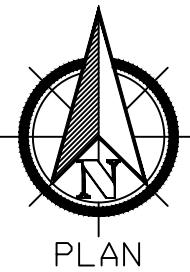
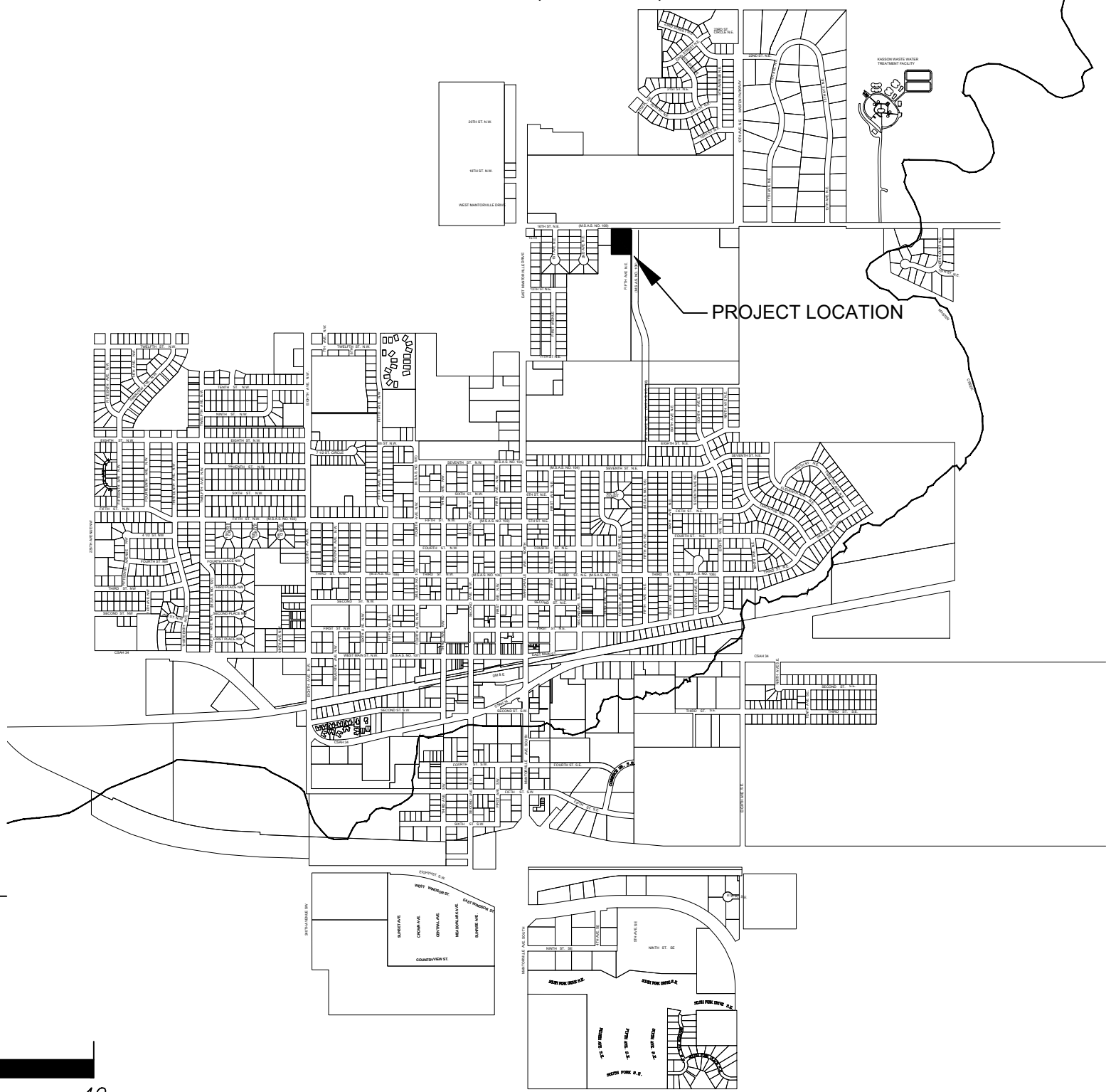


THOMPSON ADDITION 504 DEVELOPMENT PUD

LOCATION MAP
(NO SCALE)



0 10 20 40
SCALE IN FEET

EXISTING PROPERTY DESCRIPTION

Lots 1,2,3 and 4, Block 1, HACKS 2ND ADDITION, according to the plat thereof, on file in the office of the County Recorder, Dodge County, Minnesota.

AND

The North 152.00 feet of the East 108.00 feet of Lot 2, Block 1, HACKS ADDITION, according to the plat thereof, on file in the office of the County Recorder, Dodge County, Minnesota.

OWNER AND DEVELOPER

504 DEVELOPMENT, LLC
504 16th Street NE, Kasson, MN
Contact: Aaron Thompson

PROJECT AREAS:

PROPERTY AREA	68,641 SQ FT (1.58 AC)
TOTAL PROJECT SIZE (DISTURBED AREA)	57,760 SQ FT (1.33 AC)
EXISTING AREA OF IMPERVIOUS SURFACE	5,090 SQ FT (0.12 AC)
NEW IMPERVIOUS AREA CREATED	15,800 SQ FT (0.36 AC)
POST CONSTRUCTION AREA OF IMPERVIOUS SURFACE	20,890 SQ FT (0.48 AC)

GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN FOR SITE GRADING AND DRIVEWAY CONSTRUCTION

THE 2013 EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA STANDARD SPECIFICATIONS SHALL GOVERN FOR UTILITY INSTALLATION

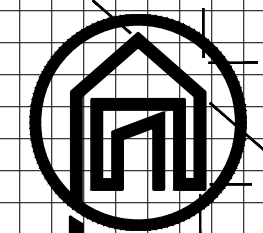
INDEX

SHEET	DESCRIPTION
C1.0	SITE LAYOUT
C2.0	GRADING AND EROSION CONTROL PLAN
C3.0	DRIVEWAY AND UTILITY PLAN
C4.0	STANDARD PLATES / TYPICAL SECTIONS
C5.0	STANDARD PLATES
C6.0	STORM WATER POLLUTION PREVENTION PLAN

BASIS OF DRAWING FILE:

DATE OF SURVEY: 08-06-2018
COORDINATE SYSTEM: DODGE COUNTY
HORIZONTAL DATUM: NAD83(2011) REF: VRS
VERTICAL DATUM: NAVD88 REF: VRS
ADDITIONAL FILE INFORMATION:

BENCHMARK ELEVATION = 1244.38
TOP NUT HYDRANT AT SE QUADRANT
OF 16TH ST SE AND 5TH AVE SE



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RED WING, MN 55066
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DIRECT SUPERVISION AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MINNESOTA.

MARK A. SCHOENFELDER
DATE: JAN 25, 2021 LC NO. 42302

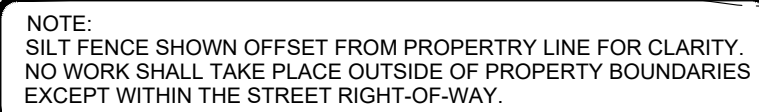
504 DEVELOPMENT PUD
SITE LAYOUT

MINNESOTA

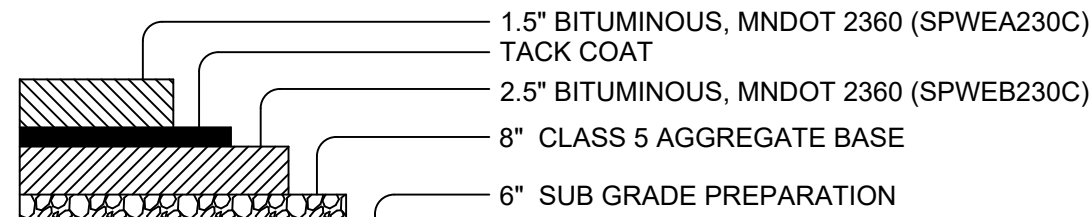
KASSON

SITE LAYOUT

C1.0



C2.0



DRIVEWAY PAVEMENT SECTION
(NOT TO SCALE)

BENCHMARK ELEVATION = 1244.38
TOP NUT HYDRANT AT SE QUADRANT
OF 16TH ST SE AND 5TH AVE SE

KEY NOTES:

- 1 SAWCUT/REMOVE AND REPLACE BITUMINOUS PAVEMENT
MATCH EXISTING SECTION
- 2 REMOVE AND REPLACE CONCRETE CURB AND GUTTER
- 3 REMOVE CONCRETE DRIVE APRON & BITUMINOUS PAVEMENT
- 4 CONCRETE DRIVE APRON

ST-1
CONNECT TO EXIST CB
INV = 1238.00

ST-2
PRIVATE STORM SEWER
CONSTRUCT MH-CB TYPE 4 (48")
NEENAH R-2533 TYPE B
RIM = 1242.20
INV = 1238.30

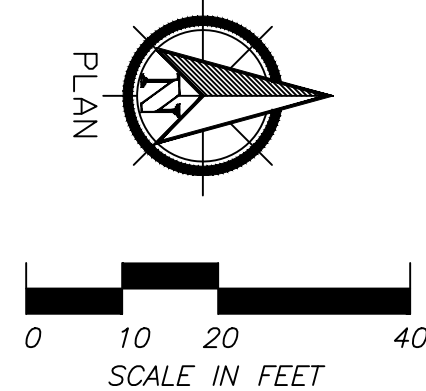
ST-3
PRIVATE STORM SEWER
CONSTRUCT CB TYPE 3
NEENAH R-3347-A TYPE C
GUTTER FLOWLINE = 1242.40
INV = 1238.82

SAN-1
CONSTRUCT SANITARY MH TYPE 3A
BYPASS MAY BE REQUIRED
E INV= 1227.25 (FIELD VERIFY)
W INV = 1227.35
S INV (LOWER) = 1228.00
S INV (UPPER) = 1232.11
RIM = 1242.42
CONTRACTOR SHALL PROVIDE ADVANCE NOTICE
TO THE CITY REGARDING THE TIME AND DATE
THAT THE CITY NEEDS TO BE AVAILABLE TO MAKE
THE CONNECTION. CONTACT DAVE VOSEN # 507-421-3185

