





Purchasing Division
Finance Department
Room 120
411 West First Street
Duluth, Minnesota 55802

 218-730-5340
 purchasing@duluthmn.gov

Addendum 2
Solicitation 24-99842
Upper Lakeside Water Interconnect – Phase 1

This addendum serves to notify all bidders of the following changes to the solicitation documents:

- See the attached documents

Please acknowledge receipt of this Addendum by checking the acknowledgement box within the www.bidexpress.com solicitation.

Posted: **November 27, 2024**

ADDENDUM #2

Date: November 27, 2024

City Job Number: 1741
Bid Number: 2024-99000842

Project Description City of Duluth
Upper Lakeside Zone Water Main Interconnect – Phase 1

To All Bidders: This addendum is issued to modify, explain, or correct the original drawings, specifications, and/or previous addenda and is hereby made part of the Contract Documents. Acknowledge receipt of this addendum on the bid form.

****This addendum modifies the project **BID DATE** from Wednesday, December 4th, 2024 to **Thursday, December 5th, 2024 at 2:00PM local time.******

Specifications:

1. SP-10 (1505) COOPERATION BY CONTRACTORS is modified to include:

During the spring of 2025 Northland Country Club plans to begin an irrigation project on their property. The Contractor shall be aware of and cooperate with Northland Country Clubs irrigation contractor as necessary while working to complete the project.

2. SP-13 (1806) DETERMINATION AND EXTENSION OF CONTRACT TIME is modified as follows:
3. **Substantial completion** date is modified from March 1st, 2025 to **April 1st, 2025**. Substantial completion will include all work in relation to construction and installation of the water main, its components, its fittings, valves, hydrants, service lines, caps, etc. Final stabilization, roadway construction, and watermain testing may occur after this date but before final completion. **Final completion** date is modified from March 1st, 2025 to **June 23rd, 2025**.

4. SP-14 (1807) FAILURE TO COMPLETE WORK ON TIME is modified as follows:

If the work required by the contract is not completed on or before the completion date specified in the contract, the Contractor will be assessed liquidated damages in the amount of **\$1,500.00 per day**. Because the actual damages due to delay will be difficult or impossible to determine, the Contractor shall pay such amount for each calendar day in which work is not completed beyond the specified completion date. The amount assessed will be deducted from money due to the Contractor or the final pay request if not sooner paid by the Contractor.

5. SP-17 (2451) NO BLAST METHOD RESTRICTION FOR ROCK EXCAVATION is modified with the following:

"Blasting, will not be allowed within 50' of a flowing creek or stream." is replaced with ***"Blasting, will not be allowed within a flowing creek, stream, or dry creek bottom."***

6. SP-18 (2451) EXCAVATION, BACKFILL, AND COMPACTION FOR UTILITIES – TRENCH BACKFILL is modified as follows:

Trench backfill above the top of encasement zone and below subgrade shall be accomplished entirely with imported granular backfill materials when **beneath the site maintenance road**. Areas of the project that the water main is built outside the maintenance road may be backfilled with common native backfill from the project site.

7. SP-20 (2504) 16" STEEL CASING PIPE WITH 12" HDPE CARRIER PIPE is added to the project specifications as follows:

The work for this pay item shall include the cost of:

- a. Installation of both the 16" steel casing and the 12" HDPE carrier pipe as shown on the plans.
- b. Dewatering
- c. Granular backfill materials and stream restoration. Stream restoration includes replacing excavated rock material and importing rip rap to stabilize stream bottom.
- d. Liner plates installation and removal if required.
- e. Grouting and bulkheading materials.
- f. Elastomeric Casing end seals and required bands.
- g. Casing Spacers secured to pipe.

Pay item does not include pipe installed outside of the casing.

8. Updated EXHIBIT A – Schedule of Prices
Update includes the addition of (2) line items.
 - a. Line item 15: 12" CAS PIPE CULVERT
 - b. Line item 24: 16" STEEL CASING PIPE WITH 12" HDPE CARRIER PIPE

Also included are some plan quantity changes as shown in the project SEQ on Sheet 2.

Plan Sheets:

1. Sheet 2 SEQ: Addition of line items 15 and 24. Modifications to plan quantities and the construction notes.
2. Sheet 6 DETAILS: Added clarity to detail 3/6.
3. Sheet 10 EXISTING CONDITIONS AND REMOVALS: Existing pipe originally called out for removal will remain in place.
4. Sheet 14 PLAN AND PROFILE: Pipe EX-D-100 will not be replaced with new pipe.
5. Sheet 16 PLAN AND PROFILE: Revised roadway profile and added 12" CAS crossing culvert.
6. Sheet 18 PLAN AND PROFILE: Updated bedrock profile.
7. Sheet 19 PLAN AND PROFILE:
 - a. Revised 1" curb stop and box location. 1" HDPE service will no longer connect to existing building.
 - b. Added 16" steel casing under the stream. See SP-20 above.
8. Sheets 23-26 SITE RESTORATION:
 - a. Segments of silt fence have been removed at boring pit locations as it won't be necessary.
 - b. Other project silt fence has been switched to sediment control log type wood fiber (9" diameter).
9. Sheet 28 SWPPP DETAILS: Silt fence detail replaced with sediment control log detail.

UPPER LAKESIDE ZONE WATER MAIN INTERCONNECT-PHASE 1

REVISED: 11-27-24

Item No.	Note No.	Spec. No.	Item Description	Unit of Measure	Estimated Quantities
1		2021.501	MOBILIZATION	LS	1
2	12	2101.505	CLEARING (P)	ACRE	0.6
3	12	2101.505	GRUBBING (P)	ACRE	0.6
4		2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	LF	76
5		2104.504	REMOVE BITUMINOUS PAVEMENT	SY	15
6		2106.507	SELECT GRANULAR EMBANKMENT MOD 7% (CV)	CY	301
7		2106.507	EXCAVATION - COMMON	CY	428
8	11	2106.601	DEWATERING	LS	1
9	1,2	2106.607	EXCAVATION - ROCK	CY	446
10		2108.504	GEOTEXTILE FABRIC TYPE 5	SY	571
11		2211.507	AGGREGATE BASE (CV) CLASS 5	CY	678
12		2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C)	TON	8
13		2360.509	TYPE SP 12.5 NON WEARING COURSE MIX (3,C)	TON	8
14	3	2451.507	EXCAVATION - CLASS R	CY	161
15		2501.503	12" CAS PIPE CULVERT	LF	24
16	4	2504.602	1" CURB STOP AND BOX	EACH	2
17	4	2504.602	12" GATE VALVE AND BOX	EACH	3
18	5	2504.602	CONNECT TO EXISTING WATERMAIN (SPEC)	EACH	1
19	6	2504.602	CONNECT TO IRRIGATION LINE	EACH	1
20	4	2504.602	HYDRANT ASSEMBLY	EACH	4
21	4	2504.603	1" HDPE SDR-11 SERVICE PIPE	LF	20
22	4	2504.603	12" WATERMAIN HDPE (DIRECTIONALLY DRILLED)	LF	3,141
23	4	2504.603	12" WATERMAIN HDPE SDR-11 (OPEN CUT)	LF	303
24		2504.603	16" STEEL CASING PIPE WITH 12" HDPE CARRIER PIPE	LF	20
25	7	2504.604	3" POLYSTYRENE INSULATION	LF	235
26	4	2504.602	6" GATE VALVE AND BOX	EACH	1
27	13	2506.602	CONCRETE COLLAR	EACH	1
28		2531.503	CONCRETE CURB & GUTTER DESIGN B624	LF	10
29		2531.504	8" CONCRETE DRIVEWAY PAVEMENT	SY	1.4
30	8	2563.601	TRAFFIC CONTROL	LS	1
31		2573.501	STABILIZED CONSTRUCTION EXIT	LS	1
32		2573.502	STORM DRAIN INLET PROTECTION	EACH	5
33	14	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LF	1,555
34	9	2575.504	ROLLED EROSION PREVENTION CATEGORY 20	SY	654
35	9,10	2575.508	SEED MIXTURE 25-131	POUND	30

1

CONSTRUCTION NOTES:

1. QUANTITY IS USED FOR BLASTING THE WATER MAIN ENCASEMENT ZONE AND FOR OVERBLASTING FOR FUTURE SANITARY SEWER. FRACTURED MATERIAL IN THE OVERBLAST AREA WILL NOT BE EXCAVATED AND WILL REMAIN IN PLACE.
2. ROCK BLASTING IS AN APPROVED METHOD OF FRAGMENTATION ON THIS PROJECT. BLASTING SHALL BE PERFORMED FOLLOWING THE CITY OF DULUTH STANDARD SPECIFICATIONS FOR CONSTRUCTION 2019 EDITION.
3. QUANTITY ONLY INCLUDES REMOVAL OF FRACTURED MATERIAL REQUIRED FOR WATER MAIN CONSTRUCTION.
4. ITEM SHALL BE PROVIDED AND INSTALLED PER THE CITY OF DULUTH STANDARD SPECIFICATIONS FOR CONSTRUCTION 2019 EDITION.
5. ITEM INCLUDES CONNECTING THE PROPOSED MAIN TO THE EXISTING 12" MAIN AT EAST 3RD STREET. CONNECTION SHALL INCLUDE NECESSARY FITTINGS AS SHOWN IN THE BLOW UP DETAIL ON SHEET 14.
6. ITEM INCLUDES CONNECTING THE EXISTING GOLF COURSE IRRIGATION SYSTEM TO THE PROPOSED MAIN. CONNECTION SHALL INCLUDE NECESSARY FITTINGS AS SHOWN IN THE BLOW UP DETAIL ON SHEET 14.
7. ITEM IS USED FOR INSULATING WATERMAIN AS SPECIFIED AT AREAS THE WATERMAIN ONLY ACHIEVES 5 FEET OF COVER DUE TO BEDROCK.
8. BID ITEM NEEDS TO INCLUDE TRAFFIC CONTROL WITHIN THE GOLF COURSE PROPERTY ALONG MAINTENANCE ROADS AND ACCESS ROUTES.
9. FINAL RESTORATION OF THE GOLF COURSE WITHIN THE LIMITS DEFINED BY THE "SPECIALTY AREA" ON SHEET 10 WILL BE PERFORMED BY OTHERS. LIMITS STILL NEED ROLLED EROSION PREVENTION AS SHOWN ON THE PLANS.
10. SEED IS APPLIED AT A RATE OF 220 LB/ACRE.
11. CONSTRUCTION DE-WATERING TO BE LUMP SUM AND INCLUDES OPEN CUT AT STREAM CROSSINGS AS NECESSARY.
12. ITEM WILL BE PAID AT PLANNED QUANTITY. CONTRACTOR TO INCLUDE ALL COSTS FOR CLEARING AND GRUBBING FOR THEIR CONSTRUCTION OPERATIONS.
13. ITEM IS USED FOR 12" MAIN LINE GATE VALVE AT 3RD STREET.
14. WOOD FIBER BIOROLLS SHALL BE 9" DIAMETER. BIOROLLS SHALL BE PLACED IN DIRECT CONTACT WITH THE GROUND FOR THE DURATION OF THE PROJECT.

