



*Trail to the Past. Road to the Future.*

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## **SPECIAL PLANNING COMMISSION MEETING**

**MANTORVILLE CITY COUNCIL CHAMBERS**

**21 5<sup>TH</sup> STREET E, MANTORVILLE, MN 55955**

**MONDAY, OCTOBER 24, 2022**

**6:30 PM**

**PLEASE TAKE NOTICE** that a special meeting of the City of Mantorville Planning Commission has been called to address the following agenda item(s):

- 1. Call to Order**
- 2. New Business**
  - A. Area 15 Preliminary Plat Application (PID 130210401)**
    - 1) Public Hearing – *to be continued to the November 14, 2022 Planning Commission Meeting***
- 3. Adjourn**



# Planning Commission Report

To: Chair and Commissioners  
 From: Shirley Buecksler, City Clerk-Treasurer  
 Date: October 24, 2022

## Area 15 Preliminary Plat Application (PID 130210401)

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### REQUEST:

Bigelow Homes, LLC, has submitted a preliminary plat application for PID 130210401, referred to as Area 15, to plat the land into 36 single family residential lots (R-1). Neighboring property owners and other interested parties were notified of the public hearing scheduled for tonight. Notice was also published in the Dodge County Independent.

Enclosed are the application materials submitted on September 7, 2022 by Bigelow Homes, LLC. At this time, further discussion between the Developer, WHKS and the City is necessary. Therefore, Staff is recommending that the Planning Commission hold the public hearing for any comments tonight, but *continue the public hearing* to November 14, 2022. Note that the enclosed materials could change before the November 14<sup>th</sup> meeting.

### CURRENT USES AND ZONING:

	Use	Zoning
<b>Subject Property</b>	Residential <i>(36 proposed single family homes)</i>	R-1 – Single Family Residential
<b>Properties to the North</b>	Residential <i>(Single Family Homes)</i>	R-1 – Single Family Residential
<b>Properties to the East</b>	Residential <i>(Single Family Homes)</i>	Residential <i>(Mantorville Township)</i>
<b>Properties to the South</b>	Ag Land	Ag Land <i>(Mantorville Township)</i>
<b>Properties to the West</b>	Residential <i>(Single Family Homes)</i>	Residential <i>(Mantorville Township)</i>

### STAFF RECOMMENDATION:

The Planning Commission should open the public hearing for comment and motion to “*continue the public hearing to the Planning Commission Meeting scheduled for 6:30 pm on Monday, November 14, 2022, to be held in the Mantorville Municipal Council Chambers located at 21 5<sup>th</sup> Street East, Mantorville, Minnesota.*”

**CITY OF MANTORVILLE  
APPLICATION FOR PRELIMINARY PLAT**

**\*Fee required: \$350 +\$1.00 per lot**  
**\*Escrow required: \$1,000**  
**\*Preliminary plat prepared by licensed surveyor and general development plans also required at the time of application**

Date Filed \_\_\_\_\_ Date Fee/Escrow Paid \$1,386.00

Date Considered Complete \_\_\_\_\_

Street Address of Property XXXX Cty Rd 15

Legal Description of Property See attached Exhibit A  
(attach additional page if necessary)

PID# (s) 13.021.0401

Owner's Name Bigelow Homes LLC (Tony Bigelow)

Address 4057 28<sup>th</sup> ST NW Rochester, MN 55901

Phone 507-529-1161 Alternate Number or Email tony@bigelowhomes.net

Applicant (If other than owner) \_\_\_\_\_

Address \_\_\_\_\_

Description of Request: Plat existing land into single family lots and connect to City sewer

Present Zoning Classification: R1 \_\_\_ R2 \_\_\_ Commercial \_\_\_ Transitional \_\_\_ Historic \_\_\_

Existing Use of Property Agricultural Land for crop farming

Future Use of Property Single Family Lots and Homes

\_\_\_ All materials required by Code submitted (preliminary plat, general development plans).

Signature of Owner(s) Tony Bigelow v.p. Date 9-7-2022

Signature of Applicant (if different) \_\_\_\_\_ Date \_\_\_\_\_

Public Hearing Date: 10.24.2022 Published Notice Date: 10.13.2022

10.13.22 ✓ Notice has been mailed to all properties within 350' of the proposed plan. (Attach Notice)

10.13.22 ✓ Notice has been mailed to all required utility companies. (Attach Notice)

\_\_\_ Council granted preliminary approval on \_\_\_\_\_

\_\_\_ Council granted final approval \_\_\_\_\_

\_\_\_ Attached copies of response from utility companies. \_\_\_ No response received.

Other Information:

\_\_\_\_\_

\_\_\_\_\_

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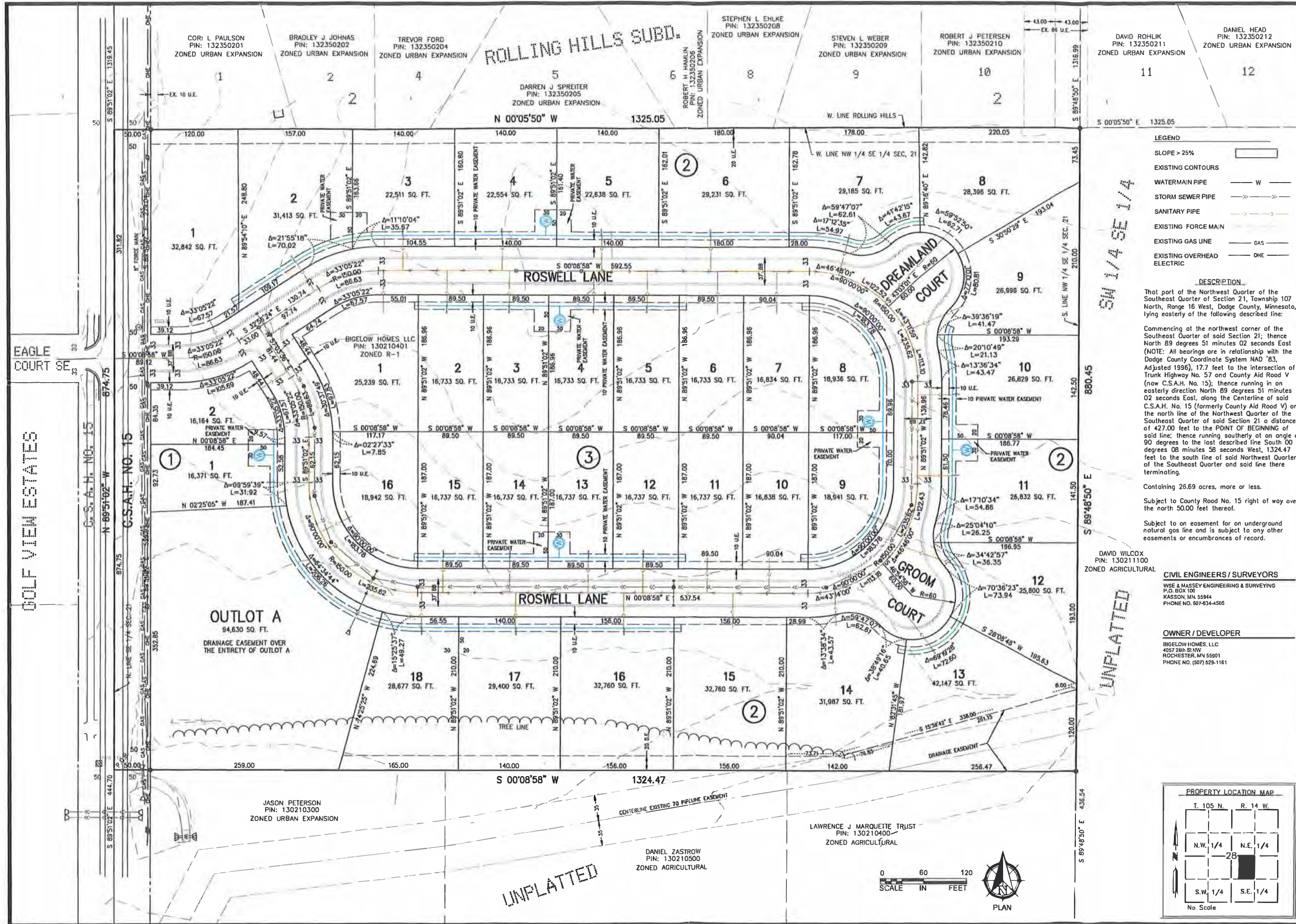
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- LEGEND**
- SLOPE > 25%
  - EXISTING CONTOURS
  - WATERMAIN PIPE  W
  - STORM SEWER PIPE  S
  - SANITARY PIPE  S
  - EXISTING FORCE MAIN  F
  - EXISTING GAS LINE  GAS
  - EXISTING OVERHEAD ELECTRIC  OHE

**DESCRIPTION**

That part of the Northwest Quarter of the Southeast Quarter of Section 21, Township 107 North, Range 16 West, Dodge County, Minnesota, lying easterly of the following described line:

Commencing at the northwest corner of the Southeast Quarter of said Section 21; thence North 89 degrees 51 minutes 02 seconds East (NOTE: All bearings are in relationship with the Dodge County Coordinate System NAD '83, Adjusted 1996), 17.7 feet to the intersection of Trunk Highway No. 57 and County Aid Road V (now C.S.A.H. No. 15); thence running in an easterly direction North 89 degrees 51 minutes 02 seconds East, along the Centerline of said C.S.A.H. No. 15 (formerly County Aid Road V) and the north line of the Northwest Quarter of the Southeast Quarter of said Section 21 a distance of 427.00 feet to the POINT OF BEGINNING of said line; thence running southerly at an angle of 90 degrees to the last described line South 00 degrees 08 minutes 58 seconds West, 1324.47 feet to the south line of said Northwest Quarter of the Southeast Quarter and said line there terminating.

Containing 26.69 acres, more or less.

Subject to County Road No. 15 right of way over the north 50.00 feet thereof.

Subject to an easement for an underground natural gas line and is subject to any other easements or encumbrances of record.

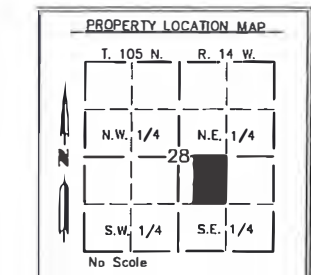
DAVID WILCOX  
PIN: 13021100  
ZONED AGRICULTURAL

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KASSON, MN 55944  
PHONE NO. 507-634-4505

**OWNER / DEVELOPER**

BIGELOW HOMES, LLC  
4057 28th St NW  
ROCHESTER, MN 55901  
PHONE NO. (507) 525-1161



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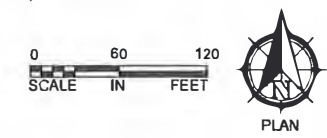
ROCHESTER OFFICE  
1712 RESTORATION  
DRIVE SW  
ROCHESTER, MN 55902

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 Land Surveyor under the laws of the State of Minnesota.

Reinhold W Ziemann  
59823 8/18/2022

REV.	DATE	DESCRIPTION

**PRELIMINARY PLAT**  
**AREA 15**  
**DODGE COUNTY, MINNESOTA**



# PUBLIC IMPROVEMENTS TO SERVE AREA 15

Dodge County, MN

ISSUE DATE - 8/19/2022

PRELIMINARY PLAT SUBMITTAL

**NOTE**

CONTRACTOR IS RESPONSIBLE TO NOTIFY THE CITY AND THE OWNER IMMEDIATELY IF UNSUITABLE SOILS ARE ENCOUNTERED.



LEGEND	
—1245—	DENOTES PROPOSED CONTOUR ANNOTATION
x 46 84	DENOTES PROPOSED SPOT ELEVATION
—>—	DENOTES DRAINAGE DIRECTION
—SF—	DENOTES SILT FENCE OR BIOROLL PER 7-01SDP
(Symbol)	DENOTES INLET PROTECTION PER 7-05SDP
(Symbol)	DENOTES PROPOSED EROSION MAT
(Symbol)	DENOTES PROPOSED BITUMINOUS
(Symbol)	DENOTES EXISTING CONTOURS
(Symbol)	DENOTES TREE LINE
(Symbol)	DENOTES WATERMAIN PIPE
(Symbol)	DENOTES STORM SEWER PIPE
(Symbol)	DENOTES SANITARY PIPE

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	TYPICAL SECTIONS
3	OVERALL LAYOUT
4	PLAN & PROFILE
5	PLAN & PROFILE
6	PLAN & PROFILE
7	PLAN & PROFILE
8	PLAN & PROFILE
9	DETAILS
10	DETAILS
11	DETAILS
12	DETAILS
13	SWPPP
14	SWPPP
15	POND DETAIL

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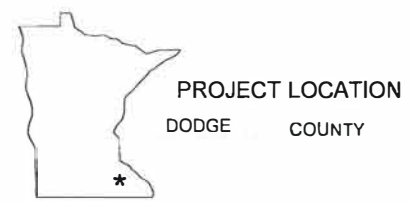
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*Les Conway*  
Les Conway  
23292 8/19/2022  
Number Date

REV	DATE	DESCRIPTION

**TITLE SHEET**  
**AREA 15**  
**DODGE COUNTY, MINNESOTA**

Approved By: \_\_\_\_\_  
City Engineer Date



UTILITY QUALITY LEVEL

The subsurface utility information in this plan is quality level **D**. This quality level was determined according to the guidelines of CVA/SC 38-2, entitled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data."

SCALE: AS SHOWN  
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JOB NUMBER: 023.3-2.13764  
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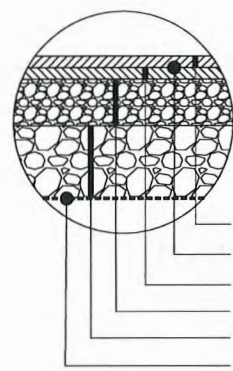
Project Number 23.3-213746 Sheet 1 of 14

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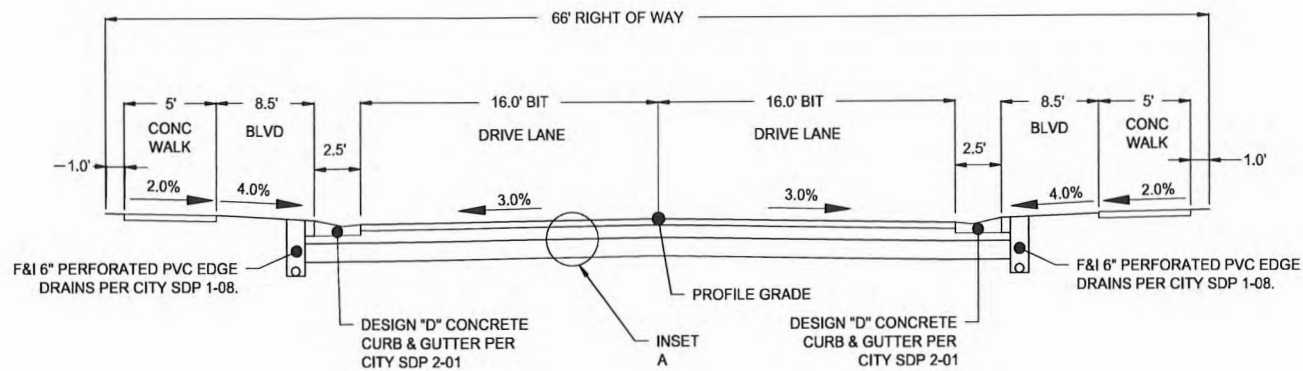
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**INSET A**  
BITUMINOUS ROAD SECTION

- 2.0" BITUMINOUS WEAR COURSE, MN DOT 2360
- 2357 BITUMINOUS TACK COAT
- 2.0" BITUMINOUS BASE COURSE, MN DOT 2360
- 8" MN DOT CLASS 5 AGGREGATE BASE
- 12" SELECT GRANULAR FILL UNDER CLASS 5 AGGREGATE BASE
- MnDOT TYPE V GEOTEXTILE SEPARATION FABRIC



CENTER LINE IS 0.23' ABOVE TOP OF CURB FOR THE PUBLIC STREET

ROSWELL LANE, GROOM COURT, AND DREAMLAND COURT



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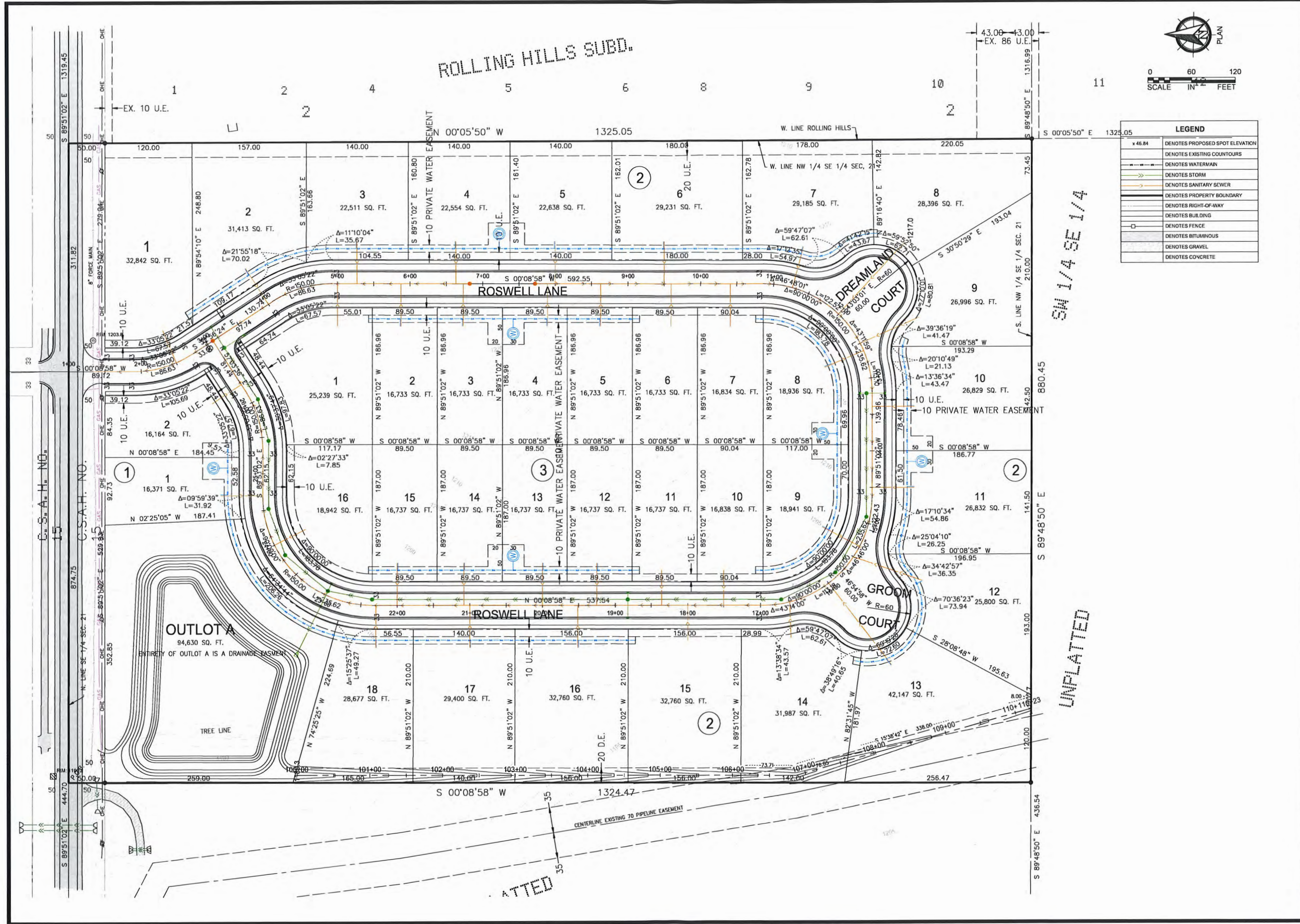
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**TYPICAL SECTIONS  
AREA 15  
DODGE COUNTY, MINNESOTA**

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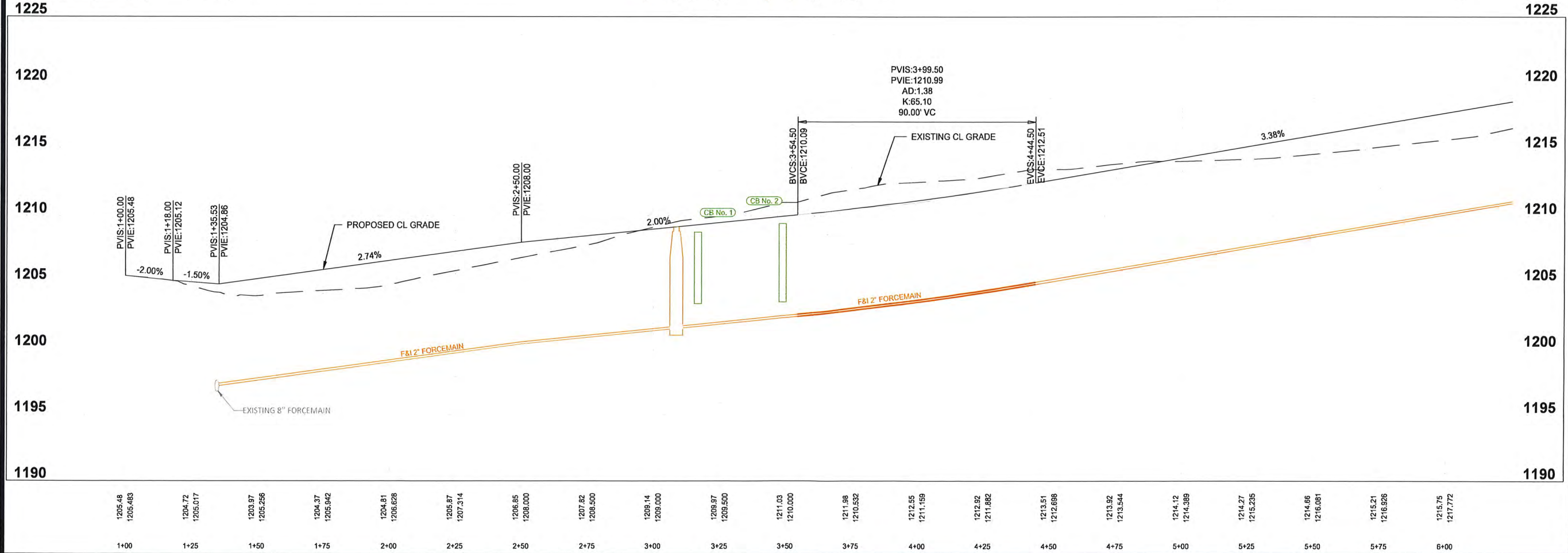
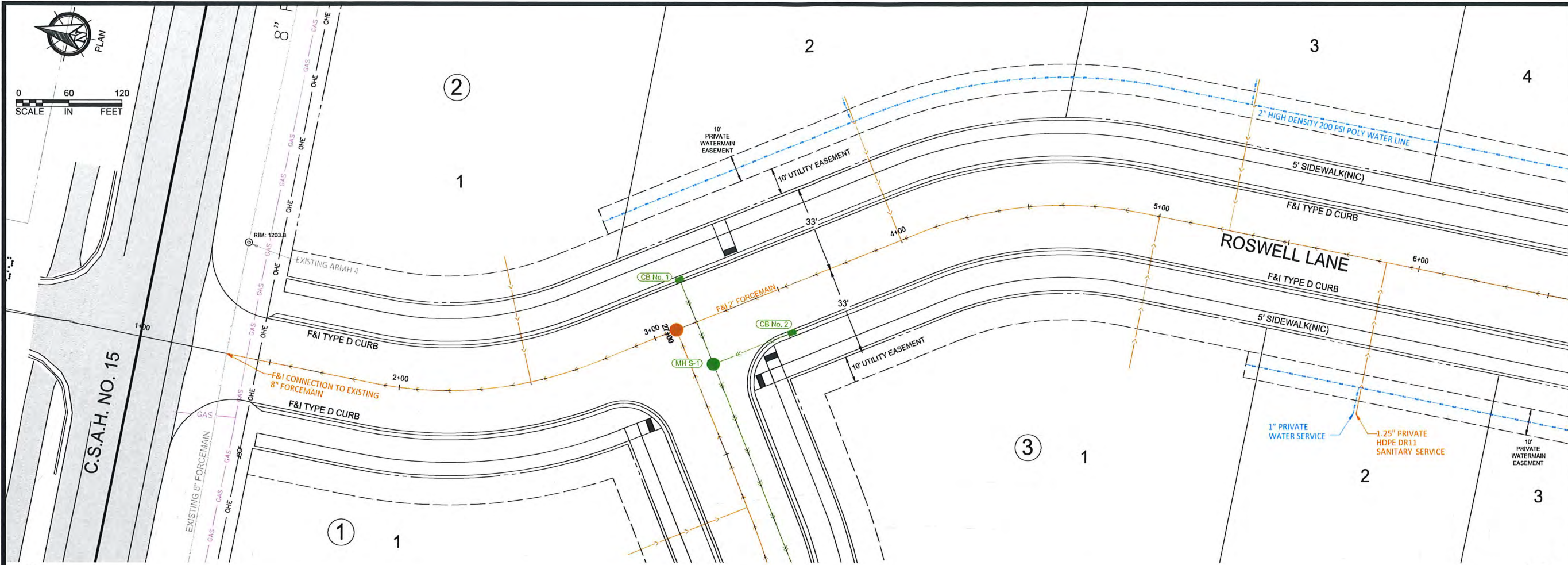
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**OVERALL LAYOUT  
 AREA 15  
 DODGE COUNTY, MINNESOTA**

