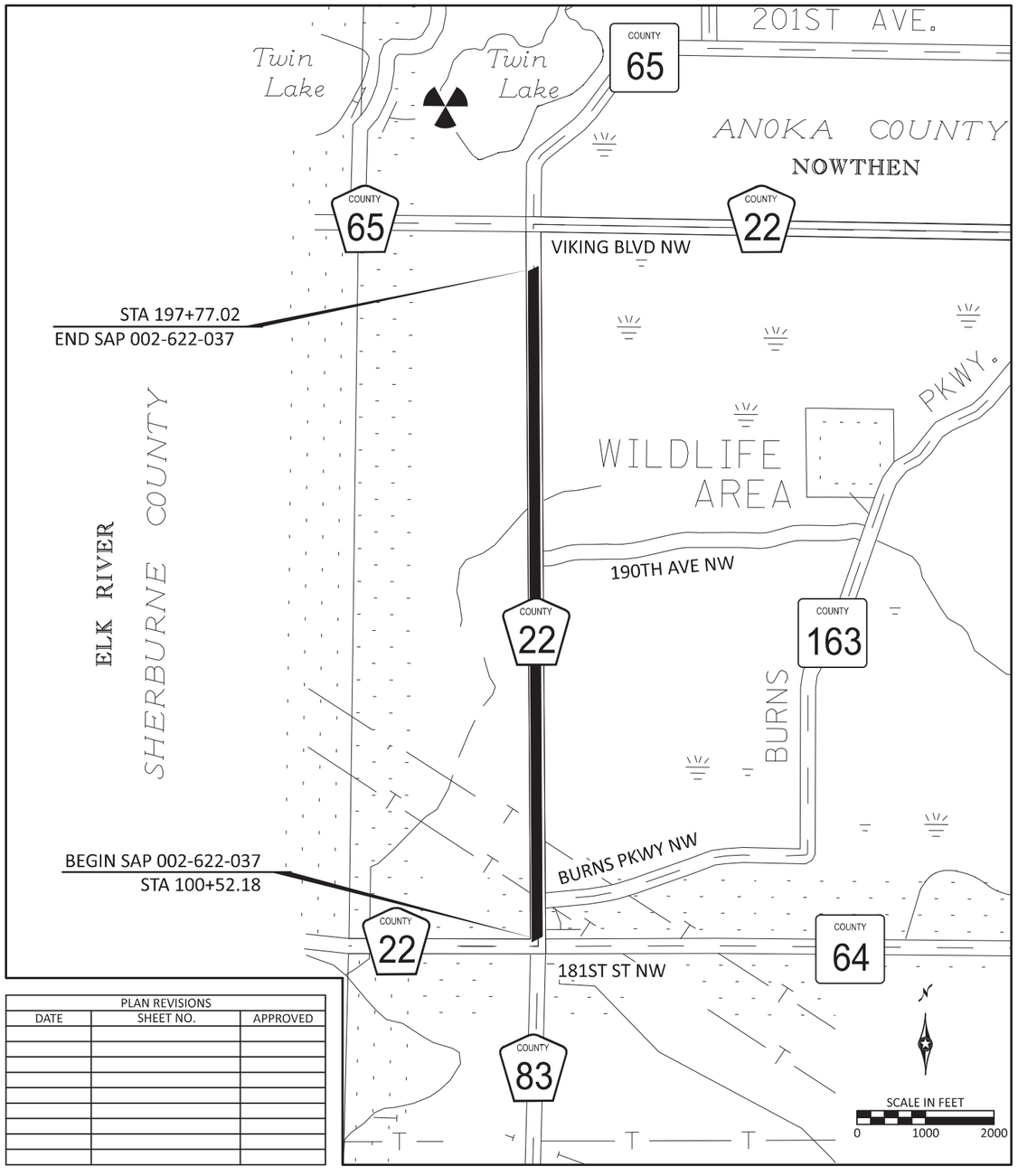
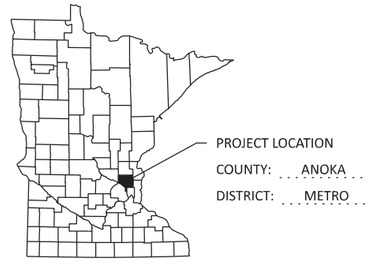
MINNESOTA DEPARTMENT OF TRANSPORTATION
Anoka County

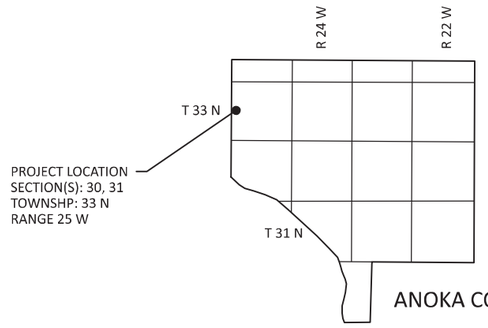
CONSTRUCTION PLAN FOR GRADING, BITUMINOUS SURFACING, CONCRETE CURB & GUTTER, AND DRAINAGE

SAP 002-622-037 LOCATED ON CSAH 22 (BAUGH ST NW) FROM CR 64 (181ST AVE NW) TO 750' SOUTH OF CSAH 65 (VIKING BLVD NW)





PROJECT LOCATION
COUNTY: ANOKA
DISTRICT: METRO



PLAN REVISIONS		
DATE	SHEET NO.	APPROVED

CSAH 22
SAP 002-622-037

GROSS LENGTH	9724.84 FEET .. 1.842 MILES
BRIDGES-LENGTH	
EXCEPTIONS-LENGTH	
NET LENGTH	9724.84 FEET .. 1.842 MILES

DESIGN DESIGNATION

R VALUE	20
ADT (Current Year) 2026	3190
ADT (Future Year) 2046	3680
D (DIRECTIONAL DISTR.)	50 / 50
HEAVY COMMERCIAL	9.34%
ESALS	1,139,000
DESIGN SPEED	55 MPH
BASED ON SIGHT DISTANCE	STOPPING
HEIGHT OF EYE / HEIGHT OF OBJECT	3.5'/2.0'
FUNCTIONAL CLASS	MINOR ARTERIAL
NO. OF TRAFFIC LANES	2
NO. OF PARKING LANES	NA
SHOULDER WIDTH	8'
TON DESIGN	10
DESIGN SPEED NOT ACHIEVED AT	NA

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST EDITION OF THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

INDEX

THIS PLAN CONTAINS 169 SHEETS.