SAN-2
CONSTRUCT SANITARY MH TYPE 3
RIM = 1245.76
INV IN = 1233.10
INV OUT = 1233.00

W-1
WET TAP EXIST WATERMAIN
F&I 6" GV AND BOX
VERIFY LOCATION WILL NOT BE IN CURB LINE

W-2
F&I HYDRANT
F&I 6" GV AND BOX
BREAKOFF ELEV = 1246.2



MAINTAIN MINIMUM 1.5' VERTICAL SEPARTATION BETWEEN
SEWER (SANITARY AND STORM) AND WATERMAIN

LOT/BLOCK		CURB STOP STATION	TOP CURB BOX ELEVATION	DIST. FROM MH TO WYE	END SANITARY SERV. ELEV.	LENGTH OF SANITARY SERVICE
1	1	0+59.0 RT	1243.4	31.6	1236.00	26.0
15	1	0+64.0 LT	1243.4	36.5	1234.50	14.0
2	1	0+88.0 RT	1243.8	60.4	1236.00	26.0
3	1	0+98.5 RT	1244.0	71.0	1236.00	26.0
14	1	1+35.5 LT	1244.3	93.8	1234.50	14.0
4	1	1+27.0 RT	1244.4	99.6	1236.00	26.0
5	1	1+32.5 RT	1244.5	105.2	1237.00	26.0
6	1	1+61.5 RT	1244.9	134.2	1237.00	26.0
7	1	1+71.5 RT	1245.1	144.0	1237.00	26.0
13	1	1+85.0 LT	1245.1	157.5	1235.00	14.0
8	1	2+01.0 RT	1245.5	173.5	1237.00	26.0
12	1	2+15.0 LT	1245.5	187.5	1235.00	14.0
11	1	2+24.5 LT	1245.7	197.2	1235.00	14.0
10	1	2+53.0 LT	1246.1	216.5	1235.00	14.0

EXISTING UTILITY NOTES

THE LOCATION OF UNDERGROUND AND OVERHEAD FACILITIES OR STRUCTURES AS SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AT THE TIME THE PLANS WERE PREPARED AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. THERE MAY BE ADDITIONAL UNDERGROUND AND OVERHEAD UTILITIES NOT SHOWN ON THE PLAN THAT MAY BE REQUIRE RELOCATION OR REMOVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST A GOPHER STATE ONE CALL PRIOR TO THE START OF ANY CONSTRUCTION TO DETERMINE THE EXACT LOCATION OF ALL FACILITIES AND TO PROVIDE ADEQUATE PROTECTION OF SAID UTILITIES DURING THE COURSE OF WORK.



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1647 16th Ave. NW
Rochester, MN 55901
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RED WING, MN 55069
(855) 754-6621