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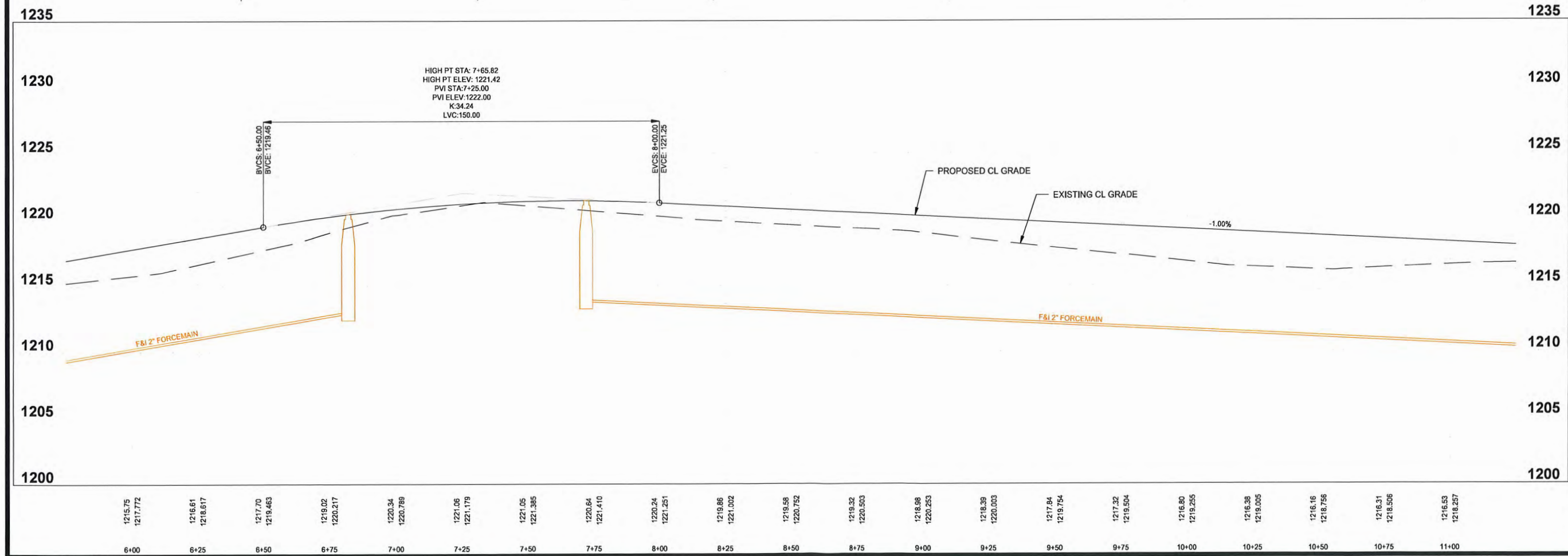
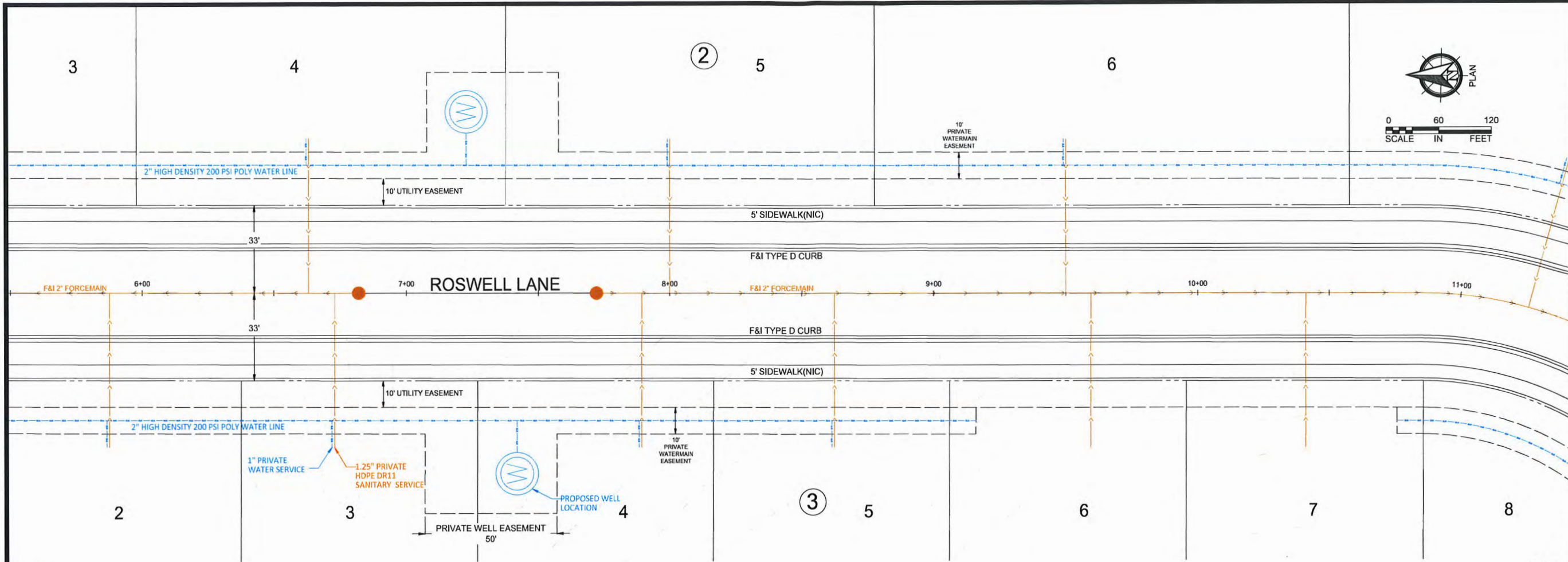
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**PLAN & PROFILE**  
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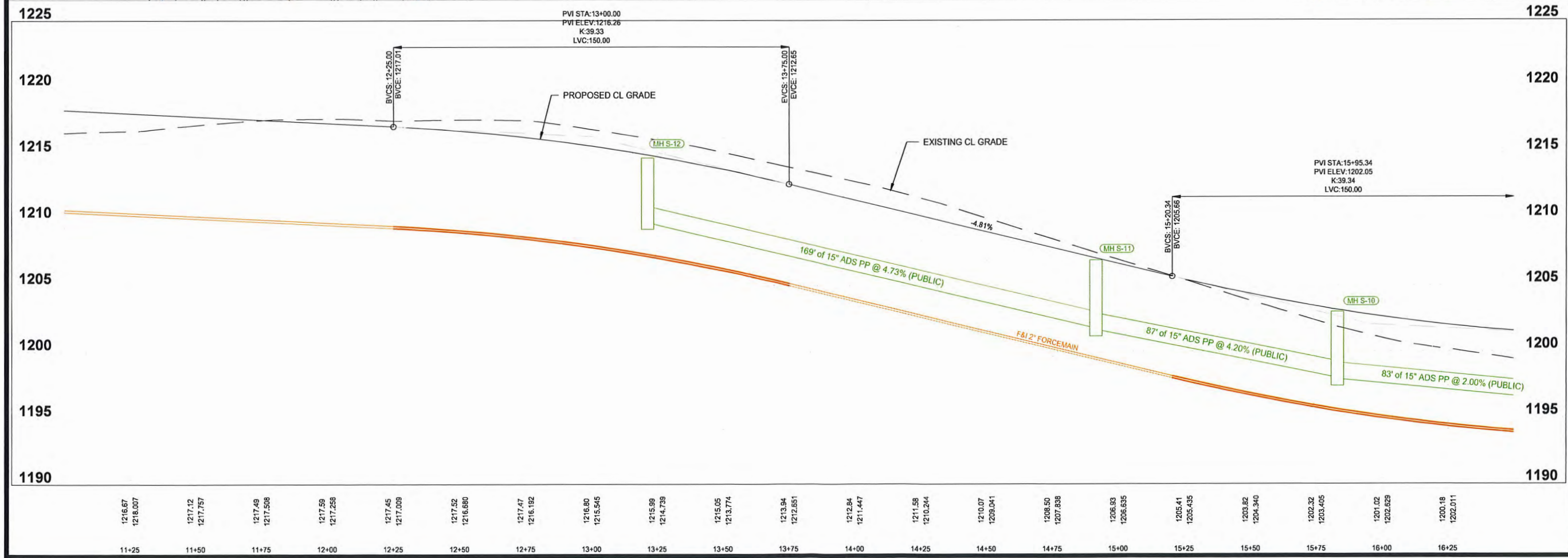
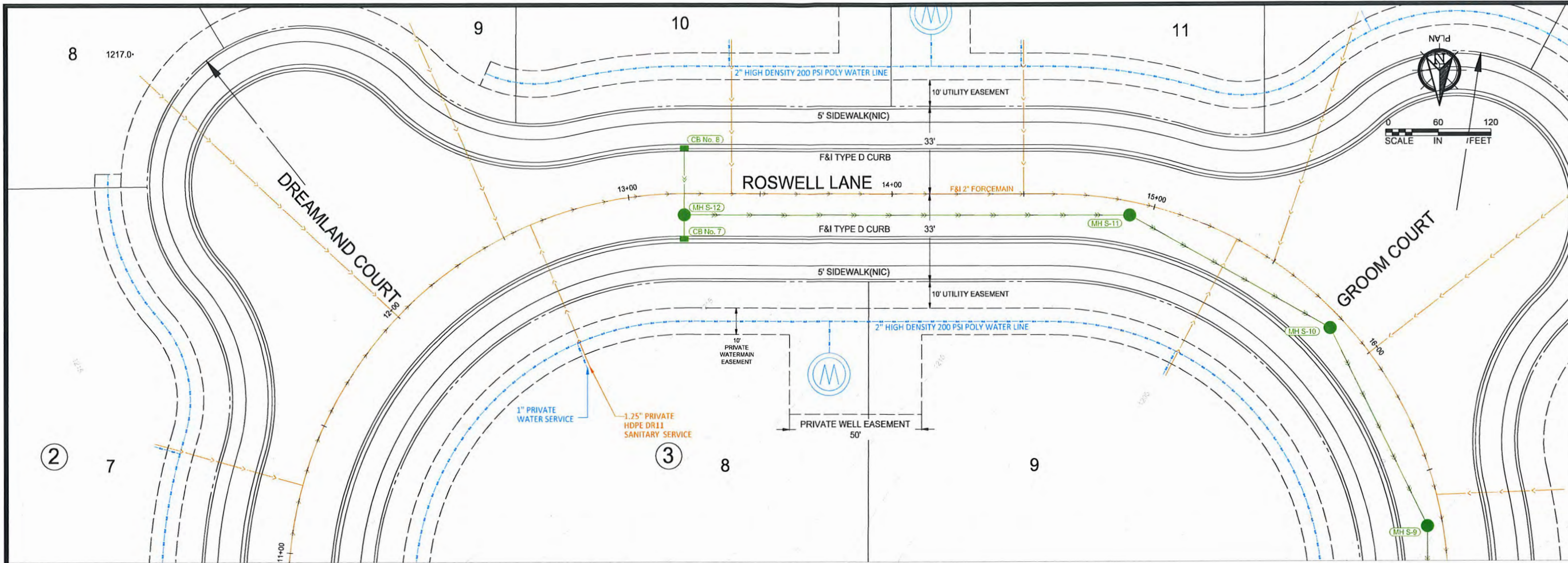
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**AREA 15**  
**DODGE COUNTY, MINNESOTA**

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Sheet 5 of 14

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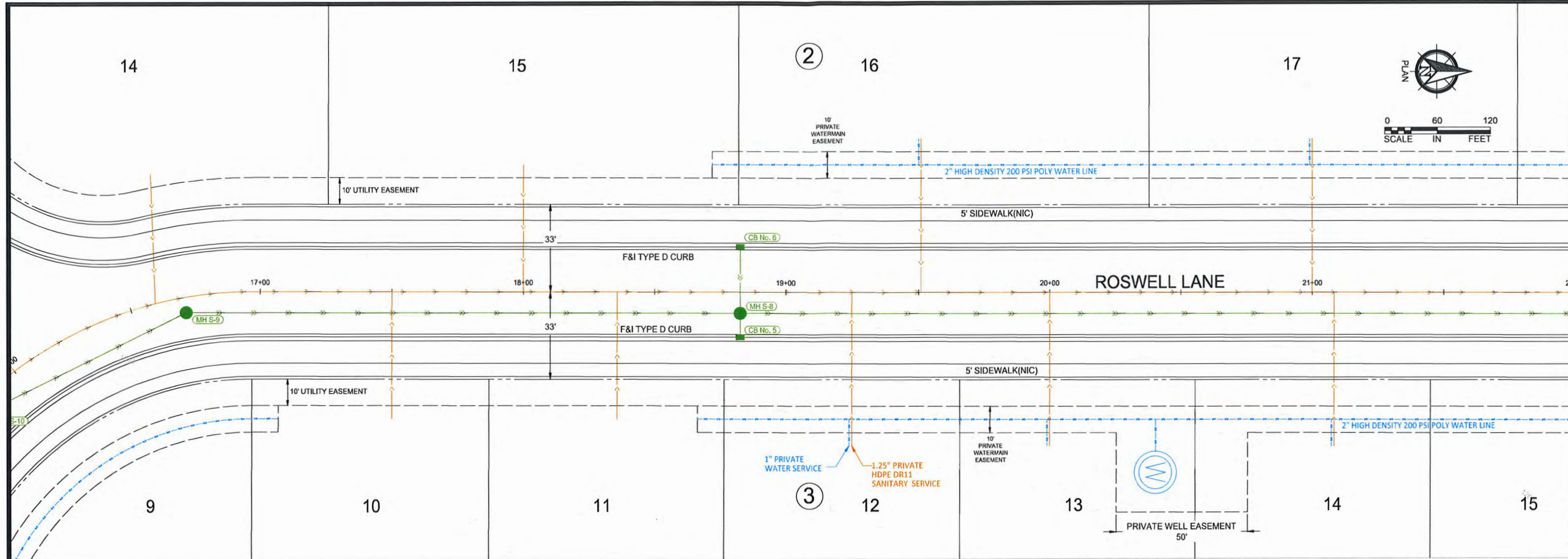
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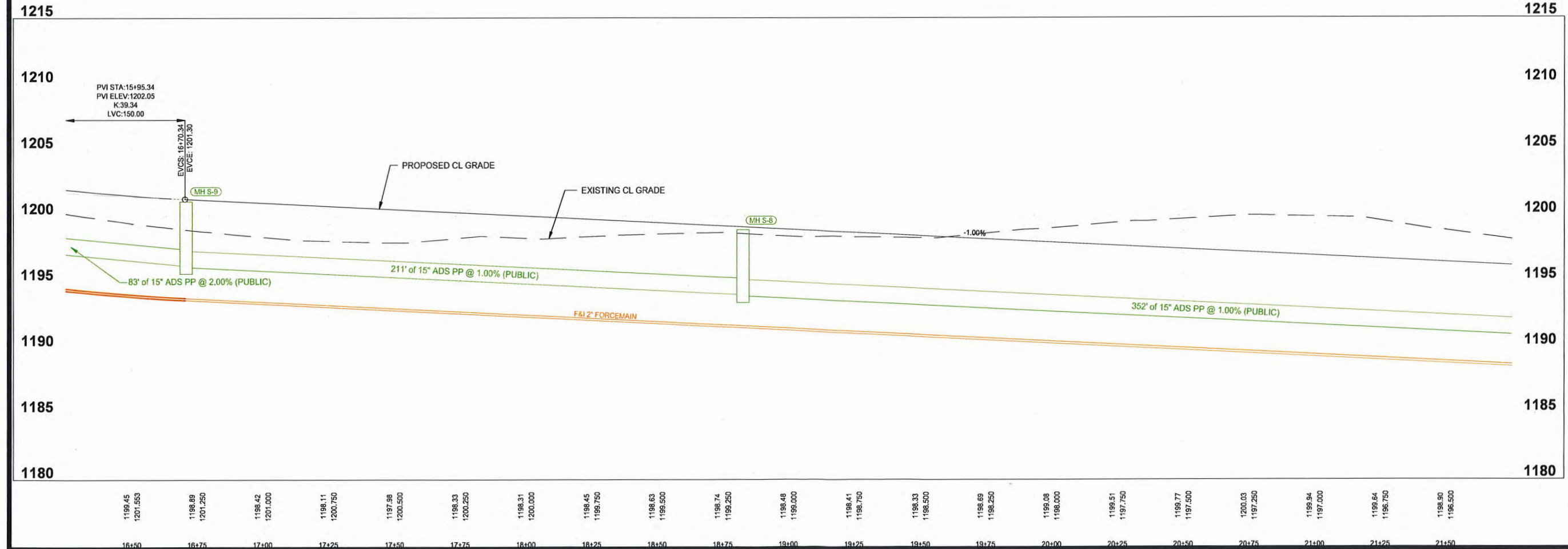
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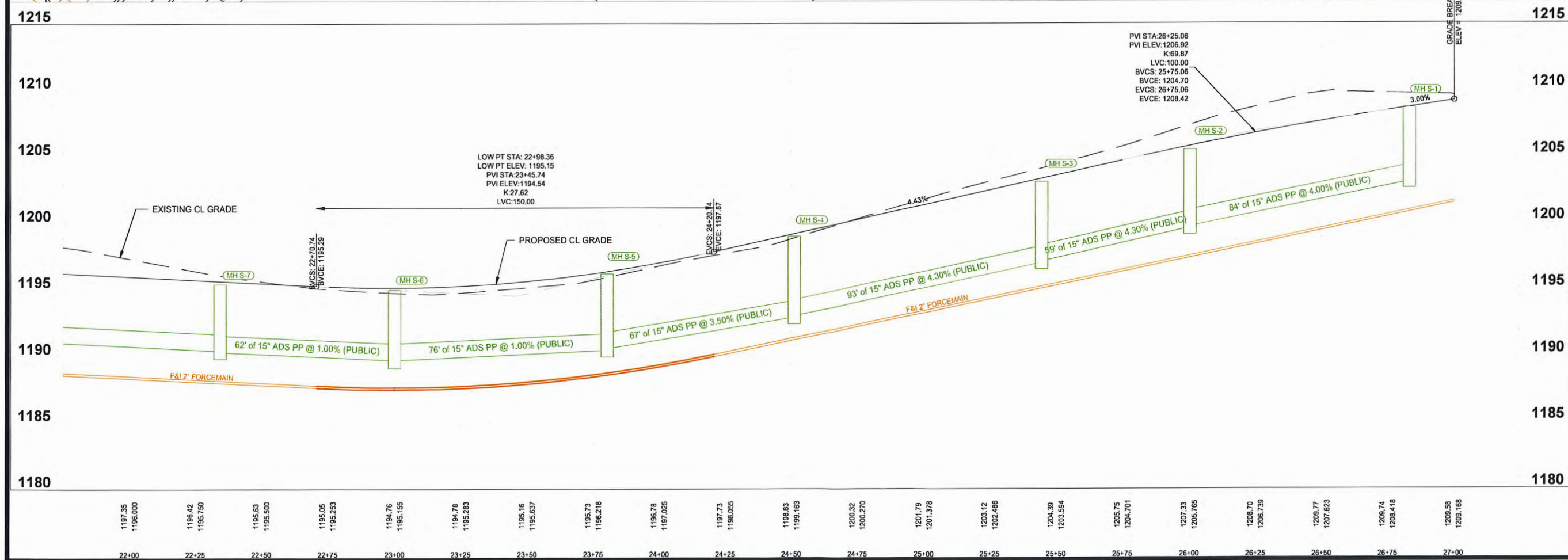
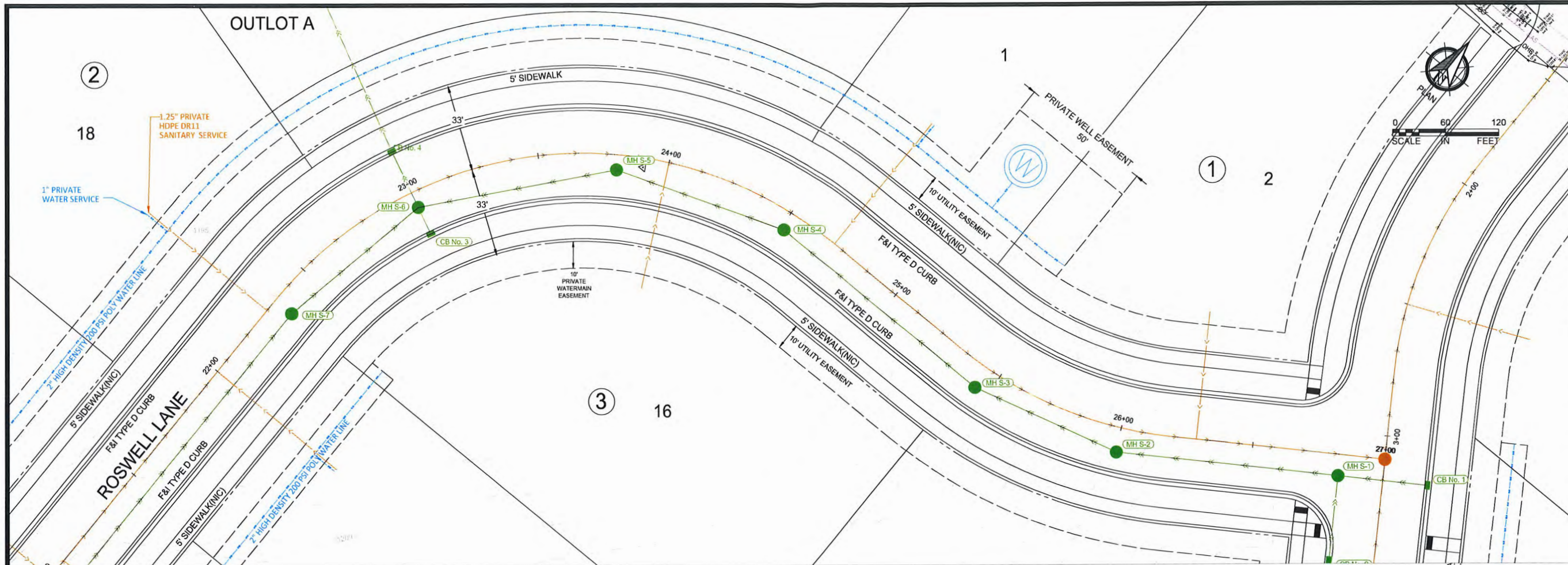