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN 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.

wsb

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

PRINTED NAME: AUSTIN J. FROSIG, PE
LICENSE NO. 61652

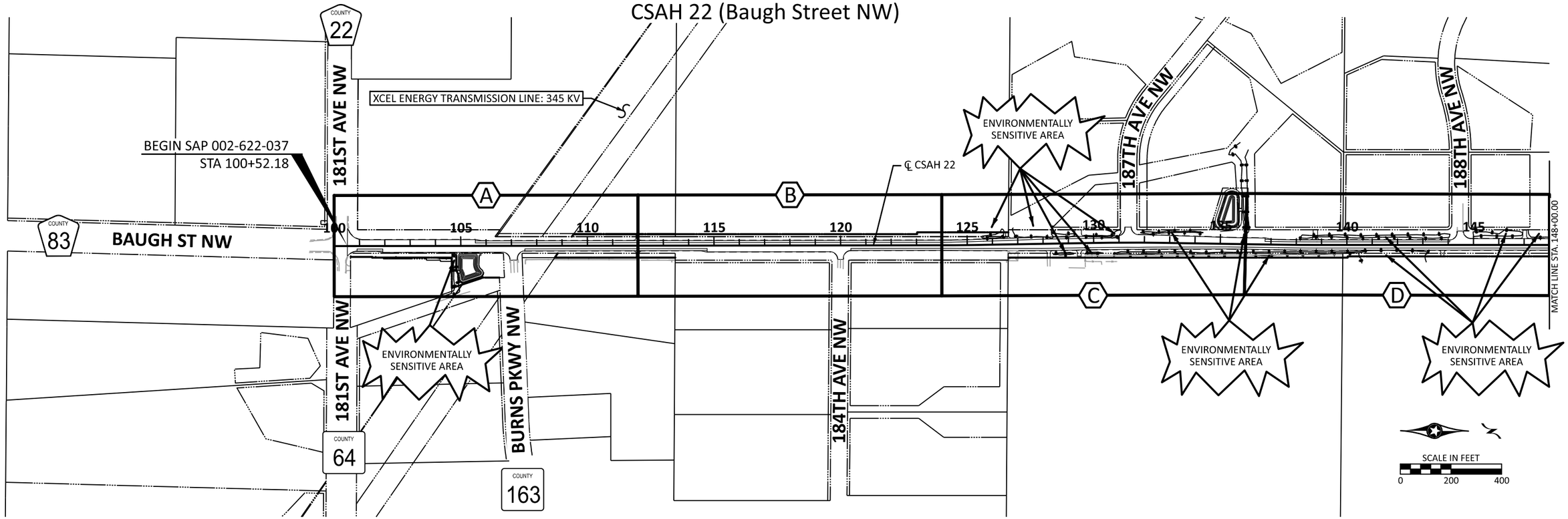
Digitally signed by Austin Frosig, PE
DN: C=US, E=afrosig@wsbeng.com, O=WSB LLC, CN="Austin Frosig, PE"
Date: 2025.11.04 12:59:01-06'00'

APPROVED: NOWTHEN CITY ENGINEER	Digitally signed by Shane Nelson Date: 2025.11.20 11:26:07 -06'00'
APPROVED: ANOKA COUNTY ENGINEER	Joe MacPherson Digitally signed by Joe MacPherson Date: 2025.11.20 10:10:23 -06'00'
DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY	Lucas Lortie Digitally signed by Lucas Lortie Date: 2025.11.21 10:28:09 -06'00'
STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING	Lucas Lortie Digitally signed by Lucas Lortie Date: 2025.11.21 10:28:22 -06'00'

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-100tsh-001 PLOTTED/REVISED: 11/4/2025

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-105gel-001
PLOTTED/REVISED: 11/4/2025 12:39:17 PM



PLAN SHEET INDEX PER SECTION

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SIGNING PLAN	112		113	
PAVEMENT MARKING PLAN	122		123	
EROSION CONTROL AND TURF ESTABLISHMENT	134		135	