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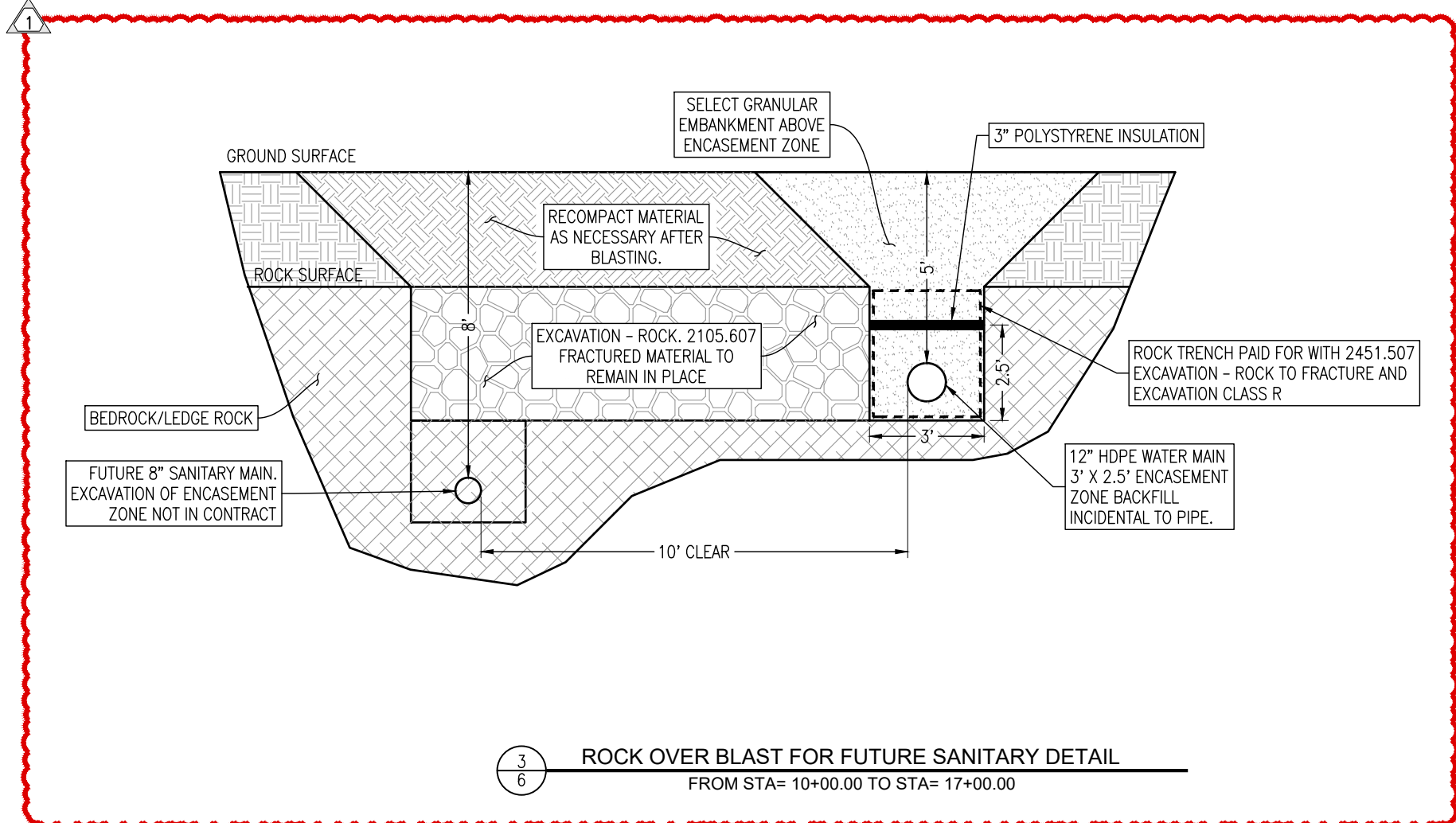
UPPER LAKESIDE ZONE WATER MAIN
INTERCONNECT - PHASE 1
CITY OF DULUTH PROJECT #1741
3901 E SUPERIOR ST, DULUTH, MN 55804

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.
11/13/24
Lic. No: 40926
Engineer: DAVID G. BOLF

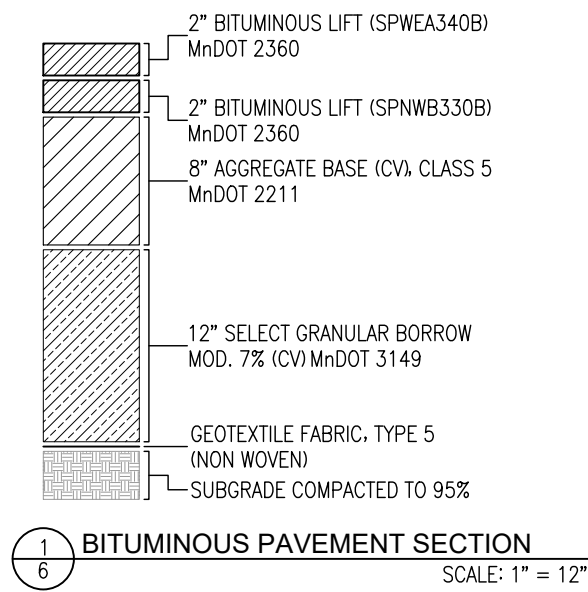
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Proj: 24-525
Date: 11/13/24
Drawn: DRH
Checked: TTP

SEQ
Sheet Title
Sheet Number
2

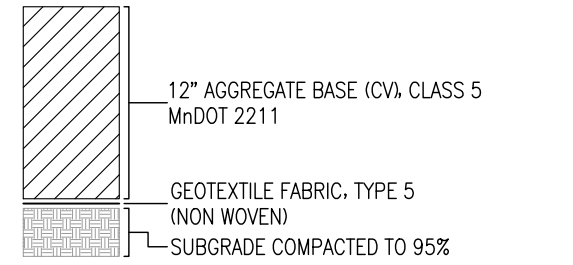
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3
6 **ROCK OVER BLAST FOR FUTURE SANITARY DETAIL**
FROM STA= 10+00.00 TO STA= 17+00.00



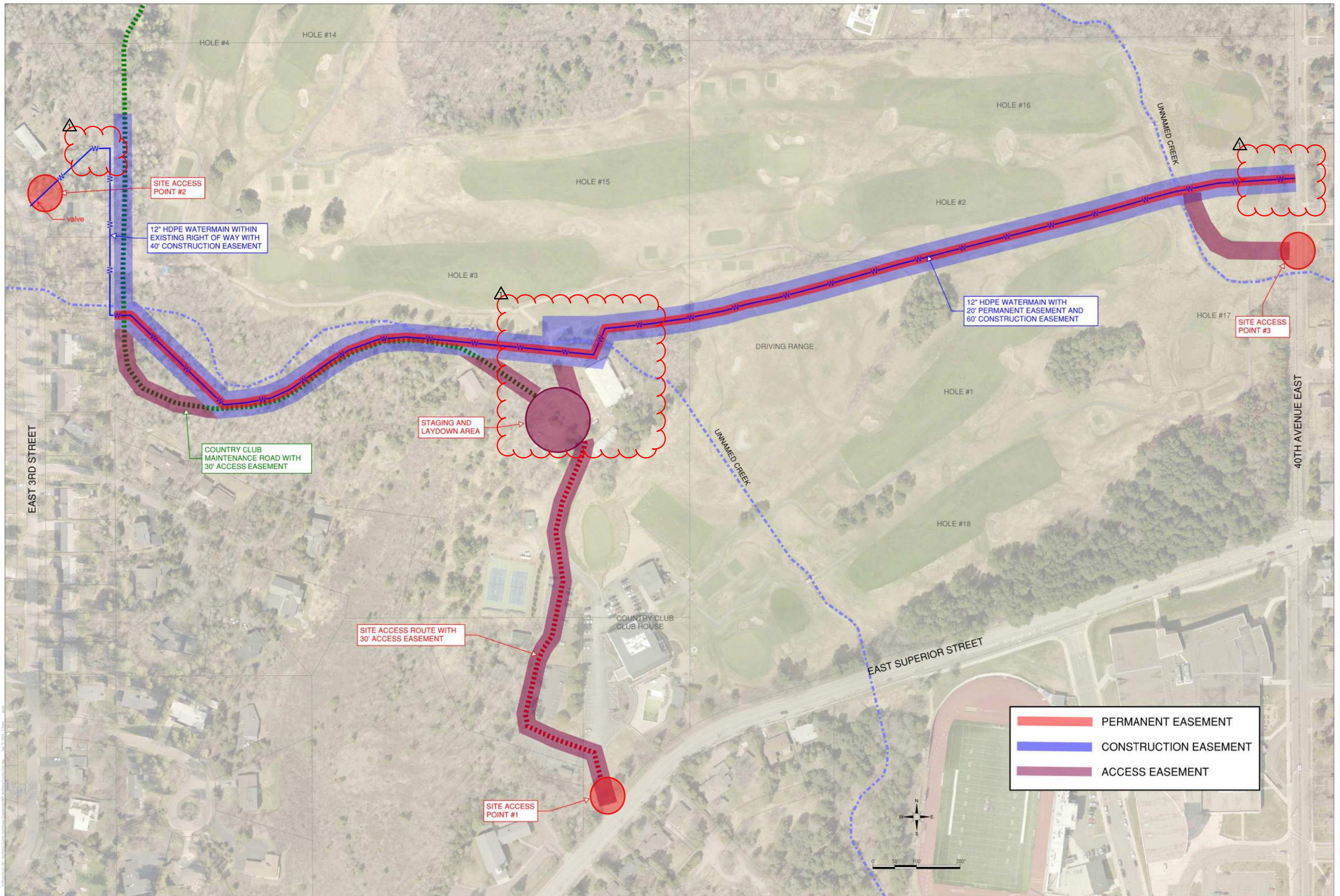
1
6 **BITUMINOUS PAVEMENT SECTION**
SCALE: 1" = 12"