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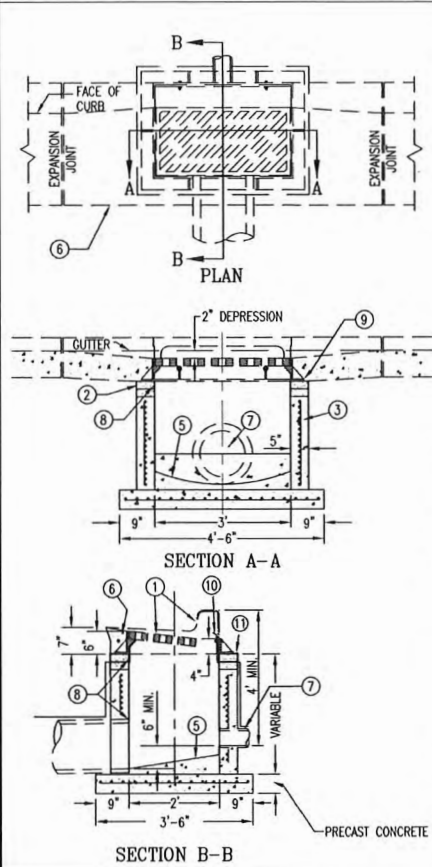
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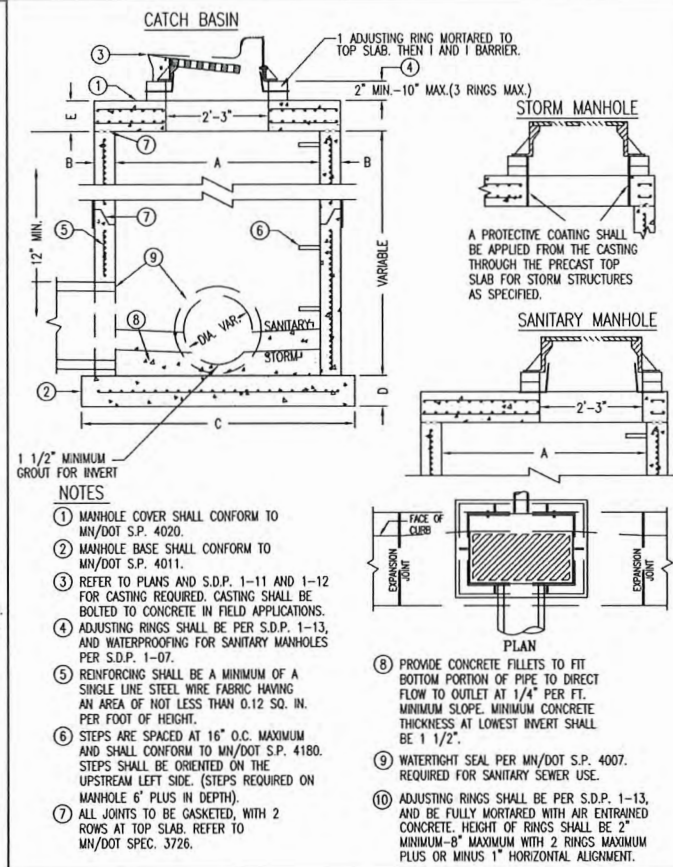
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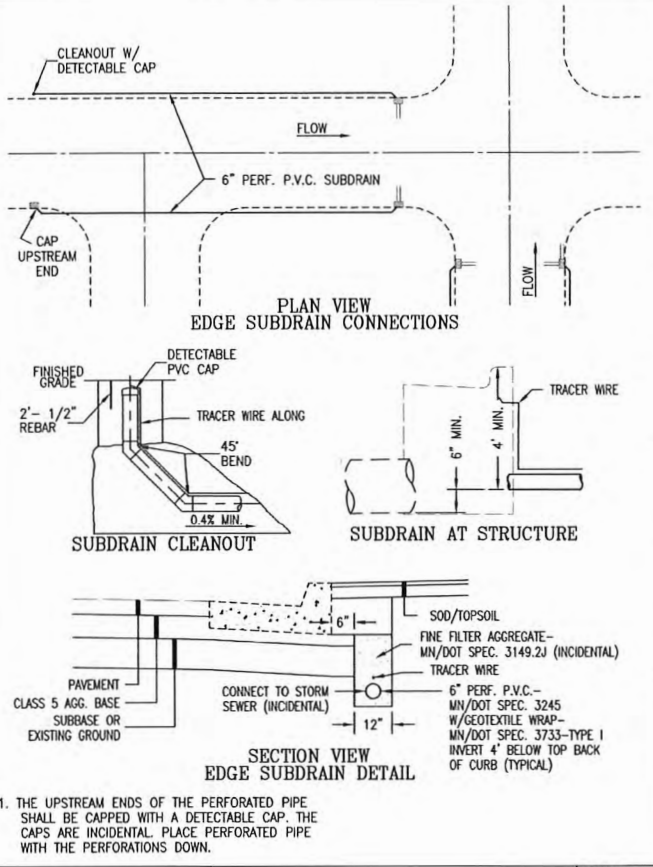


- NOTES**
- REFER TO PLANS AND S.D.P. 1-11 & 1-12 FOR TYPE OF FRAME, GRATE AND CURB BOX.
  - ADJUSTING RINGS SHALL BE PER S.D.P. 1-13, AND BE FULLY MORTARED WITH AIR ENTRAINED CONCRETE. HEIGHT OF RINGS SHALL BE 2" MINIMUM-10" MAXIMUM WITH 3 RINGS MAXIMUM PLUS OR MINUS. MAX 1" HORIZONTAL OFF CURB ALIGNMENT.
  - REINFORCING SHALL BE A MINIMUM OF SINGLE LINE STEEL WIRE FABRIC HAVING AN AREA OF NOT LESS THAN 0.12 SQ. IN. PER FOOT OF HEIGHT.
  - NO STEPS REQUIRED.
  - PROVIDE CONCRETE FILLETS TO FIT BOTTOM PORTION OF STRUCTURE AND TO DIRECT THE FLOW TO OUTLET AT MINIMUM SLOPE OF 1/4" PER FOOT. MINIMUM CONCRETE THICKNESS AT OUTLET 1 1/2".
  - SEE S.D.P. 2-01, 2-05 AND 2-06 FOR CURB, GUTTER AND REINFORCEMENT DETAILS AT CATCH BASINS.
  - SEE S.D.P. 1-08 FOR SUBDRAIN DETAILS AT CATCH BASINS AS SHOWN ON PLANS.
  - CONCRETE BLOCK WITH NON SHRINK GROUT. NON SHRINK GROUT SHALL BE AIR-ENTRAINED. INTERIOR SHALL BE TUCK POINTED BRUSHED SMOOTH. EXTERIOR SHALL BE BACKPLASTERED.
  - SHIM BETWEEN TOP ADJUSTING RING AND CASTING. FILL ANNUAL SPACE WITH AIR-ENTRAINED NONSHRINK. SHIM SHALL BE PLASTIC OR CONCRETE (WOOD OR OTHER DISSIMILAR MATERIALS NOT ACCEPTABLE).
  - TRACER WIRE
  - INFI-SHIELD UNI-BAND OR APPROVED EQUAL (INCIDENTAL ITEM)



**ALTERNATE TOP SLAB FOR MANHOLE**

MH TOP SLAB	MANHOLE DIMENSIONS	MAX. PIPE SIZE
W X Y Z	A B C D E	135-180" 90"
6' 9" -	58" 48" 5" 64" 6" 6"	27" 18"
6' 6" -	65" 54" 5.5" 72" 8" 8"	33" 21"
7' 3" -	72" 60" 6" 78" 8" 8"	36" 24"
7' 0" -	79" 66" 6.5" 85" 8" 8"	42" 30"
8' -	86" 72" 7" 92" 8" 8"	42" 33"
8' -	93" 78" 7.5" 100" 8" 8"	48" 36"
9' -	100" 84" 8" 106" 8" 8"	54" 42"
9' -	107" 90" 8.5" 114" 8" 8"	60" 42"
9' -	114" 96" 9" 120" 8" 8"	60" 42"
9' -	121" 102" 9.5" 127" 8" 8"	60" 48"
10' -	126" 108" 10" 132" 9" 12"	60" 54"
11' -	140" 120" 10" 146" 12" 12"	60" 60"



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P.O. BOX 100  
33 E VETERANS  
MEMORIAL HIGHWAY  
KASSON, MN 55944

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320 WEST BROADWAY  
SUITE 3  
PLAINVIEW, MN 55964

**ROCHESTER OFFICE**  
1712 RESTORATION  
DRIVE SW  
ROCHESTER, MN 55902

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.

*Jan Busway*  
Les Conway  
23292 8/19/2022  
Number Date

**whks** STRUCTURE TYPE 1  
CITY OF KASSON

REVISED: 9/04/20  
SHEET: 1 OF 1  
PLATE NO. 1-01

**whks** STRUCTURE TYPE 4 (XX in.)  
CITY OF KASSON

REVISED: 9/04/20  
SHEET: 1 OF 1  
PLATE NO. 1-04

**WSE MASSEY ENGINEERING & SURVEYING**  
KASSON, MN 55944

**STRUCTURE TYPE 4**  
SHT 2 OF 2 SHTS DATE REVISED 4/25/06 PLATE NO. 1.04 REV. B

**whks** SUBSURFACE EDGE DRAINS  
CITY OF KASSON

REVISED: 9/04/20  
SHEET: 1 OF 2  
PLATE NO. 1-08

**TABLE OF QUANTITIES**  
RIPRAP AT RCP OUTLETS

DIA. OF ROUND PIPE (IN.)	CLASS II C <sub>50</sub> = 6"			CLASS III C <sub>50</sub> = 9"			CLASS IV C <sub>50</sub> = 12"			
	L	GEOTEXTILE UNDER RIPRAP	12" DEPTH UNDER RIPRAP	L	GEOTEXTILE UNDER RIPRAP	18" DEPTH UNDER RIPRAP	L	GEOTEXTILE UNDER RIPRAP	24" DEPTH UNDER RIPRAP	
12	8	18.0	0.2	3.0	19.6	0.1	4.4	23.9	0.4	6.4
15	8	22.4	0.3	4.3	29.6	0.4	4.8	39.0	0.5	8.5
21	10	24.1	0.4	4.7	27.4	0.6	7.1	50.5	0.7	9.4
24	12	29.7	0.5	6.2	33.4	0.8	9.2	37.2	1.0	12.3
27	12	31.4	0.6	6.6	35.2	0.9	9.5	39.2	1.2	13.2
30	14	37.4	0.8	8.2	41.6	1.1	12.3	46.0	1.5	16.4
36	16	45.9	1.1	10.6	50.5	1.4	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	28.6

**TABLE OF QUANTITIES**  
RIPRAP AT RCP-A OUTLETS

SPAN OF PIPE (IN.)	CLASS II C <sub>50</sub> = 6"			CLASS III C <sub>50</sub> = 9"			CLASS IV C <sub>50</sub> = 12"			
	L	GEOTEXTILE UNDER RIPRAP	12" DEPTH UNDER RIPRAP	L	GEOTEXTILE UNDER RIPRAP	18" DEPTH UNDER RIPRAP	L	GEOTEXTILE UNDER RIPRAP	24" DEPTH UNDER RIPRAP	
22	10	22.4	0.3	4.3	25.6	0.4	6.1	25.0	0.5	8.1
28	12	29.5	0.5	5.7	33.2	0.7	8.3	37.4	1.1	11.3
36	14	37.3	0.8	7.5	41.9	1.1	11.2	45.8	1.5	14.9
43	16	45.9	1.1	9.5	50.5	1.4	14.1	55.3	2.1	19.2
51	18	52.5	1.2	11.3	57.5	1.7	16.9	62.7	2.3	22.5
58	20	59.9	1.5	13.2	65.2	1.9	19.8	70.7	2.5	26.4

**NOTES:**  
REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS WILL BE DESIGNATED IN THE PLANS. PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.  
① FOR PIPES GREATER THAN OR EQUAL TO 30", USE 1.5".  
② GEOTEXTILE FILTER, SPEC. 3733, SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIPRAP, GRANULAR FILTER MATERIALS.  
③ DIMENSION E IS GIVEN ON STANDARD PLATES 3100 AND 3110.  
④ GRANULAR FILTER, SPEC. 3601, MAY BE USED AS A CUSHION LAYER. PLACE FILTER PER SPEC. 3601. THE CUSHION LAYER IS INCIDENTAL.  
⑤ GRANULAR FILTER OR RIPRAP, SPEC. 3601, 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 3" LAYER OF 1.5" 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  
RIPRAP AT RCP OUTLETS  
SPECIFICATION REFERENCE: 3100, 3110, 3601, 3733, 2011  
STANDARD PLATE NO. 3133D

**NOTES**

- 1/2" PREFORMED JOINT FILLER MATERIAL PER MN/DOT SPEC. 3702
- SEE S.D.P. 2-06 FOR CURB REINFORCEMENT AT CATCH BASIN.
- SEE S.D.P. 1-01 FOR CATCH BASIN DETAIL.

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TRANSITION CURB & GUTTER DRIVEOVER TO TYPE B OR V  
SHT 1 OF 1 SHTS DATE REVISED 9/23/03 PLATE NO. MLS2.05 REV. A

**NOTES**

- CONCRETE MIX: MANUAL PLACEMENT-MN/DOT SPEC. 3A32, SLIP-FORM PLACEMENT-MN/DOT SPEC. 3A22.
- PROVIDE 1/2" EXP. JT. AT 300" MAX SPACING AND TO MATCH PAVEMENT EXP. JTS. IN ADDITION TO EXP. JTS. SHOWN ON OTHER DETAIL PLATES.
- PROVIDE CONTRACTION JTS. @ 9' MAX. SPACING, SAW CUT 2" MIN. DEPTH.
- ALL CONC. C. & G. SHALL BE PLACED ON A MIN. OF 4" CLASS II AGGREGATE BASE.
- SILL REQUIRED FOR DESIGN "V" AND "B", WHEREVER SIDEWALK ABUTS CURB. SEE S.D.P. 2-02.

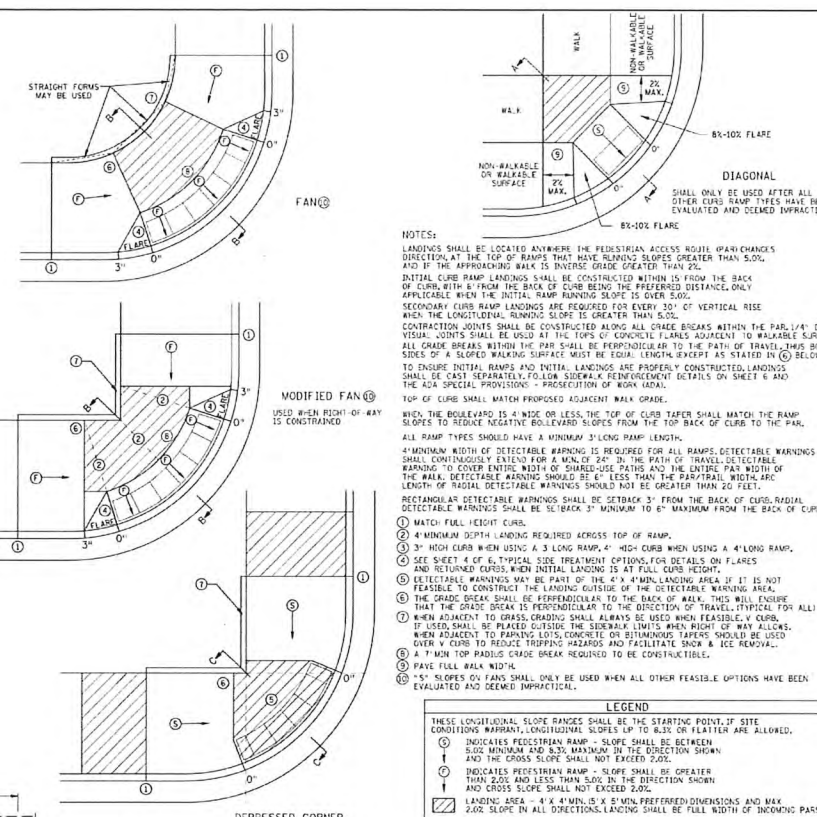
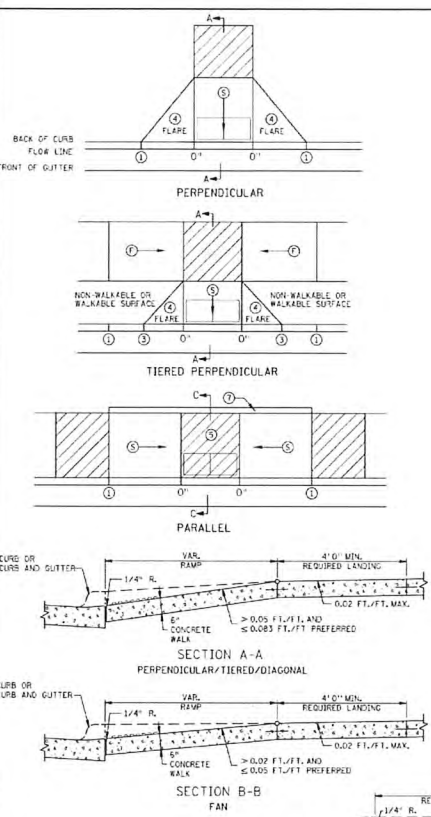
**WSE MASSEY ENGINEERING & SURVEYING**  
KASSON, MN 55944  
CONCRETE CURB & GUTTER  
SHT 1 OF 1 SHTS DATE REVISED 6/18/07 PLATE NO. 2.01 REV. C

SCALE: AS SHOWN  
DATE: 8/19/2022  
DRAWN BY: TAC  
JOB NUMBER: 023-3-213764  
DWG. FILE: 23-3-213764-GP01.dwg

Sheet 9 of 14

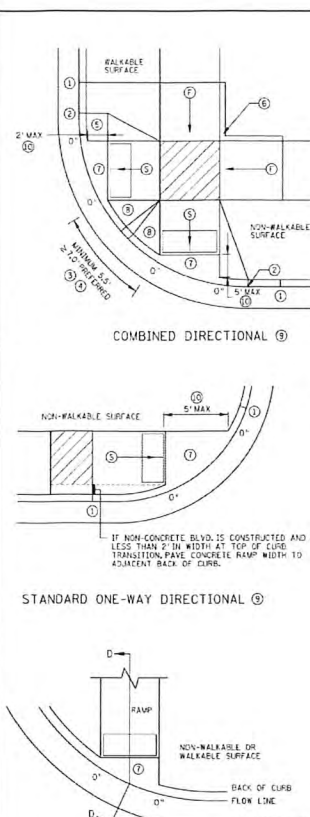
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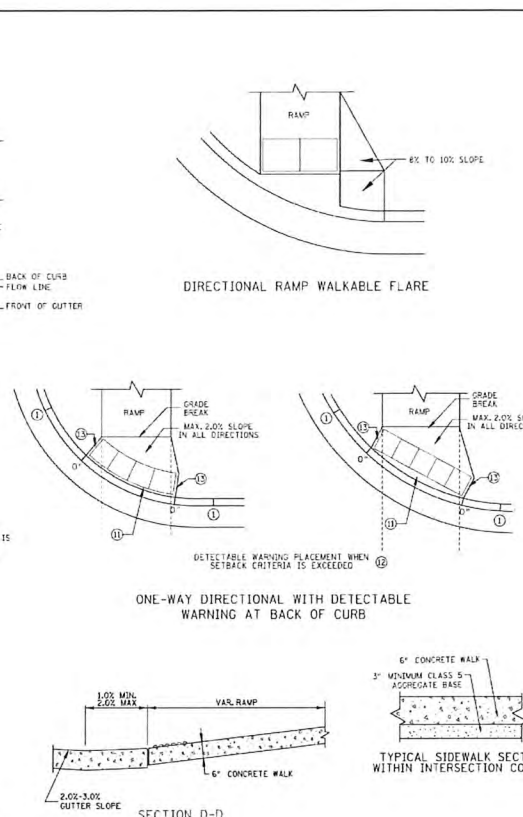


**NOTES:**  
 LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PARALLEL OR DIAGONAL) AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0% AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.  
 INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB WITH 6" FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE. ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.  
 SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30° OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.  
 CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR 1/4" DEEP VERTICAL JOINTS SHALL BE LOCATED AT THE TOP OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.  
 ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THE BOTH SIDES OF A SLOPED WALKING SURFACE SHALL BE EQUAL LENGTH. TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY, FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 4 AND THE ADA SPECIAL PROVISIONS - PRECESSION OF ROAD LOCAL.  
 TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.  
 WHEN THE BOULEVARD IS A WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR. ALL RAMP TYPES SHOULD HAVE A MINIMUM 3" LONG RAMP LENGTH.  
 4" MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNING SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-PATHS AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/PATH WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNING SHOULD NOT BE GREATER THAN 20 FEET.  
 RECTANGULAR DETECTABLE WARNING SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNING SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.  
 1. MATCH - FULL HEIGHT CURB.  
 2. 4" MINIMUM DEPTH LANDING REQUIRED ABOVE TOP OF RAMP.  
 3. 3" HIGH CURB WHEN USING A 3" LONG RAMP, 4" HIGH CURB WHEN USING A 4" LONG RAMP.  
 4. SEE SHEET 4 OF 6 TYPICAL SIDE TREATMENT OPTIONS FOR DETAILS ON FLARES AND RETURNED CURBS. WHEN INITIAL LANDING IS AT FULL CURB HEIGHT.  
 5. DETECTABLE WARNING MAY BE PART OF THE 4" X 4" MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.  
 6. THE GRADE CURB SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE MATERIAL TO BE REMOVED DURING THE COURSE OF TRAVEL IS TYPICAL FOR ALL.  
 7. WHEN ADJACENT TO GRASS GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. A CURB, IF USED SHALL BE CAST SEPARATELY, FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 4 AND THE ADA SPECIAL PROVISIONS - PRECESSION OF ROAD LOCAL.  
 8. WHEN ADJACENT TO PAVING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE ICE REMOVAL.  
 9. A 1" MIN TOP RADIAL CHASE REQUIRED TO BE CONSTRUCTIBLE.  
 10. PAVE FULL WALK WIDTH.  
 11. 5% SLOPES OF FAN SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.  
 12. 5" SLOPES OF FAN SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

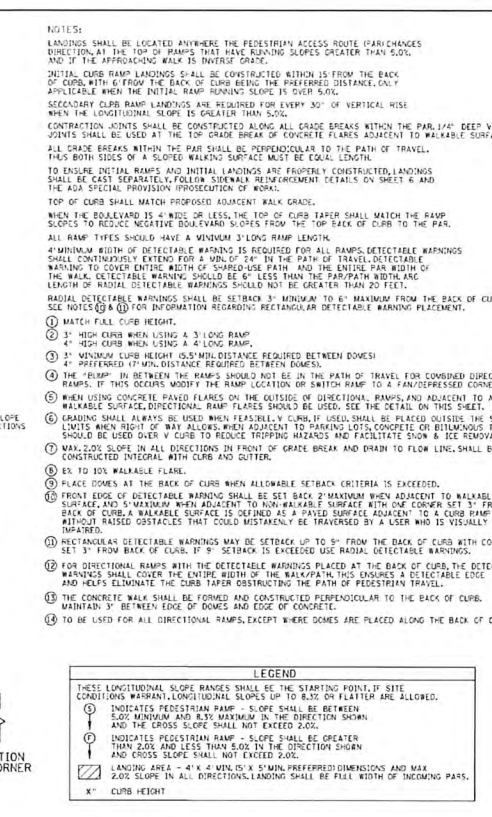
**LEGEND**  
 THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT IF SITE CONDITIONS WARRANT. LONGITUDINAL SLOPES UP TO 8.5% ON FLATLAND ARE ALLOWED.  
 (1) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 2.0% MINIMUM AND 8.5% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.  
 (2) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.  
 (3) LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PASS.  
 (4) CURB HEIGHT



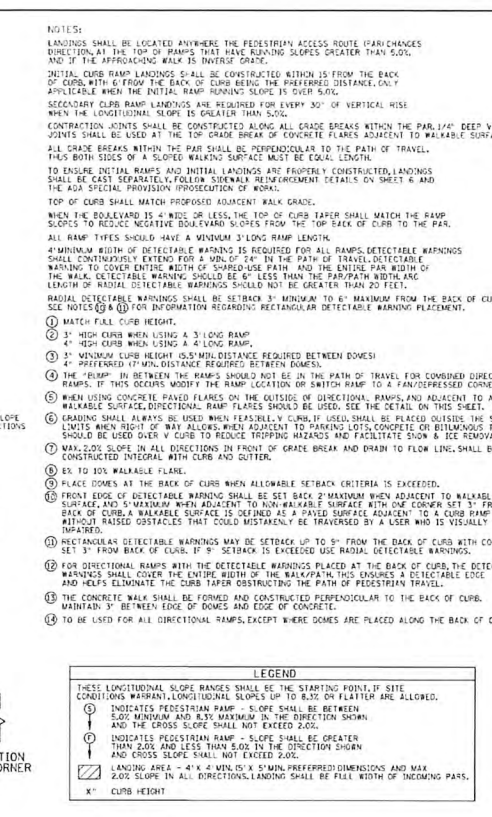
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 STANDARD PLAN 5-297.250 1 OF 6  
 APPROVED: 1-23-2017  
 STATE DESIGN ENGINEER: [Signature]