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 148+00
GENERAL LAYOUT

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-105gel-001
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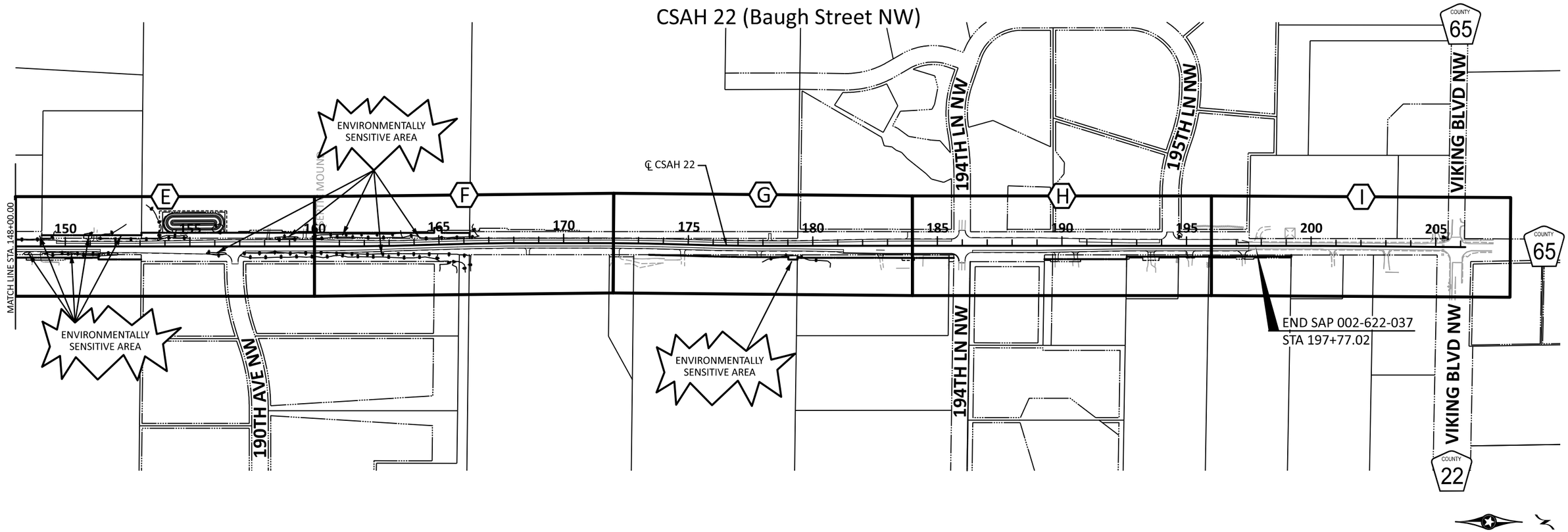

PLAN SHEET INDEX PER SECTION

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SIGNING PLAN	114		115		116
PAVEMENT MARKING PLAN	124		125		126
EROSION CONTROL AND TURF ESTABLISHMENT	136		137		138

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 197+77.02
GENERAL LAYOUT

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000-110est-001 PLOTTED/REVISED: 12/18/2025 2:02:36 PM

STATEMENT OF ESTIMATED QUANTITIES

TAB ID	SHEET NO.	ITEM	DESCRIPTION	NOTES	UNIT	PROJECT TOTAL	ANOKA COUNTY SAP 002-622-037	STORM SEWER 56% SAP 002-622-037 44% NOWTHEN (LOCAL)	NOWTHEN (LOCAL)
						ESTIMATED QUANTITY	ESTIMATED QUANTITY	ESTIMATED QUANTITY	ESTIMATED QUANTITY
		2021.501	MOBILIZATION		LUMP SUM	1	0.98	0.02	
		2031.502	FIELD OFFICE		EACH	1	1		
A	6R	2101.502	CLEARING	(1)(2)	EACH	79	79		
A	6R	2101.502	GRUBBING	(1)	EACH	79	79		
A	6R	2101.505	CLEARING	(1)(2)	ACRE	1.7	1.7		
A	6R	2101.505	GRUBBING	(1)	ACRE	1.7	1.7		
M	110	2104.502	REMOVE DELINEATOR / MARKER		EACH	11	11		
M	110	2104.502	REMOVE SIGN		EACH	30	30		
G	8	2104.502	SALVAGE VEHICULAR GATE		EACH	1	1		
M	110	2104.502	SALVAGE SIGN		EACH	1	1		
2 A	6R	2104.502	SALVAGE MAIL BOX SUPPORT	(9)	EACH	12	12		
A	6R	2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)		LIN FT	33	33		
A	6R	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	(3)	LIN FT	453	453		
A	6R	2104.503	REMOVE PIPE CULVERTS	(11)	LIN FT	1784	1784		
A	6R	2104.503	REMOVE CURB & GUTTER		LIN FT	27	27		
A	6R	2104.503	REMOVE FENCE		LIN FT	1981	1981		
A	6R	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SQ YD	124	124		
A	6R	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT		SQ YD	306	306		
A	6R	2104.504	REMOVE BITUMINOUS PAVEMENT	(3)	SQ YD	29799	29799		
A	6R	2104.507	REMOVE RIPRAP		CU YD	11	11		
N	111	2104.602	SALVAGE SIGN SPECIAL		EACH	7	7		
2 H	9 - 10	2106.507	EXCAVATION - COMMON		CU YD	31365	31365		
H	9 - 10	2106.507	EXCAVATION - MUCK		CU YD	1408	1408		
H	9 - 10	2106.507	EXCAVATION - SUBGRADE	(P)	CU YD	19079	19079		
H	10	2106.507	EXCAVATION - CHANNEL AND POND	(P)	CU YD	2947	2947		
2 H	9 - 10	2106.507	SELECT GRANULAR EMBANKMENT (CV)		CU YD	23485	23485		
2 H	9 - 10	2106.507	COMMON EMBANKMENT (CV)		CU YD	13692	13692		
		2106.601	DEWATERING		LUMP SUM	1	1		
B	7	2108.504	GEOGRID TYPE 1	(10)	SQ YD	18694	18694		
B	7	2108.504	GEOTEXTILE FABRIC TYPE 7	(10)	SQ YD	67195	67195		
		2123.610	STREET SWEEPER (WITH PICKUP BROOM)	(6)	HOUR	80	80		
		2123.610	1.5 CU YD BACKHOE	(7)	HOUR	80	80		
		2130.523	WATER	(5)	M GALLON	100	100		
B	7	2211.507	AGGREGATE BASE (CV) CLASS 5		CU YD	14768	14768		
C	7	2211.507	AGGREGATE BASE (CV) CLASS 5 (DRIVEWAY)		CU YD	252	252		
H	9 - 10	2211.507	AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION)		CU YD	1408	1408		
B	7	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	5050	5050		
C	7	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C)		TON	36	36		
B	7	2360.509	TYPE SP 12.5 NON WEAR COURSE MIX (3,B)		TON	5696	5696		
B	7	2360.509	TYPE SP 12.5 WEARING COURSE MIX (4,C)		TON	11388	11388		
K	105R1	2451.507	FINE AGGREGATE BEDDING (CV)		CU YD	1148	1148		
K	105R1	2501.502	15" RC PIPE APRON		EACH	4	4		
K	105R1	2501.502	18" RC PIPE APRON		EACH	10	10		
1 K	105R1	2501.502	24" RC PIPE APRON		EACH	2	2		
K	105R1	2501.502	36" RC PIPE APRON		EACH	2	2		
K	105R1	2501.502	15" GS SAFETY APRON		EACH	48	48		
K	105R1	2501.502	15" RC SAFETY APRON		EACH	8	7	1	
K	105R1	2501.502	18" RC SAFETY APRON		EACH	10	9	1	
K	105R1	2501.502	24" RC SAFETY APRON		EACH	16	14	2	
K	105R1	2501.503	15" CP PIPE CULVERT		LIN FT	841	841		
K	105R1	2501.503	15" RC PIPE CULVERT DES 3006 CL V		LIN FT	226	226		
K	105R1	2501.503	18" RC PIPE CULVERT DES 3006 CL V		LIN FT	740	740		
K	105R1	2501.503	24" RC PIPE CULVERT DES 3006		LIN FT	455	455		
K	105R1	2501.503	24" RC PIPE CULVERT DES 3006 CL V		LIN FT	53	53		
K	105R1	2501.503	36" RC PIPE CULVERT DES 3006		LIN FT	105	105		
F	8	2502.502	4" PRECAST CONCRETE HEADWALL		EACH	29	29		
F	8	2502.503	4" PVC PIPE DRAIN		LIN FT	1408	1408		
F	8	2502.503	4" PERF PE PIPE DRAIN	(12)	LIN FT	18258	18258		