2
6 **CLASS 5 SECTION**
SCALE: 1" = 12"

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SITE ACCESS POINT #2

12" HDPE WATERMAIN WITH EXISTING RIGHT OF WAY WITH 40' CONSTRUCTION EASEMENT

12" HDPE WATERMAIN WITH 20' PERMANENT EASEMENT AND 60' CONSTRUCTION EASEMENT

COUNTRY CLUB MAINTENANCE ROAD WITH 30' ACCESS EASEMENT

STAGING AND LAYDOWN AREA

SITE ACCESS ROUTE WITH 30' ACCESS EASEMENT

SITE ACCESS POINT #1

SITE ACCESS POINT #3

- PERMANENT EASEMENT
- CONSTRUCTION EASEMENT
- ACCESS EASEMENT

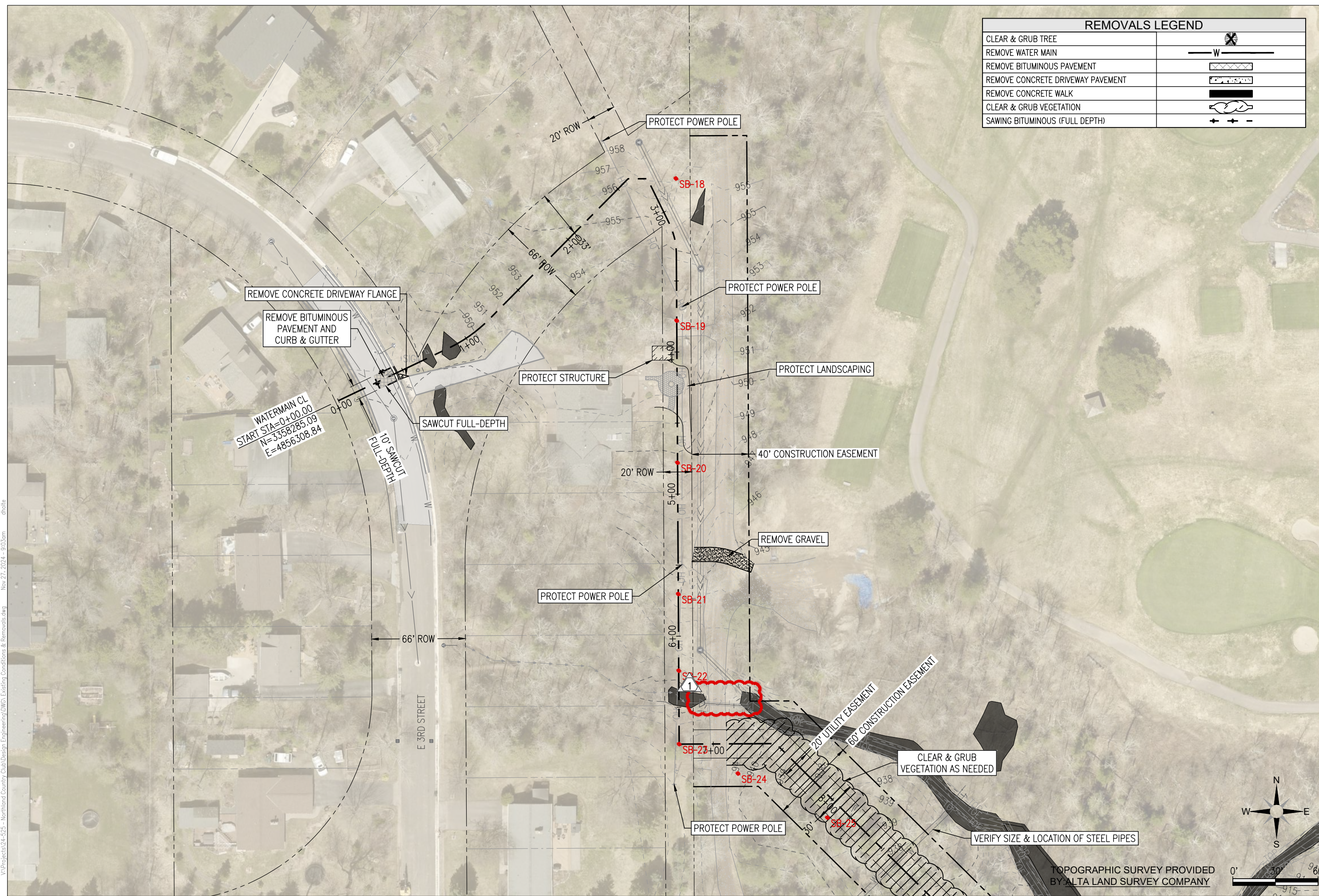
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.
 NOT FOR CONSTRUCTION
 Engineer: Adam R. Zwick, P.E. Lic. No. 54565

REVISIONS:
 REV 1 1/27/24

PROJECT: 22-191
 CHECKED: DGB
 DRAWN: DRH
 DATE: 2024/09/19

Sheet Title
WATER MAIN

Sheet Number
EX 1



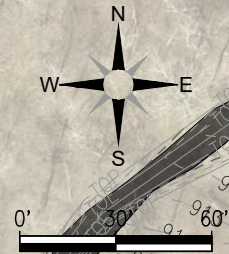
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CLEAR & GRUB TREE	
REMOVE WATER MAIN	
REMOVE BITUMINOUS PAVEMENT	
REMOVE CONCRETE DRIVEWAY PAVEMENT	
REMOVE CONCRETE WALK	
CLEAR & GRUB VEGETATION	
SAWING BITUMINOUS (FULL DEPTH)	

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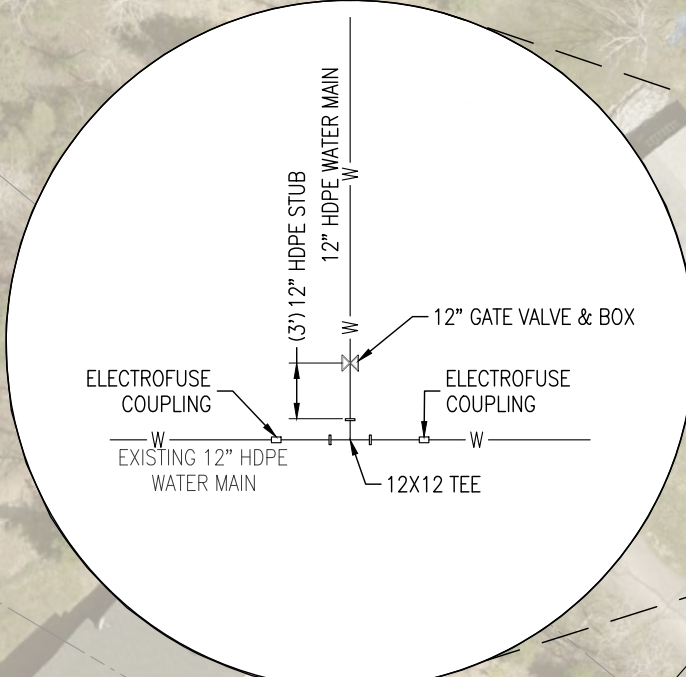
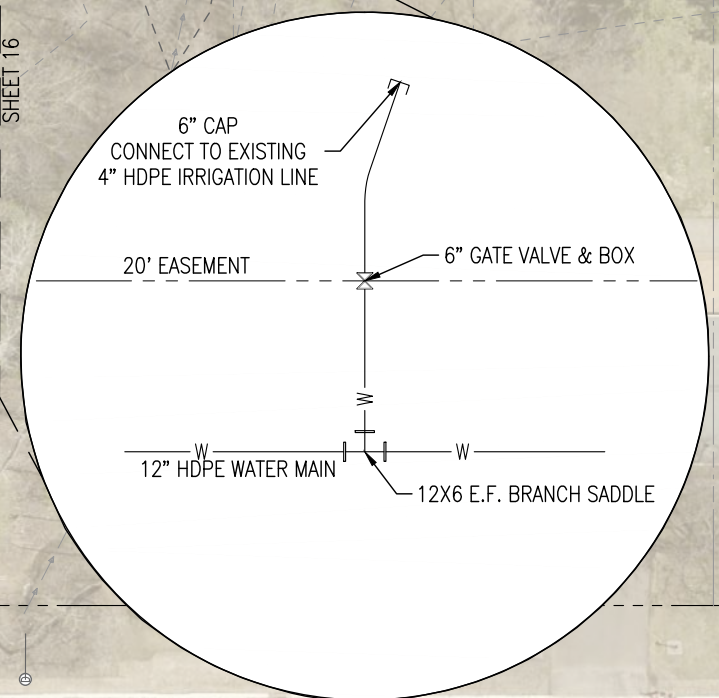
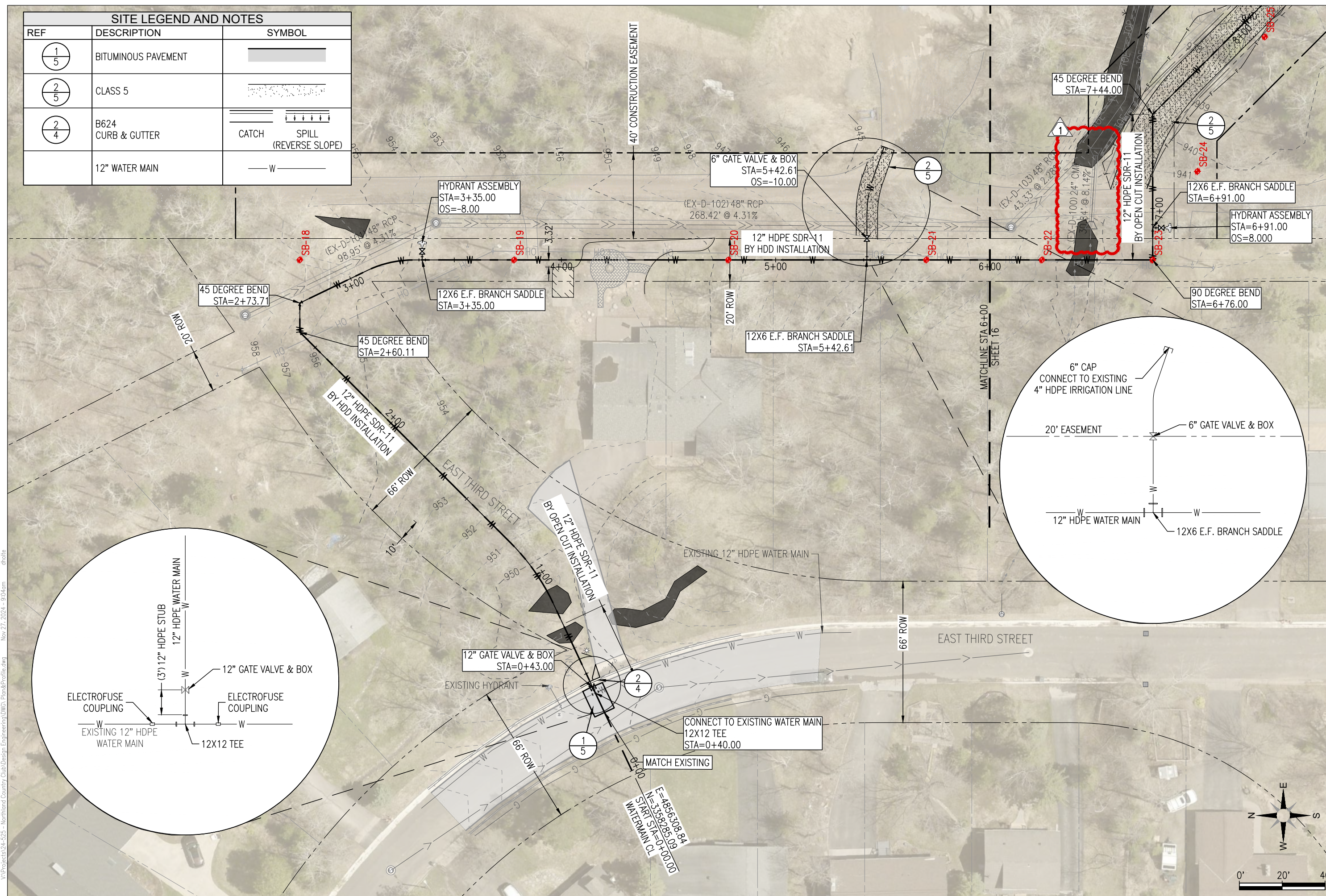
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EXISTING CONDITIONS & REMOVALS	Sheet Title
Sheet Number	10