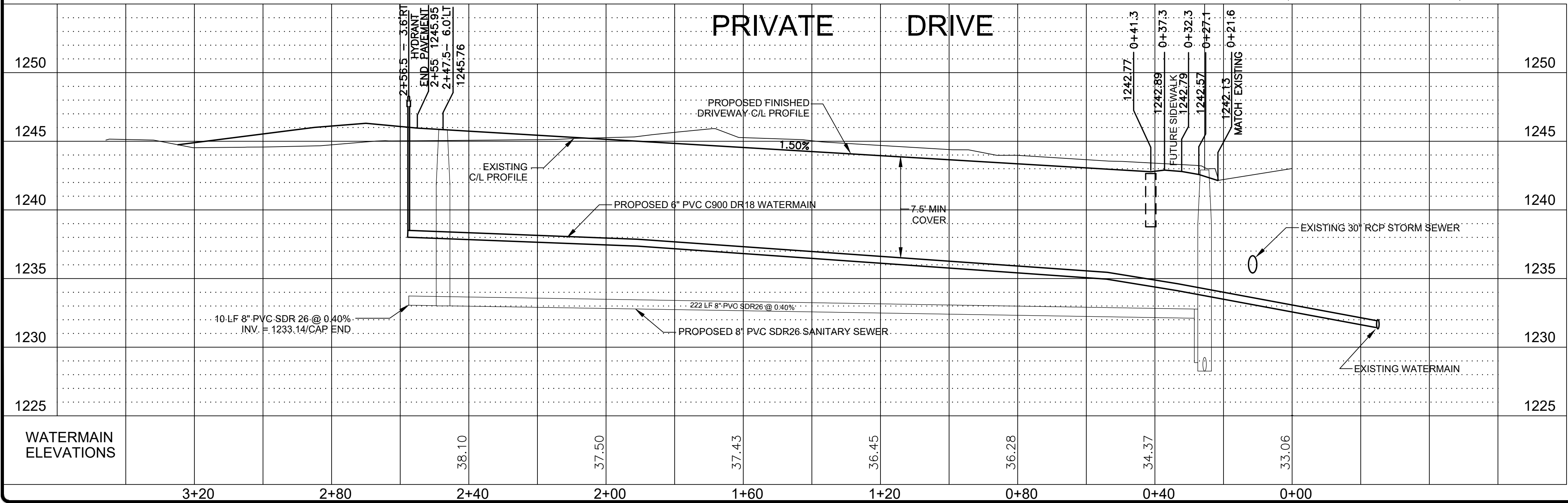
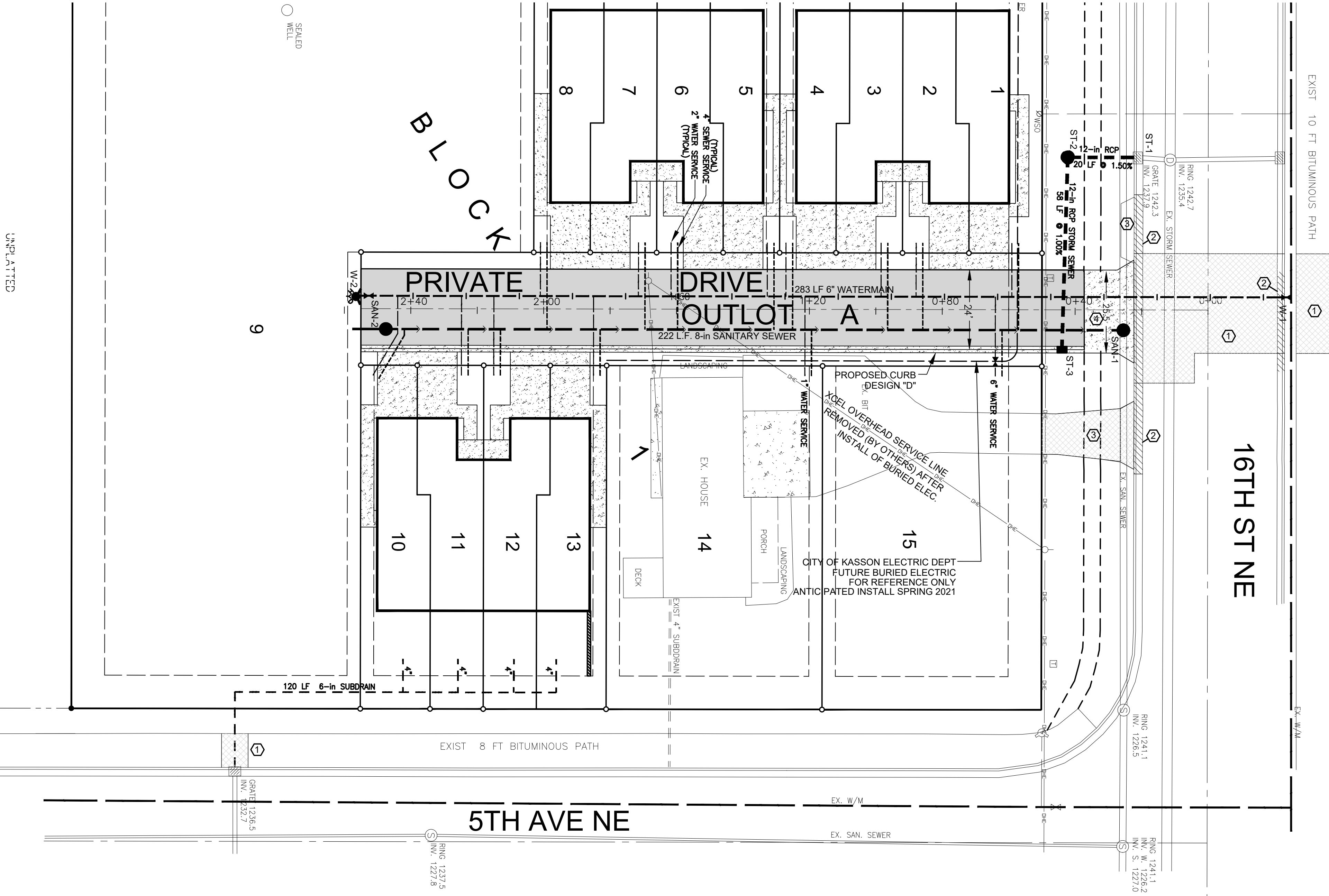
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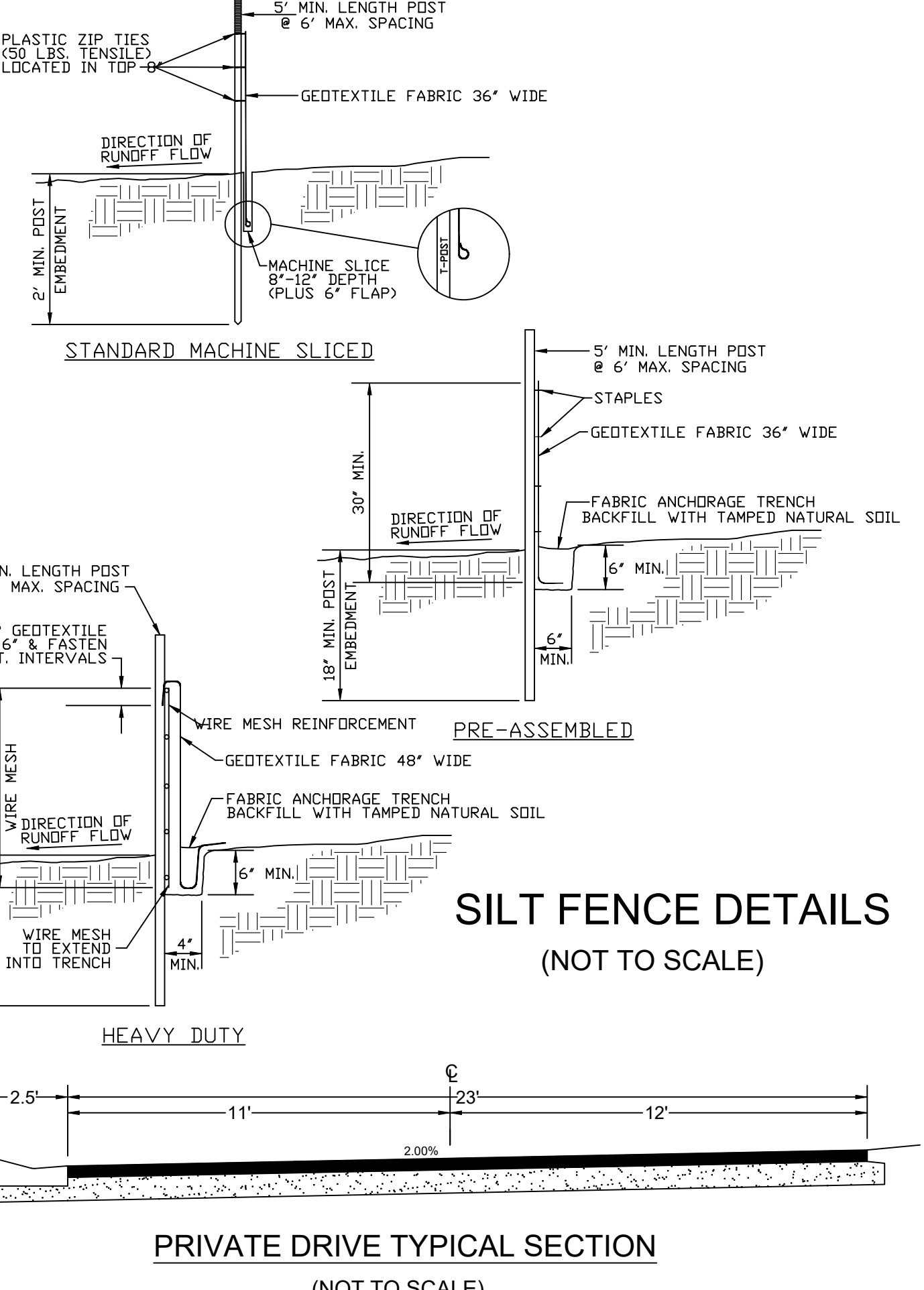
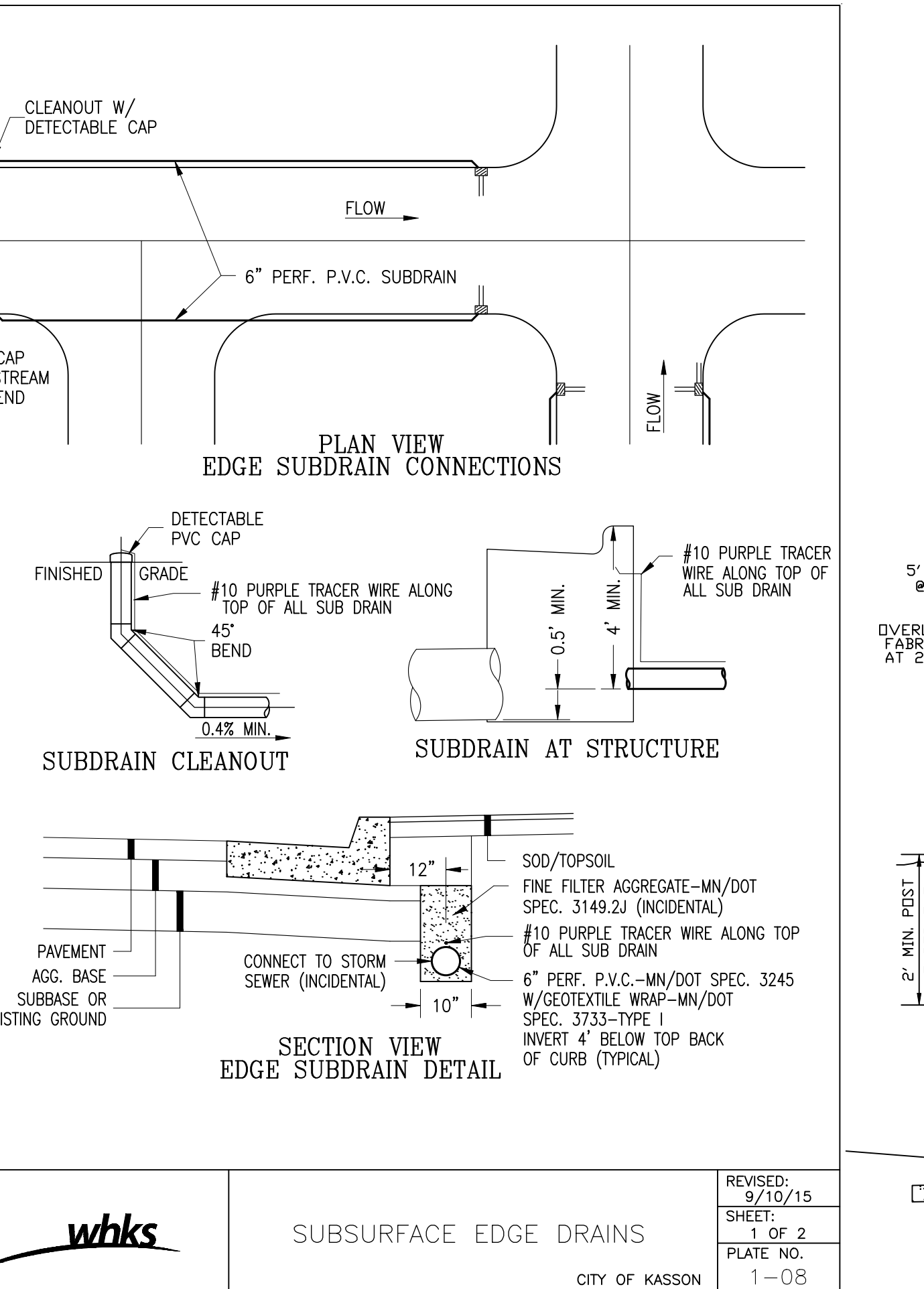