NOTES:

(1) NO TREES SHALL BE CLEARED OR GRUBBED WITHOUT THE ENGINEER'S APPROVAL.
(2) LIMBING OF TREES 7' UP FROM GROUND IS INCIDENTAL TO CLEARING.
(3) DEPTH VARIES, 5"-7" ON CSAH 22.
(4) ALL LOGS SHALL BE STAKED.
(5) WATER TO BE USED FOR DUST CONTROL AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL WATER USED FOR COMPACTION IS INCIDENTAL.
(6) TO BE USED AS APPROVED BY THE ENGINEER.
(7) TO BE USED AS APPROVED BY THE ENGINEER FOR MINOR DITCH CLEANING.
(8) SEE TABULATION FOR COLOR.
(9) SALVAGE OF EXISTING MAIL BOX AND/OR NEWSPAPER TUBE IS INCIDENTAL.
(10) TO BE USED IN AREAS IDENTIFIED ON THE CONSTRUCTION PLAN AND AS APPROVED BY THE ENGINEER.
(11) INCLUDES LENGTH OF PIPE APRONS
(12) WITH GEOTEXTILE WRAP, 3733, TYPE 1
(13) HIGH EARLY
(14) SEE SHEET 21 FOR DETAILS.
(15) INSTALLATION OF EXISTING MAIL BOX AND/OR NEWSPAPER TUBE IS INCIDENTAL.
(16) SEE NOWTHEN STANDARD PLATE 701 ON SHEET 12
(17) SEE DETAILS ON SHEET 18 .
(P) PLAN QUANTITY

NO	DATE	DWN	CKD	REVISIONS
1	12/10/2025	JB	AJF	24" RC PIPE APRONS ADDED
2	12/19/2025	JB	AJF	REMOVE PLAN QUANTITY, MAIL BOX SUPPORTS

DRAWN BY: AJF
DESIGNED BY: AJF
CHECKED BY: NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STATEMENT OF ESTIMATED QUANTITIES