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TOPOGRAPHIC SURVEY PROVIDED BY ALTA LAND SURVEY COMPANY



SITE LEGEND AND NOTES		
REF	DESCRIPTION	SYMBOL
① 5	BITUMINOUS PAVEMENT	
② 5	CLASS 5	
② 4	B624 CURB & GUTTER	
	12" WATER MAIN	



Northland
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Structural, Civil and Forensic Engineering Services
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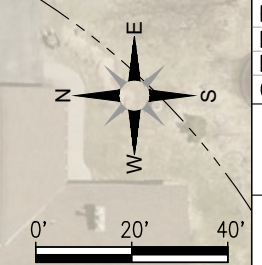
UPPER LAKESIDE ZONE WATER MAIN
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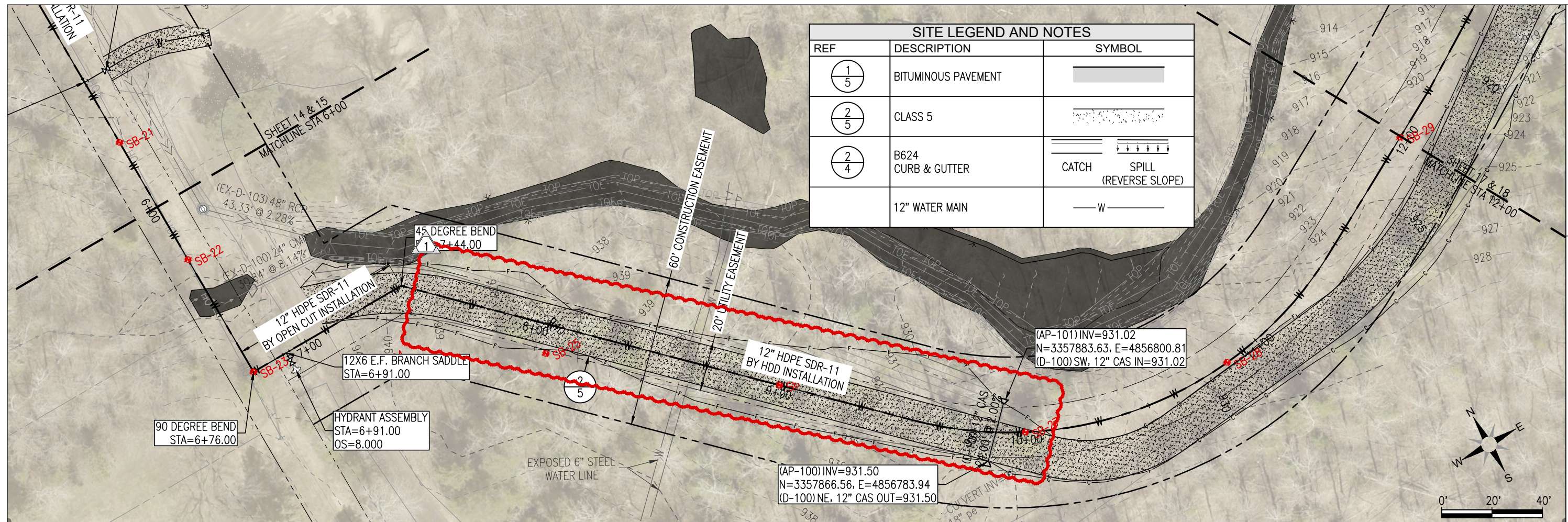
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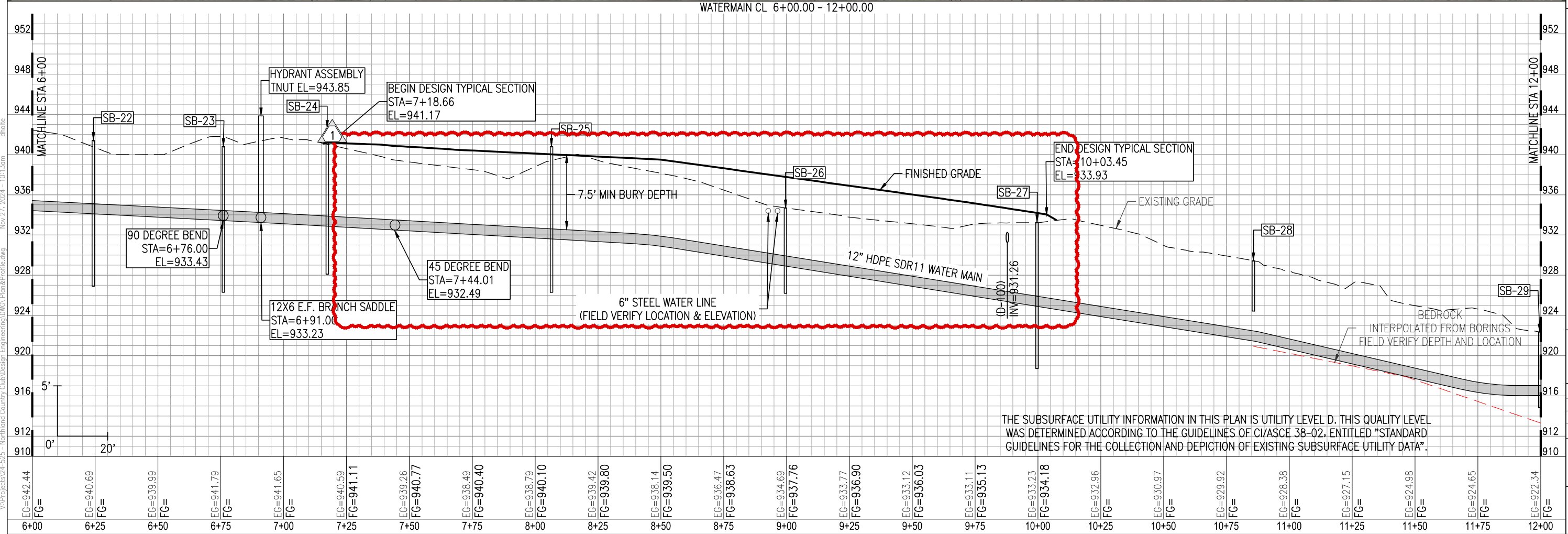
PLAN & PROFILE
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Sheet Number
14