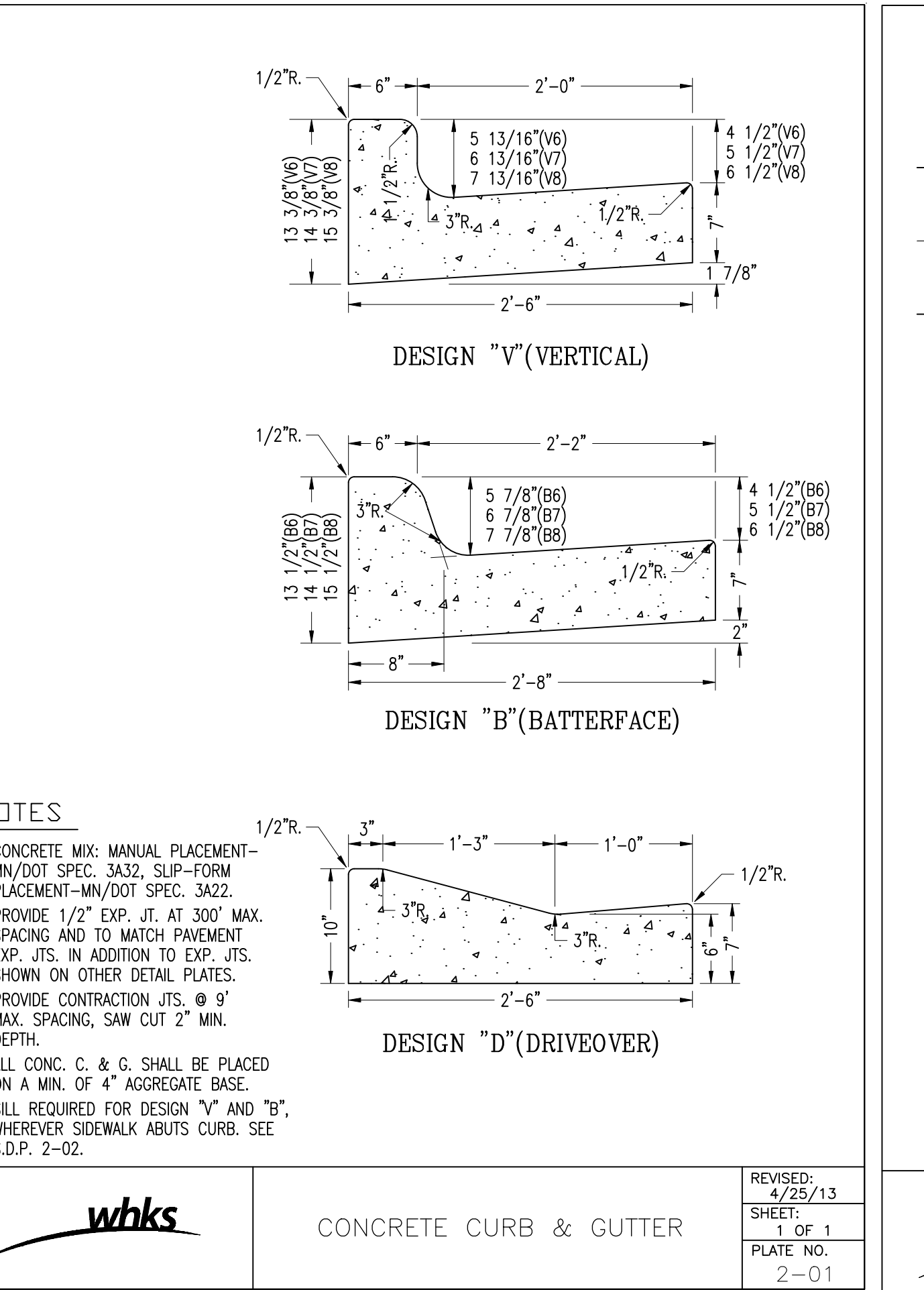
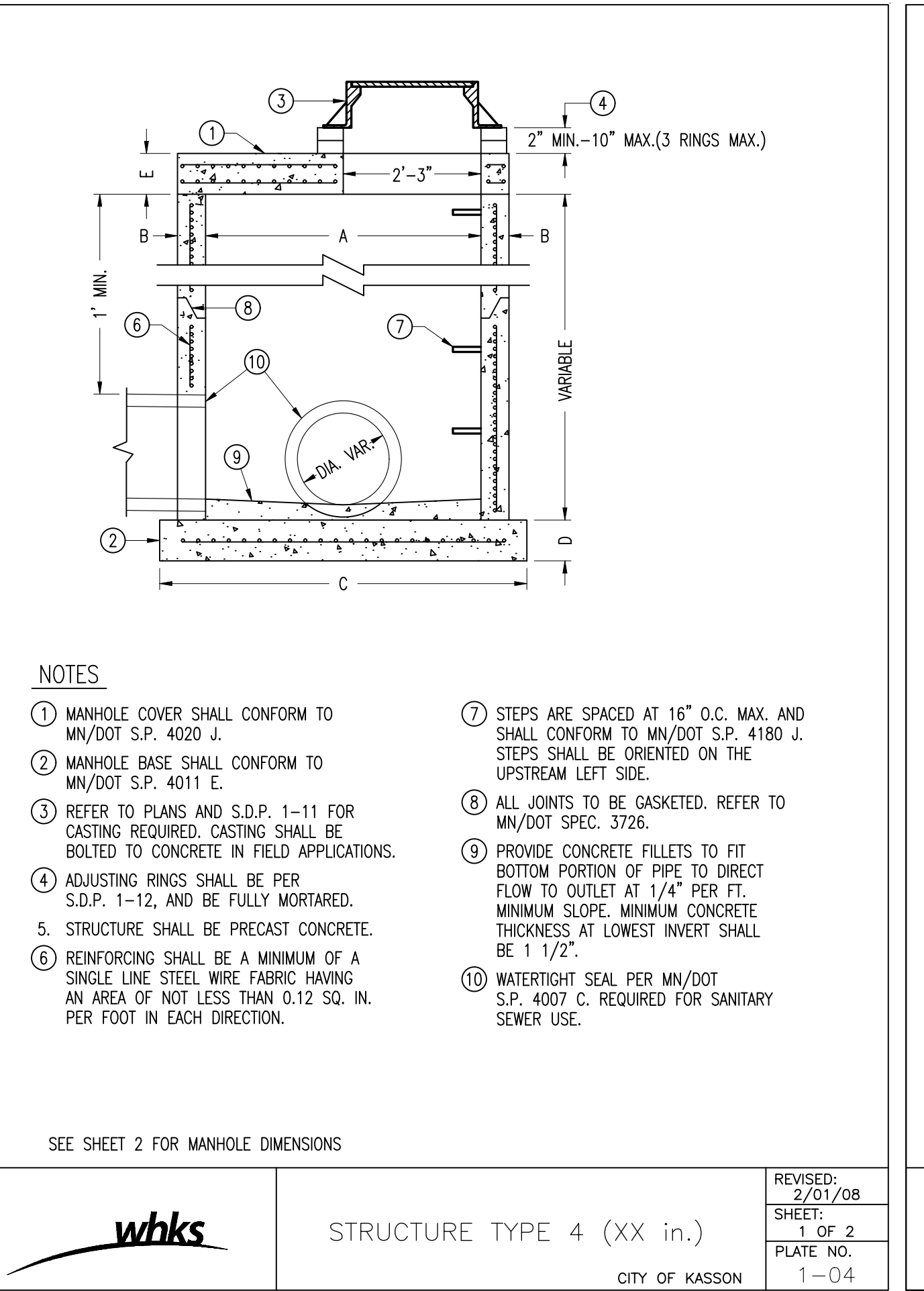
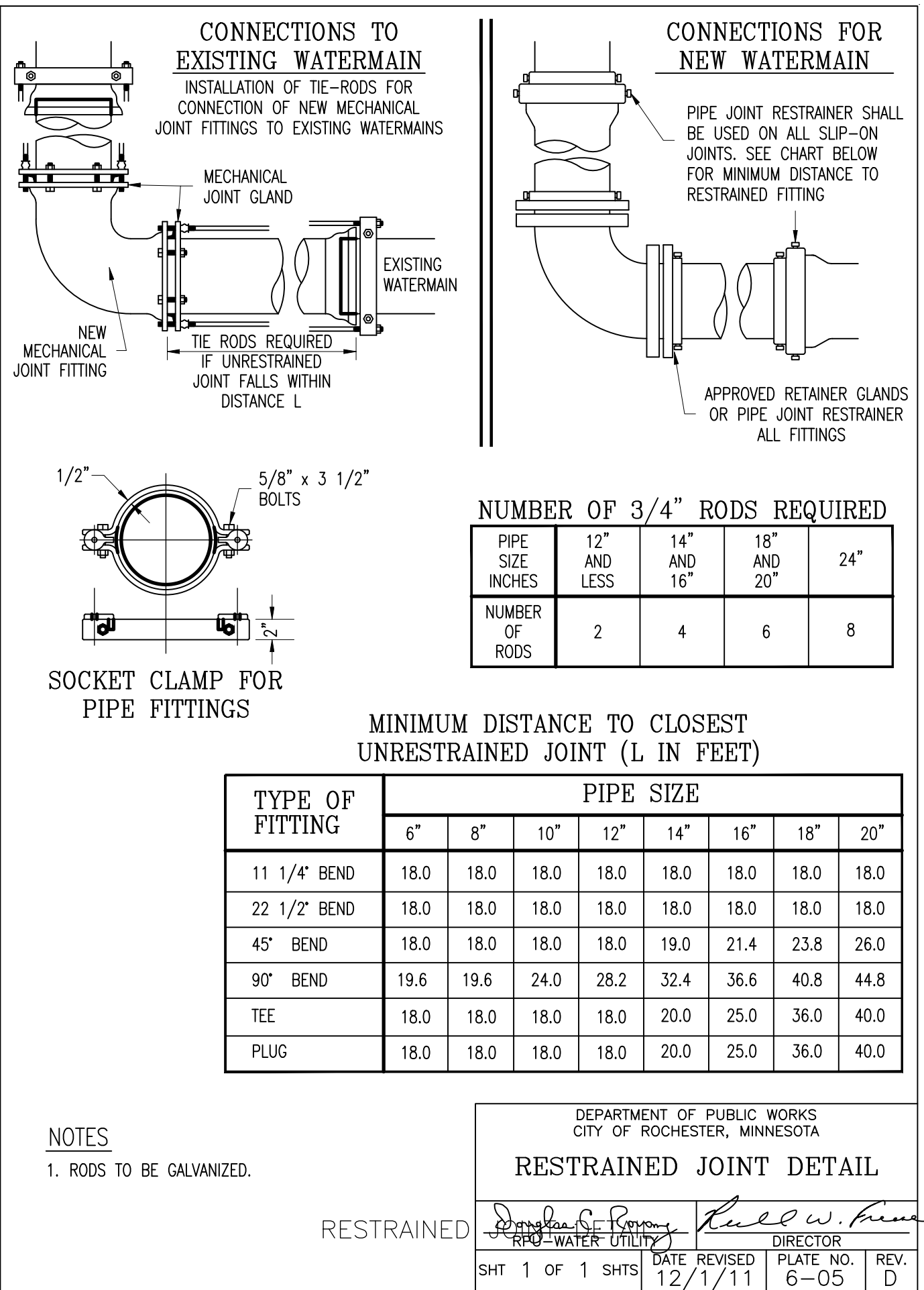
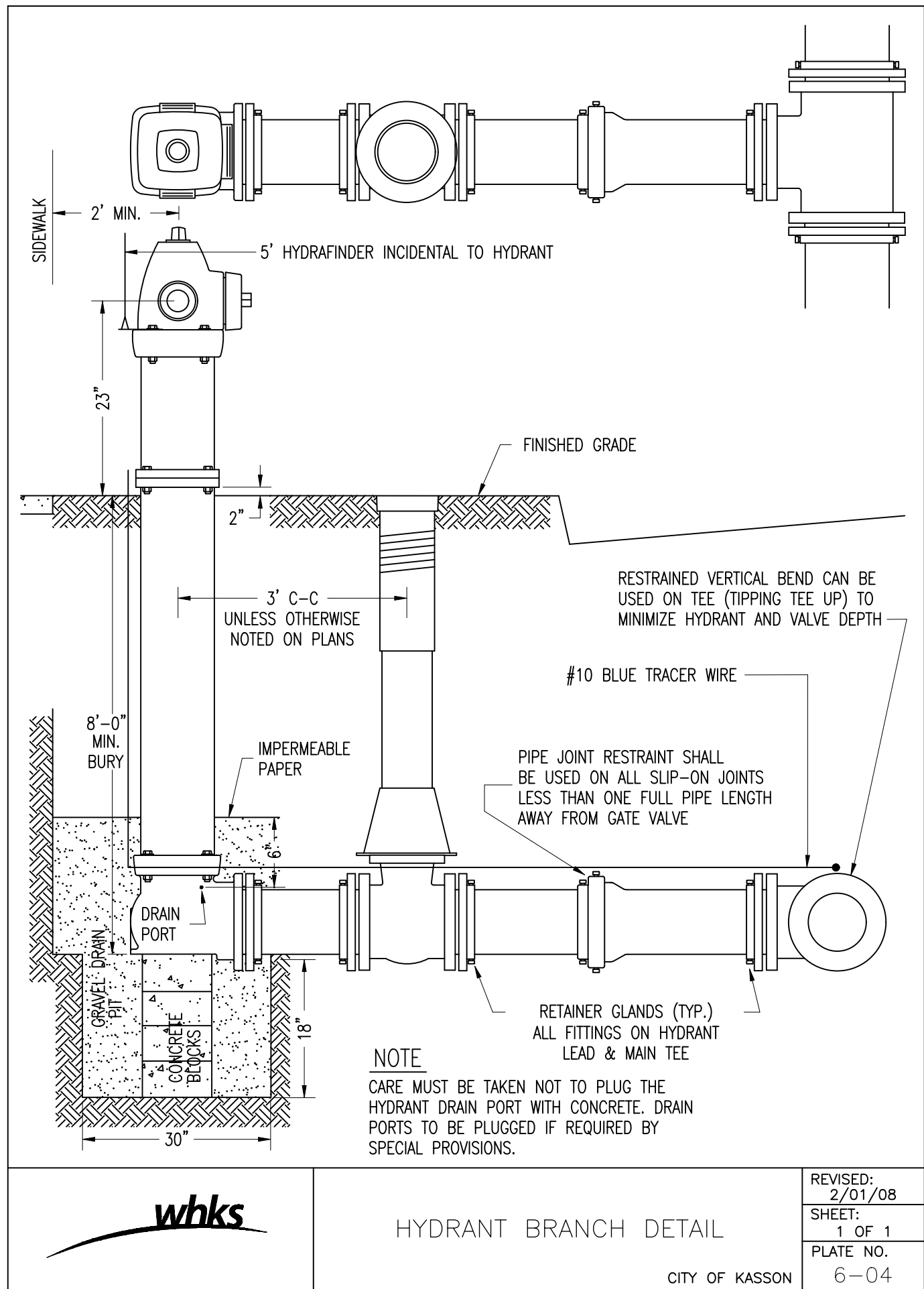
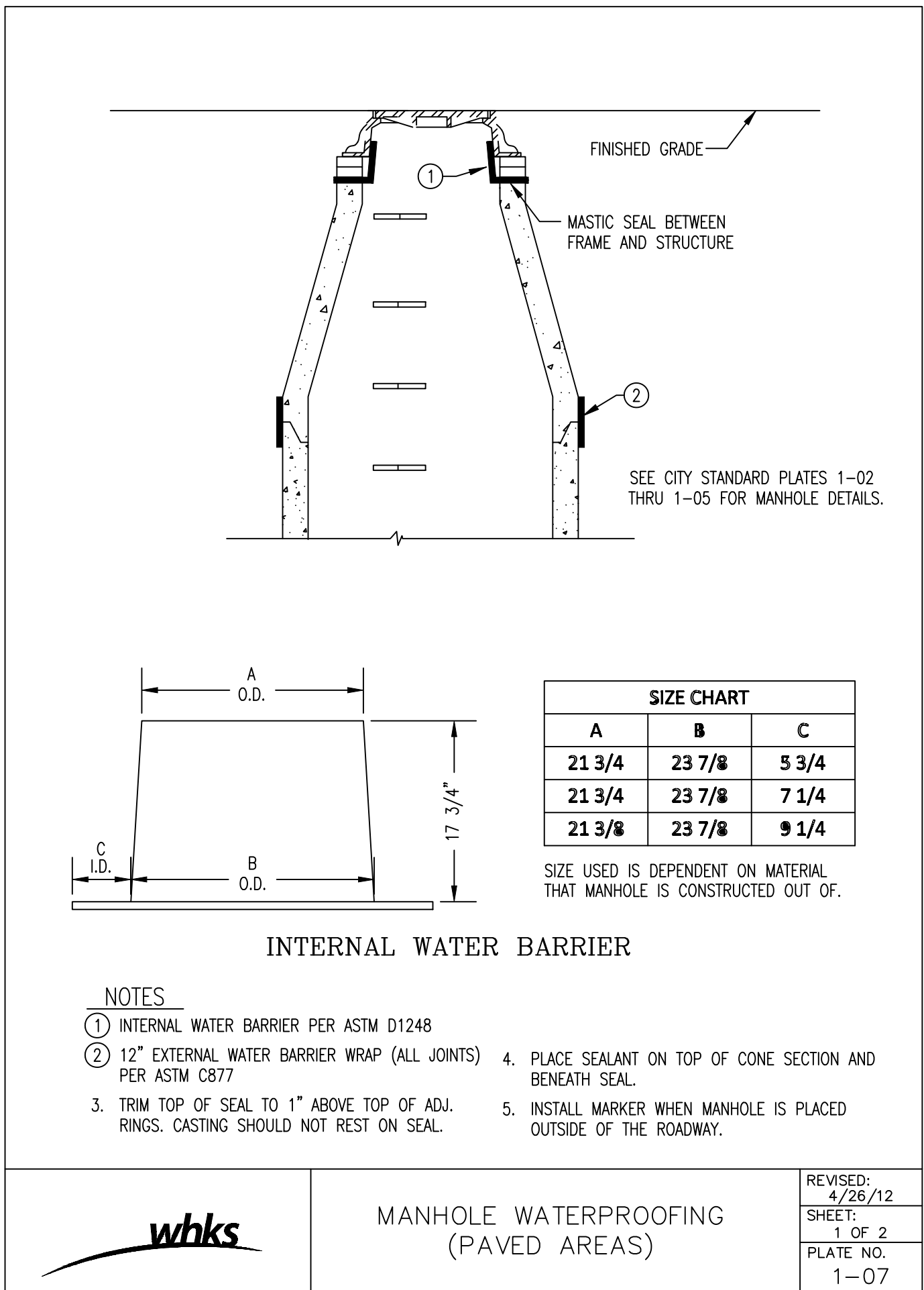