SAP 002-622-037

STATEMENT OF ESTIMATED QUANTITIES

TAB ID	SHEET NO.	ITEM	DESCRIPTION	NOTES	UNIT	PROJECT TOTAL	ANOKA COUNTY SAP 002-622-037	STORM SEWER 56% SAP 002-622-037 44% NOWTHEN (LOCAL)	NOWTHEN (LOCAL)
						ESTIMATED QUANTITY	ESTIMATED QUANTITY	ESTIMATED QUANTITY	ESTIMATED QUANTITY
K	105R1	2503.503	12" RC PIPE SEWER DES 3006 CL V		LIN FT	9		9	
K	105R1	2503.503	15" RC PIPE SEWER DES 3006 CL V		LIN FT	17		17	
K	105R1	2503.503	18" RC PIPE SEWER DES 3006 CL V		LIN FT	31		31	
K	105R1	2503.503	24" RC PIPE SEWER DES 3006 CL V		LIN FT	595		595	
F	8	2506.502	CONST DRAINAGE STRUCTURE DESIGN SPECIAL	(17)	EACH	21	21		
K	105R1	2506.502	CASTING ASSEMBLY		EACH	5		5	
K	105R1	2506.503	CONST DRAINAGE STRUCTURE DESIGN H		LIN FT	8.2		8.2	
K	105R1	2506.503	CONST DRAINAGE STRUCTURE DES 48-4020		LIN FT	14.8		14.8	
K	105R1	2511.504	GEOTEXTILE FILTER TYPE 4		SQ YD	758	699	59	
K	105R1	2511.507	RANDOM RIPRAP CLASS III		CU YD	269	254	15	
D	7	2531.503	SURMOUNTABLE CONCRETE CURB & GUTTER	(16)	LIN FT	10	5		5
D	7	2531.503	CONCRETE CURB & GUTTER DESIGN B424		LIN FT	470	235		235
C	7	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	(13)	SQ YD	100	100		
1		2540.602	INSTALL MAIL BOX SUPPORT	(14)(15)	EACH	12	12		
F, K	8 , 105R1	2554.502	GUIDE POST TYPE B		EACH	79	75	4	
G	8	2557.602	INSTALL VEHICULAR GATE		EACH	1	1		
G	8	2557.603	WOODEN FENCE		LIN FT	315	315		
G	8	2557.603	BARBED WIRE FENCE		LIN FT	1531	1531		
		2563.601	TRAFFIC CONTROL		LUMP SUM	1	0.98	0.02	
		2563.613	PORTABLE CHANGEABLE MESSAGE SIGN		UNIT DAY	100	100		
M	110	2564.602	INSTALL SIGN		EACH	1	1		
N	111	2564.602	INSTALL SIGN SPECIAL		EACH	7	7		
M	110	2564.602	DELINEATOR / MARKER PANEL		EACH	11	11		
M	110	2564.618	SIGN		SQ FT	349	349		
		2573.501	STABILIZED CONSTRUCTION EXIT		LUMP SUM	1	0.98	0.02	
E	8	2573.502	STORM DRAIN INLET PROTECTION		EACH	5	5		
E	8	2573.502	CULVERT END CONTROLS		EACH	49	49		
E	8	2573.503	SILT FENCE, TYPE MS		LIN FT	5977	5977		
E	8	2573.503	SEDIMENT CONTROL LOG TYPE COMPOST	(4)	LIN FT	3999	3999		
E	8	2574.505	SUBSOILING		ACRE	5.6	5.6		
E	8	2574.505	SOIL BED PREPARATION		ACRE	10.6	10.6		
K	105R1	2574.507	COMPOST GRADE 2		CU YD	54	54		
E	8	2574.508	FERTILIZER TYPE 3		POUND	1981	1981		
E	8	2574.508	FERTILIZER TYPE 4		POUND	564	564		
1	107R	2574.601	INFILTRATION TESTING		LUMP SUM	1	1		
E	8	2575.504	RAPID STABILIZATION METHOD 4		SQ YD	22563	22563		
E	8	2575.504	ROLLED EROSION PREVENTION CATEGORY 20		SQ YD	17946	17946		
E	8	2575.504	ROLLED EROSION PREVENTION CATEGORY 25		SQ YD	4619	4619		
E	8	2575.505	SEEDING		ACRE	10.6	10.6		
E	8	2575.508	HYDRAULIC REINFORCED FIBER MATRIX		POUND	22029	22029		
E	8	2575.523	RAPID STABILIZATION METHOD 3		M GALLON	39	39		
E	8	2575.608	SEED TURFGRASS		POUND	419	419		
E	8	2575.608	SEED MESIC INSLOPE		POUND	236	236		
E	8	2575.608	SEED SOUTHERN SHORTGRASS ROADSIDE		POUND	100	100		
E	8	2575.608	SEED SOUTHERN TALLGRASS ROADSIDE		POUND	26	26		
O	121	2580.503	INTERIM PAVEMENT MARKING		LIN FT	7208	7208		
O	121	2580.603	PAVEMENT MARKING - LATE SEASON	(8)	LIN FT	41843	41843		
O	121	2582.503	24" SOLID LINE PREF THERMO GR IN	(8)	LIN FT	372	372		
O	121	2582.518	PAVT MSSG PREF THERMO		SQ FT	188	188		

NOTES:

(1) NO TREES SHALL BE CLEARED OR GRUBBED WITHOUT THE ENGINEER'S APPROVAL.
(2) LIMBING OF TREES 7' UP FROM GROUND IS INCIDENTAL TO CLEARING.
(3) DEPTH VARIES, 5"-7" ON CSAH 22.
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(14) SEE SHEET 21 FOR DETAILS.
(15) INSTALLATION OF EXISTING MAIL BOX AND/OR NEWSPAPER TUBE IS INCIDENTAL.
(16) SEE NOWTHEN STANDARD PLATE 701 ON SHEET 12
(17) SEE DETAILS ON SHEET 18 .
(P) PLAN QUANTITY

NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	INFILTRATION TESTING, MAIL BOX INSTALL

DRAWN BY: AJF
DESIGNED BY: AJF
CHECKED BY: NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STATEMENT OF ESTIMATED QUANTITIES