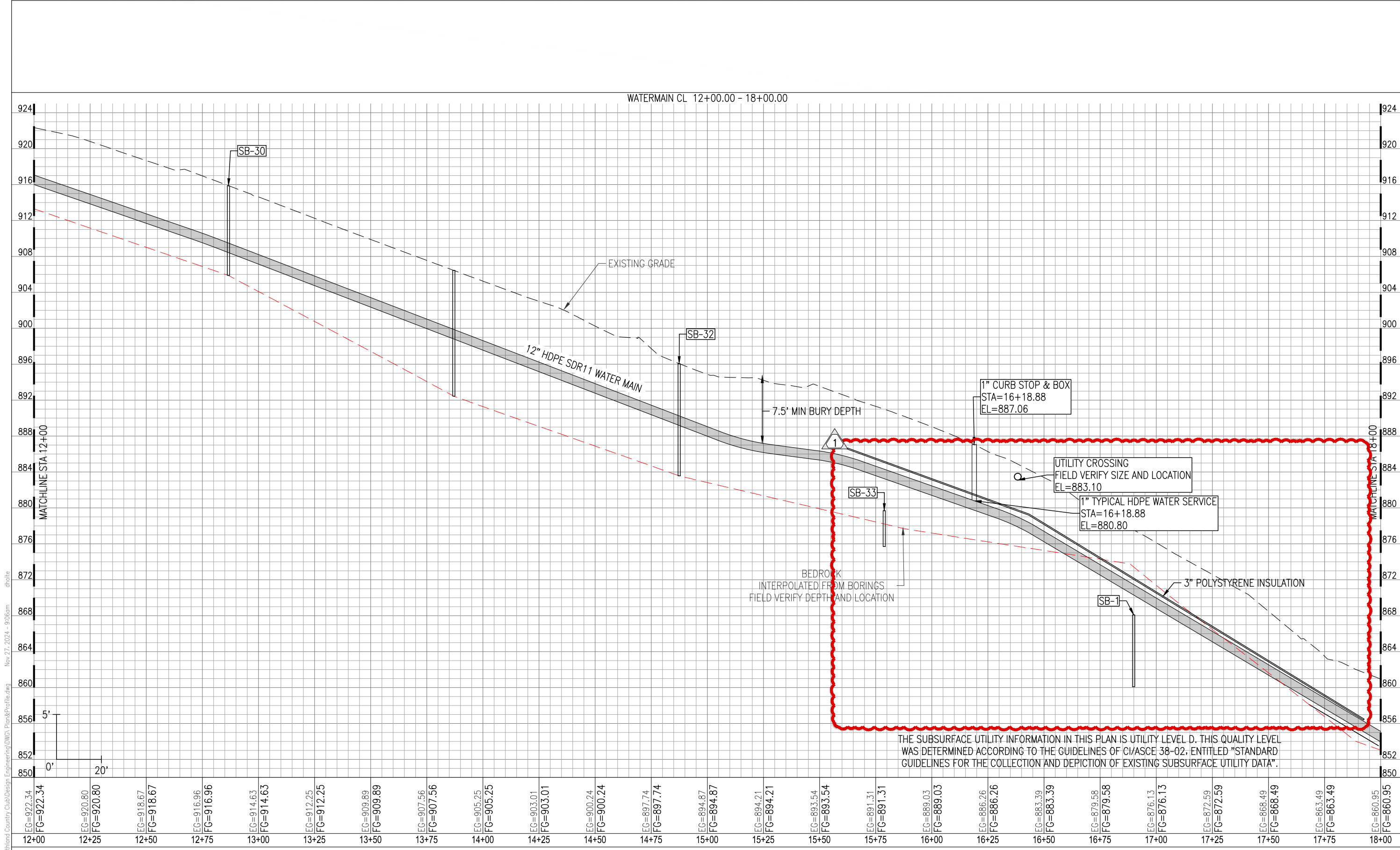


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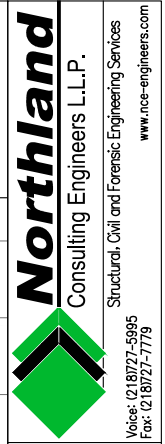
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REF	DESCRIPTION	SYMBOL
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② 5	CLASS 5	[Symbol]
② 4	B624 CURB & GUTTER	CATCH SPILL (REVERSE SLOPE)
	12" WATER MAIN	—W—





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WATERMAIN CL 12+00.00 - 18+00.00



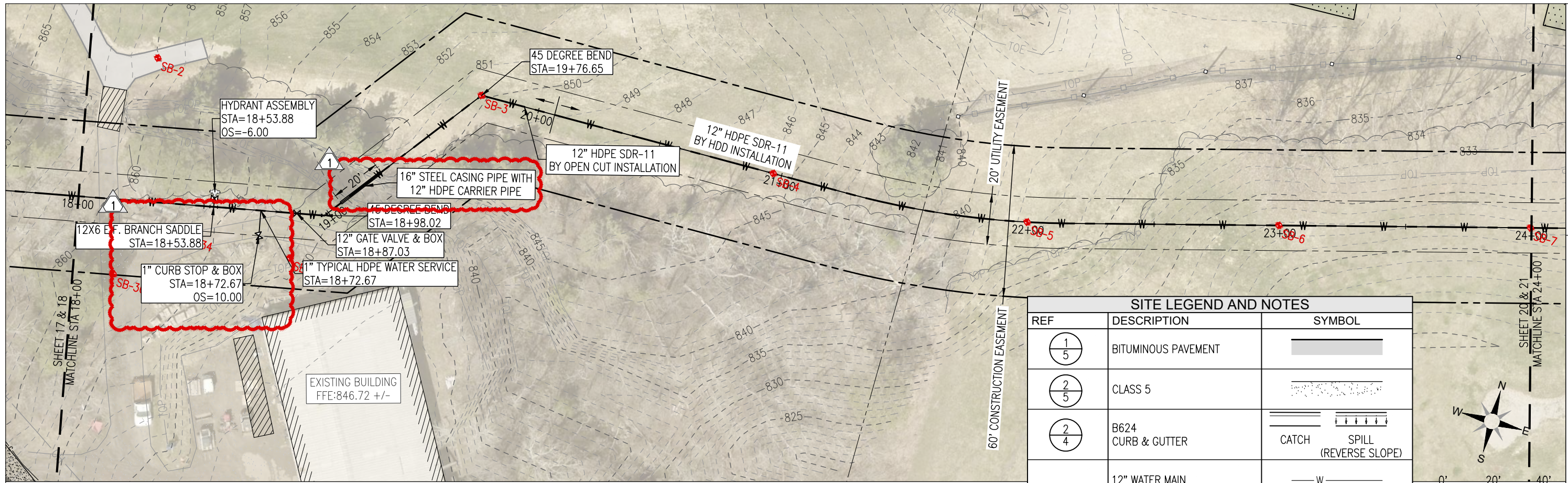
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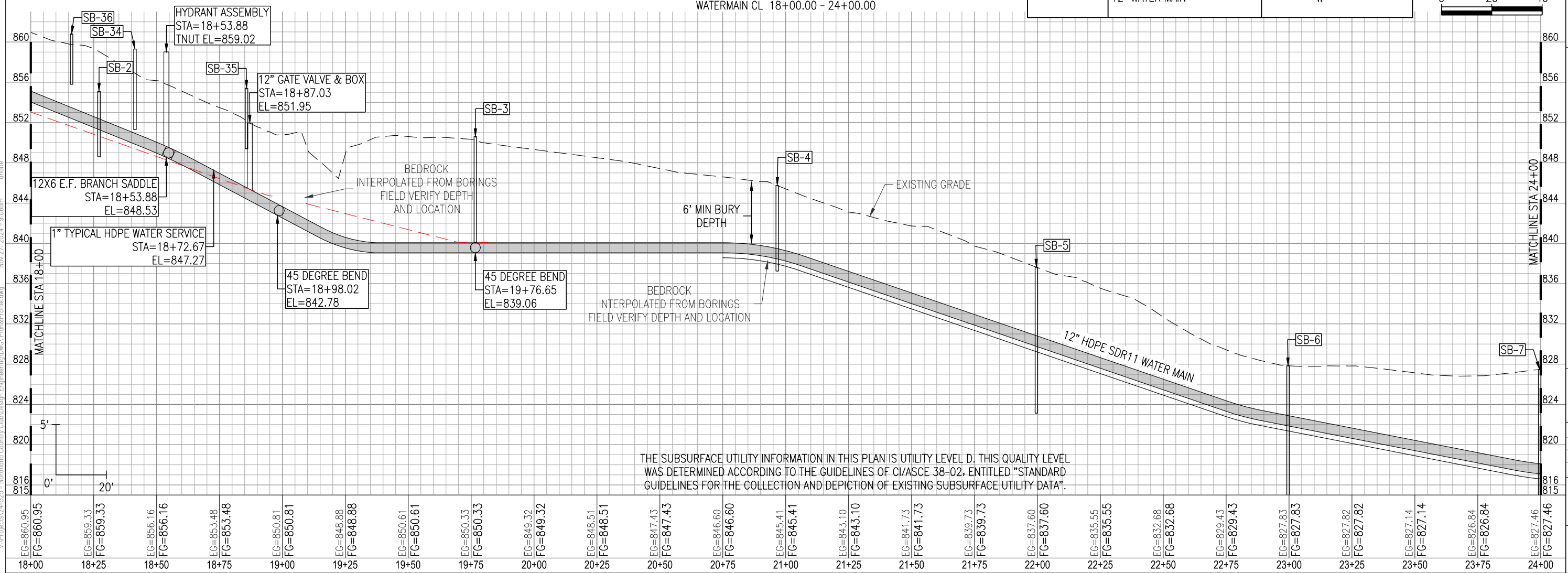
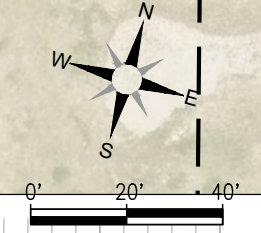
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PLAN & PROFILE
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Sheet Number
18

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".