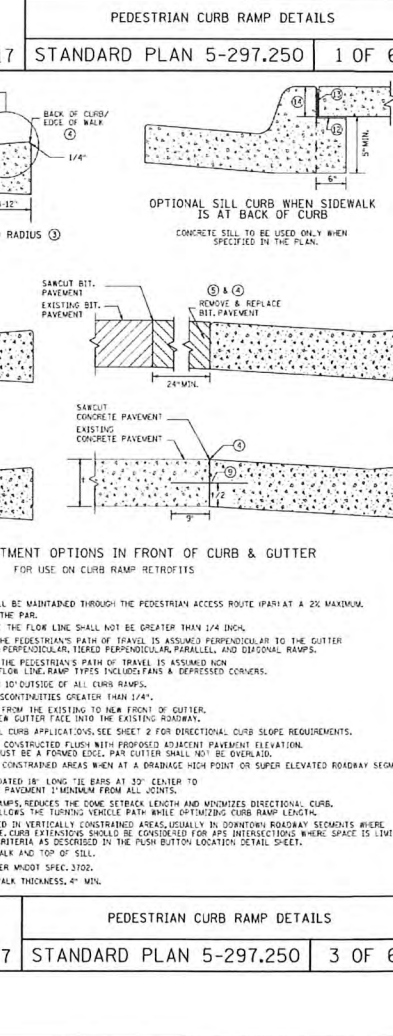
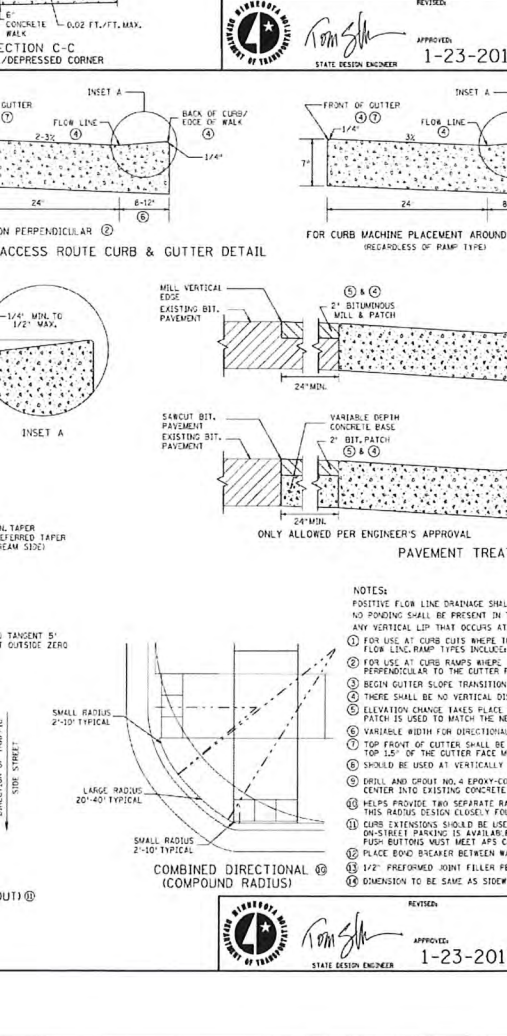
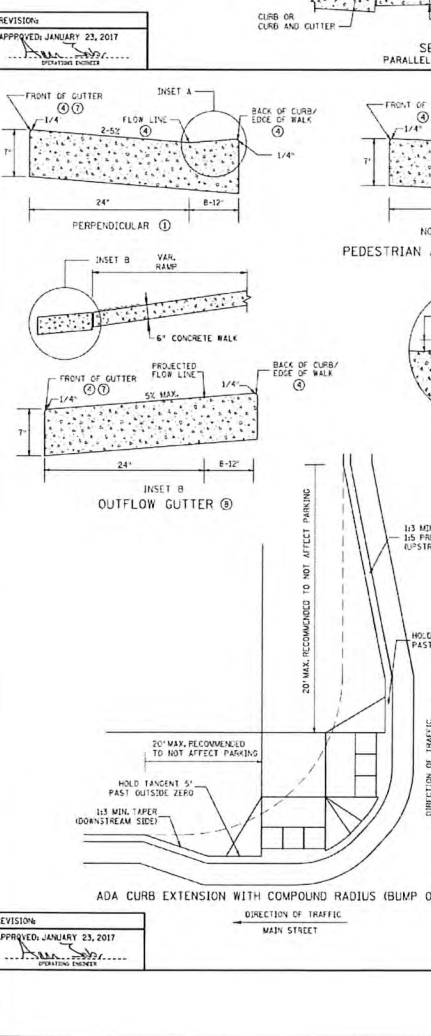
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 STANDARD PLAN 5-297.250 2 OF 6  
 APPROVED: 1-23-2017  
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**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 3 OF 6  
 APPROVED: 1-23-2017  
 STATE DESIGN ENGINEER: [Signature]

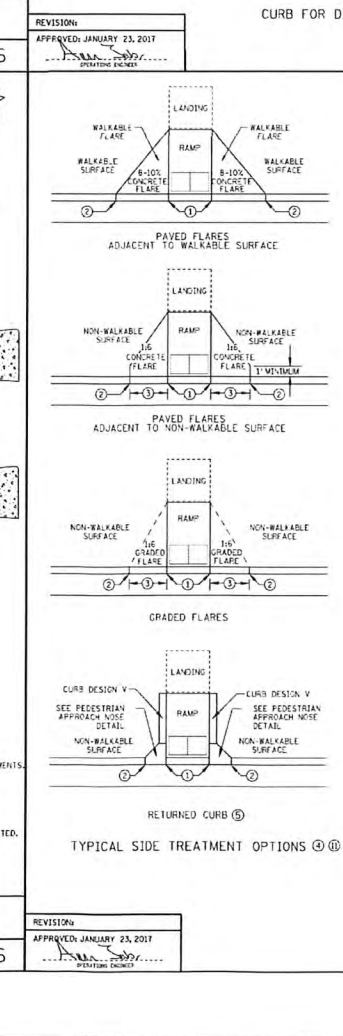


**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 4 OF 6  
 APPROVED: 1-23-2017  
 STATE DESIGN ENGINEER: [Signature]

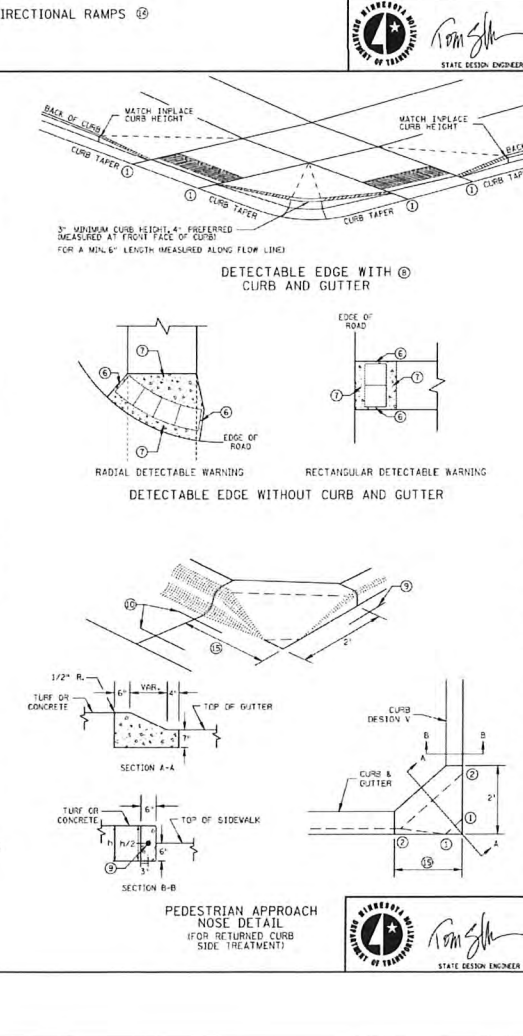


**NOTES:**  
 POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM. NO PONDING SHALL BE PRESENT IN THE PAR.  
 ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4" HIGH.  
 FOR USE AT CURB CUTS WHERE THE PEDESTRIAN PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL AND DIAGONAL RAMPS.  
 FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE FAN AND DECREASED CORNERS.  
 BEGIN OUTLET SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.  
 THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".  
 ELEVATION CHANGE RANGES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.  
 VARIABLE WIDTH FOR DIAGONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIAGONAL CURB SLOPE REQUIREMENTS.  
 TOP FRONT OF CURB SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION.  
 TOP 1/2" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR CUTTERS SHALL NOT BE USED TO BE AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.  
 SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.  
 DRILL AND GROUT NO. 4 EPOXY-COATED IR - LONG "RE BARS AT 20" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1" MINIMUM FROM ALL CURBS.  
 HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE CONC SETBACK LENGTH AND MINIMIZES DIAGONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.  
 CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, ESPECIALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR ALL INTERSECTIONS WHERE SPACE IS LIMITED. PUSH BUTTONS MUST MEET ADA CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.  
 PLACE BOOM BREAKER BETWEEN WALK AND TOP OF SILL.  
 1/2" PREFORMED JOINT FILLER PER MDOT SPEC 3102.  
 DIMENSION TO BE SAME AS SIDEWALK THICKNESS, 4" MIN.

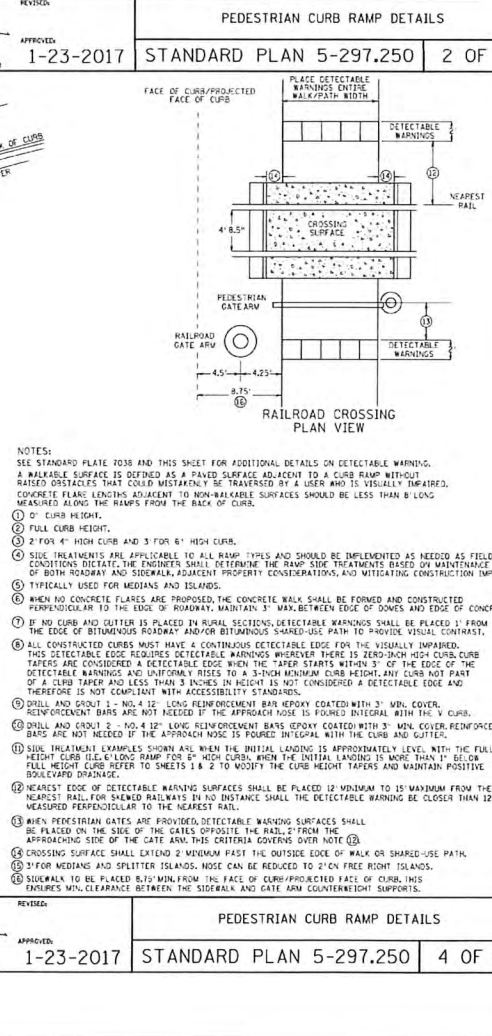
**LEGEND**  
 THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT IF SITE CONDITIONS WARRANT. LONGITUDINAL SLOPES UP TO 8.5% ON FLATLAND ARE ALLOWED.  
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 (3) LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PASS.  
 (4) CURB HEIGHT



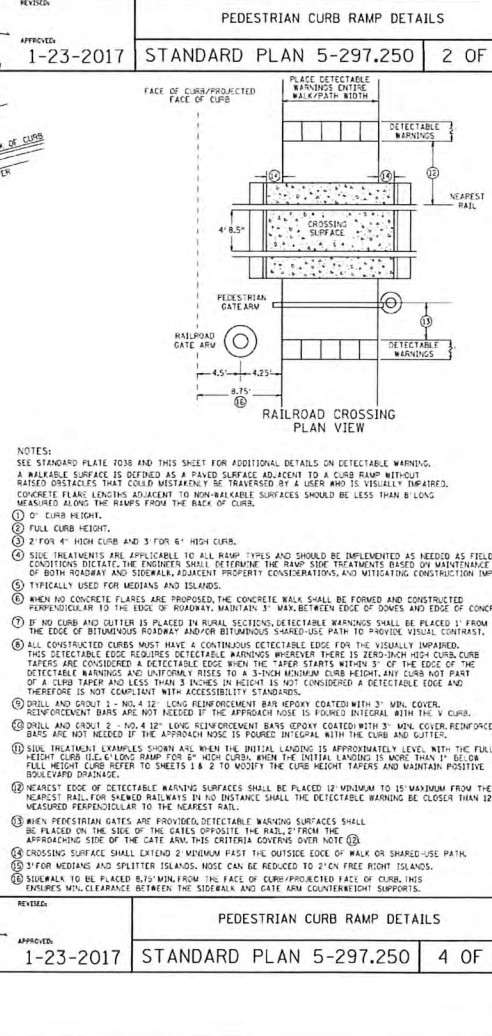
**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 1 OF 6  
 APPROVED: 1-23-2017  
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**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 2 OF 6  
 APPROVED: 1-23-2017  
 STATE DESIGN ENGINEER: [Signature]



**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 3 OF 6  
 APPROVED: 1-23-2017  
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**PEDESTRIAN CURB RAMP DETAILS**  
 STANDARD PLAN 5-297.250 4 OF 6  
 APPROVED: 1-23-2017  
 STATE DESIGN ENGINEER: [Signature]

Engineering & Surveying  
 PH. NO. 507-634-4505  
 PLANS@WSE.ENGINEERING  
 www.wse.engineering  
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 P.O. BOX 100  
 33 B E VETERANS  
 MEMORIAL HIGHWAY  
 KASSON, MN 55944  
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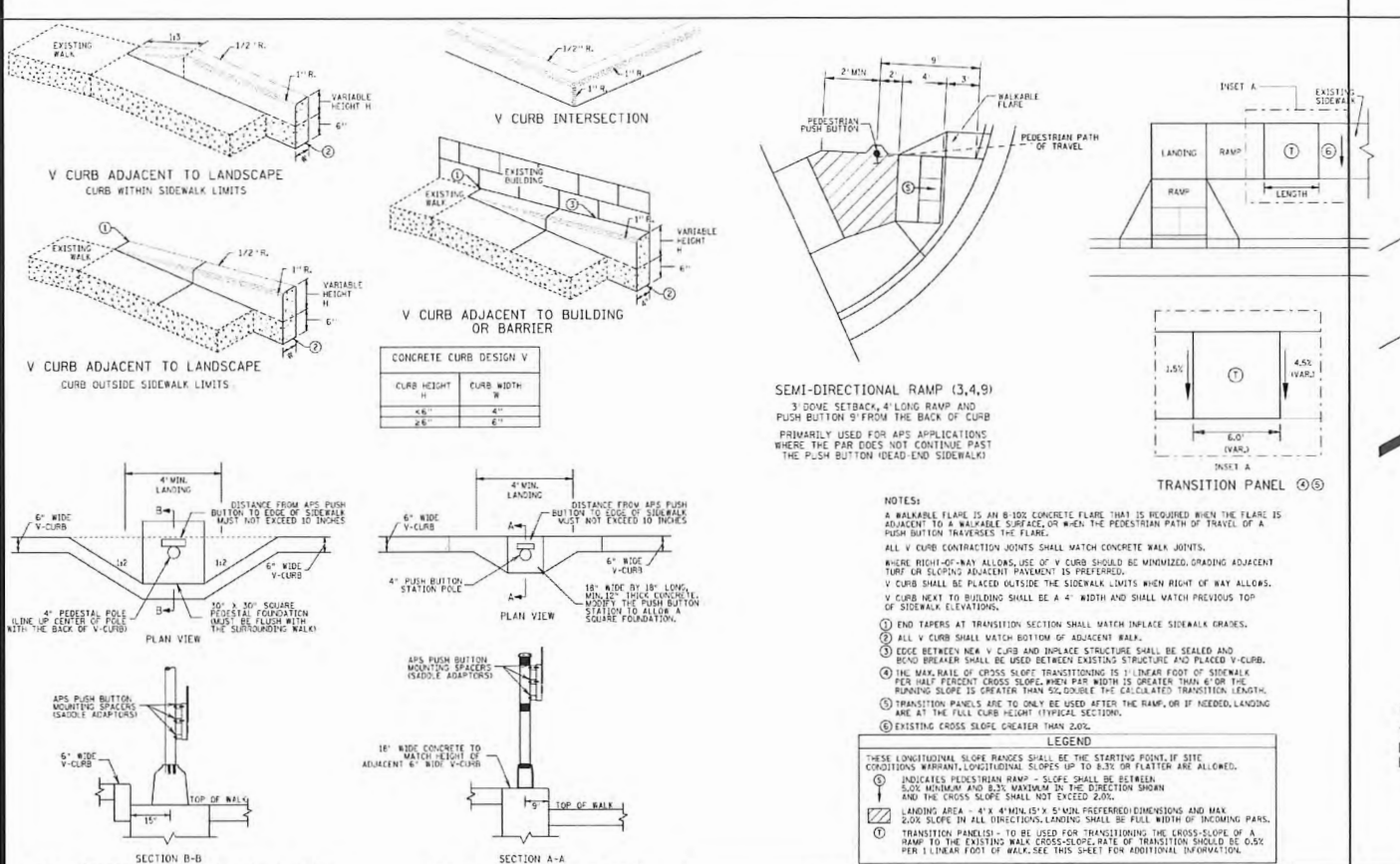
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Les Conway  
 23292 8/19/2022  
 Number Date

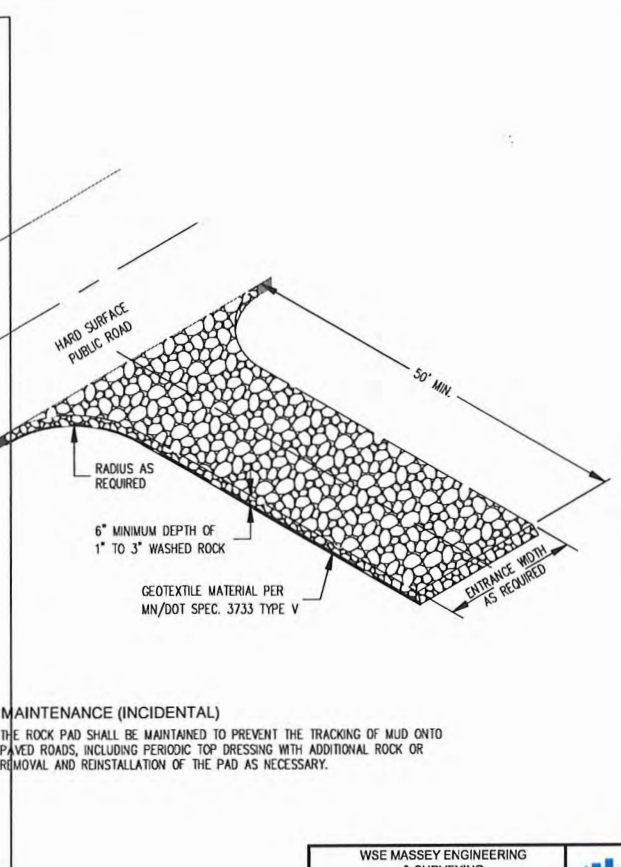
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 Sheet 10 of 14

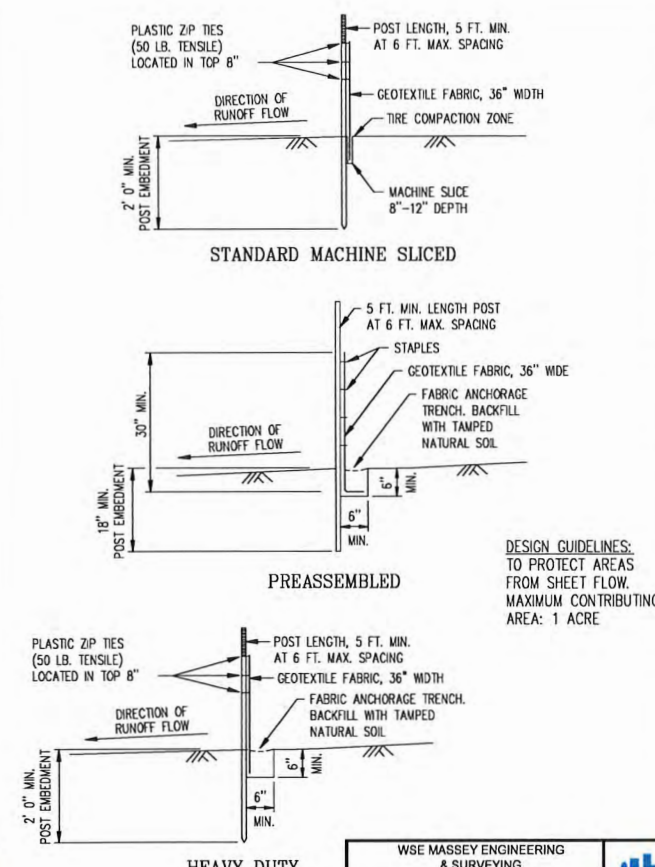
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 DODGE COUNTY, MINNESOTA



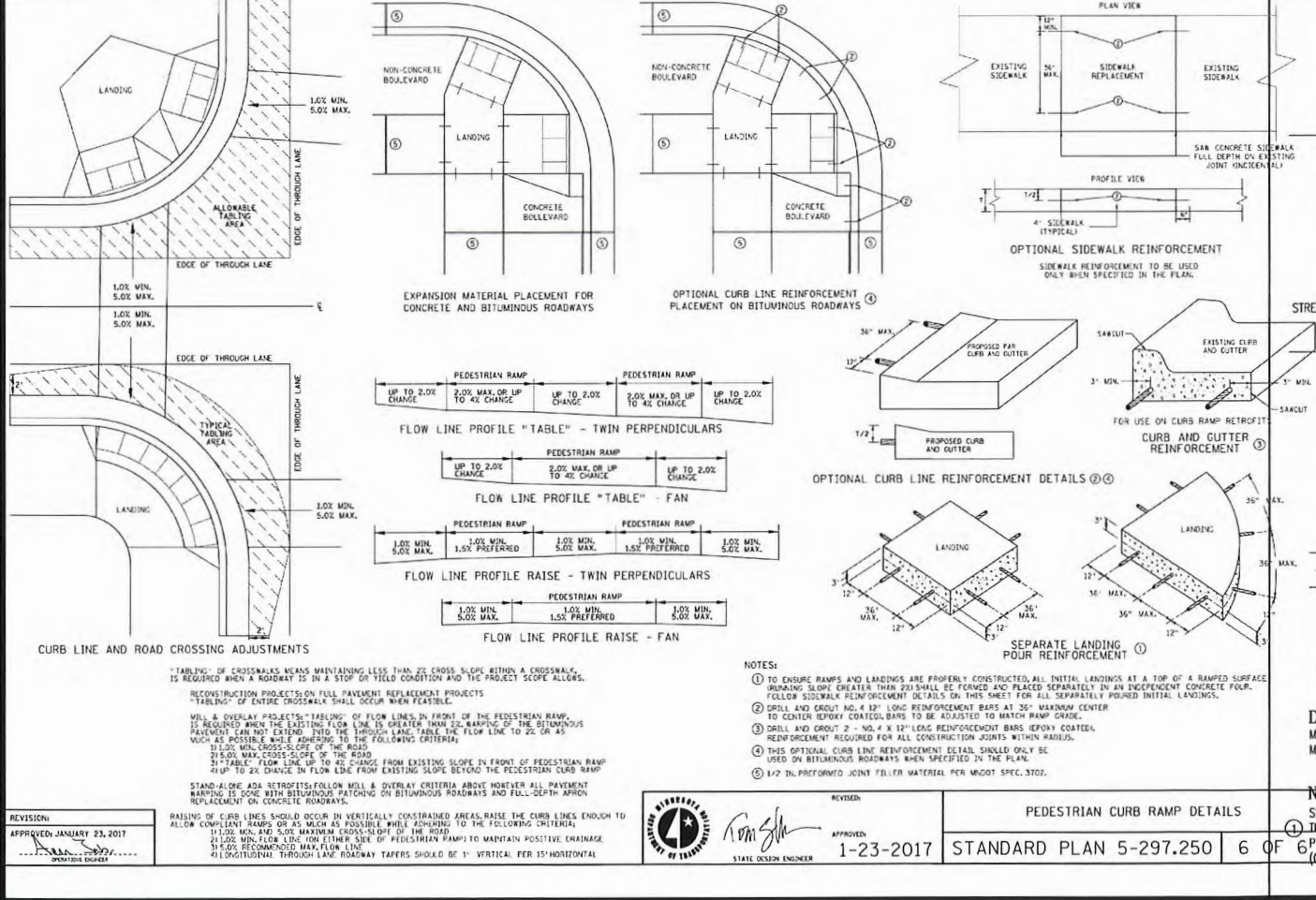
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REVISION	APPROVED 1-23-2017	STATE DESIGN ENGINEER



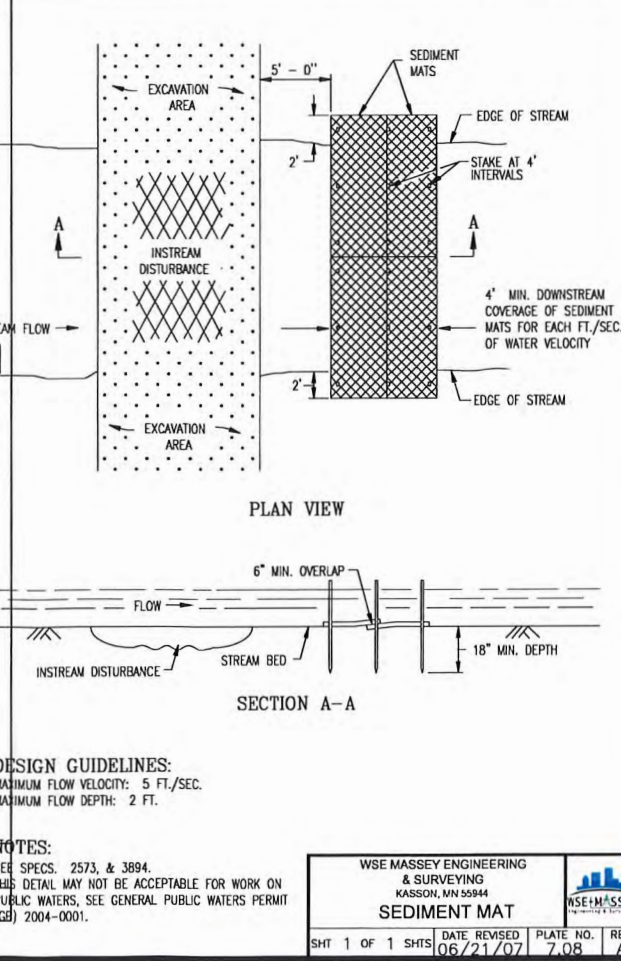
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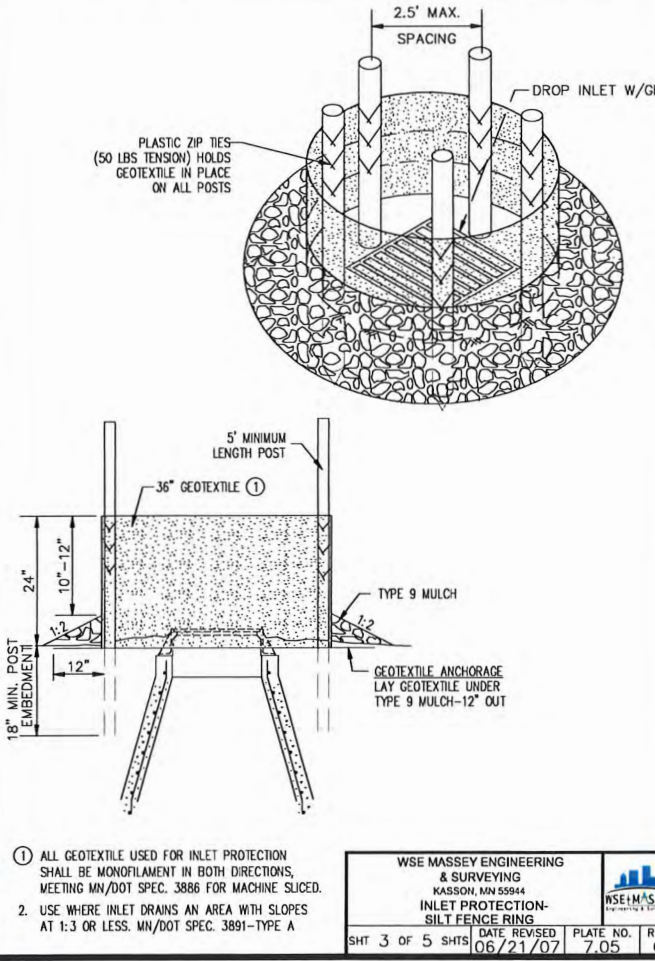
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APPROVED 06/21/07	7.06	D		



REVISION	APPROVED JANUARY 23, 2017	DESIGNER
REVISION	APPROVED 1-23-2017	STATE DESIGN ENGINEER



REVISION	APPROVED 06/21/07	DATE REVISED	PLATE NO.	REV.
APPROVED 06/21/07	7.08	A		



REVISION	APPROVED 06/21/07	DATE REVISED	PLATE NO.	REV.
APPROVED 06/21/07	7.05	C		

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33 B E VETERANS  
MEMORIAL HIGHWAY  
KASSON, MN 55944

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PLAINVIEW, MN 55964

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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.