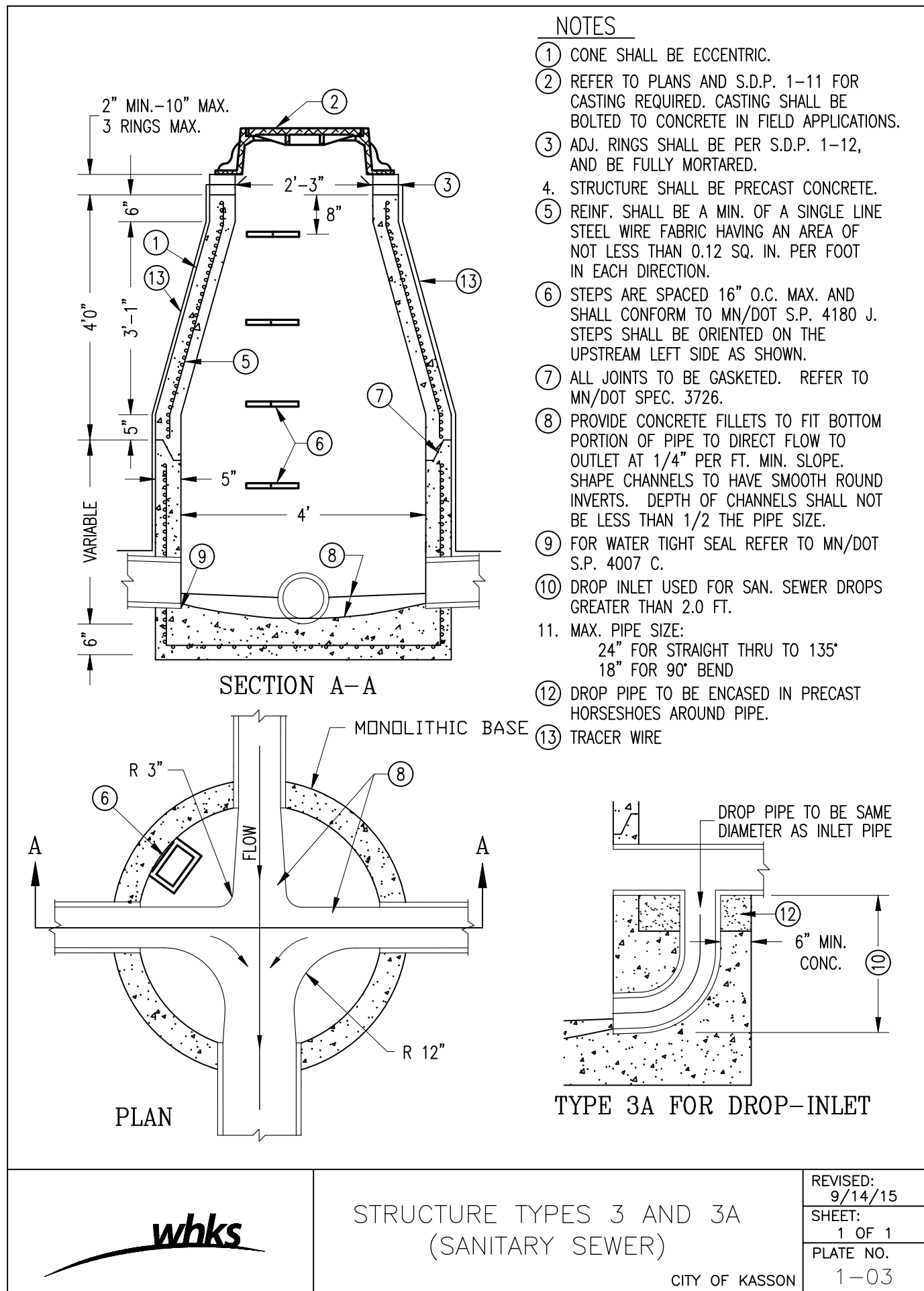
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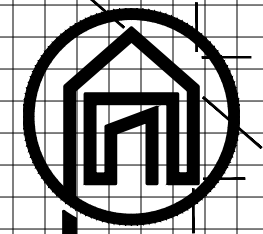
504 DEVELOPMENT PUD
DRIVEWAY AND UTILITY PLAN
MINNESOTA
KASSON