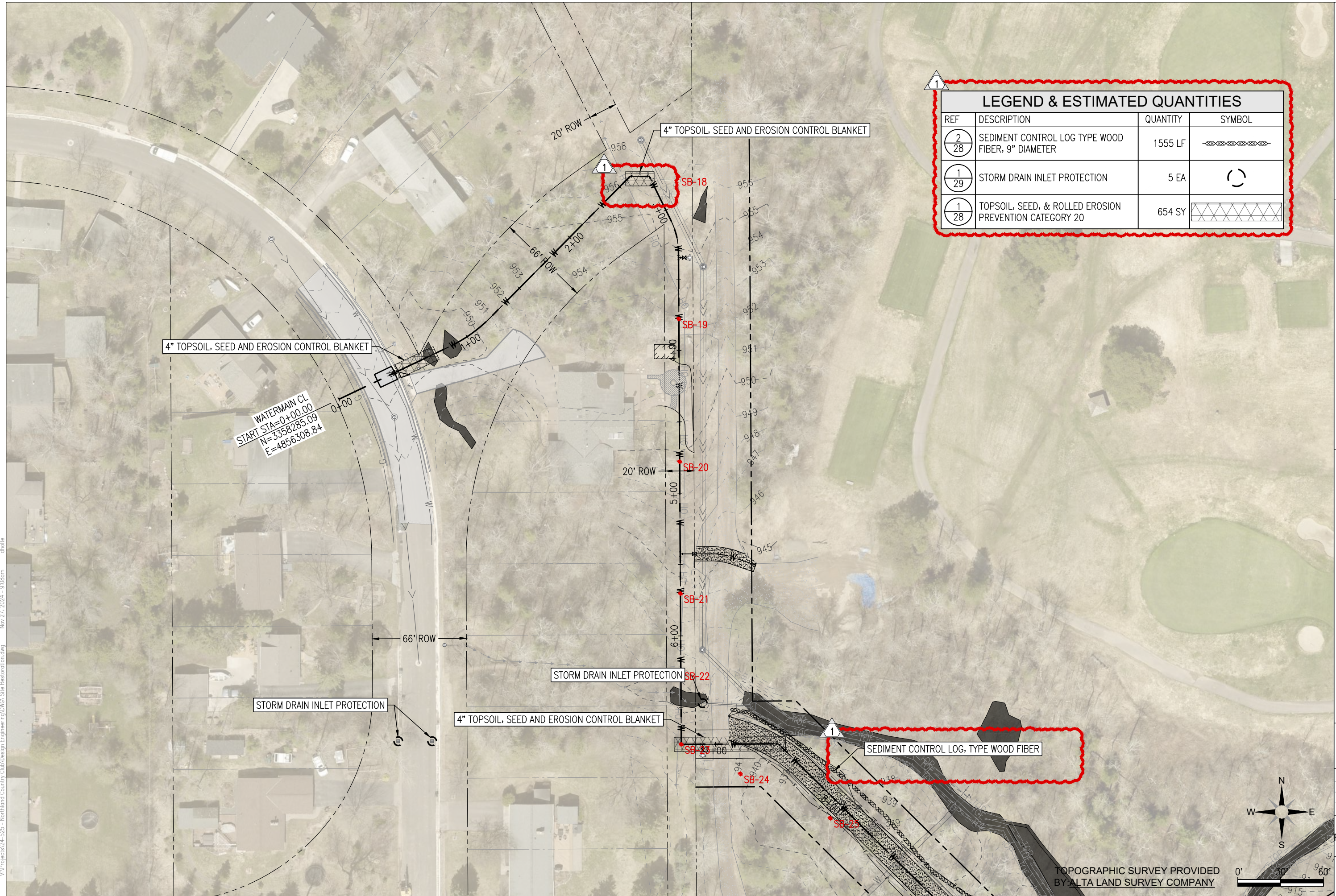
SITE LEGEND AND NOTES		
REF	DESCRIPTION	SYMBOL
① 5	BITUMINOUS PAVEMENT	
② 5	CLASS 5	
② 4	B624 CURB & GUTTER	
	12" WATER MAIN	



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LEGEND & ESTIMATED QUANTITIES			
REF	DESCRIPTION	QUANTITY	SYMBOL
2/28	SEDIMENT CONTROL LOG TYPE WOOD FIBER, 9" DIAMETER	1555 LF	
1/29	STORM DRAIN INLET PROTECTION	5 EA	
1/28	TOPSOIL, SEED, & ROLLED EROSION PREVENTION CATEGORY 20	654 SY	

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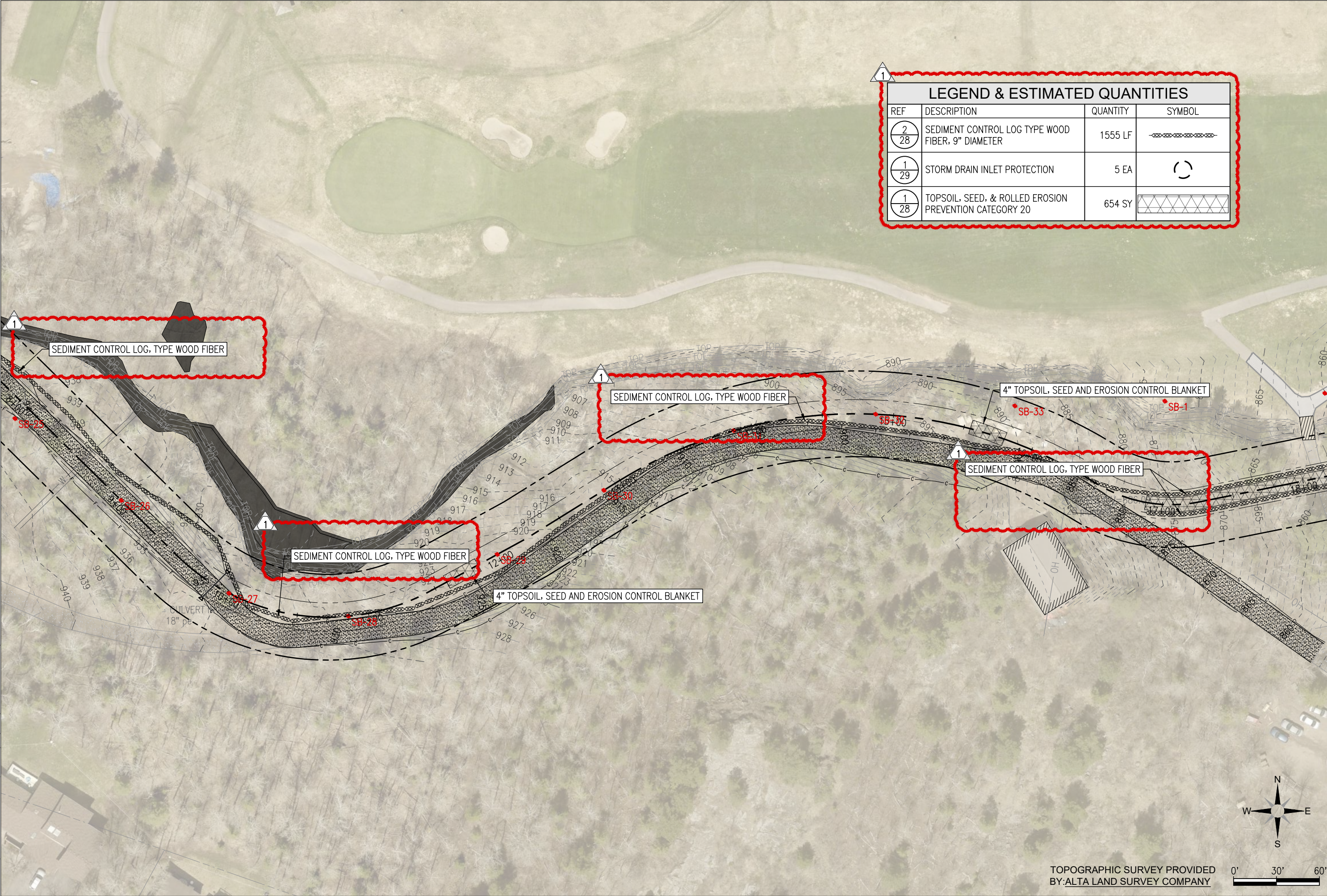
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Proj: 24-525
 Date: 11/13/24
 Drawn: DRH
 Checked: TTP

SITE RESTORATION
 Sheet Title
 Sheet Number

TOPOGRAPHIC SURVEY PROVIDED BY ALTA LAND SURVEY COMPANY

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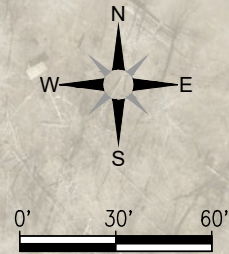


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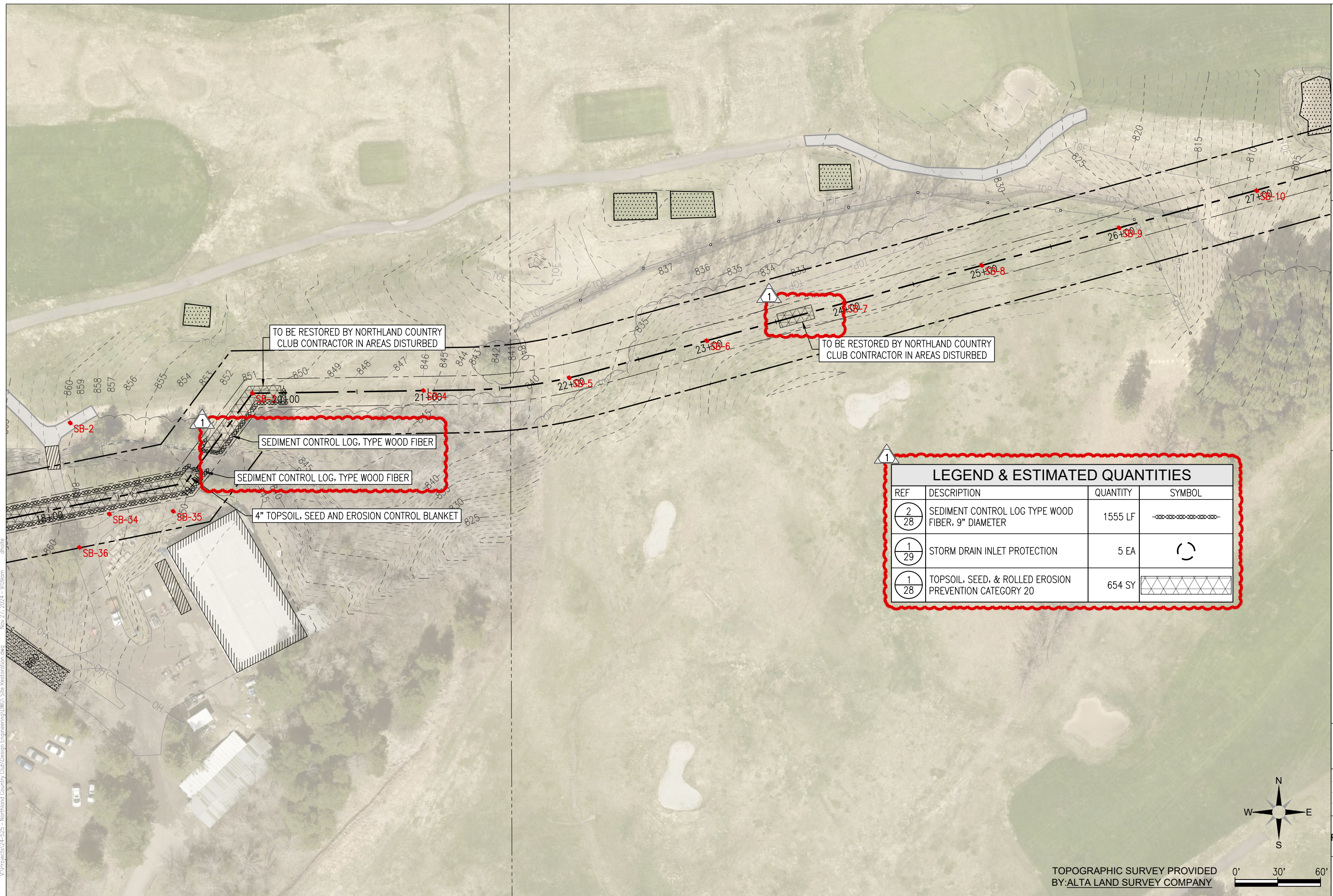
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 Engineer: DAVID G. BOLF
 Lic. No: 40926
 11/13/24