*Les Conway*  
Les Conway  
23292 8/19/2022  
Number Date

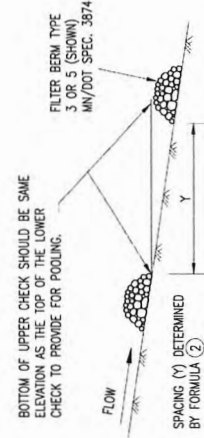
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**DETAILS**  
**AREA 15**  
**DODGE COUNTY, MINNESOTA**

SCALE: AS SHOWN  
DATE: 8/19/2022  
DRAWN BY: TAC  
JOB NUMBER: 023-213764  
DWG. FILE: 23-3-213764 GP01.dwg

Sheet 11 of 14





DITCH CHECK SPACING (1)

GENERAL DESIGN GUIDELINES			
DITCH CHECK TYPE	ROCK WEEPER	ROCK CHECK	ROCK CHECK
STORM FREQUENCY:	5 YR. - 24 HR.	5 YR. - 24 HR.	5 YR. - 24 HR.
MAX. FLOW VELOCITY:	12 FT./SEC	12 FT./SEC	12 FT./SEC
MAX. DITCH GRADE:	3% - 5%	3% - 5%	3% - 5%
MAX. DRAINAGE AREA:	4+ ACRE	4+ ACRE	4+ ACRE

**NOTES**

SEE M/DOE SPECS. 2573, 3601, 3733 & 3874

(1) ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE WILL NEED TO BE 18" OR LESS IN HEIGHT. A 1:8 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

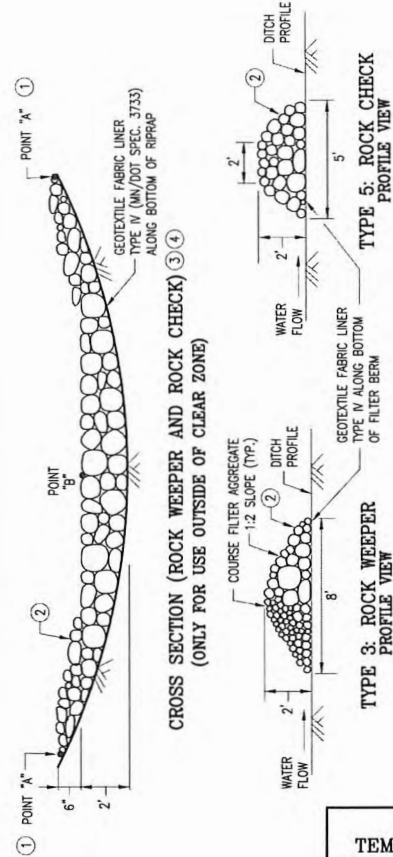
(2) APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM SPACING FORMULA: (FT.) =  $Y = \frac{V}{S} \times 100$

DEPARTMENT OF PUBLIC WORKS  
CITY OF ROCHESTER, MINNESOTA  
**TEMP. SEDIMENT CONTROL FILTER BERMS**

*Dan S. Deibel*  
CITY ENGINEER

DATE REVISED 4/15/20 PLATE NO. 7-03 REV. D

SHT 1 OF 2 SHTS



**NOTES**

SEE M/DOE SPECS. 2573, 3601, 3733 & 3874.

SEE SHEET 1 FOR DITCH CHECK SPACING.

(1) POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

(2) RIPRAP (M/DOE SPEC. 3601) ROCK WEEPER - CLASS I, ROCK CHECK - CLASS II

(3) DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:8 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

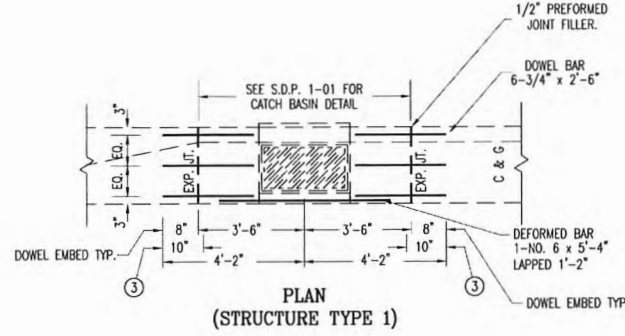
(4) DITCH GRADE 3%-5% MAX. FLOW VELOCITY 12 FT./SEC.

DEPARTMENT OF PUBLIC WORKS  
CITY OF ROCHESTER, MINNESOTA  
**TEMP. SEDIMENT CONTROL TYPES 3 & 5 DITCH CHECKS**

*Dan S. Deibel*  
CITY ENGINEER

DATE REVISED 4/15/20 PLATE NO. 7-03 REV. D

SHT 2 OF 2 SHTS



**NOTES**

1. DOWEL BARS SHALL BE PER M/DOE SPEC. 3302 (EPOXY COATED).

2. DEFORMED BAR SHALL BE PER M/DOE SPEC. 3301 (EPOXY COATED).

(3) COAT THE DOWEL BARS WITH A THIN UNIFORM COATING OF AN APPROVED FORM COATING MATERIAL MEETING M/DOE SPEC. 3902 NOT MORE THAN ONE HOUR BEFORE COVERING WITH CONCRETE, OR WRAP WITH TEFLON TAPE.

DEPARTMENT OF PUBLIC WORKS  
CITY OF ROCHESTER, MINNESOTA  
**CURB & GUTTER REINFORCEMENT AT CATCH BASINS**

*Dan S. Deibel*  
CITY ENGINEER

DATE REVISED 1/20/17 PLATE NO. 2-06 REV. E

SHT 1 OF 1 SHTS

TYPE	DESCRIPTION	CASTINGS - STRUCTURE TYPE 1		REMARKS
		NEENAH REF. NO.	GRATE SLOTS	
B	3' CURB INLET FRAME, GRATE & BOX	R-3087	DIAGONAL	USE WHERE DRIVEWAY PRECLUDES USE OF TYPE B IN INTERFACE CURB
C	3' DRIVEWAY INLET FRAME & GRATE	R-3290-A	PARALLEL (BICYCLE SAFE)	USE WHEN STREET GRADE EXCEEDS 2%
V	3' CURB INLET FRAME, GRATE & BOX	R-3087	PERPENDICULAR VANE	USE WHEN STREET GRADE EXCEEDS 2%

CASTINGS - OTHER STRUCTURES			REMARKS
TYPE	DESCRIPTION	NEENAH REF. NO.	
1	9" FRAME & COVER-T GASKETED	R-1916-C	USED IN FLOOD PRONE AREAS & IN CONCRETE PAVING
2	9" FRAME & COVER-T GASKETED	R-1733-B	INGENIUM TOP
3	7" FRAME & COVER-T GASKETED	R-1642	INGENIUM TOP
4	7" FRAME & COVER-NON ROOFTOP OR T GASKET	R-1740-B	INGENIUM TOP
5	9" FRAME & GRATE-NON ROOFTOP OR T GASKET	R-2533	FLAT GRATE
6	DITCH GRATE-STOOL TYPE-TALL	R-4341-A	STOOL GRATE
7	DITCH GRATE-STOOL TYPE-SHORT	R-4342	STOOL GRATE
	POND SKIMMER GRATE		1/2" STEEL PLATE

**NOTES:**

1. CASTINGS SHALL BE ACCORDING TO M/DOE SPEC. 3321.1-2 SUPPLIED BY FOUNDRIES THAT ARE APPROVED ON THE M/DOE APPROVED/QUALIFIED PRODUCTS LIST

2. ALL CASTINGS SHALL COMPLY WITH M/DOE SPEC. M-306

3. ALL CASTINGS SHALL COMPLY WITH U.S. CODE OF FEDERAL REGULATIONS 23CFR635.410. THE "BUY AMERICAN STEEL & IRON" REGULATION

4. ALL STORM SEWER CASTINGS SHALL INCLUDE IMPRINT FISH STAMP AND "JUMP NO WASTE"

5. CORNERS SHALL BE STAMPED FOR SPECIFIC UTILITY (EX. SANITARY SEWER).

whks

CASTING SCHEDULE

REVISED: 9/04/20  
SHEET: 1 OF 1  
PLATE NO. 1-11  
CITY OF KASSON

REV.	DATE	DESCRIPTION

Les Conway  
23292 8/19/2022  
Number Date

KASSON OFFICE  
P.O. BOX 100  
33 B F VETERANS  
MEMORIAL HIGHWAY  
KASSON, MN 55944

PLAINVIEW OFFICE  
320 WEST BROADWAY  
SUITE 3  
PLAINVIEW, MN 55964

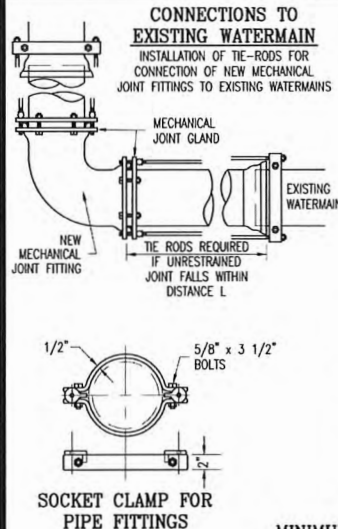
ROCHESTER OFFICE  
1712 RESTORATION  
DRIVE SW  
ROCHESTER, MN 55902

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.

*Les Conway*

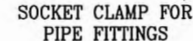
Number Date

REV.	DATE	DESCRIPTION



NUMBER OF 3/4" RODS REQUIRED

PIPE SIZE INCHES	12" AND LESS	14" AND 16"	18" AND 20"	24"
NUMBER OF RODS	2	4	6	8



MINIMUM DISTANCE TO CLOSEST UNRESTRAINED JOINT (L IN FEET)

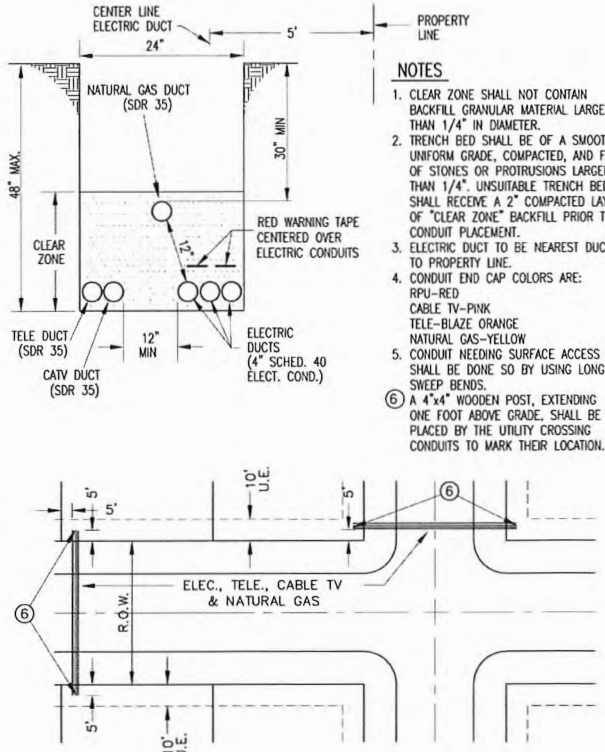
TYPE OF FITTING	PIPE SIZE							
	6"	8"	10"	12"	14"	16"	18"	20"
11 1/4" BEND	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
22 1/2" BEND	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
45" BEND	18.0	18.0	18.0	18.0	19.0	21.4	23.8	26.0
90" BEND	19.6	19.6	24.0	28.2	32.4	36.6	40.8	44.8
TEE	18.0	18.0	18.0	18.0	20.0	25.0	36.0	40.0
PLUG	18.0	18.0	18.0	18.0	20.0	25.0	36.0	40.0

DEPARTMENT OF PUBLIC WORKS  
CITY OF ROCHESTER, MINNESOTA  
**RESTRAINED JOINT DETAIL**

*Douglas C. Romo*  
DIRECTOR

DATE REVISED 12/1/11 PLATE NO. 6-05 REV. D

SHT 1 OF 1 SHTS



**NOTES**

1. CLEAR ZONE SHALL NOT CONTAIN BACKFILL GRANULAR MATERIAL LARGER THAN 1/4" IN DIAMETER.

2. TRENCH BED SHALL BE OF A SMOOTH, UNIFORM GRADE, COMPACTED, AND FREE OF STONES OR PROTRUSIONS LARGER THAN 1/4". UNSUITABLE TRENCH BEDS SHALL RECEIVE A 2" COMPACTED LAYER OF "CLEAR ZONE" BACKFILL PRIOR TO CONDUIT PLACEMENT.

3. ELECTRIC DUCT TO BE NEAREST DUCT TO PROPERTY LINE.

4. CONDUIT END CAP COLORS ARE:  
RIP-RED  
CABLE TV-PINK  
TELE-BLAZE ORANGE  
NATURAL GAS-YELLOW

5. CONDUIT NEEDING SURFACE ACCESS SHALL BE DONE SO BY USING LONG SWEEP BENDS.

(6) A 4"x4" WOODEN POST, EXTENDING ONE FOOT ABOVE GRADE, SHALL BE PLACED BY THE UTILITY CROSSING CONDUITS TO MARK THEIR LOCATION.

DEPARTMENT OF PUBLIC WORKS  
CITY OF ROCHESTER, MINNESOTA  
**STREET CROSSINGS FOR UTILITY CONDUITS**

*Dan S. Deibel*  
CITY ENGINEER

DATE REVISED 4/15/20 PLATE NO. 4-03 REV. C

SHT 1 OF 1 SHTS

STRUCTURE TABLE		STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:	STRUCTURE NAME:	DETAILS:
APRON 1	RIM = 1189.43 INV IN = 1187.91(15')	MH S-4	TYPE 4(48) RIM = 1199.00 INV IN = 1193.01(15') INV OUT = 1192.91(15')
CB No. 1	TYPE 1 RIM = 1208.77 INV OUT = 1203.68(15')	MH S-5	TYPE 4(48) RIM = 1196.20 INV IN = 1190.56(15') INV OUT = 1190.44(15')
CB No. 2	TYPE 1 RIM = 1209.41 INV OUT = 1204.00(15')	MH S-6	TYPE 4(48) RIM = 1194.97 INV IN = 1189.68(15') INV IN = 1189.68(15') INV OUT = 1189.58(15')
CB No. 3	TYPE 1 RIM = 1194.59 INV OUT = 1192.54(15')	MH S-7	TYPE 4(48) RIM = 1195.42 INV IN = 1190.40(15') INV OUT = 1190.30(15')
CB No. 4	TYPE 1 RIM = 1194.59 INV IN = 1189.12(15') INV OUT = 1189.02(15')	MH S-8	TYPE 4(48) RIM = 1198.61 INV IN = 1194.02(15') INV IN = 1193.92(12') INV OUT = 1193.92(12')
CB No. 5	TYPE 1 RIM = 1198.61 INV OUT = -0.50(12')	MH S-9	TYPE 4(48) RIM = 1201.12 INV IN = 1196.23(15') INV OUT = 1196.13(15')
CB No. 6	TYPE 1 RIM = 1198.61 INV OUT = -0.50(12')	MH S-10	TYPE 4(48) RIM = 1202.99 INV IN = 1198.00(15') INV OUT = 1197.90(15')
CB No. 7	TYPE 1 RIM = 1214.31 INV OUT = -0.62(15')	MH S-11	TYPE 4(48) RIM = 1206.90 INV IN = 1201.75(15') INV OUT = 1201.65(15')
CB No. 8	TYPE 1 RIM = 1214.31 INV OUT = -0.62(15')	MH S-12	TYPE 4(48) RIM = 1214.63 INV IN = 1214.00(15') INV IN = 1214.00(15') INV OUT = 1209.75(15')
MH S-1	TYPE 4(48) RIM = 1208.67 INV IN = 1203.20(15') INV OUT = 1203.10(15')		
MH S-2	TYPE 4(48) RIM = 1205.50 INV IN = 1199.74(15') INV OUT = 1199.64(15')		
MH S-3	TYPE 4(48) RIM = 1203.09 INV IN = 1197.12(15') INV OUT = 1197.02(15')		

SCALE: AS SHOWN  
DATE: 8/19/2022  
DRAWN BY: TAC  
JOB NUMBER: 23.3-213764  
DWG. FILE: 23.3-213764 GP01.dwg

DETAILS  
AREA 15  
DODGE COUNTY, MINNESOTA



23.3-213764 SWPPP01.dwg

SPECIFIC REQUIREMENTS: (CONTINUED)

THE CONTRACTOR/VECS 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/VECS 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 6.1-6.4 OF THE NPDES/SDS PROGRAM MNR100001.

SEDIMENT CONTROL PRACTICES:

THE CONTRACTOR/VECS IS RESPONSIBLE FOR THE SEDIMENT CONTROL PRACTICES CONTAINED IN PART 9.1 OF THE NPDES PERMIT. SEDIMENT CONTROL PRACTICES MUST BE INSTALLED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UPGRADE...

PERIMETER CONTROL BMPs SHALL BE INSTALLED ON ALL DOWN GRADIENT PERIMETERS AND UP GRADIENT OF ANY BUFFER AREA, PRIOR TO INITIATING UP GRADIENT LAND DISTURBANCE ACTIVITIES. UPLAND PERIMETER CONTROLS BMPs SHALL BE PLACED AS CLOSE AS POSSIBLE TO FOLLOW A SINGLE CONTOUR ELEVATION...

SURFACE WATERS INCLUDING OFF-SITE AND DOWNSTREAM DRAINAGE DITCHES, CATCH BASINS, AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. THE REMOVAL AND STABILIZATION OF EXPOSED SOILS MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS...

IF THE DOWN GRADIENT TREATMENT SYSTEM IS OVERLOADED, ADDITIONAL UP GRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs MUST BE INSTALLED TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES.

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 CAN BE REMOVED IF A SPECIFIC SAFETY CONCERN HAS BEEN IDENTIFIED AND THE PROCEDURE IN PART 9.6-9.8 OF THE NPDES/SDS PROGRAM MNR100001 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 FROM 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...

DEWATERING RELATED TO THE CONSTRUCTION ACTIVITY MUST COMPLY WITH PART 10.1-10.5 OF THE NPDES/SDS PROGRAM MNR10000. 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...

EROSION PREVENTION PRACTICES:

THE CONTRACTOR/VECS IS RESPONSIBLE FOR THE EROSION PREVENTION PRACTICES CONTAINED IN PART 8.1 OF THE NPDES PERMIT. THE CONTRACTOR/VECS MUST PLAN FOR AND IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATION BUFFER STRIPS, HORIZONTAL SLOPE GRADING AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION...

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 OR DAMAGED OR INEFFECTIVE EROSION CONTROL DEVICES...

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:

Table with 3 columns: TYPE OF SLOPE OR DISTURBANCE AREA, TIME AREA CAN REMAIN OPEN WITHOUT BEING ACTIVELY WORKED, and NORMAL WATER vs SPECIAL/IMPAIRED WATER.

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...

RAPID STABILIZATION METHOD #1: THIS METHOD SHALL CONSIST OF TYPE 1 MULCH (2 TON PER ACRE) WITH DISC ANCHORING BE SPREAD IN AREAS THAT HAVE BEEN UNWORKED FOR 14 DAYS. THIS METHOD SHALL BE USED ON SLOPES OF 3:1 AND LESS.

RAPID STABILIZATION METHOD #2: THIS WORK SHALL CONSIST OF OPERATIONS NECESSARY TO RAPIDLY STABILIZE SMALL CRITICAL AREA WITHIN 200 FEET OF SURFACE WATERS, TO PREVENT OFF SITE SEDIMENTATION AND OR TO COMPLY WITH PERMIT REQUIREMENTS.

RAPID STABILIZATION METHOD #3: THIS METHOD SHALL CONSIST OF CATEGORY 3 EROSION CONTROL BLANKET (NATURAL NET ONLY) IN COMBINATION WITH MNDOT SEE MIX 22-111 (2 LBS PER 100 SQ. YD.) AND TYPE 3 SLOW RELEASE FERTILIZER (8LBS PER 100 SQ. YD.)...

EROSION PREVENTION PRACTICES:

SOD/SEED MIX: MNDOT SEED MIX AND/OR SOD WITH APPROPRIATE MNDOT FERTILIZER WILL BE USED AS PERMANENT COVER FOR ALL EXPOSED GROUND AREAS PER MANUFACTURERS SPECIFICATIONS...

EROSION CONTROL BLANKET: A MNDOT CLASSIFIED EROSION CONTROL BLANKET SHALL BE ADDED IN COMBINATION WITH SEED MIX/FERTILIZER TO ALL AREAS SLOPED AT 4:1 OR GREATER AND 4:1 SLOPES LONGER THAN 30', HIGH PRIORITY AREAS...

TEMPORARY WINTER COVER: AREAS OF EXPOSED SOILS THAT ARE NOT COMPLETED BEFORE THE WINTER WILL BE STABILIZED WITH TYPE #3 MULCH (CERTIFIED AS WEED FREE) ADJACENT TO WETLAND OR STORMWATER PONDS...

NOTE: SEED SHALL BE MNDOT MIXTURE 25-131 AT A PLS RATE OF 220 LBS/ACRE AND SHALL BE PLACED IN ACCORDANCE WITH MNDOT 2575. SEED SHALL MEET MNDOT SPECIFICATION 3876...

CONSTRUCTION PRACTICES TO MINIMIZE STORM WATER CONTAMINATION:

POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE: SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVAL/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPING STOCKPILING, WET/DRY PAVEMENT REMOVALS/COMPACTION...

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE PART 12.1-12.8 OF THE NPDES/SDS PROGRAM MNR10000. IN ADDITION, THE OPERATOR WILL COMPLY WITH STATE RULE 7011.0150 ON DUST PREVENTION REQUIREMENTS...

TEMPORARY/PERMANENT DRAINAGE DITCHES & SWALES: THE NORMAL WETTED PERIMETER (2-YEAR, 24-HOUR PRECIPITATION EVENT) OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH, CHANNEL, OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE...