PROJECT #: 1900
DRAWN BY: MAS
CHECKED BY: MAS
PRELIM DATE: 01/21/2019
BID SET DATE: 03/23/2019
PERMIT SET DATE:
REVISION: 06/30/2019 11/17/2020 01/25/2021
PRINTED: 06/30/2019 12/31/2020

DRIVEWAY &
UTILITY PLAN
C3.0







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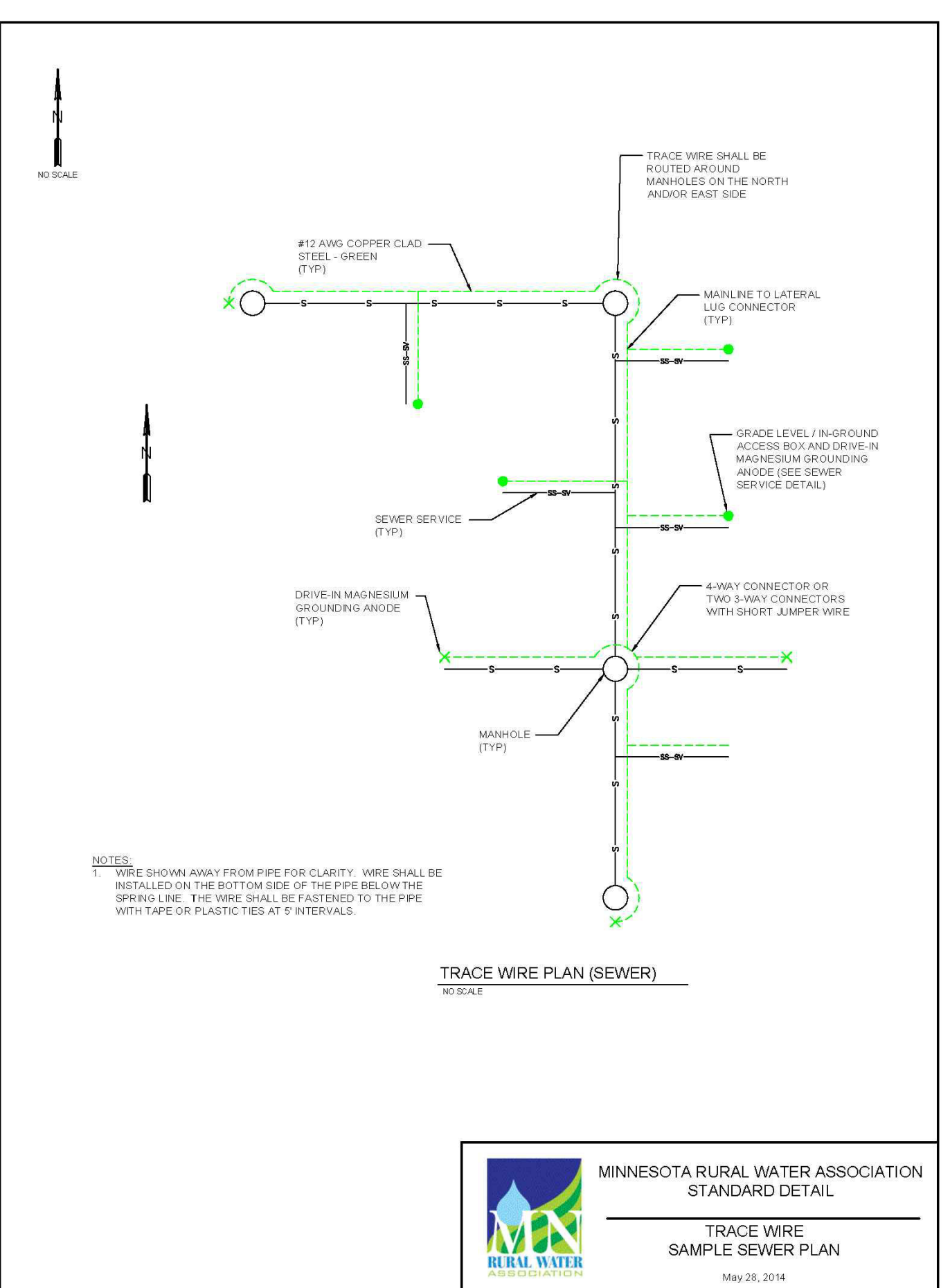
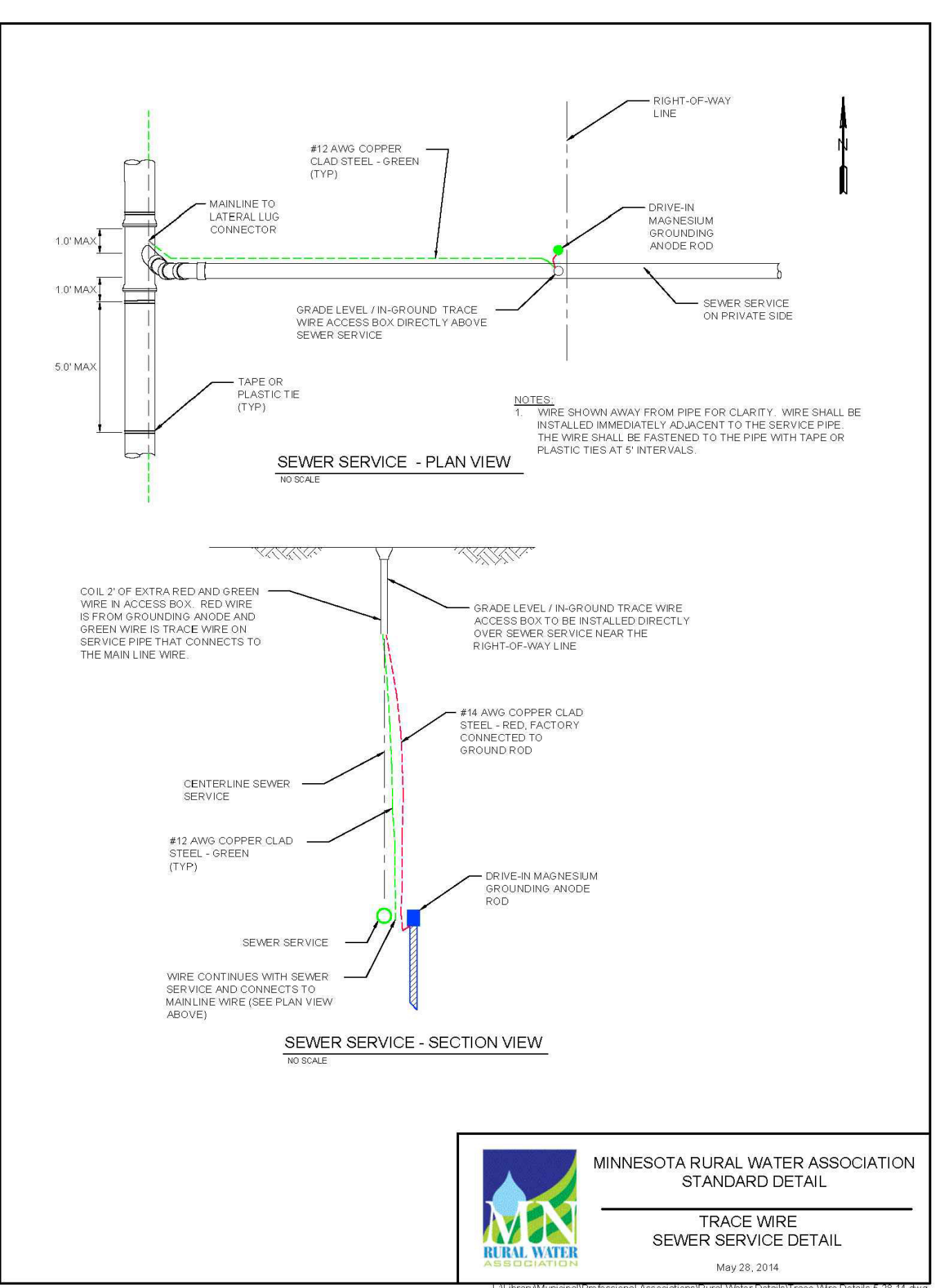
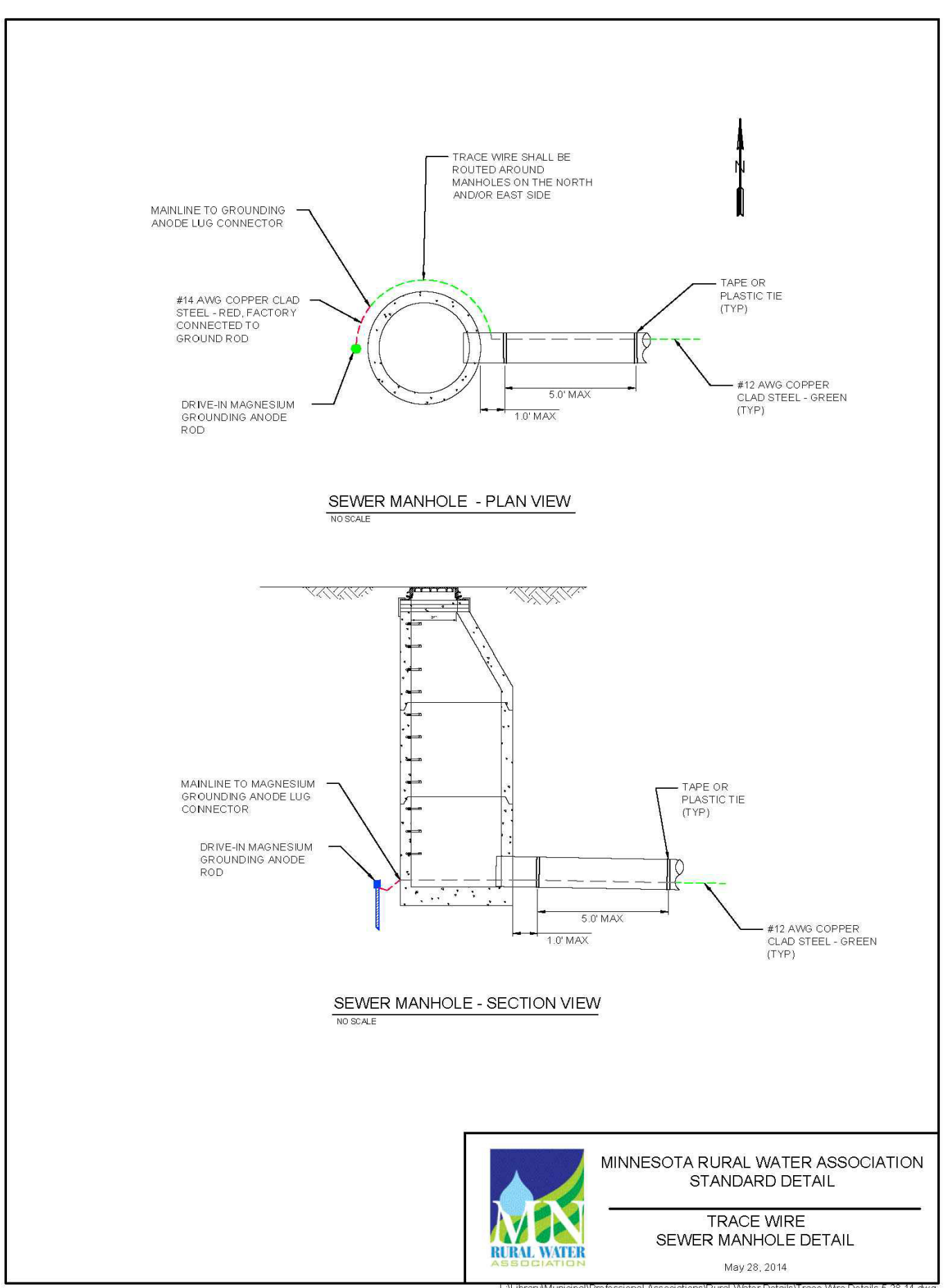
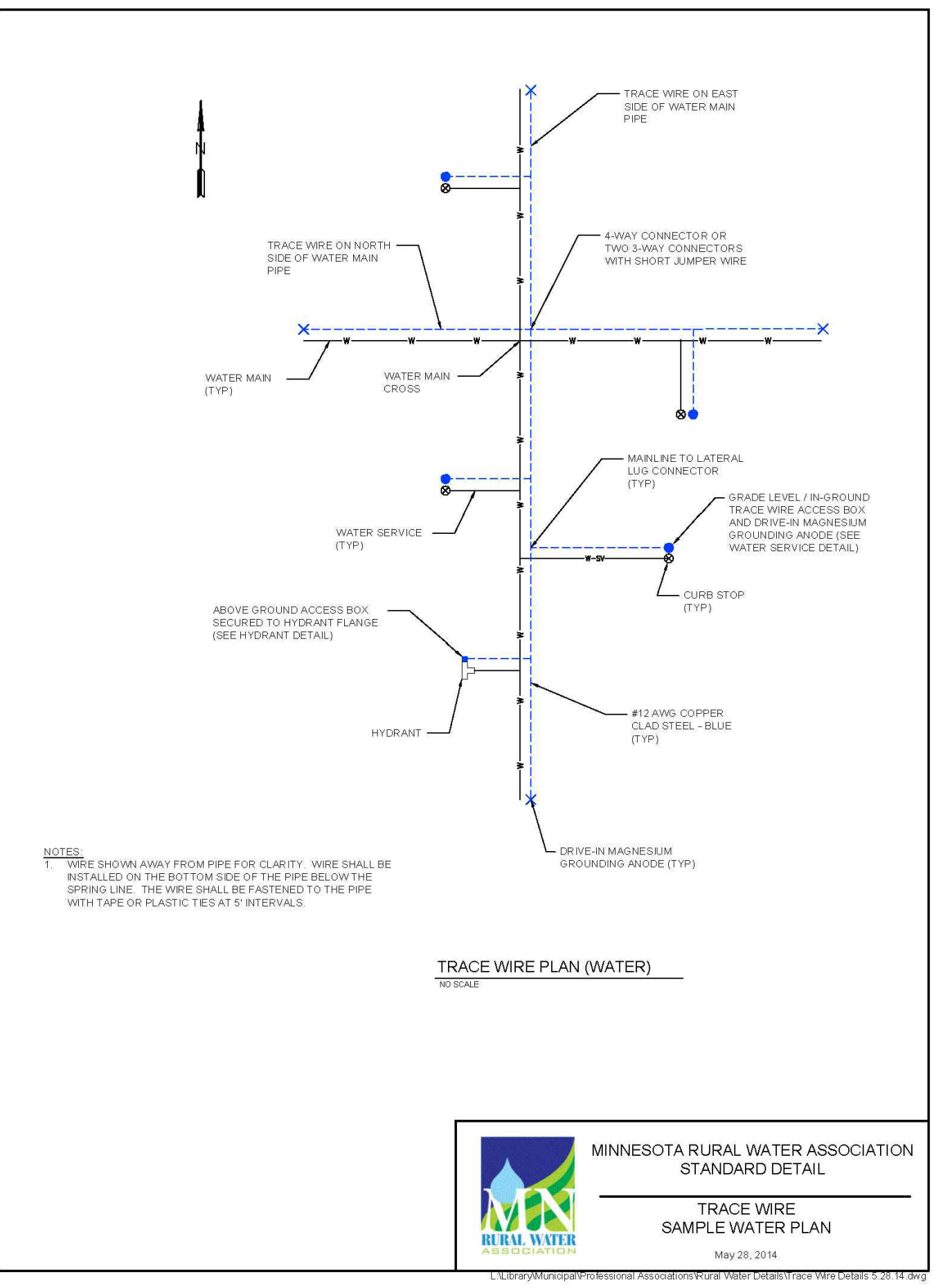
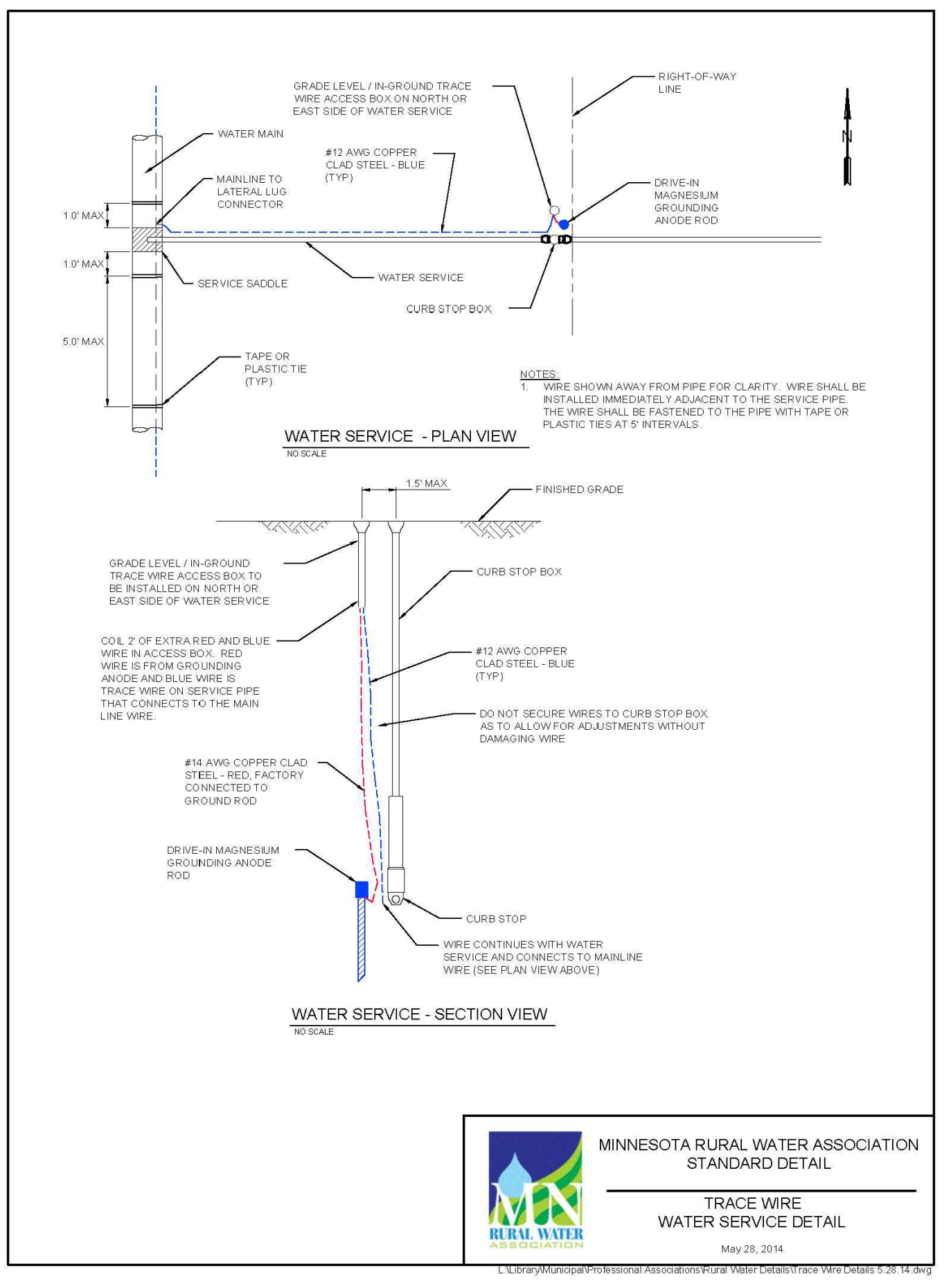
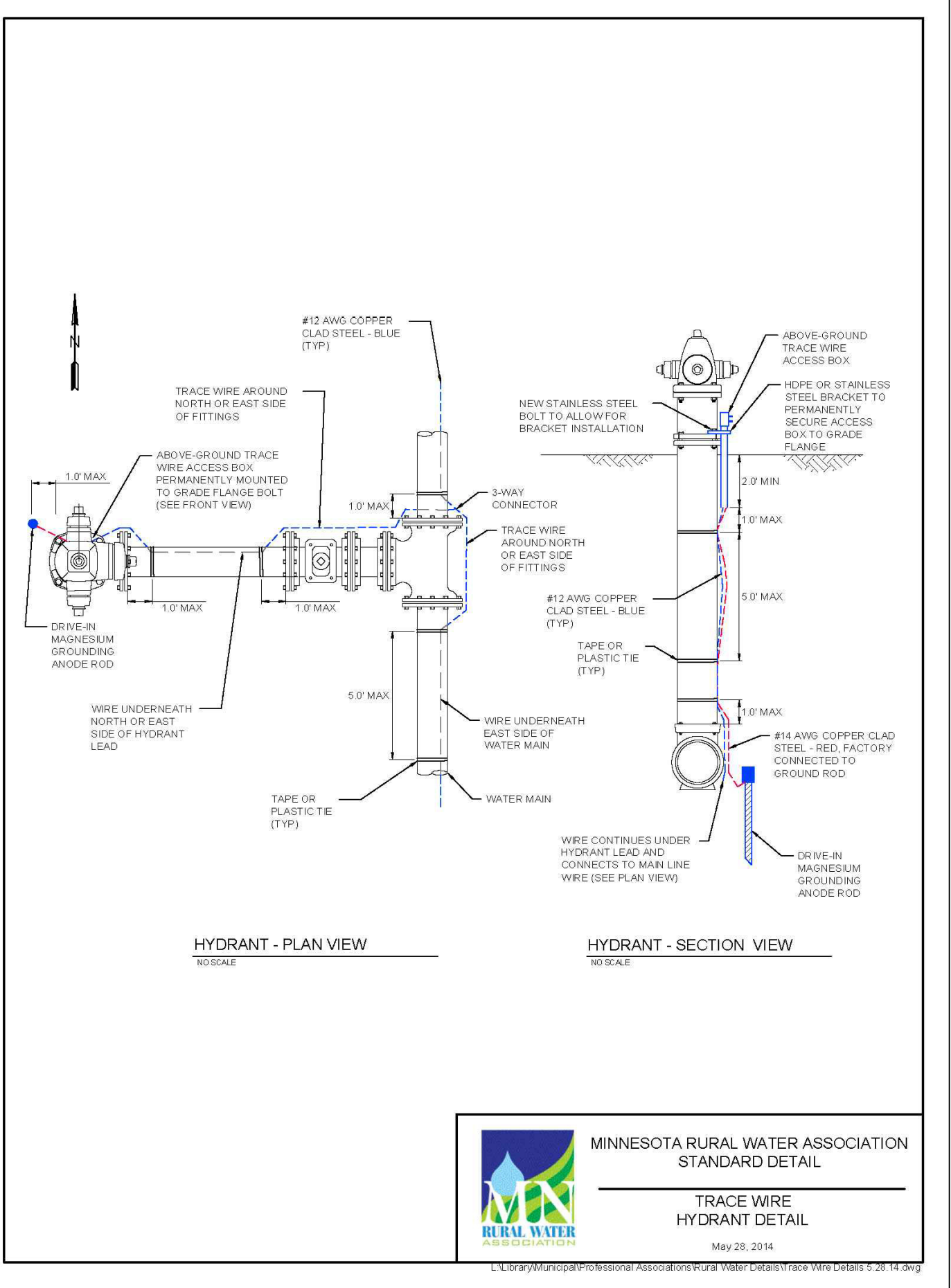
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Mark A. Schoenfelder
MARK A. SCHOENFELDER
DATE: JAN 25, 2021 LC NO. 42302