SAP 002-622-037

REMOVALS TABULATION

A

LOCATION	CLEARING (1)(2)	GRUBBING (1)	CLEARING (1)(2)	GRUBBING (1)	SAWING CONC PAVEMENT (FULL DEPTH)	SAWING BIT PAVEMENT (FULL DEPTH) (3)	REMOVE							REMOVE
							PIPE CULVERTS (4)	CURB & GUTTER	FENCE	BITUMINOUS PAVEMENT (3)	CONCRETE DRIVEWAY PAVEMENT	BITUMINOUS DRIVEWAY PAVEMENT	SALVAGE MAIL BOX SUPPORT 1	RIPRAP
	EACH	EACH	ACRE	ACRE	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	SQ YD	SQ YD	SQ YD	EACH	CU YD
FUNDING GROUP:	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
CSAH 22 (BAUGH STREET NW)														
STA 100+52.18 TO STA 112+00	5	5	0.2	0.2		138	233		422	4315				
STA 112+00 TO STA 124+00	19	19	0.1	0.1		47	41			3417				
STA 124+00 TO STA 136+00	15	15	0.1	0.1		24	293		667	4256			1	6
STA 136+00 TO STA 148+00	4	4	0.3	0.3		48	354	27	397	3482				
STA 148+00 TO STA 160+00	19	19	0.1	0.1		25	278			3511			3	
STA 160+00 TO STA 172+00	1	1	0.2	0.2			105		25	3273			1	
STA 172+00 TO STA 184+00	1	1	0.3	0.3			173			3272			3	
STA 184+00 TO STA 196+00	14	14	0.4	0.4	33	133	246		154	3852	124	233	3	5
STA 196+00 TO STA 197+77.02	1	1				38	61		316	421		73	1	
SAP 002-622-037 SUBTOTAL	**79**	**79**	**1.7**	**1.7**	**33**	**453**	**1784**	**27**	**1981**	**29799**	**124**	**306**	**12**	**11**
NOWTHEN SUBTOTAL														
PROJECT TOTAL	**79**	**79**	**1.7**	**1.7**	**33**	**453**	**1784**	**27**	**1981**	**29799**	**124**	**306**	**12**	**11**

GENERAL NOTES:

- SAWCUTTING FOR CONCRETE CURB & GUTTER, CONCRETE WALK, AND BITUMINOUS WALK SHALL BE INCIDENTAL.
- ALL REMOVAL ITEMS SHALL BE DISPOSED OF OFF THE PROJECT SITE IN ACCORDANCE WITH THE SPECIFICATIONS, INCIDENTAL.

NOTES:

(1) NO TREES SHALL BE CLEARED OR GRUBBED WITHOUT THE ENGINEER'S APPROVAL.
(2) LIMBING OF TREES 7' UP FROM GROUND IS INCIDENTAL TO CLEARING.
(3) DEPTH VARIES, 5"-7" ON CSAH 22.
(4) INCLUDES LENGTH OF PIPE APRONS

FUNDING GROUPS:
(A) 100% SAP 002-622-037
(B) 50% SAP 002-622-037, 50% NOWTHEN

NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-130tab-001
PLOTTED/REVISED: 12/18/2025 1:49:37 PM

DRAWN BY: AJF
DESIGNED BY: AJF
CHECKED BY: NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

QUANTITY TABULATIONS

SAP 002-622-037

BITUMINOUS & AGGREGATE TABULATION — B

LOCATION	GEOGRID TYPE 1	GEOTEXTILE FABRIC TYPE 7	AGGREGATE BASE (CV) CLASS 5 (5)	BITUMINOUS MATERIAL FOR TACK COAT	TYPE SP 12.5 NON WEAR COURSE MIXTURE (3,B)	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)
	SQ YD	SQ YD	CU YD	GALLON	TON	TON
FUNDING GROUP:	(A)	(A)	(A)	(A)	(A)	(A)
CSAH 22 (BAUGH STREET NW)						
STA 100+52.18 TO STA 112+00		7941	1750	595	670	1340
STA 112+00 TO STA 124+00		7885	1727	575	650	1300
STA 124+00 TO STA 136+00	7797	8921	1958	680	768	1535
STA 136+00 TO STA 148+00	1574	7831	1716	570	645	1289
STA 148+00 TO STA 160+00		8763	1928	670	753	1505
STA 160+00 TO STA 172+00	5930	7815	1690	560	632	1264
STA 172+00 TO STA 184+00	3393	7955	1728	590	665	1329
STA 184+00 TO STA 196+00		9108	2058	740	834	1668
STA 196+00 TO STA 197+77.02		976	213	70	79	158
SAP 002-622-037 SUBTOTAL	**18694**	**67195**	**14768**	**5050**	**5696**	**11388**
NOWTHEN SUBTOTAL						
PROJECT TOTAL	**18694**	**67195**	**14768**	**5050**	**5696**	**11388**

NOTES:
(5) INCLUDES AGGREGATE UNDER BITUMINOUS PAVEMENT,UNDER CURB & GUTTER, AND PI SURFACING

BASIS OF QUANTITIES:
- BITUMINOUS DENSITY: 113 LB/SY/IN
- TACK COAT BETWEEN BITUMINOUS LIFTS SHALL CONFORM WITH MNDOT SPECIFICATIONS.

CONCRETE TABULATION — D

LOCATION	CONCRETE CURB & GUTTER DESIGN B424	SURMOUNTABLE CONCRETE CURB AND GUTTER (7)
	OUTSIDE	OUTSIDE
	LIN FT	LIN FT
FUNDING GROUP:	(B)	(B)
CSAH 22 (BAUGH STREET NW)		
STA 100+52.18 TO STA 112+00		
STA 112+00 TO STA 124+00		
STA 124+00 TO STA 136+00		
STA 136+00 TO STA 148+00		10
STA 148+00 TO STA 160+00		
STA 160+00 TO STA 172+00		
STA 172+00 TO STA 184+00	271	
STA 184+00 TO STA 196+00	199	
STA 196+00 TO STA 197+77.02		
50% SAP 002-622-037, 50% NOWTHEN SUBTOTAL	470	10
PROJECT TOTAL	470	10

NOTES:
(7) SEE CITY OF NOWTHEN STANDARD PLATE NO. 701 FOR DETAILS.