STOCKPILES SHOULD BE CONSTRUCTED AWAY FROM SLOPES AND NATURAL DRAINAGEWAYS.

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 12.9 OF THE NPDES/SDS PROGRAM MNR10000.

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.

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...

CONTRACTOR MUST CONTROL WEEDS ON THE ENTIRE PROJECT SITE.

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 MANUFACTURERS RECOMMENDATIONS.

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: THE CONTRACTOR IS REMINDED TO READ AND UNDERSTAND THE FOLLOWING MINNESOTA RULE 7011.0150 AND THE FOLLOWING: NO PERSON MAY CAUSE OR PERMIT THE HANDLING, TRANSPORTING OR STORING OF ANY MATERIAL IN A MANNER WHICH ALLOWS OR MAY ALLOW CONTROLLABLE PARTICULATE MATTER TO BECOME AIRBORNE...



WETLAND MAP (NO SCALE)

Table with 4 columns: Map Unit Symbol, Map Unit Name, Acres in AOI, and Percent of AOI. Lists map units N574B, N574C2, and N574D with their respective acreages and percentages.



SOILS MAP (NO SCALE)

Legend table defining symbols for Discharge Points, Project Area, 1 Mile Buffer Area, 200 Foot Buffer Area, Potentially Highly Erodible Land, Highly Erodible Land, Impaired Waters, DNR Public Waters, and Ditches and Streams.

WSE+MASSEY logo and contact information for KASSON OFFICE and PLAINVIEW OFFICE.

ROCHESTER OFFICE contact information: 1712 RESTORATION DRIVE SW, ROCHESTER, MN 55902.

Professional Engineer certification statement for Les Conway, dated 8/19/2022.

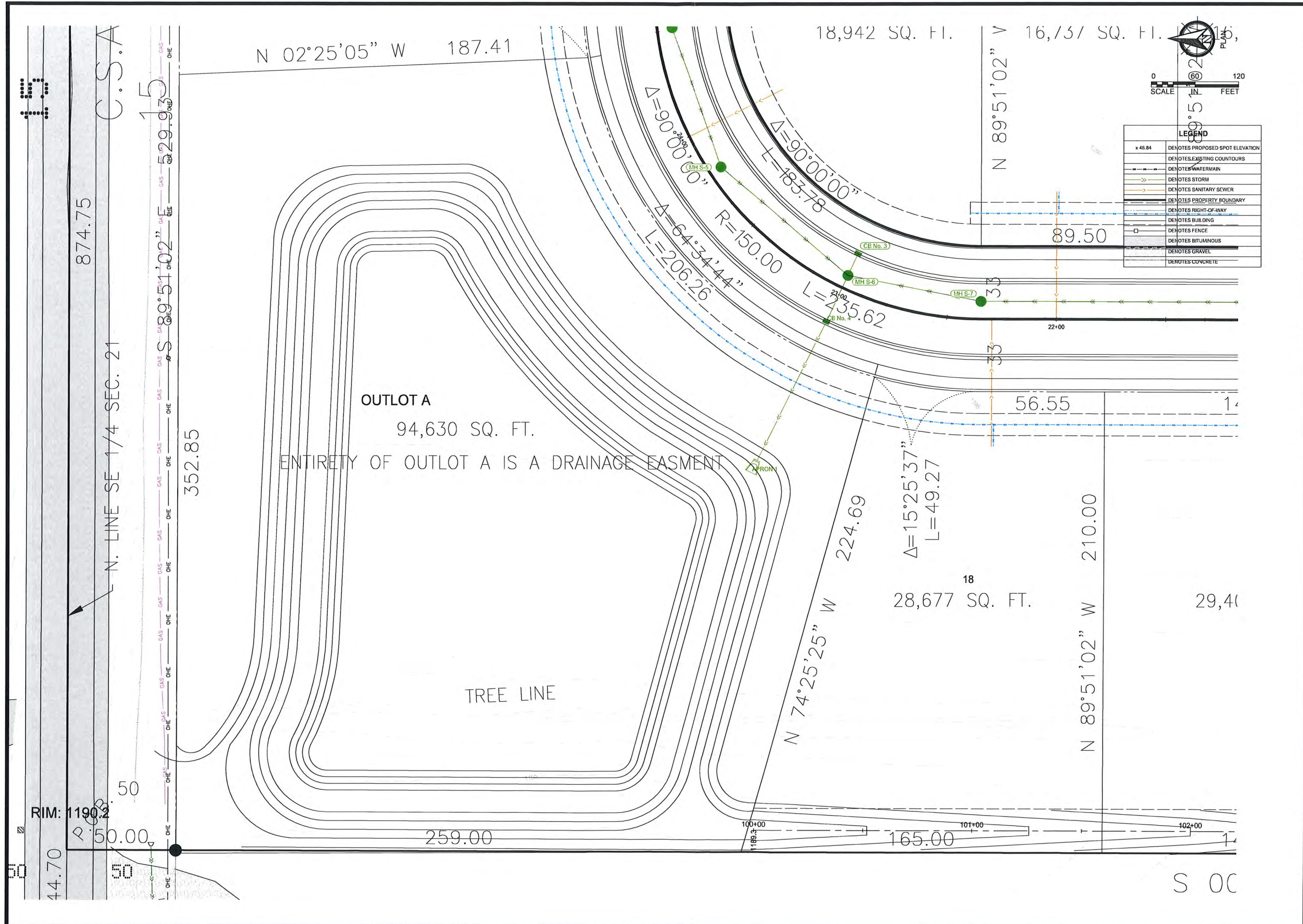
Signature of Les Conway and date 8/19/2022.

Table with columns for REV, DATE, and DESCRIPTION, used for revision tracking.

Vertical text: SWPPP AREA 15 DODGE COUNTY, MINNESOTA

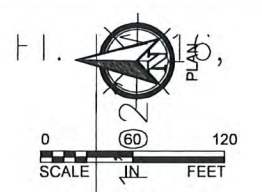
Scale, Date (8/19/2022), Drawn by (TAC), Job Number (23.3-213764), and DWG File (23.3-213764 SWPPP01.dwg).

8/19/2022 12:54:04 PM



LEGEND

x 46.84	DENOTES PROPOSED SPOT ELEVATION
---	DENOTES EXISTING COUNTOURS
---	DENOTES WATERMAIN
---	DENOTES STORM
---	DENOTES SANITARY SEWER
---	DENOTES PROPERTY BOUNDARY
---	DENOTES RIGHT-OF-WAY
---	DENOTES BUILDING
---	DENOTES FENCE
---	DENOTES BITUMINOUS
---	DENOTES GRAVEL
---	DENOTES CONCRETE



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**KASSON OFFICE**  
P.O. BOX 100  
33 B E VETERANS  
MEMORIAL HIGHWAY  
KASSON, MN 55944

**PLAINVIEW OFFICE**  
320 WEST BROADWAY  
SUITE 3  
PLAINVIEW, MN 55964

**ROCHESTER OFFICE**  
1712 RESTORATION  
DRIVE SW  
ROCHESTER, MN 55902

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.

*Les Conway*  
Les Conway  
23292 8/19/2022  
Number Date

REV.	DATE	DESCRIPTION

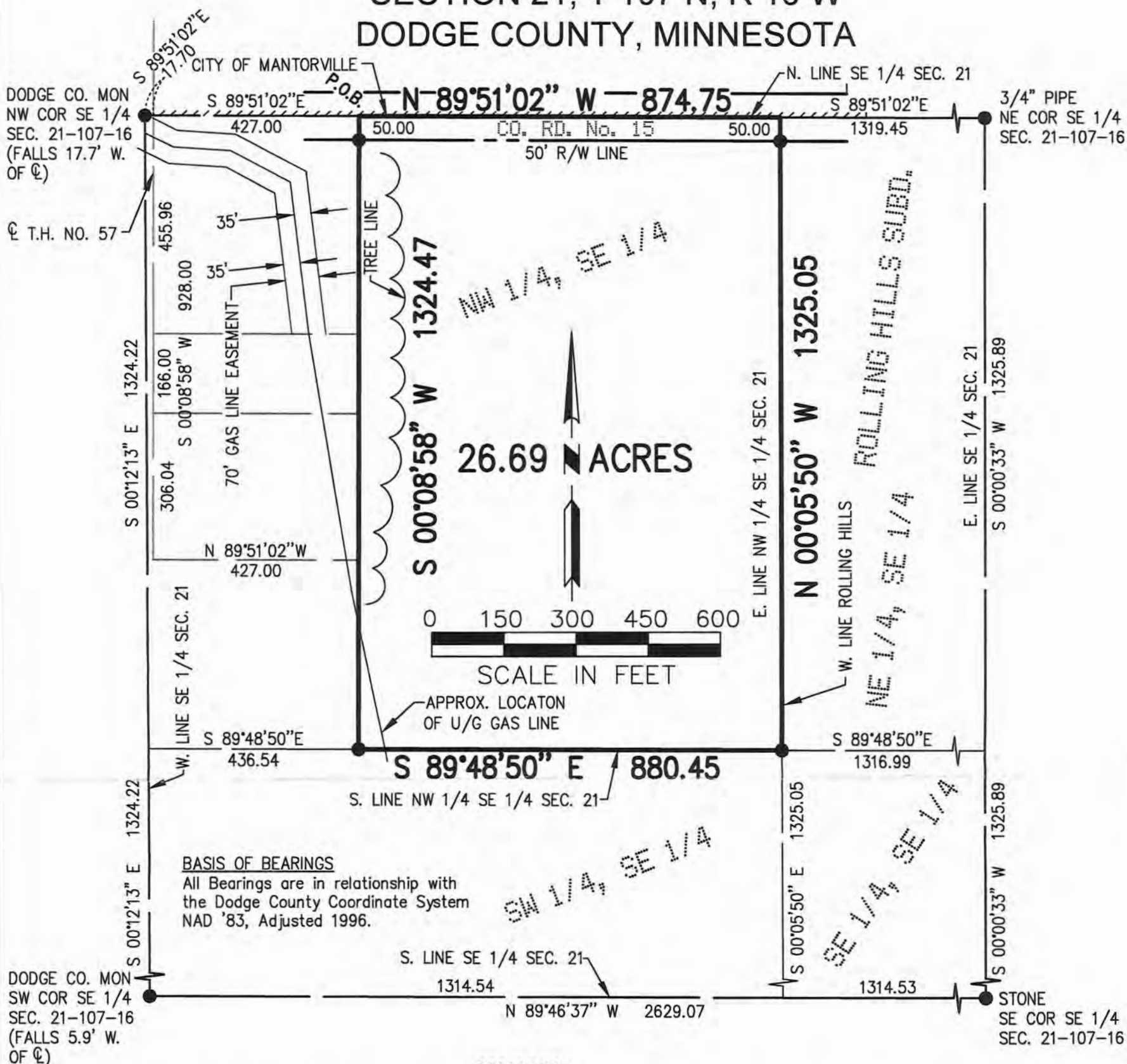
**POND DETAIL**  
**AREA 15**  
**DODGE COUNTY, MINNESOTA**

SCALE: AS SHOWN  
DATE: 8/19/2022  
DRAWN BY: TAC  
JOB NUMBER: 023.3-213764  
DWG. FILE: 23.3-213764\_GPD1.dwg

Sheet 15 of 14

# ANNEXATION EXHIBIT

## PART OF THE NW 1/4 OF THE SE 1/4 SECTION 21, T 107 N, R 16 W DODGE COUNTY, MINNESOTA



### DESCRIPTION

That part of the Northwest Quarter of the Southeast Quarter of Section 21, Township 107 North, Range 16 West, Dodge County, Minnesota, lying easterly of the following described line:

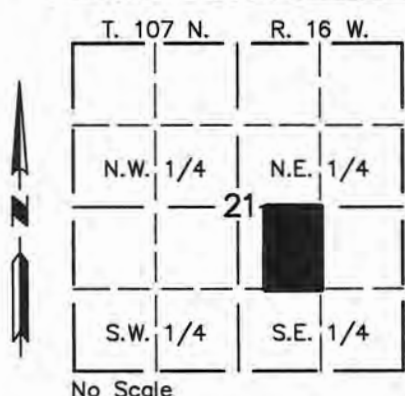
Commencing at the northwest corner of the Southeast Quarter of said Section 21; thence North 89 degrees 51 minutes 02 seconds East (NOTE: All bearings are in relationship with the Dodge County Coordinate System NAD '83, Adjusted 1996), 17.7 feet to the intersection of Trunk Highway No. 57 and County Aid Road V (now C.S.A.H. No. 15); thence running in an easterly direction North 89 degrees 51 minutes 02 seconds East, along the Centerline of said C.S.A.H. No. 15 (formerly County Aid Road V) and the north line of the Northwest Quarter of the Southeast Quarter of said Section 21 a distance of 427.00 feet to the POINT OF BEGINNING of said line; thence running southerly at an angle of 90 degrees to the last described line South 00 degrees 08 minutes 58 seconds West, 1324.47 feet to the south line of said Northwest Quarter of the Southeast Quarter and said line there terminating.

Containing 26.69 acres, more or less.

Subject to County Road No. 15 right of way over the north 50.00 feet thereof.

Subject to an easement for an underground natural gas line and is subject to any other easements or encumbrances of record.

#### PROPERTY LOCATION MAP



## WSE + MASSEY

**ENGINEERING & LAND SURVEYING**

P.O. BOX 100, KASSON, MN 55944  
PH. NO. 507-634-4505, EMAIL SURVEY@WSE.ENGINEERING

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

*RWZ*  
Reinhold W. Zieman

Date 2/15/2022

LIC. NO.: 59823

THIS SURVEY AND DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF:

BIGELOW HOLMES, LLC  
ROCHESTER, MN

#### MONUMENTS

- FOUND (5/8" PIPE UNLESS NOTED OTHERWISE)
- SET (5/8" PIPE UNLESS NOTED OTHERWISE)

DATE: 2/15/2022

DWG NO. 3764SX01 JOB NO. 3764

DRAWN BY: G.D.Z. SHEET 1 OF 1

## Exhibit A

*That part of the Northwest Quarter of the Southeast Quarter of Section 21, Township 107 North, Range 16 West, Dodge County, Minnesota, lying easterly of the following described line:*

*Commencing at the northwest corner of the Southeast Quarter of said Section 21; thence North 89 degrees 51 minutes 02 seconds East (NOTE: All bearings are in relationship with the Dodge County Coordinate System NAD '83, Adjusted 1996), 17.7 feet to the intersection of Trunk Highway No. 57 and County Aid Road V (now C.S.A.H. No. 15); thence running in an easterly direction North 89 degrees 51 minutes 02 seconds East, along the Centerline of said C.S.A.H. No. 15 (formerly County Aid Road V) and the north line of the Northwest Quarter of the Southeast Quarter of said Section 21 a distance of 427.00 feet to the POINT OF BEGINNING of said line; thence running southerly at an angle of 90 degrees to the last described line South 00 degrees 08 minutes 58 seconds West, 1324.47 feet to the south line of said Northwest Quarter of the Southeast Quarter and said line there terminating.*

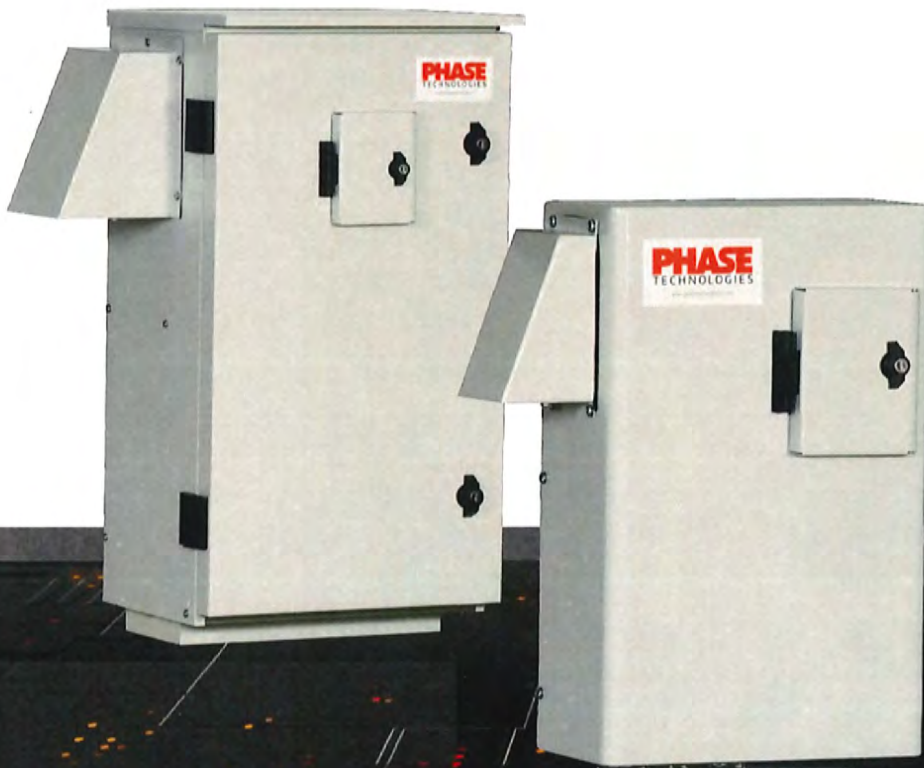
*Containing 26.69 acres, more or less.*

*Subject to County Road No. 15 right of way over the north 50.00 feet thereof.*

*Subject to an easement for an underground natural gas line and is subject to any other easements or encumbrances of record.*

**PHASE**  
TECHNOLOGIES

**SD-2XD**  
SERIES  
2 HP to 15 HP



**SD-2XD** SERIES  
VARIABLE FREQUENCY DRIVE  
Phase Converting | Voltage Doubling

**INTUITIVELY  
ENGINEERED**



# PUMP SMARTER

## Intuitive VFDs - Specifically Designed For Pumping

### Simple Installation

- Standard input filters and optional output filters facilitate a quick and effortless installation

### Perfect Pressure™ Programming

- User-friendly constant pressure setup wizard

### EXCLUSIVE! Voltage Doubling VFDs

- Convert 240V single/three-phase to 480V three-phase power
- Big cost savings for long-lead or deep well applications

### Rugged & Reliable Engineering

- Designed with quality, serviceability, and performance in mind

## SD SERIES Phase Converting VFDs

Phase Technologies has designed a simple, phase converting solution for residential and light commercial constant pressure installations (2-10 HP). The SD product line offers simple setup, rugged hardware, NEMA Type 3R enclosures, and a top-of-the-line oil-filled pressure transducer.

System setup with Perfect Pressure™ requires only a few minutes and is capable of controlling the most complicated pump systems with ease.

The SD and 2XD Series VFDs control pressure consistently regardless of demand. The pump system runs smoothly with fewer instances of short cycling.

## Simple Keypad & Easy Setup



- Identical keypad & setup on all models
- Bright & readable screen
- Prompts & messages in clear language
- Perfect Pressure™ Quick and easy constant pressure setup

### Locking Enclosure & Keypad Cover

Safe and secure from tampering



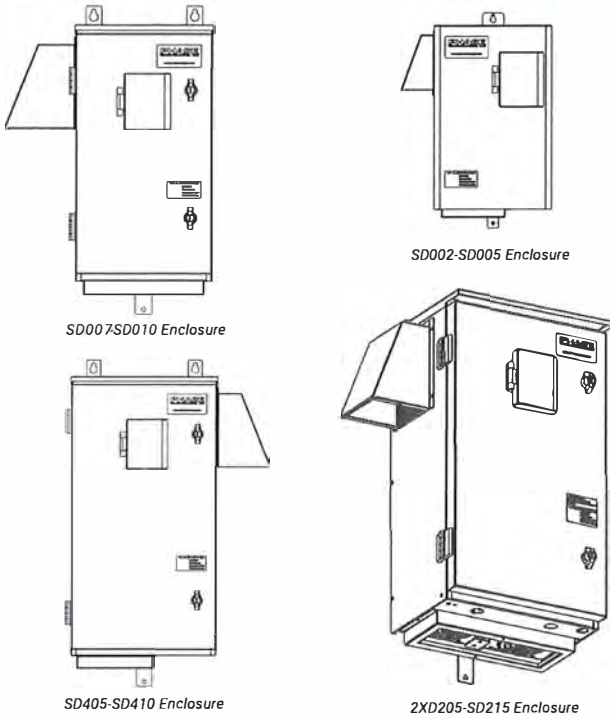


# Rugged Design For Any Outdoor Application

# SD-2XD SERIES

The need for water doesn't stop just because the weather changes. All Phase Technologies products are designed capable of withstanding extreme environmental conditions.

**NEMA 3R Outdoor Enclosures | 122° F (50° C) | Easy Field Serviceability | Locking Enclosures**



## 2XD SERIES

Phase Converting & Voltage Doubling VFDs

Patented Technology

Available Only From



## Significant Cost Savings Unmatched Power

Voltage doubling is an innovation developed and patented by Phase Technologies that converts 208V/240V single-phase or three-phase power to nominal 480V three-phase power. If you've installed submersible pumps you know motor cable is a costly expense.

With our robust phase converting VFD systems, the efficiency, motor cable cost savings of 480V three-phase motors can be realized without the cost and time required to upgrade the utility service.

— Install Smaller Motor Cable



### 2XD Series Estimated Motor Cable Savings

Motor HP	240V 3-Phase		480V 3-Phase		Savings
	Wire size	Cost	Wire size	Cost	5 HP Savings
5 HP	500 ft.	8 AWG \$635	14 AWG	\$220	\$415
	1000 ft.	4 AWG \$2,690	10 AWG	\$850	\$1,840
	1500 ft.	2 AWG \$6,375	8 AWG	\$1,905	\$4,470
7.5 HP	500 ft.	6 AWG \$950	12 AWG	\$300	\$650
	1000 ft.	4 AWG \$2,690	10 AWG	\$850	\$1,840
	1500 ft.	2 AWG \$6,375	8 AWG	\$1,905	\$4,470
10 HP	500 ft.	6 AWG \$950	12 AWG	\$300	\$650
	1000 ft.	2 AWG \$4,250	8 AWG	\$1,270	\$2,980
	1500 ft.	0 AWG \$11,400	6 AWG	\$2,850	\$8,550
15 HP	500 ft.	4 AWG \$1,345	10 AWG	\$425	\$920
	1000 ft.	0 AWG \$7,600	6 AWG	\$1,900	\$5,700
	1500 ft.	000 AWG \$22,485	4 AWG	\$4,035	\$18,450

# SD-2XD SERIES

2 HP to 15 HP

## Specifications



Model / Part Number	HP	Input Rated Amps	Output Rated Amps	Weight	Max Dimensions (W x H x D) Inches
---------------------	----	------------------	-------------------	--------	-----------------------------------

### SD SERIES *Phase Converting*

#### 240V Input Single-Phase | 240V Output Three-Phase

SD002	2 HP	20 A	8 A	15 lbs	14 x 20 x 7 in.
SD003	3 HP	30 A	10 A	16 lbs	14 x 20 x 7 in.
SD005	5 HP	42 A	18 A	17 lbs	14 x 20 x 7 in.
SD007	7.5 HP	58 A	27 A	17 lbs	19 x 28 x 12 in.
SD010	10 HP	69 A	33 A	19 lbs	19 x 28 x 12 in.

#### 480V Input Single-Phase | 480V Output Three-Phase

SD405	5 HP	30 A	10 A	29 lbs	20 x 33 x 10 in.
SD407	7.5 HP	37 A	13 A	31 lbs	20 x 33 x 10 in.
SD410	10 HP	42 A	18 A	33 lbs	20 x 33 x 10 in.

### 2XD SERIES *Phase Converting Voltage Doubling - Exclusive To Phase Technologies*

#### 240V Input Single-Phase | 480V Output Three-Phase

2XD205	5 HP	31 A	10 A	67 lbs	21 x 32 x 13 in.
2XD207	7.5 HP	52 A	13 A	79 lbs	21 x 32 x 13 in.
2XD210	10 HP	64 A	18 A	85 lbs	21 x 32 x 13 in.
2XD215	15 HP	87 A	24 A	86 lbs	21 x 32 x 13 in.

NOTE: Dimensions are measured at maximum size and includes mounting hardware.

Sinewave Filter - Available on: SD405, SD407, SD410, 2XD205, 2XD207, 2XD210

#### 508A Panel Shop Options

dV/dt Filter - Only available on: 2XD215

Strikesorb® Surge Protection - Available on: SD007, SD010. Standard on: 2XD205, 2XD207, 2XD210, 2XD215

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Visit our website, [www.phasetechnologies.com](http://www.phasetechnologies.com) and build a custom quote. Or call our technical sales team at 866-250-7934 for questions.