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Date:	11/13/24
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SITE RESTORATION	
Sheet Title	
Sheet Number	24

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LEGEND & ESTIMATED QUANTITIES			
REF	DESCRIPTION	QUANTITY	SYMBOL
2/28	SEDIMENT CONTROL LOG TYPE WOOD FIBER, 9" DIAMETER	1555 LF	
1/29	STORM DRAIN INLET PROTECTION	5 EA	
1/28	TOPSOIL, SEED, & ROLLED EROSION PREVENTION CATEGORY 20	654 SY	



TOPOGRAPHIC SURVEY PROVIDED BY: ALTA LAND SURVEY COMPANY

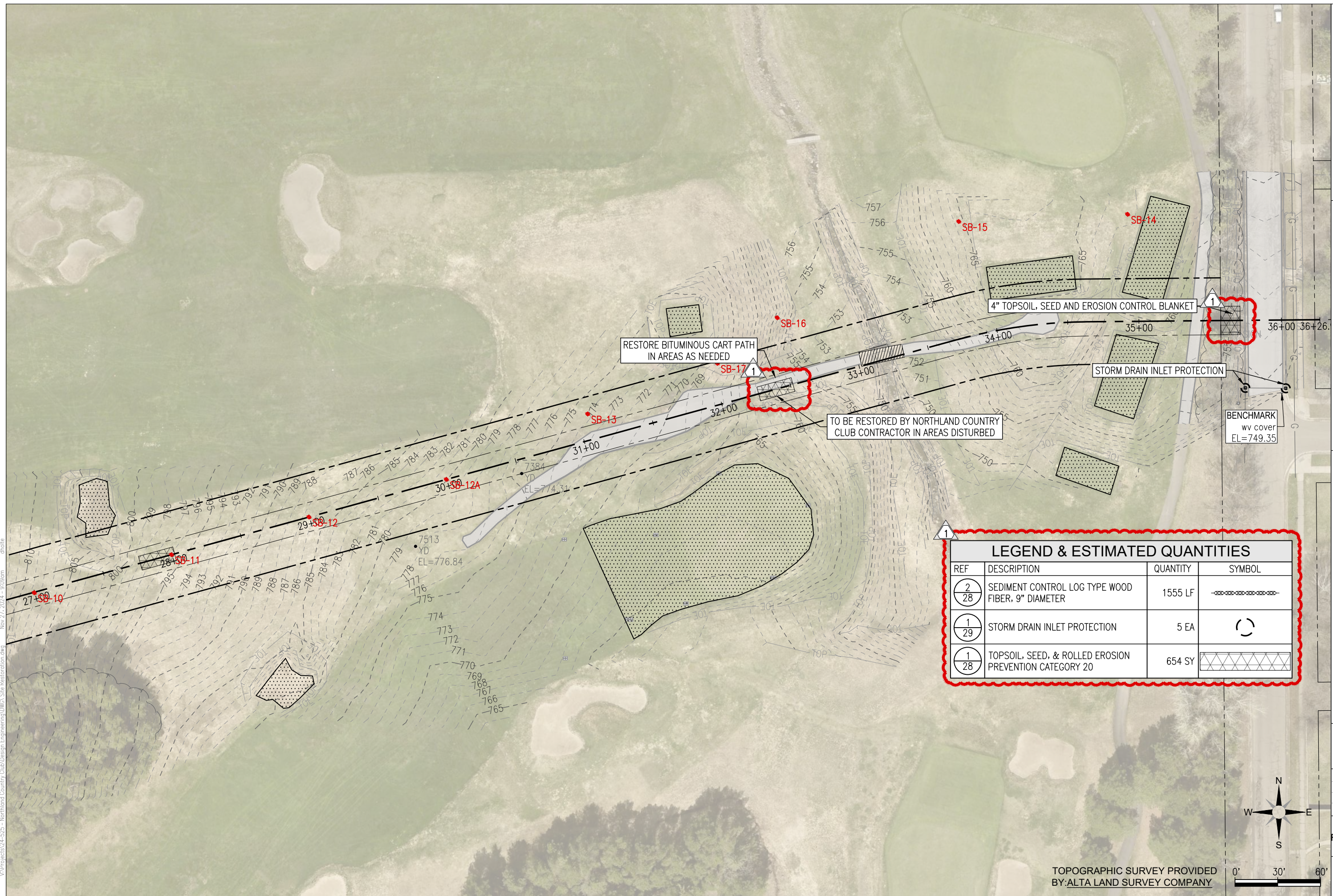
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.
 11/13/24
 Lic. No: 40926
 Engineer: DAVID G. BOLF

revision	Δ REV 1 11/27/24
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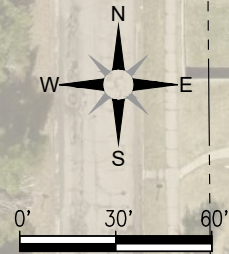
Proj: 24-525
 Date: 11/13/24
 Drawn: DRH
 Checked: TTP

SITE RESTORATION
 Sheet Title
 Sheet Number

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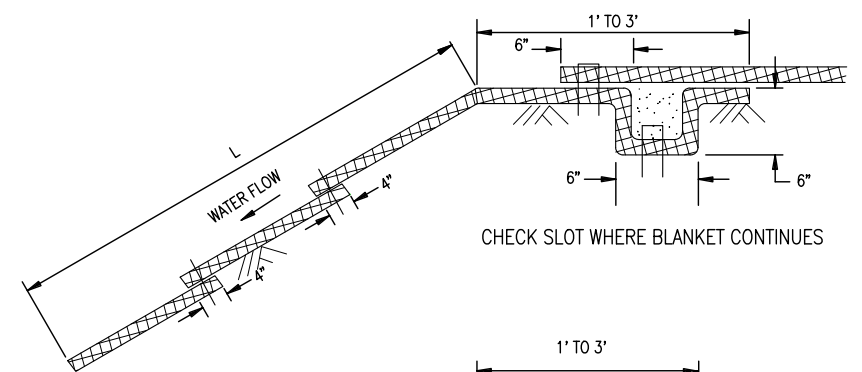
LEGEND & ESTIMATED QUANTITIES			
REF	DESCRIPTION	QUANTITY	SYMBOL
2/28	SEDIMENT CONTROL LOG TYPE WOOD FIBER, 9" DIAMETER	1555 LF	
1/29	STORM DRAIN INLET PROTECTION	5 EA	
1/28	TOPSOIL, SEED, & ROLLED EROSION PREVENTION CATEGORY 20	654 SY	



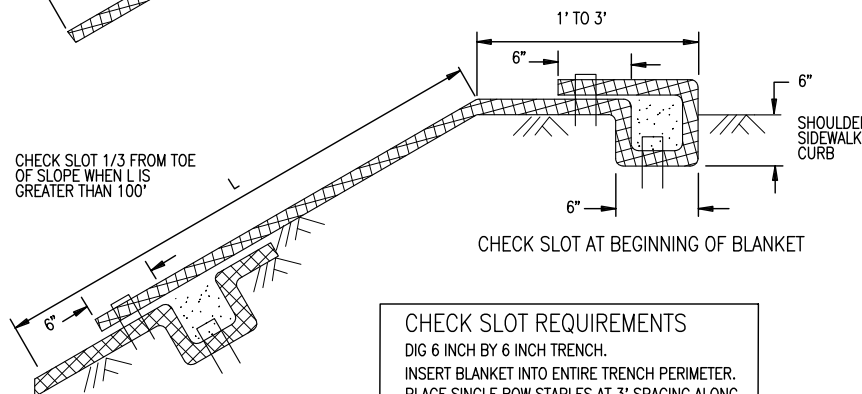
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Proj:	24-525
Date:	11/13/24
Drawn:	DRH
Checked:	TTP
SITE RESTORATION	
Sheet Title	
Sheet Number	26