DRIVEWAY TABULATION — C

PARCEL NO.	ALIGNMENT	STATION	SIDE	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	6" CONCRETE DRIVEWAY PAVEMENT (6)	AGGREGATE BASE (CV) CLASS 5 (DRIVEWAY)
				TON	SQ YD	CU YD
		FUNDING GROUP:		(A)	(A)	(A)
2	CSAH 22	111+97	LT			5
3	CSAH 22	126+59	LT			6
4	CSAH 22	129+39	LT			14
5	CSAH 22	138+75	LT			14
7	CSAH 22	147+02	LT			10
8	CSAH 22	151+20	LT			7
9	CSAH 22	158+16	LT			6
	CSAH 22	159+61	LT			7
10	CSAH 22	178+59	LT			7
11	CSAH 22	183+89	LT			10
23	CSAH 22	197+29	RT	13		12
24	CSAH 22	195+15	RT	16		14
25	CSAH 22	193+56	RT	4	40	17
26	CSAH 22	189+79	RT			9
	CSAH 22	190+58	RT	3	44	8
28	CSAH 22	182+73	RT		16	6
29	CSAH 22	174+79	RT			8
	CSAH 22	177+85	RT			8
30	CSAH 22	172+11	RT			18
31	CSAH 22	168+56	RT			7
35	CSAH 22	143+77	RT			6
	CSAH 22	147+11	RT			9
	CSAH 22	148+88	RT			22
36	CSAH 22	128+21	RT			7
	CSAH 22	129+42	RT			8
39	CSAH 22	111+99	RT			7
		SAP 002-622-037 TOTAL		**36**	**100**	**252**

NOTES:
(6) HIGH EARLY

BASIS OF QUANTITIES:
- BITUMINOUS DENSITY: 113 LB/SY/IN

FUNDING GROUPS:
(A) 100% SAP 002-622-037
(B) 50% SAP 002-622-037, 50% NOWTHEN

DRAWN BY: AJF DESIGNED BY: AJF CHECKED BY: NEH	I HEREBY CERTIFY THAT THIS SHEET 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. SIGNATURE: Austin J. Frosig PRINTED NAME: AUSTIN J. FROSIG, PE DATE: 11/4/2025 LIC. NO. 61652	wsb	ANOKA COUNTY	**CSAH 22 (Baugh Street NW) Reconstruction**	QUANTITY TABULATIONS	SAP 002-622-037 Sheet No. 7 of 138 Sheets

EROSION CONTROL & TURF ESTABLISHMENT TABULATION — E

LOCATION	STORM DRAIN INLET PROTECTION	CULVERT END CONTROLS	SILT FENCE, TYPE MS	SEDIMENT CONTROL LOG TYPE COMPOST	SUBSOILING	SOIL BED PREPARATION	FERTILIZER		ROLLED EROSION PREVENTION PRODUCT		SEEDING	SEED				WEED SPRAYING	WEED SPRAY MIXTURE	HYDRAULIC REINFORCED FIBER MATRIX	RAPID STABILIZATION METHOD 3	RAPID STABILIZATION METHOD 4
							TYPE 3	TYPE 4	CATEGORY 20	CATEGORY 25		TURFGRASS	MESIC INSLOPE	SOUTHERN SHORTGRASS	SOUTHERN TALL GRASS					
	EACH	EACH	LIN FT	LIN FT	ACRE	ACRE	POUND	POUND	SQ YD	SQ YD	ACRE	POUND	POUND	POUND	POUND	ACRE	GALLON	POUND	MGAL	SQ YD
FUNDING GROUP:	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
CSAH 22 (BAUGH STREET NW)																				
STA 100+52.18 TO STA 112+00	1	5	405	327	0.8	1.5	218	102	2678	1411	1.5		41		8	0.8	0.1	2426	4	4089
STA 112+00 TO STA 124+00		3	1195		0.6	1.1	221	54	2167		1.1		41	15		0.6	0.1	2455	4	2167
STA 124+00 TO STA 136+00		9	231	811	0.7	1.4	192	100	2721	1292	1.4	35	25	12	7	0.7	0.1	2135	4	4012
STA 136+00 TO STA 148+00		7	675	1347	0.7	1.3	207	78	3130		1.3	30	29	15		0.7	0.1	2303	4	3130
STA 148+00 TO STA 160+00		9	1177	489	0.8	1.6	249	99	2066	1916	1.6	97	15	17	11	0.8	0.1	2770	5	3981
STA 160+00 TO STA 172+00		2	716	356	0.7	1.3	236	76	3030		1.3	22	37	12		0.7	0.1	2624	5	3030
STA 172+00 TO STA 184+00	1	4	840	223	0.6	1.1	248	43	1724		1.1	86	19	17		0.6	0.1	2758	5	1724
STA 184+00 TO STA 196+00	3	9	738	297	0.6	1.1	353	9	344		1.1	129	24	10		0.6	0.1	3930	7	344
STA 196+00 TO STA 197+77.02		1		149	0.1	0.2	57	3	86		0.2	20	5	2		0.1	0.1	628	1	86
SAP 002-622-037 SUBTOTAL	5	49	5977	3999	5.6	10.6	1981	564	17946	4619	10.6	419	236	100	26	5.6	0.9	22029	39	22563
NOWTHEN SUBTOTAL																				
PROJECT TOTAL	5	49	5977	3999	5.6	10.6	1981	564	17946	4619	10.6	419	236	100	26	5.6	0.9	22029	39	22563

NOTES:

- SEE SHEET 133 FOR BASIS OF QUANTITIES.