**Industry Best Lead Times: 3-7 Business Days**



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TECHNOLOGIES

Phase Technologies, LLC  
231 East Main St. North, Rapid City, SD 57701  
605.343.7934 - Main 866.250.7934 - Toll Free

[www.phasetechnologies.com](http://www.phasetechnologies.com)



SD-2XD v1.0.08152019



Area 15 LPS

Proposal

PRJ 22-077

Rev.00

July 27, 2022

## Table of Contents

Basin Detail .....	3
Lift Station Components & Accessories.....	5
Pump Tech Data .....	9
Control Panel Wiring Diagram & Data.....	12



## Basin Details

# BASIN BUILDER



Trusted. Tested. Tough.™

## PROJECT INFORMATION

Project Name	22-077 Area 15 LS Typical
Contact Info	

Prepackaged Simplex Basin System, Pre-Plumbed, w/ Rail System  
(Stainless Steel Pump Lifting Cables Included)

## BASIC SYSTEM INFORMATION

Build	Prepackaged
Type	Simplex
Discharge Exit	Side

Ball Valve & Check Valve Installed

Approx. Weight: 490 lbs

## INTENDED PUMP DATA

Pump Division	Engineered Prod.
Pump Family	7020/7021
Pump Discharge	1.25"

(1) - 2" Vent in Cover  
(may or may not be shown)

30" Dia. Solid Cover-Fiberglass

## BASIN SIZE PREFERENCES

Diameter	30"
Height	120"

S.S. Rails

## COVER PREFERENCES

Surface	Solid
Material	Fiberglass
Vent Quantity	1 EA
Vent Size	2"

72" to Center

Side Discharge

120" Tall Fiberglass Basin

## PLUMBING PREFERENCES

Inlet Hub	4" Pipe Seal
Discharge Piping	1.25"
Discharge Depth	72"
Pipe Material	Sch. 80 PVC
Shutoff Valve	Ball Valve

1.25" Plumbing Sch. 80 PVC

4" Pipe Seal Loose

## DISCONNECT PREFERENCES

Class	Stainless Steel
Rail Material	Stainless Steel

1.25" Vertical Rail System S.S. Hardware

F.G. AFD Dia. 36.5"

## DESIGN AIDS

Hub Invert Depth <sup>1</sup>	72"
Gallons / Inch	3.06 Gal / In
Working Volume <sup>2</sup>	73.4 Gallons

<sup>1</sup> Hub is field installed. Depth is used to compute working volumes.  
<sup>2</sup> Usable volume between inlet invert and minimum water level.

## ACCESSORIES

Lifting Lugs  
Electrical Coupling

Yes
In Basin

NOTES: DRAWING IS NOT TO SCALE.

PUMPS NOT INCLUDED - Pumps shown only for reference. Systems include check valves and disconnects as selected.

Individual components may differ from those shown.

Customer is wholly responsible for verifying code compliance. Consult factory for basins larger than 72" dia. or 144" tall.

This Builder is valid for use until 9/30/2022.

## Pricing

No

Sign Below For Approval



Lift Station Components  
&  
Accessories

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Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



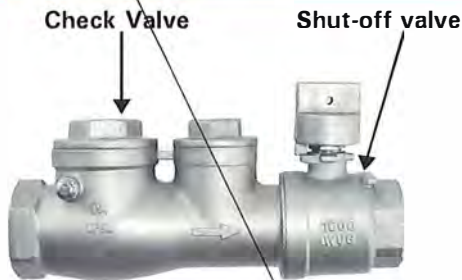
SECTION:Z4.20.400  
ZM3191  
0921  
Supersedes  
1020

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## Accessories for LPS Systems (Low Pressure Sewers)



### Curb Valve Assembly #10-4698 - 1.25" #10-4893 - 2"

- Lateral valve assembly installed at the entrance of each pressure sewer site
- Includes a 316 SS curb stop valve and check valve
- Curb stop valve used to isolate site from pressure sewer
- Check valve provides redundant protection against potentially harmful backflows
- 1.25" or 2" NPT connection for use with HDPE and PVC pressure sewer pipe and fittings (Adapters included)
- Rated up to 200 psi service pressure
- Designed for use with an optional curb box and valve extension rod

### Curb Box #10-4875 (30" to 42") #10-4867 (42" to 60")

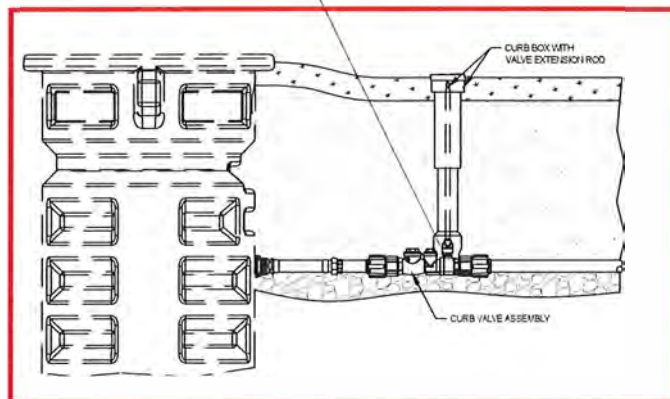
- Class 30 cast iron construction
- Conforms to ASTM A48 / A48M-03 specifications
- Designed to fit over and attach to a 1.25" or 2" curb stop valve
- Two sizes, selected by valve burial depths, adjustable 30" to 42" or 42" to 60"
- Depth adjustments, secured by internal threads
- Bolt down cover, imprinted with SEWER marking
- Steel centering ring, for positioning and stabilizing the rod



### Valve Extension Rod #10-4876 - 24" Rod #10-4877 - 36" Rod #10-4866 - 48" Rod

- 5/8" OD steel rod with means for connecting to the curb stop valve

## Typical Curb Valve and Box Installation



SK3240



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Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



SECTION: Z7.00.150  
ZM1328  
0921  
Supersedes  
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## FLOAT SWITCHES AND BRACKETS



### COMPARE THESE FEATURES

- Float is constructed of durable PVC/polypropylene encasing variable level switch.
- Standard mechanical variable level control switches are rated for 115/230V, 5 amps.
- 18/2 Type SJOW CPE Cord-Standard
- Cords are available in 15-20-25-35-50 foot lengths.
- Temperature rating of 140 °F (60 °C)
- Low current switches for Class I, Division 1, Group C & D locations and Class Zone 1, Group IIA & IIB when used in intrinsically safe circuits and rated for 30 VDC, 0.1 Amps
- Approximately 1/2" liquid level differential in switching action

Variable Level Control Switch is normally open when hanging vertically above liquid level. Switch closes when it reaches a few degrees above the horizontal position.

### APPLICATIONS

- Switch for Simplex or Duplex pump control and High Level Alarm on Electrical Alternating Control Panel systems for dewatering, effluent and sewage applications.
- Switch for A-Pak
- High Level Alarm Switch

### ADJUSTABLE WEIGHT: (P/N 10-0689)

- Provides an accurate pivot point for suspended float switches
- Gripper teeth on clip and weight channel securely lock float cable into place.
- Cable weight can be adjusted without the use of tools.

**HOUSING:** 1 lb. 12 oz. (0.8 kg) 2.8" x 3.3" (7.1 cm x 8.4 cm)  
impact-resistant and non-corrodible, PVC housing for liquids up to 140 °F (60 °C)

**CLIP:** injection-molded acetal plastic

**WIRE/CABLE ACCOMODATED:** SJOW, SJTW, 18/2, 16/3, 14/4, 14/2

**SHIPWEIGHT:** 2 lbs. (32 oz)

Float Switch Kits - 20' Cords	
10-0347	3 switches and weights
10-0348	4 switches and weights
10-0689	Weight Only

### VARIABLE LEVEL CONTROL SWITCHES

Pipe Clamp Type



Adjustable Weight



May not be exactly as pictured.

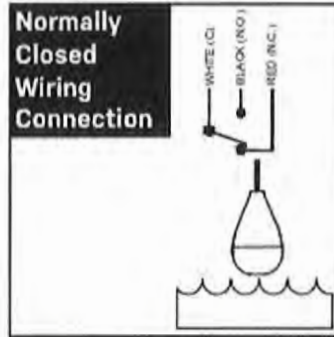
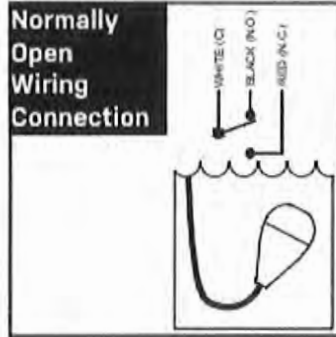
### FLOAT SWITCHES

Mechanical		Cord Length	Mounting Method
Standard P/N*	Low Current P/N**		
10-0743	10-2060	15	Clamp
10-0744	10-2061	20	Clamp
10-1877	10-2062	25	Clamp
10-1878	<del>10-2063</del>	35	Clamp
10-1879	10-2064	50	Clamp
10-1880	10-2065	15	Adjustable weight
10-2033	10-3284	20	Adjustable weight
10-1881	10-2066	25	Adjustable weight
10-1882	10-2067	35	Adjustable weight
10-1883	10-2068	50	Adjustable weight

## 2 in 1 Control Switch



10-5119 - 25' Cord



## Features

- Internally weighted
- 3 wire cable – SPDT (Single Pole, Double Throw) can be wired as normally open or normally closed. Wire color: Common (white), N.O. (black), N.C. (red)
- Large twin wall tear drop shape design offers increased buoyancy
- Two-color housing allows for easy identification of float position
- Unique gold cross-point contacts provide precision and reliable control signals up to 1 amp
- Excellent solution for applications with high grease content

## Float Switch Brackets

FLOAT SWITCH TREES			
Mechanical		Cord Length	Mounting Method
Standard P/N*	Intrinsically Safe P/N		
10-1456	10-1456	---	Tree only
10-1886	10-2069	15	(3) 15' Floats & Tree
10-1887	10-2070	15	(4) 15' Floats & Tree
10-5135	-	-	Tree only ( 72" rotomolded basin)
10-5153	-	-	Tree only ( 98" rotomolded basin)



ANCHOR KIT WITH CHAIN		
Part Number	Chain Length	Float Clamps
10-5036	15'	4
10-5037	20'	4
10-5038	25'	4
10-5039	30'	4

## Features

- 3/16" Type 304 Stainless Steel Chain
- Anchor to rest at bottom of basin
- Includes 4 float clamps. Additional float clamps available upon request
- Floats not included



## Pump Tech Data

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Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



SECTION: Z4.20.100  
ZM2424  
0821  
Supersedes  
0121

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## MODELS 7020-7021 TECHNICAL DATA 1.0 & 2.0 HP



<b>MODELS:</b>	<input checked="" type="checkbox"/> 7020	<input type="checkbox"/> 7021
<b>PUMP NAME PLATE HORSEPOWER:</b>	1.0	2.0
<b>SERVICE FACTOR:</b>	1.2	1.2
<b>MAXIMUM KW INPUT:</b>	1.5 (230 V)	2.0 (200 V), 2.1 (230 V)
<b>DISCHARGE SIZE:</b>	1.25" NPT	1.25" NPT

<b>IMPELLER TYPE:</b>	HYDRAULIC HELIX ROTOR	<b>MECHANICAL SHAFT SEAL:</b>	TYPE 6A
<b>CUTTER &amp; PLATE:</b>	440C SS HARDENED TO ROCKWELL C55-60	<b>MOTOR DESIGN LETTER:</b>	NEMA L (1Ph)
<b>PUMP NET WEIGHT:</b>	88 IBS. (39.9 KG)	<b>POWER CORD LENGTH: ft (m)</b> (20' STANDARD) <b>OPTIONAL:</b>	<input type="checkbox"/> 25' (7.6 m) <input checked="" type="checkbox"/> 35' (10.7 m) <input type="checkbox"/> 50' (15.2 m)
<b>O-RING &amp; GASKET:</b>	VITON		
<b>MOTOR SHAFT:</b>	416 SS	<b>POWER CORD:</b>	16 GAUGE SOOW
<b>RPM:</b>	1750	<b>STATOR &amp; LEAD WIRES INSULATION:</b>	CLASS B
<b>MOTOR TYPE:</b>	SUBMERSIBLE	<b>MAXIMUM STATOR TEMPERATURE:</b>	266 °F (130 °C)

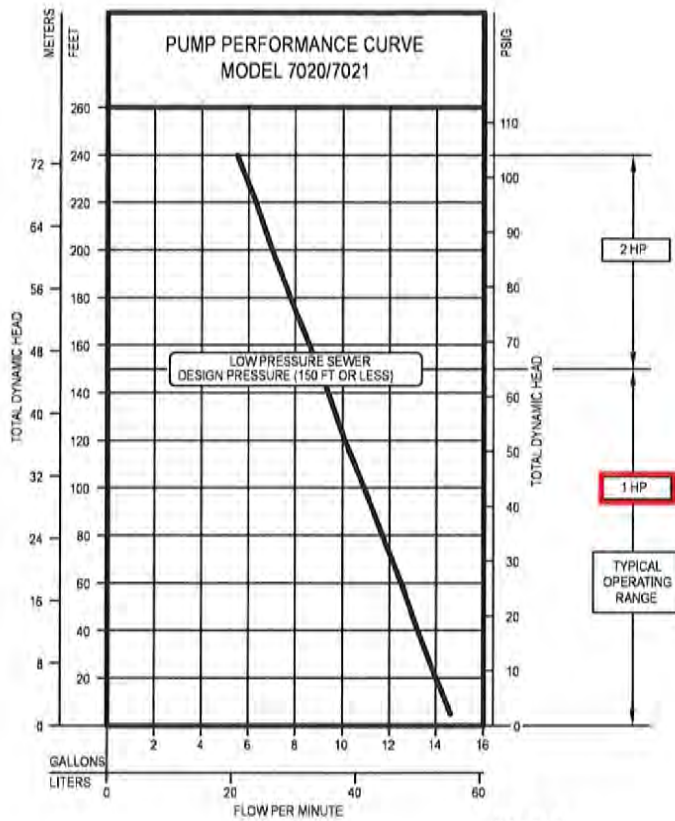
<b>SHAFT SEAL CONSTRUCTION:</b>	STANDARD	SILICON CARBIDE/CARBON
<b>MOTOR PROTECTION</b>	INTEGRAL OVERLOAD	
<b>MAXIMUM WATER TEMPERATURE:</b>	130 °F (54 °C)	

MODEL	HP	SERVICE FACTOR	□ 200V / 1 PH		□ 230V / 1 PH	
			FLA	LRA	FLA	LRA
7020	1	1.2	N/A	N/A	7.0	24.5
7021	2	1.2	12.0	49.5	10.0	44.0

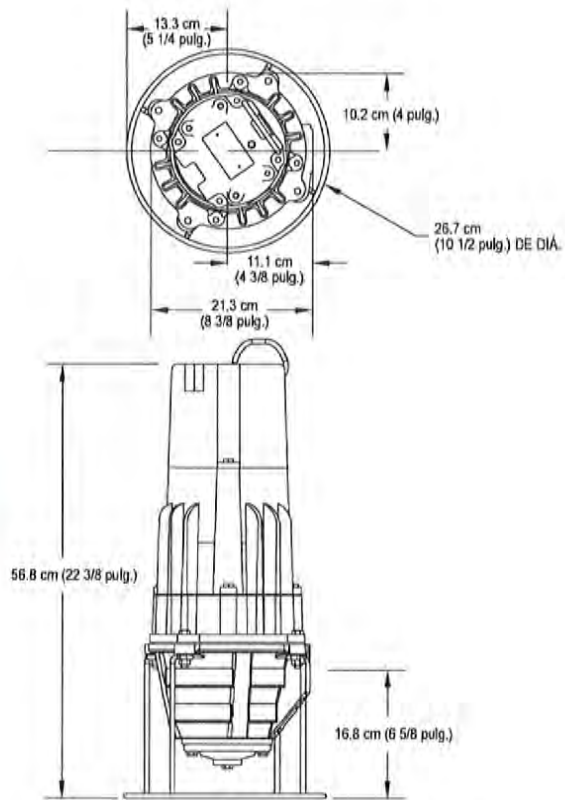
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SWPA Data Categories Presented -- Data on this sheet supply design information as the minimum recommended by the Submersible Wastewater Pump Association and is defined in accordance with SWPA's Standardized Definitions for Pump and Motor Characteristics. The accuracy of the data is the responsibility of Zoeller Engineered Products.

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018330



SK2533

Standard all models- 20 Ft. - 1 HP				
7020 models	Control Selection			Listed
	Volts	Ph	Amps	cCSAus
*E7020	230	1	7.0	Yes
RWD7020	230	1	7.0	Yes

Standard all models- 20 Ft. - 2 HP				
7021 models	Control Selection			Listed
	Volts	Ph	Amps	cCSAus
*E7021	230	1	10.5	Yes
RWD7021	230	1	10.5	Yes
I7021	200	1	12.0	Yes
RWH7021	200	1	12.0	Yes

## FEATURES

- Durable epoxy coated cast iron construction
- Bearings - upper and lower ball bearing
- Stainless steel motor shaft
- Motor - 1 HP (7020) or 2 HP (7021), 60 Hz, 1750 RPM, 1 PH, oil-filled, hermetically sealed, automatic reset thermal overload protected
- Silicon carbide/carbon shaft seal
- Viton O-ring seals and cover gasket
- UL Listed 20 ft. 3-wire SOW cord with 15 amp plug. Longer cords available in 25', 35' & 50'.
- Hardened 440C stainless steel cutter and disc, Rockwell C55-60
- Stainless steel helix hydraulic pump rotor with integral upper deflection shield
- Buna N hydraulic rotor
- Pressure relief valve
- 304 SS hardware
- SS mounting stand for free standing installation
- 100% computerized tested

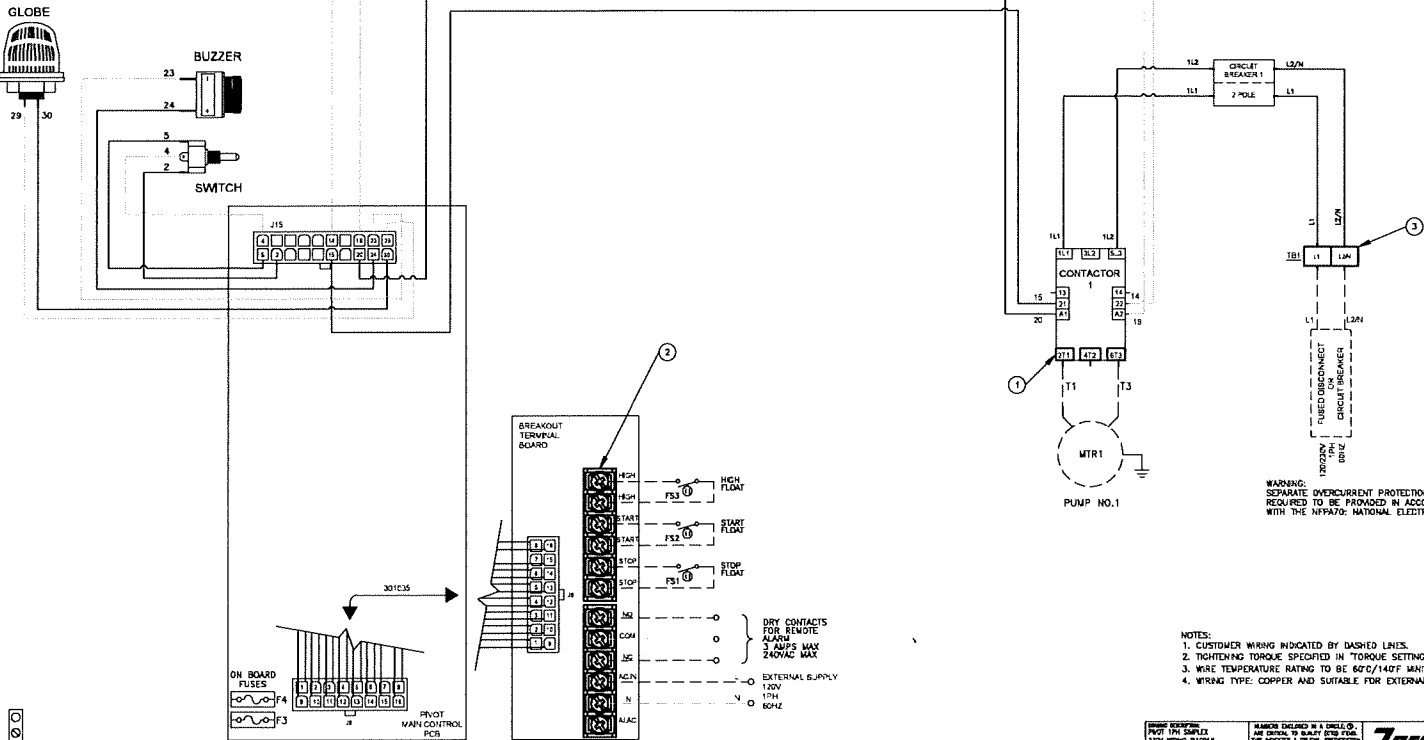
\* Molded plug.



Control Panel  
Wiring Diagram & Data

CUSTOMER TORQUE SETTING		
NUMBER	COMPONENT	TORQUE
1	CONTACTORS	1.7 N.m. 15 lb-in
2	BREAKOUT TERMINAL BOARD	1.15 N.m. 10 lb-in
3	TERMINAL BLOCK	1.6 N.m. 18 lb-in

REVISIONS			
REV	BY	DATE	DESCRIPTION
1	JH	10/26/78	INITIAL RELEASE
2	JH	10/26/78	IMPROVED WIRING
3	JH	10/26/78	IMPROVED WIRING



WARNING: SEPARATE OVERCURRENT PROTECTION IS REQUIRED TO BE PROVIDED IN ACCORDANCE WITH THE NFPA70: NATIONAL ELECTRICAL CODE

- NOTES:
1. CUSTOMER WIRING INDICATED BY DASHED LINES.
  2. TIGHTENING TORQUE SPECIFIED IN "TORQUE SETTING" CHART.
  3. WIRE TEMPERATURE RATING TO BE 60°C/140°F MINIMUM.
  4. WIRING TYPE: COPPER AND SUITABLE FOR EXTERNAL HOOKUP.

NOTICE: THESE ARE INFORMATIONAL SCHEMATICS ONLY. THEY DO NOT REPLACE PROFESSIONAL GUIDANCE WITHIN ANY JURISDICTION OR FOR ANY APPLICATION AN SHOULD NOT BE RELIED UPON TO DO SO

<b>MODEL SPECIFICATIONS</b> PUMP 174 SAMPLE 230V WEGING DIAGRAM	<b>NUMBER ENCLOSED IN A CIRCLE</b> ARE OPTIONAL TO QUALITY CONTROL THE APPLICABLE A CIRCULAR IDENTIFICATION THAT MUST BE INDICATED BY THE USER	
<b>DESIGNER</b> JH <b>DATE</b> 10/26/78 <b>PROJ. NO.</b> 11101	<b>COMPONENT NO.</b> ALL WIRING SHOWN BY DASHED LINES James Mueller 11/10/78 DATE: 05/01/21	
<b>REVISED</b> NONE <b>DATE</b> NONE <b>BY</b> NONE	<b>REVISED</b> NONE <b>DATE</b> NONE <b>BY</b> NONE	<b>REVISED</b> NONE <b>DATE</b> NONE <b>BY</b> NONE

GLOBE BAR

# Pivot Your Thinking™

More Standard Features, Greater Value, Fewer Models To Stock.

## Introducing: Pivot® 1Ph Control Panels

For 1Ph and 3Ph Pivot® Pro, see other side

### Text Key:

Features common with our previous model

*Additional STANDARD features on Pivot® and Pivot® Pro*

**Pivot®: 115/200/230**

Simplex and Duplex models

Limited 5 year warranty



**Touch-safe user interface LED indicators:**

-System Ready

-Float switch LED indicators

-float switch faults

-Pump Run LED indicator(s)

**Latching globe and horn feature**

3 or 4 float switch operation

-choice of multiple float logic and orders

-built in switch redundancy

-configurable float switch operation

-choose between Smart and Relay Switch Logic

Separate fuses for alarm and control circuits

**Smart HOA:**

-prevents accidental On or Off

-Off mode reminder

Pictured panel: Pivot® Pro 1Ph  
32324-0001 (Replaces: 10-1044)

Top mount globe  
-varying globe patterns for distinct alarm conditions

Side mount horn

Side mount Test/Silence switch

Test switch tests all LEDs, globe, and horn

NEMA 4X enclosure, locking hasp, dead front.  
**12x10x6 Pivot™**

Motor contactor(s), breakers (1Ph)  
-staggered pump start

Alarms for:  
-high water alarm  
-continuous pump run  
-incorrect control voltage  
-disabled alarm circuit  
-failed contactor  
-overload  
-float fault  
-HOA Off timeout

Auxiliary output, form C (aka dry contacts)

**USB features:**  
-pump starts counter  
-elapsed time meter  
-custom configurations  
-update firmware

**Factory Reset for clearing and troubleshooting**  
Set of 5 PCB jumpers for selection of preferences

Ample room for field wiring

Next up for the Pivot® line:

- Pivot® Pro+ reversing
- Pivot® Pro+ time dose



Trusted. Tested. Tough.®

zoellerpumps.com 800-928-7867  
3649 Cane Run Road, Louisville, KY 40211 USA

FM3294  
1121  
Supersedes  
1220



# Pivot Your Thinking™

More Standard Features, Greater Value, Fewer Models To Stock.

