR THE SATISFACTORY COLLECTION AND TRANSPORTATION OF ALL SOLID WASTE ACCUMULATED AT A PREMISE, BUSINESS ESTABLISHMENT, OR INDUSTRY TO A SOLID WASTE DISPOSAL, TRANSFER, OR PROCESSING FACILITY THAT IS AUTHORIZED TO ACCEPT THE WASTE.

 PER MINN. R. 7035.08, SUBP. 2, VEHICLES OR CONTAINERS USED FOR THE COLLECTION AND TRANSPORTATION OF GARBAGE AND SIMILAR PUTRESCIBLE WASTES, OR REFUSE CONTAINING SUCH MATERIALS, MUST BE COVERED, LEAKPROOF, DURABLE, AND OF EASILY CLEANABLE CONSTRUCTION. THEY MUST BE CLEANED TO PREVENT NUISANCES, POLLUTION, OR INSECT BREEDING, AND MUST BE MAINTAINED IN GOOD REPAIR. VEHICLES OR CONTAINERS USED FOR THE TRANSPORTATION OF MUNICIPAL SOLID WASTE COMBUSTOR ASH MUST BE COVERED TO PREVENT FUGITIVE DUST EMISSIONS AND CONSTRUCTION TO PREVENT LEAKING OF FLUID WHICH HAS BEEN IN CONTACT WITH ASH.
- E. **DESCRIBE MANAGEMENT OF PORTABLE TOILETS TO PREVENT TIPPING AND DISPOSAL OF SANITARY WASTES IN ACCORDANCE WITH MINN. R. CH. 7041:**
 PORTABLE TOILETS MUST BE POSITIONED SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. DISPOSAL OF SANITARY WASTES SHALL BE IN ACCORDANCE WITH MINN. R. CH. 7041.
- F. **DESCRIBE STORAGE AND DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES TO THAT WASTES DO NOT CONTACT THE GROUND:**
 CONCRETE WASHOUTS, WHICH PROHIBIT WASHOUT LIQUID AND SOLID WASTES FROM CONTACTING THE GROUND AND ENTERING THE GROUNDWATER, MAY BE; APPROVED FACILITIES OFFSITE, PORTABLE ONSITE FACILITIES, OR FACILITIES CONSTRUCTED ONSITE. ALL WASHOUT FACILITIES CONSTRUCTED ONSITE MUST BE IN APPROVED COMMUNAL LOCATIONS AND/OR LOCATED ON THE INDIVIDUAL LOT BEING DEVELOPED. ONSITE CONSTRUCTED FACILITIES SHALL HAVE A LEAK-PROOF, IMPERMEABLE LINER AND FOLLOW THE CONSTRUCTION, MAINTENANCE AND REMOVAL PROCESSES AS RECOMMENDED ON THE MPCA WEBSITE.
- IX. **PERMIT TERMINATION CONDITIONS**
 - A. **DESCRIBE METHOD OF FINAL STABILIZATION (PERMANENT COVER) OF ALL DISTURBED AREAS:**
 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTED THE NOTICE OF TERMINATION (NOT). VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.
 - B. **DESCRIBE METHODS USED TO CLEAN ALL STORMWATER TREATMENT SYSTEMS AND STORMWATER CONVEYANCE SYSTEMS OF ACCUMULATED SEDIMENT:**
 PERMITTEES MUST CLEAN THE STORMWATER CONVEYANCE SYSTEMS OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM IS OPERATING AS DESIGNED.
 - C. **DESCRIBE METHODS FOR REMOVING ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs:**
 COMMON METHODS FOR REMOVING ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs ARE ACCEPTABLE; SO LONG AS ALL TEMPORARY SYNTHETIC DEVICES ARE REMOVED PRIOR TO SUBMITTED THE NOTICE OF TERMINATION (NOT). PERMITTEES MAY LEAVE BMPs DESIGNED TO DECOMPOSE ON-SITE IN PLACE.

USDA NRCS WEB SOIL SURVEY MAP & MAP UNIT LEGEND



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
401B	Mt. Carroll silt loam, 2 to 6 percent slopes, moderately eroded	5.2	23.2%
401C2	Mt. Carroll silt loam, 6 to 12 percent slopes, moderately eroded	0.6	2.5%
489A	Atkinson loam, 0 to 1 percent slopes	13.7	60.9%
493B	Oronoco loam, 2 to 6 percent slopes	1.4	6.3%
493C	Oronoco loam, 6 to 12 percent slopes	1.3	5.7%
593E	Elbaville silt loam, 18 to 30 percent slopes	0.3	1.4%
Totals for Area of Interest		22.5	100.0%

SOIL CLASSIFICATION	HYDROLOGIC SOIL GROUP (HSG)
*401B - MT. CARROLL SILT LOAM.....	B
*401C2 - MT. CARROLL LOAM.....	B
*489A - ATKINSON LOAM.....	C
*493B - ORONOCO LOAM.....	B
*493C - ORONOCO LOAM.....	B
*593E - ELBAVILLE SILT LOAM.....	C

*PROPOSED TO BE DISTURBED WITH DEVELOPMENT OF MAYO WOODLANDS FOURTH.

USGS QUAD MAP - MINNESOTA - OLMSTED COUNTY - 7.5-MINUTE SERIES



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: 05/17/23
 GEOFFREY G. GRIFFIN
 REG. NO. 21940
 FILE NO.: 22-032 MW4 GP

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DESIGNED: JWK
 DRAWN: JWK
 CHECKED: GGG

REVISED	BY	DATE
TRAIL REV.	JWK	2/16/23
TWP. COMMENTS	JWK	3/21/23
MPCA COMMENTS	JWK	3/31/23
1.5" WAT. SERV.	JWK	4/28/23
8' TRAIL WIDTH	JWK	5/17/23

OLMSTED COUNTY
 ROCHESTER TOWNSHIP

MAYO WOODLANDS FOURTH
 SWPPP