504 DEVELOPMENT PUD
DETAILS
KASSON
MINNESOTA

PROJECT #: 19001
DRAWN BY: MAS
CHECKED BY: MAS
PRELIM DATE:
BID SET DATE: 03/22/2019
PERMIT SET DATE:
REVISION:
PRINTED:

DETAILS
C5.0



STORM WATER POLLUTION PREVENTION PLAN

GENERAL PROJECT INFORMATION:

PROJECT NARRATIVE:

This project consists of grading activities necessary for the construction of underground utilities, driveway and residential homes. Applicable Erosion Prevention and Sediment Control BMPs to control the discharge of sediment and/or other potential pollutants from the site are shown within the grading/erosion control plan sheets. The grading/erosion control sheets shall be incorporated within and shall become a part of the SWPPP.

RESPONSIBLE PARTIES:

Contractor and Owner are required to apply for and receive a National Pollution Discharge Elimination System (NPDES) Stormwater Construction Permit from the MPCA at least 7 days prior to beginning work.

Contractor and Owner shall identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will oversee the implementation of the SWPPP.

Company: Name: Phone:

Company: Name: Phone:

Owner shall identify the entity responsible for the long term Operation and Maintenance of the Storm Water Management System.

Company: Name: Phone:

PROJECT AREAS:

PROPERTY AREA	68,641 SQ FT (1.58 AC)
TOTAL PROJECT SIZE (DISTURBED AREA)	58,993 SQ FT (1.35 AC)
EXISTING AREA OF IMPERVIOUS SURFACE	5,090 SQ FT (0.12 AC)
NEW IMPERVIOUS AREA CREATED	34,760 SQ FT (0.80 AC)
POST CONSTRUCTION AREA OF IMPERVIOUS SURFACE	39,850 SQ FT (0.91 AC)

STORM WATER MANAGEMENT:

Types of permanent storm water management that will be used if more than one acre of new impervious surface is created are checked below:

- ☐ Wet sedimentation basin
- ☒ Infiltration / Filtration
- ☐ Regional Pond - Un-named
- ☐ Alternative methods

Infiltration:

Bioswale along westerly property line.

RECEIVING WATERS:

Surface waters which will receive storm water for the site within 1 mile of project boundary. Include waters shown on USGS 7.5 minute quad and all waters identified in Appendix A of the Permit.

Appendix A		
Name of Water Body	Type (ditch, pond, wetland, lake, etc)	Special or Impaired Water?
MASTEN CREEK	STREAM	NO

Additional BMPs together with enhanced runoff controls are required for discharges to Special or Impaired Waters within 1 mile of the site. (See Appendix A)

OTHER PROJECT INFORMATION:

QUANTITY TABULATION EROSION PREVENTION / SEDIMENT CONTROL BMPs		
ITEM	UNIT	QUANTITY
SILT FENCE, TYPE PREASSEMBLED	LF	975
INLET PROTECTION	EA	4
BIOROLL DITCH CHECK	LF	0
SEEDING	AC	1.22
EROSION CONTROL BLANKET	SY	250

CONSTRUCTION ACTIVITY NOTES:

CONSTRUCTION SEQUENCE:

1. Install Erosion Control Measures
2. Install Storm Sewer
3. Install Structures
4. Install Pavements
5. Install Seed Mixtures/Erosion Control Blanket
6. Flush Storm Sewer
7. Remove Erosion Control Measures only after all pavements have been installed and all soils have been stabilized.