## Introducing: Pivot® Pro 1Ph and 3Ph Control Panels

For Pivot® 1Ph, see other side

Pivot® Pro includes all the features of the Pivot® (other side)

*PLUS these additional upgraded features*

*Pivot® Pro: 1Ph and 3Ph circuit breakers or 3Ph 200/230/460V with multi-tap transformer*

Simplex and duplex models

Limited 5 year warranty



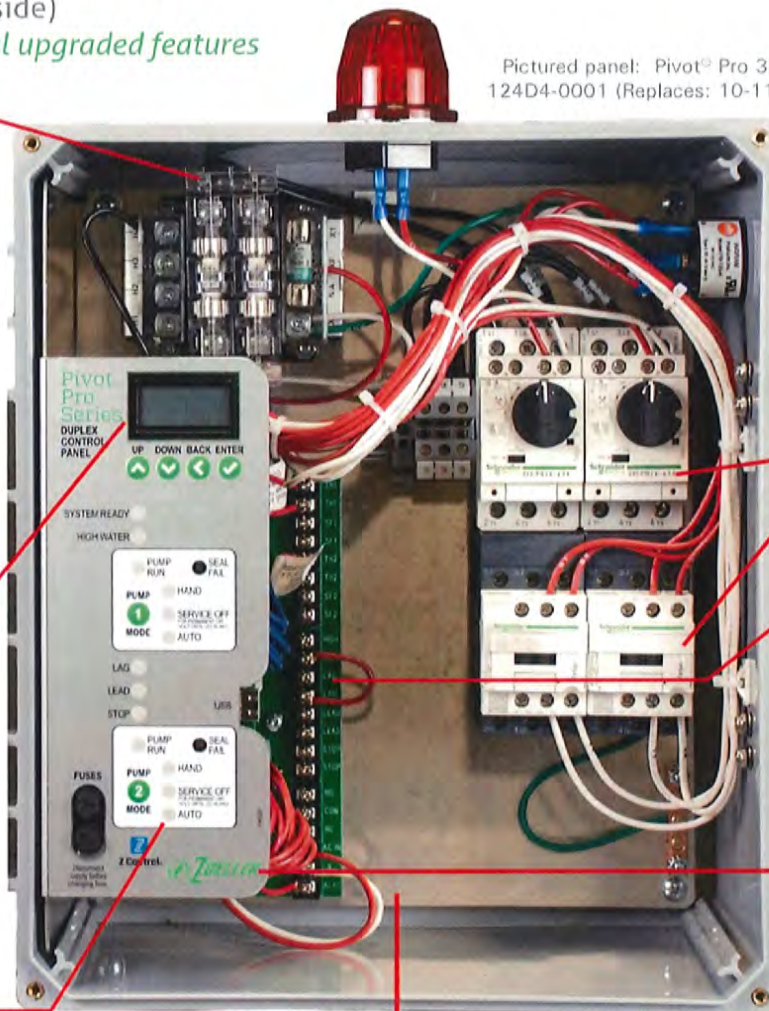
**LCD display:**

- full menu system for configuration
- keypad lock for security
- service information: name and phone number
- review pump starts, elapsed run times, and other system data
- selectable ratio for pump alternation (duplex)
- lead/lag select (duplex)
- configurable continuous run alarm timer
- horn configurable: latching/active

**Smart HOA:**

- prevents accidental pump damage
- reminder to return to Auto operation
- adjustable behaviors

Pictured panel: Pivot® Pro 3Ph  
124D4-0001 (Replaces: 10-1108)



NEMA 4X enclosure, locking hasp, dead front.

-14x12x6 Pivot® Pro

Motor contactors with built-in pump run contacts. Overloads (3Ph)

Terminal strip for circuit and alarm power, float switches, auxiliary contacts, seal fail leads, and thermal leads.

**Data jack for Z Control® Gateway (sold separately)**

- remote testing and monitoring
- remote configuration
- alert notifications: text, email, app push.

Ample room for field wiring

Next up for the Pivot® line:  
-Pivot® Pro+ reversing  
-Pivot® Pro+ time dose



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zoellerpumps.com 800-928-7867  
3649 Cane Run Road, Louisville, KY 40211 USA

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

## TECHNICAL DATA SHEET

### Pivot Series Control Panels

- Pivot 1Ph control panel, highly featured
- Pivot Pro 1Ph or 3Ph control panel with advanced features such as a user-friendly LCD interface and support for pump sensors and Z Control®
- Pivot Pro + The Pivot Pro + control panel is a Pivot Pro control panel built with one or more options and usually requiring a larger enclosure

#### SPECIFICATIONS

##### Certifications

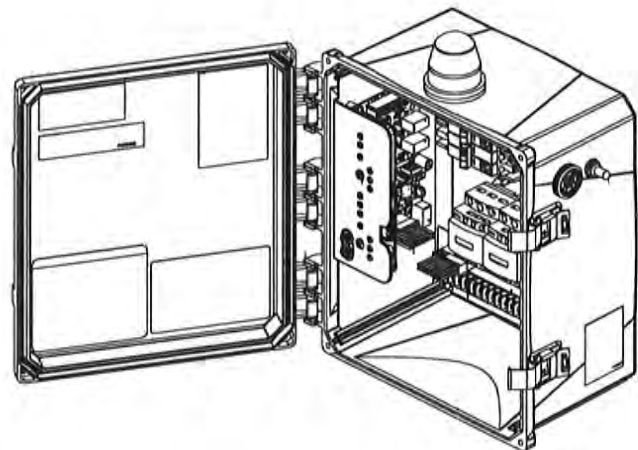
- cCSAus certified to standard UL508
- FCC Class-B certification to ISSED Canada ICES-003, Issue 6
- For outdoor or indoor use, -40C to +60C

##### Components

- Red alarm beacon with 360-degree visibility
- Audible alarm buzzer rated 95 db at 2' (0.6 m)
- SILENCE/RESET/TEST toggle switch with weatherproof rubber boot
- HAND/OFF/AUTO control are included for each pump
- Auxiliary output dry contacts (NO-COM-NC) terminals, Form C, 5A resistive load
- Pump Run dry contact, (NO-COM)
- NEMA 4X 12"x10"x6" enclosure with lockable latch

##### Power

- Control circuit powered by 120VAC, 60 Hz
- Alarm circuit can be powered by separate power feed, if needed
- Alarm and control circuits individually fused, 3A, fast-acting, 120VAC
- Circuit breaker protection
- Max alarm and control circuit power consumption: Simplex models 32W, Duplex models 40W
- Max standby power consumption: 5W
- Terminals for 120VAC control power, 120VAC alarm power, up to 4 float switches (duplex), pump input power
- 1Ph IEC motor contactors, models 120/208/240 VAC, 50/60Hz, up to 50A maximum



31314-0001

##### Field Wiring & Maintenance

- 4 enclosure mounting brackets are included
- 2 sets of wiring schematics and installation instructions are included along with an inside door mounted QR code for easy access to additional support material online
- All wires and terminal locations thoroughly labeled for easy identification
- All components are serviceable (See FM3364 for available replacement parts)

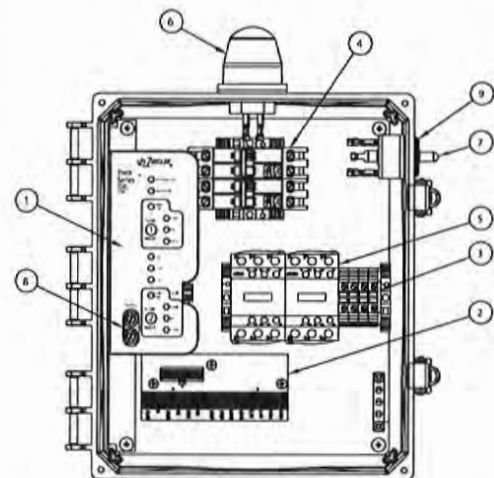
**STANDARD FEATURES** (For a more thorough description of features, see ZM3376 Panel Selection Guide or FM3295 Cross Reference and Features Comparison List)

- 5 year limited warranty
- RED/AMBER/GREEN LEDs for float switch indicators, Pump Run, High Water, System Ready, and HOA functions
- Ample room for field wiring
- TEST toggle will check all LEDs, globe, and horn
- Elapsed time and cycle counts via USB port
- Adjustable settings (see Installation Instructions)
  - o 'Smart' or 'Standard' float logic (Smart logic will compensate for bad floats. Standard logic will operate like traditional panels.)
  - o Continuous run alarm: 20 minute default (Additional adjustable settings accessible: enable or disable via USB port)
  - o HOA Pump Run & Service Off Timeouts (enable or disable via USB port)
    - Service OFF and Permanent OFF pump modes
    - Smart HOA timer prevents pump damage caused by accidental "ON"
    - Smart HOA includes a Service OFF reminder alarm
  - o Globe mode (solid, blink, or alarm-specific blink pattern)
  - o Duplex float configuration (Stop/Lead/Lag/High or Stop/Lead/High/Lag)

**COMMON PIVOT CONTROL PANEL DETAILS**

PART NO.	REV	SIMPLEX OR DUPLEX	ENCLOSURE	VOLTAGE	PHASE	FULL LOAD AMP	BREAKER RATING	DIMENSIONS "A" X "B" X "C"
31314-0001	A	SIMPLEX	NEMA-4X	120/208/240	1	0 TO 7	15	12" X 10" X 6"
31324-0001	A	SIMPLEX	NEMA-4X	120/208/240	1	7 TO 15	20	12" X 10" X 6"
31334-0001	A	SIMPLEX	NEMA-4X	120/208/240	1	15 TO 20	30	12" X 10" X 6"
31344-0001	A	SIMPLEX	NEMA-4X	120/208/240	1	20 TO 30	50	12" X 10" X 6"
31354-0001	A	SIMPLEX	NEMA-4X	120/208/240	1	0 TO 20	25	12" X 10" X 6"
32124-0001	A	DUPLEX	NEMA-4X	120	1	7 TO 15	20	12" X 10" X 6"
32134-0001	A	DUPLEX	NEMA-4X	120	1	15 TO 20	30	12" X 10" X 6"
32314-0001	A	DUPLEX	NEMA-4X	120/208/240	1	0 TO 7	15	12" X 10" X 6"
32324-0001	A	DUPLEX	NEMA-4X	120/208/240	1	7 TO 15	20	12" X 10" X 6"
32334-0001	A	DUPLEX	NEMA-4X	120/208/240	1	15 TO 20	30	12" X 10" X 6"
32344-0001	A	DUPLEX	NEMA-4X	120/208/240	1	20 TO 30	50	12" X 10" X 6"
32354-0001	A	DUPLEX	NEMA-4X	120/208/240	1	0 TO 20	25	12" X 10" X 6"

- 1) User Interface
- 2) Terminal Board
- 3) Pump Power Terminals (TB1)
- 4) Pump Circuits Breaker(s)
- 5) Motor Contactors
- 6) Globe
- 7) Test/Silence/Reset Switch
- 8) Fuses
- 9) Buzzer



Duplex Pivot

**Alarm Conditions**

Alarm Condition	User Interface LEDs						
	Latching	Globe	System Ready	High Water	Pump Run (1 or 2)	Pump Off (1 or 2)	Stop, Start/Lead, or Lag
Service Off Timeout	No	Double Blink	Off	Off	Off	Blinking Red	Off
Disabled Alarm Circuit	No	Double Blink	Off	Solid Red	Off	Off	Solid Red
Continuous Run	Yes	Solid	Off	Off	Blinking Amber	Off	Off
High Water Float Logic Error	Yes	Slow Blink	Off	Blinking Red	Off	Off	Off
Float Logic Error	Yes	Slow Blink	Off	Off	Off	Off	Blinking Red
Float Questionable	Yes	Slow Blink	Off	Off	Off	Off	Blinking Amber
High Water	Yes	Solid	Off	Solid Red	Off	Off	Off
High Control Voltage	Yes	Off	Blinking Green	Blinking Red	Blinking Red	Blinking Red	Blinking Red

# **CITY OF MANTORVILLE NOTICE OF PUBLIC HEARING**

Notice is hereby given that the City of Mantorville Planning Commission will convene on Monday, October 24, 2022, at 6:30 pm in the Council Chambers at Mantorville City Hall, 21 5th St E, Mantorville, MN 55955. During said meeting, the Planning Commission will conduct a public hearing for the preliminary plat tentatively called Area 15, which proposes to subdivide Dodge County PID 130210401 into 36 residential lots and one outlot. Thereafter, the Planning Commission will make a recommendation to the City Council regarding the application. All interested persons are invited to attend the public hearing and be heard. Materials submitted by the applicant are available for inspection at Mantorville City Hall during regular business hours.

Shirley R Buecksler  
City Clerk-Treasurer



*Trail to the Past. Road to the Future.*

**CITY OF MANTORVILLE  
NOTICE OF PUBLIC HEARING**

Notice is hereby given that the City of Mantorville Planning Commission will convene on Monday, October 24, 2022, at 6:30 pm in the Council Chambers at Mantorville City Hall, 21 5<sup>th</sup> St E, Mantorville, MN 55955. During said meeting, the Planning Commission will conduct a public hearing for the preliminary plat tentatively called Area 15, which proposes to subdivide Dodge County PID 130210401 into 36 residential lots and one outlot. Thereafter, the Planning Commission will make a recommendation to the City Council regarding the application. All interested persons are invited to attend the public hearing and be heard. Materials submitted by the applicant are available for inspection at Mantorville City Hall during regular business hours.

Shirley R Buecksler  
City Clerk-Treasurer

**CITY OF MANTORVILLE**

21 5th Street E • P.O. Box 188 | Mantorville, MN 55955 | p: 507.635.5170

email: [info@mantorville.com](mailto:info@mantorville.com) | [www.mantorville.com](http://www.mantorville.com)

*On the National Register of Historical Places Est. 1854*





*Trail to the Past. Road to the Future.*

**CITY OF MANTORVILLE  
NOTICE OF PUBLIC HEARING**

**TO WHOM IT MAY CONCERN:**

A parcel that you own is within 350 feet of the preliminary plat tentatively called Area 15, which proposes to subdivide Dodge County PID 130210401. Notice is hereby given that the City of Mantorville Planning Commission will convene on Monday, October 24, 2022, at 6:30 pm in the Council Chambers at Mantorville City Hall, 21 5<sup>th</sup> Street East, Mantorville, Minnesota 55955. During said meeting, the Planning Commission will conduct a public hearing for the above-referenced preliminary plat. The plat proposes to establish 36 buildable residential lots and one outlot on Dodge County PID 130210401. After the public hearing, the Planning Commission will make a recommendation to the City Council regarding the application. Materials submitted by the applicant are available for inspection at Mantorville City Hall during regular business hours.

All interested persons are invited to attend the public hearing and be heard. If you are unable to attend the public hearing but would like to provide comment, you may send an email to my attention at [shirley@mantorville.com](mailto:shirley@mantorville.com) by 3:00 pm on Monday, October 24, 2022. All comments received by this date and time will be printed and provided to the Planning Commission for the public hearing.

If you have any questions, please feel free to contact me at 507.635.5116.

Sincerely,

Shirley R. Buecksler  
City Clerk-Treasurer

**CITY OF MANTORVILLE**

21 5th Street E • P.O. Box 188 | Mantorville, MN 55955 | p: 507.635.5170

email: [info@mantorville.com](mailto:info@mantorville.com) | [www.mantorville.com](http://www.mantorville.com)

*On the National Register of Historical Places Est. 1854*

Mail by 10.13.22



# Dodge County Internal Parcel Viewer

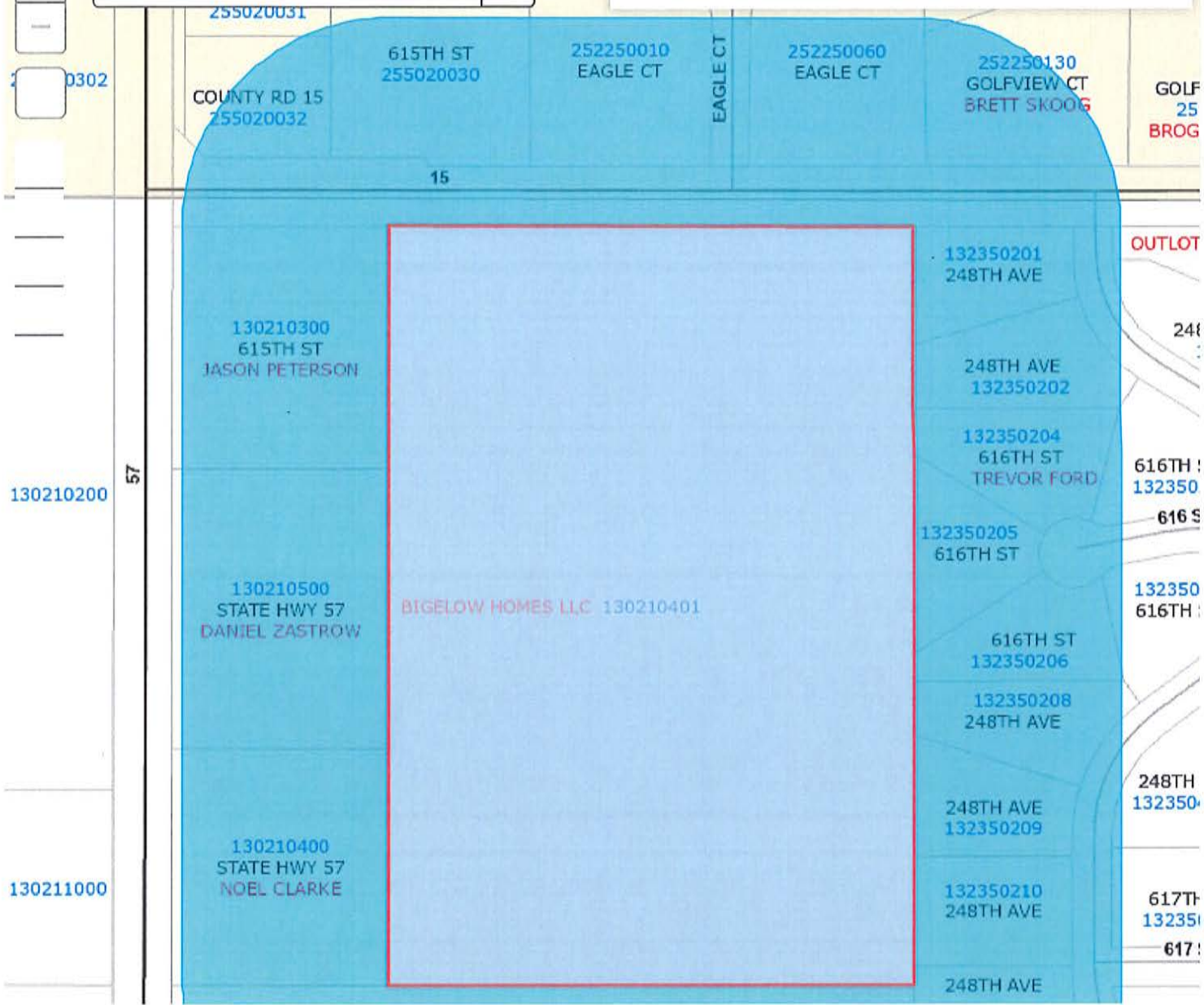


721 MAIN ST N (All Caps)



EAGLE

Enhanced Search



### App State

Click to restore the map extent and layers visibility where you left off.





# Dodge County Internal Parcel Viewer



721 MAIN ST N (All Caps)



Enhanced Search



E HWY 57  
1210200

JASON PETERSON

130210500  
STATE HWY 57  
DANIEL ZASTROW

BIGELOW HOMES LLC 130210401

132350204  
616TH ST  
TREVOR FORD

132350205  
616TH ST

616TH ST  
132350206

132350208  
248TH AVE

248TH AVE  
132350209

132350210  
248TH AVE

DAVID ROHLIK  
132350211  
248TH AVE

132350212  
248TH AVE

13235021  
248TH AVE

DAVID WILCOX

130211100

132350215  
618TH ST

618TH ST  
132350216

130211000  
STATE HWY 57

STATE HWY 57  
130210700

130210600

App State

Click to restore the map extent and layers visibility where you left off.



PIN	Tax Payer 1	Tax Payer 2	Address 1	Address 2	City	State	ZIP
252250060	RUSSELL H HILSMAN	BECKY L HILSMAN	520 EAGLE CT SE		MANTORVILLE	MN	55955
132350210	ROBERT J PETERSEN	CAROL S PETERSEN	61719 248TH AVE		MANTORVILLE	MN	55955
252250130	BRETT SKOOG	TESSAH SKOOG	612 GOLFVIEW CT		MANTORVILLE	MN	55955
130210500	DANIEL ZASTROW		61648 STATE HWY 57		KASSON	MN	55944
255020032	WAYNE C SCHERBRING	BECKY R SCHERBRING	24584 615TH ST		MANTORVILLE	MN	55955
130211100	DAVID WILCOX		945 150TH ST		KANAWHA	IA	50447
132350209	STEVEN L WEBER		61696 248TH AVE		MANTORVILLE	MN	55955
130210400	NOEL CLARKE		61748 STATE HWY 57		KASSON	MN	55944
132350204	TREVOR FORD	SASHA FORD	24700 616TH ST		MANTORVILLE	MN	55955
132350100	OUTLOT C ROLLING HILLS ASSOC	% ROBERT HAMLIN, PRESIDENT	24711 616TH ST		MANTORVILLE	MN	55955
132350208	STEPHEN L EHLKE	NANCY M EHLKE	61677 248TH AVE		MANTORVILLE	MN	55955
255020030	WAYNE C SCHERBRING	BECKY R SCHERBRING	24584 615TH ST		MANTORVILLE	MN	55955
132350206	ROBERT H HAMLIN	KATHLEEN M HAMLIN	24711 616TH ST		MANTORVILLE	MN	55955
132350409	MARK E KUJATH	NICOLE E KUJATH	61674 248TH AVE		MANTORVILLE	MN	55955
252250010	EDWARD & DEBORAH REICHER TS AG		521 EAGLE CT SE		MANTORVILLE	MN	55955
132350201	CORI L PAULSON		61519 248TH AVE		MANTORVILLE	MN	55955
132350104	SHAUN HALL	SARAH E HANCOCK-HALL	61528 248TH AVE		MANTORVILLE	MN	55955
132350212	DANIEL HEAD	LINDA HEAD	61755 248TH AVE		MANTORVILLE	MN	55955
132350203	CHAD M BOELTER	AMANDA J BOELTER	24724 616TH ST		MANTORVILLE	MN	55955
132350205	DARREN J SPREITER	SHERI SPREITER	24709 616TH ST		MANTORVILLE	MN	55955
255020031	CASEY A ARNOLD	SARAH A ARNOLD	140 STATE HWY 57		MANTORVILLE	MN	55955
132350404	ANTHONY J NELSON	RHONDA L NELSON	61774 248TH AVE		MANTORVILLE	MN	55955
130210300	JASON PETERSON	TIFFANY PETERSON	24575 615TH ST		MANTORVILLE	MN	55955
252250140	MICHAEL E NOBLE	ELAINE M NOBLE	614 GOLFVIEW COURT		MANTORVILLE	MN	55955
132350213	GEOFFREY R FLYNN	JENNIFER A FLYNN	61771 248TH AVE		MANTORVILLE	MN	55955
130210401	BIGELOW HOMES LLC		4057 28TH ST NW #100		ROCHESTER	MN	55901
132350408	DAVID M WILCOX		24842 617TH ST		MANTORVILLE	MN	55955
132350211	DAVID ROHLIK	GINA ROHLIK	61743 248TH AVE		MANTORVILLE	MN	55955
132350207	KATE E BROSSARD		24719 616TH ST		MANTORVILLE	MN	55955
132350202	BRADLEY J JOHNAS	JENNIFER J JOHNAS	61535 248TH AVE		MANTORVILLE	MN	55955

Additional:

TONY BIGELOW		4057 28TH ST NW	ROCHESTER	MN	55901
CAROL ALLEN	MANTORVILLE TOWNSHIP				
DUKE HARBAUGH	MANTORVILLE TOWNSHIP				
DODGE COUNTY HIGHWAY DEPT					
DODGE COUNTY ASSESSOR'S OFFICE					
DODGE COUNTY SURVEYOR					
WHKS					
KASSON MANTORVILLE SCHOOL BOARD					
XCEL ENERGY					
KM TELECOM					
MnDOT DISTRICT 6					
MEDIACOM LLC					
DODGE COUNTY PLANNING					
MINNESOTA ENERGY RESOURCES					
XCEL ENERGY (LAND USE)					
KENNEDY & GRAVEN					
DODGE COUNTY ENVIRONMENTAL QUALITY					