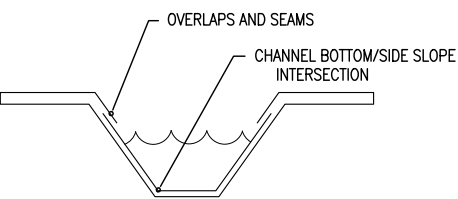


CHECK SLOT WHERE BLANKET CONTINUES

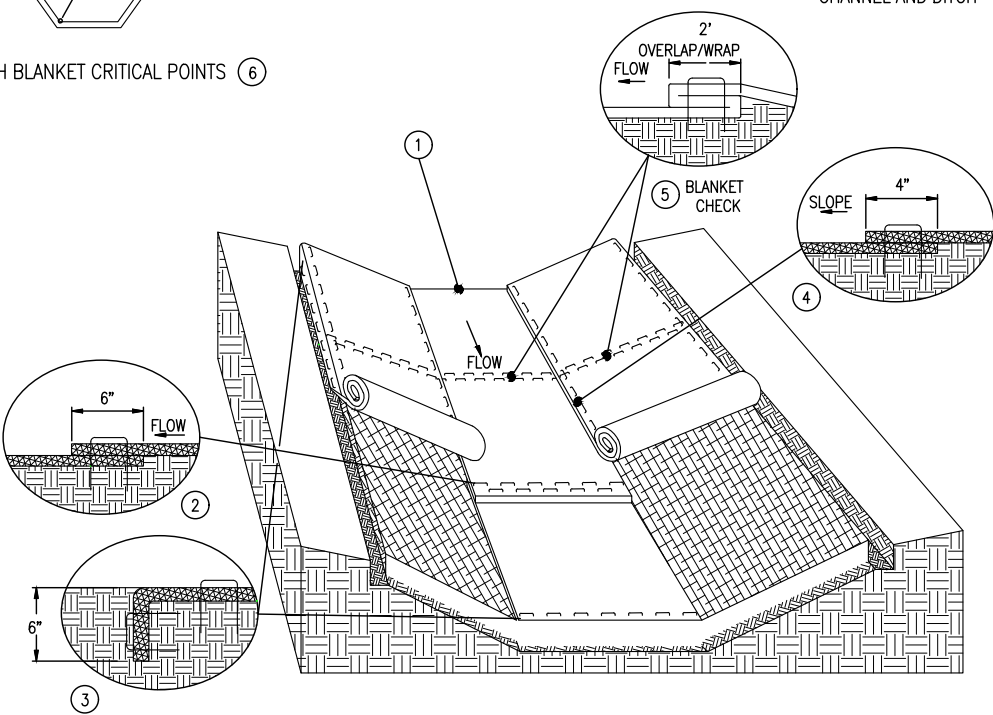


CHECK SLOT AT BEGINNING OF BLANKET

CHECK SLOT REQUIREMENTS
 DIG 6 INCH BY 6 INCH TRENCH.
 INSERT BLANKET INTO ENTIRE TRENCH PERIMETER.
 PLACE SINGLE ROW STAPLES AT 3' SPACING ALONG THE BOTTOM OF THE TRENCH.
 BACKFILL TRENCH WITH SOIL AND TAMP.
 PLACE SINGLE ROW STAPLES AT 3' SPACING ON OVERLAP.



DITCH BLANKET CRITICAL POINTS ⑥



DITCH BLANKET STAPLE DETAIL NOTES

- ① USE CHECK SLOT DETAIL (NO ALTERNATES).
- ② PLACE DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER.
- ③ USE 6" X 6" TRENCH TO PLACE BLANKET. PLACE SINGLE ROW OF STAPLES ON TOP AND TRENCH SIDES AT 12" SPACING. BACKFILL TRENCH WITH SOIL AND TAMP.
- ④ PLACE SINGLE ROW OF STAPLES AT 12" SPACING.
- ⑤ USE BLANKET CHECKS FOR THE FOLLOWING SLOPES:
 0%-3% 100 FT INTERVALS
 3%-5% 50 FT INTERVALS
 5%-7% 25 FT INTERVALS
- ⑥ CRITICAL POINTS SHALL BE SECURED WITH PROPER STAPLE PATTERNS.

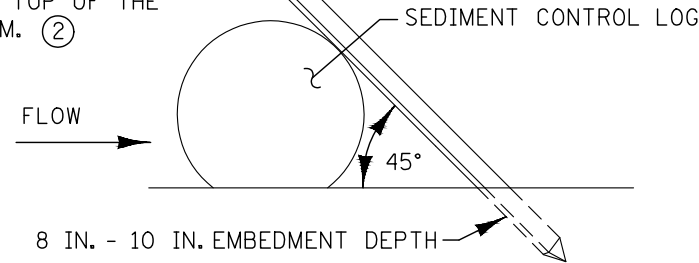
GENERAL BLANKET INSTALLATION REQUIREMENTS

PREPARE SOIL AS PER SPECIFICATION 2574.
 LAY PARALLEL OR PERPENDICULAR TO THE DIRECTION OF WATER FLOW.
 OVERLAP ADJACENT STRIP EDGES A MINIMUM OF 4 INCHES.
 OVERLAP BLANKET 6" (MIN.) AT EACH END. OVERLAP BOTTOM END OF UPPER BLANKET OVER TOP END OF LOWER BLANKET. STAPLE ALONG OVERLAP EVERY 1.5'.
 THE UPPERMOST BLANKET OF ALL SLOPE APPLICATIONS MUST START IN A CHECK SLOT. IF SLOPE LENGTH (L) IS 100' OR GREATER, INSERT BLANKET INTO A CHECK SLOT 1/3 FROM THE BOTTOM OF THE SLOPE.

BLANKET STAPLE PATTERN
 SLOPES FLATTER THAN 1:2 - 120 STAPLES PER 100 SQ YD
 SLOPES 1:2 TO 1:1 - 170 STAPLES PER 100 SQ YD
 CHANNEL AND DITCH - 350 STAPLES PER 100 SQ YD

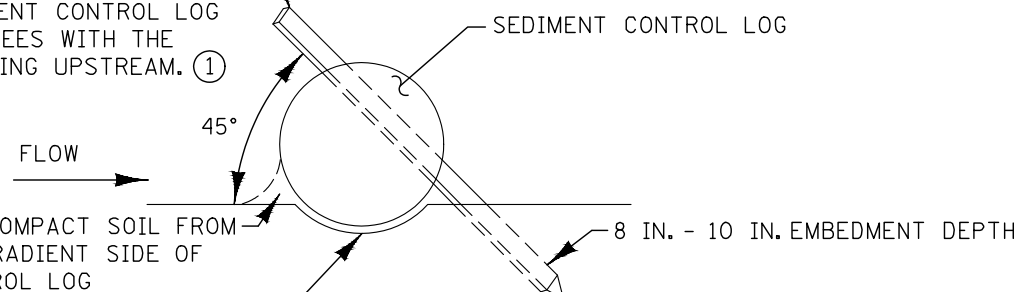
1
28 PERMANENT EROSION CONTROL - TYPE REPP (BLANKET)
SEE MNDOT STANDARD PLAN 5-297.404 SHT 3 OF 3 NTS.

1 IN. X 2 IN. X 24 IN. LONG WOODEN STAKES AS NEEDED. STAKES SHALL BE DRIVEN OVER THE SEDIMENT CONTROL LOG AT AN ANGLE OF 45 DEGREES WITH THE TOP OF THE STAKE POINTING UPSTREAM. ②



TYPES: WOOD CHIP, COMPOST, OR ROCK

1 IN. X 2 IN. X 24 IN. LONG WOODEN STAKES. STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE SEDIMENT CONTROL LOG AT AN ANGLE OF 45 DEGREES WITH THE TOP OF THE STAKE POINTING UPSTREAM. ①



BACKFILL AND COMPACT SOIL FROM TRENCH ON UPGRADIENT SIDE OF SEDIMENT CONTROL LOG
 PLACE SEDIMENT CONTROL LOG IN SHALLOW TRENCH (1 TO 2 IN. DEPTH)
 TYPES: STRAW, WOOD FIBER, OR COIR

NOTES:

- SEE MNDOT SPECS. 2573, 3874, 3882, & 3897.
- FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM WITH ENDS 6 INCHES HIGHER THAN MIDDLE TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:
 APPROXIMATE SPACING OF DITCH CHECKS (FT.) = Y = (DITCH CHECK HEIGHT (FT.) / % CHANNEL SLOPE) X 100
- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
 - ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.

2
28 TEMPORARY SEDIMENT CONTROL
SEDIMENT CONTROL LOGS NTS.

EXHIBIT A - Schedule of Prices

RQ No. 2024-99000842 / City Proj. No. 1741

Project Name: c Upper Lakeside Zone Water Main

Interconnect - Phase 1

Line No.	Spec. No.	Description	Unit	Est. Qty	Unit Price	Total Price
1	2021.501	MOBILIZATION	LS	1		
2	2101.505	CLEARING (P)	ACRE	0.59		
3	2101.505	GRUBBING (P)	ACRE	0.59		
4	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	LF	76		
5	2104.504	REMOVE BITUMINOUS PAVEMENT	SY	14.7		
6	2106.507	SELECT GRANULAR EMBANKMENT MOD 7% (CV)	CY	300.91		
7	2106.507	EXCAVATION - COMMON	CY	427.7		
8	2106.601	DEWATERING	LS	1		
9	2106.607	EXCAVATION - ROCK	CY	446.16		
10	2108.504	GEOTEXTILE FABRIC TYPE 5	SY	571.37		
11	2211.507	AGGREGATE BASE (CV) CLASS 5	CY	678		
12	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C)	TON	8.2		
13	2360.509	TYPE SP 12.5 NON WEARING COURSE MIX (3,C)	TON	8.2		
14	2451.507	EXCAVATION - CLASS R	CY	161.03		
15	2501.503	12" CAS PIPE CULVERT	LF	24		
16	2504.602	1" CURB STOP AND BOX	EACH	2		
17	2504.602	12" GATE VALVE AND BOX	EACH	3		
18	2504.602	CONNECT TO EXISTING WATERMAIN (SPEC)	EACH	1		
19	2504.602	CONNECT TO IRRIGATION LINE	EACH	1		
20	2504.602	HYDRANT ASSEMBLY	EACH	4		
21	2504.603	1" HDPE SDR-11 SERVICE PIPE	LF	20		
22	2504.603	12" WATERMAIN HDPE (DIRECTIONALLY DRILLED)	LF	3141		
23	2504.603	12" WATERMAIN HDPE SDR-11 (OPEN CUT)	LF	392		
24	2504.603	16" STEEL CASING PIPE WITH 12" HDPE CARRIER PIPE	LF	20		

Line No.	Spec. No.	Description	Unit	Est. Qty	Unit Price	Total Price
25	2504.604	3" POLYSTYRENE INSULATION	LF	235		
26	2504.602	6" GATE VALVE AND BOX	EACH	1		
27	2506.602	CONCRETE COLLAR	EACH	1		
28	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LF	10		
29	2531.504	8" CONCRETE DRIVEWAY PAVEMENT	SY	1.41		
30	2563.601	TRAFFIC CONTROL	LS	1		
31	2573.501	STABILIZED CONSTRUCTION EXIT	LS	1		
32	2573.502	STORM DRAIN INLET PROTECTION	EACH	5		
33	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LF	1555		
34	2575.504	ROLLED EROSION PREVENTION CATEGORY 20	SY	653.5		
35	2575.508	SEED MIXTURE 25-131	POUND	29.7		