SPECIFIC REQUIREMENTS:

The Contractor must identify an Erosion Control Supervisor (ECS) who is knowledgeable and experience in the application of erosion and sediment control Best Management Practices (BMPs). The ECS must work with the Project Engineer to oversee and implement the SWPPP and the installation, inspection and maintenance of erosion and sediment control BMPs before, during and after construction. The Contractor/ECS is required to comply with the training requirements in Part III.A of the NPDES Permit.

The Contractor/ECS shall develop a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until the project site has undergone Final Stabilization in accordance with Part IV.G of the NPDES Permit and a Notice of Termination (NOT) has been submitted to the MPCA in accordance with Part II.C of the NPDES Permit.

The Contractor/ECS must routinely inspect the entire construction site at least once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inch in 24 hours. The Contractor shall take action to eliminate any deficiencies found during these inspections and contact the MPCA if contaminated stormwater has reached any surface water. The Contractor must provide 2 rain gauges to be installed on the construction site. Inspections, maintenance and documentation must be in accordance with the NPDES Permit Part IV.E. See Part III.D of the NPDES Permit for record retention requirements. Copies of the inspection records are to be submitted to the Engineer. Drainage calculations are retained in the project design file.

The Contractor/ECS or Project Engineer must amend the SWPPP as necessary to include additional requirements, such as additional or modified BMPs, designed to correct problems or address situations in accordance with Part III.A.5 of the NPDES Permit.

SEDIMENT CONTROL PRACTICES:

The Contractor/ECS is responsible for the Sediment Control Practices contained in Part IV.C of the NPDES Permit. Sediment Control Practices must be installed on all down gradient perimeters before any upgradient land disturbing activities begin. There shall be no unbroken slope length greater than 75 feet for slopes with a grade of 3:1 or steeper. These practices must remain in place until Final Stabilization has been established in accordance with Part IV.G of the NPDES Permit.

The timing of Sediment Control Practices may be adjusted to accommodate short-term activities such as clearing and grubbing, or passage of vehicles. Short-term activities must be completed as quickly as possible and the practices must be installed immediately after the activity is completed; however the Sediment Control Practices must be installed before the next precipitation event even if the activity is not complete.

All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be removed if a specific safety concern has been identified and the procedure in Part IV.C.4 of the NPDES Permit is followed.

Temporary soil stockpiles must have silt fence or other effective sediment controls and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduit and ditches unless there is a bypass for stormwater.

Vehicle tracking of sediment form the construction site must be minimized by BMPs such as stone or wood chip pads, concrete or steel wash racks, or equivalent systems. Street sweeping with collection must be used if such BMPs are not adequate to prevent sediment form being tracked onto the street (see Part IV.E.4.d of the NPDES Permit).

Dewatering related to the construction activity must comply with Part IV.D of the NPDES Permit. Dewatering discharge that may have turbid or sediment laden discharge must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible and BMPs must be implemented to prevent water containing sediment or other pollutants from being discharged to a Water of the State. Contractor may construct temporary sedimentation basins in accordance with Part III.B of the NPDES Permit.

EROSION PREVENTION PRACTICES:

The Contractor/ECS is responsible for the Erosion Prevention Practices contained in Part IV.B of the NPDES Permit. The Contractor/ECS must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading and other construction practices that minimize erosion. The location of areas not to be disturbed must be delineated (marked) on the development site before work begins.

Construction of silt fence and all other erosion control measures shall be complete before other construction activity occurs.

Use phased construction whenever practical and establish turf as soon as possible to minimize sediment transport.

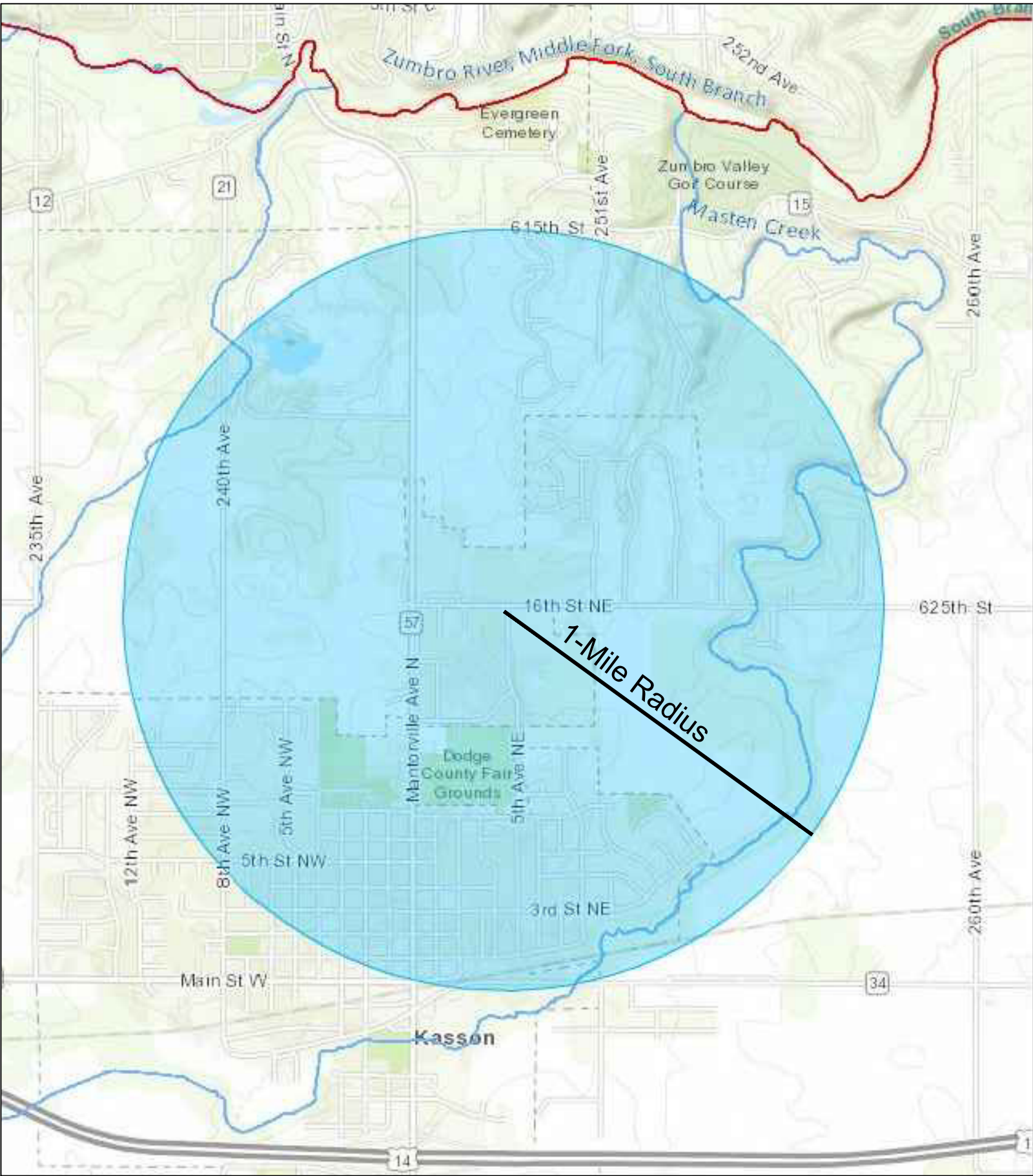
The contractor shall inspect the construction site once every seven days and within 24 hours after rain events for damage to erosion control devices. If damaged or ineffective erosion control devices are discovered, they shall be repaired or replaced. The contractor shall maintain inspection records, which include date and time of inspections, dates of rainfall events, rainfall amount, findings of inspections, corrective actions taken (including dates and times), and documentation of any changes to the temporary or permanent erosion control plans made during construction.

All exposed soil areas must be stabilized as soon as possible to limit soil erosion after the construction activity in that portion of the site has temporarily or permanently ceased but in no case later than the following:

Type of Slope or Disturbance Area	Time Area Can Remain Open Without Being Actively Worked	
	Normal Water	Special/Impaired Water
Steeper than 3:1	14 Days	7 Days
10:1 to 3:1	14 Days	7 Days
Flatter than 10:1	14 Days	7 Days
Ditches	14 Days	7 Days
Pipe Ends	1 Day	1 Day
Within 200 feet of Surface Water	1 Day	1 Day

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 construction site, must be stabilized within 200 lineal feet from the property edge, or form the discharge into any surface water. Stabilization must be complete within 24 hours after connection to a surface water.

Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water.



CONSTRUCTION PRACTICES TO MINIMIZE STORM WATER CONTAMINATION:

Stockpiles should be constructed away from slopes and natural drainage ways.

Collected solid waste (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

No construction materials can be buried on site.

Licensed sanitary waste management handler must dispose of sanitary waste.

Concrete washout operations must be contained in a leak proof containment facility or impermeable liner and must be performed in accordance with Part IV.F.4 of the NPDES Permit.

Fertilizers must be stored in covered locations.

Restricted access to chemical storage areas must be provided to prevent vandalism.

All chemicals must be stored in locked containers when not in use.

Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge.

Storage and disposal of hazardous waste must be in compliance with MPCA regulations.

Vehicles must be monitored for leaks and preventative maintenance scheduled.

Spill kits must be available during equipment fueling and maintenance operations.

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 degreasing is allowed on site.

Asphalt substances must be applied according to manufactures recommendations.

Spray guns must be cleaned on removable surfaces such as tarpaulins.

Contractor/Erosion Control Supervisor must make a spill response plan before the application of any chemical that may be harmful to the environment.

All spills must be reported immediately. Spill cleanup materials must be available on site. Material shall include, but not limited to, brooms, mops, rags, gloves, absorbent material, sand plastic and metal containers. Spills that reach storm water conveyance systems connected to a Water of the State must be immediately reported to the MPCA State Duty Officer.

Contractor must control weeds on the entire project site.

Form release oil must be applied over a pallet covered with absorbent material to collect excess fluid. The absorbent material shall be replaced when saturated.

Dust control must be provided as conditions warrant.

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Mark A. Schoenfelder

MARK A. SCHOENFELDER
DATE: JAN 25, 2021 LC. NO. 42302

504 DEVELOPMENT PUD

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

MINNESOTA

KASSON

PROJECT #: 19001
DRAWN BY: MAS
CHECKED BY: MAS
PRELIM DATE:
BID SET DATE: 03/22/2019
PERMIT SET DATE:
REVISION : 05/09/2020 11/17/2020
PRINTED:

SWPPP

C6.0