SUBSURFACE DRAIN — F

LOCATION	4" PERF PE PIPE DRAIN (9)(10)	4" PVC PIPE DRAIN (10)	4" PRECAST CONCRETE HEADWALL		CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL	GUIDE POST TYPE B
			SINGLE DISCHARGE	3-WAY DISCHARGE		
	LIN FT	LIN FT	EACH		EACH	EACH
FUNDING GROUP:	(A)	(A)	(A)		(A)	(A)
CSAH 22 (BAUGH STREET NW)						
STA 100+52.18 TO STA 112+00	2045	140	3	1	3	4
STA 112+00 TO STA 124+00	2319	190		1	5	1
STA 124+00 TO STA 136+00	2244	175	6		2	6
STA 136+00 TO STA 148+00	2273	145	4		2	4
STA 148+00 TO STA 160+00	2277	211	4	1	3	5
STA 160+00 TO STA 172+00	2369		6			6
STA 172+00 TO STA 184+00	2381	105		1	3	1
STA 184+00 TO STA 196+00	2142	442		2	3	2
STA 196+00 TO STA 197+77.02	208					0
SAP 002-622-037 SUBTOTAL	**18258**	**1408**	**23**	**6**	**21**	**29**
NOWTHEN SUBTOTAL						
PROJECT TOTAL	**18258**	**1408**	**29**		**21**	**29**

NOTES:

(9) WITH GEOTEXTILE WRAP TYPE 1

(10) FINE FILTER AGGREGATE IS INCIDENTAL, SEE DETAILS ON PAGE 20 .

FENCE TABULATION — G

LOCATION			WOODEN FENCE	SALVAGE & INSTALL VEHICULAR GATE	BARBED WIRE FENCE
			LIN FT	EACH	LIN FT
FUNDING GROUP:			(A)	(A)	(A)
STA 100+65 43'RT	TO	STA 103+43 43'RT			278
STA 103+43 43'RT	TO	STA 104+23 51'RT			81
STA 104+23 51' RT	TO	STA 104+63 51'RT			40
STA 104+63 51'RT	TO	STA 104+63 61'RT			10
STA 129+65 57'RT	TO	STA 139+84 50' RT			1019
STA 184+43 49'RT	TO	STA 185+45 49'RT			103
STA 195+95 48'RT	TO	STA 195+97 44'RT	6		
STA 195+97 44'RT	TO	STA 197+20 44' RT	125		
STA 197+20 44' RT	TO	STA 197+35 44' RT		1	
STA 197+35 44' RT	TO	STA 199+19 44'RT	184		
SAP 002-622-037 TOTAL			**315**	**1**	**1531**

FUNDING GROUPS:
(A) 100% SAP 002-622-037
(B) 50% SAP 002-622-037, 50% NOWTHEN

DRAWN BY: AJF	I HEREBY CERTIFY THAT THIS SHEET 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.	SIGNATURE:	wsb	CSAH 22 (Baugh Street NW) Reconstruction	SAP 002-622-037
DESIGNED BY: AJF		PRINTED NAME: AUSTIN J. FROSIG, PE		QUANTITY TABULATIONS	
CHECKED BY: NEH		DATE: 11/4/2025 LIC. NO. 61652	ANOKA COUNTY		Sheet No. 8 of 138 Sheets

EARTHWORK TABULATION — H

STATION	EXCAVATION COMMON (CU YD)	EXCAVATION SUBGRADE (CU YD)	EXCAVATION MUCK (CU YD)	EMBANKMENT COMMON (CU YD)	EMBANKMENT SELECT GRANULAR (CV) (CU YD)	EMBANKMENT AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION) (CU YD)
CSAH-22						
100+50.00 R1 TO 101+00.000 R1	217	102		37	102	
101+00.000 R1 TO 101+50.000 R1	170	107		35	107	
101+50.000 R1 TO 102+00.000 R1	167	108		37	111	
102+00.000 R1 TO 102+50.000 R1	172	107		64	116	
102+50.000 R1 TO 103+00.000 R1	170	105		73	116	
103+00.000 R1 TO 103+50.000 R1	183	108		66	116	
103+50.000 R1 TO 104+00.000 R1	191	107		65	116	
104+00.000 R1 TO 104+50.000 R1	197	104		77	116	
104+50.000 R1 TO 105+00.000 R1	192	112		58	116	
105+00.000 R1 TO 105+50.000 R1	173	104		59	116	
105+50.000 R1 TO 106+00.000 R1	132	95		55	109	
106+00.000 R1 TO 106+50.000 R1	121	86		51	106	
106+50.000 R1 TO 107+00.000 R1	127	95		38	109	
107+00.000 R1 TO 107+50.000 R1	165	125		28	129	
107+50.000 R1 TO 108+00.000 R1	139	93		45	100	
108+00.000 R1 TO 108+50.000 R1	135	87		44	97	
108+50.000 R1 TO 109+00.000 R1	145	88		44	97	
109+00.000 R1 TO 109+50.000 R1	130	82		44	97	
109+50.000 R1 TO 110+00.000 R1	126	80		43	97	
110+00.000 R1 TO 110+50.000 R1	125	81		42	97	
110+50.000 R1 TO 111+00.000 R1	113	84		42	97	
111+00.000 R1 TO 111+50.000 R1	119	84		43	97	
111+50.000 R1 TO 112+00.000 R1	144	90		42	97	
112+00.000 R1 TO 112+50.000 R1	134	89		41	97	
112+50.000 R1 TO 113+00.000 R1	94	78		48	97	
113+00.000 R1 TO 113+50.000 R1	98	80		43	97	
113+50.000 R1 TO 114+00.000 R1	102	81		43	97	
114+00.000 R1 TO 114+50.000 R1	123	84		43	97	
114+50.000 R1 TO 115+00.000 R1	136	83		49	104	
115+00.000 R1 TO 115+50.000 R1	136	84		52	106	
115+50.000 R1 TO 116+00.000 R1	127	88		51	106	
116+00.000 R1 TO 116+50.000 R1	104	88		46	106	
116+50.000 R1 TO 117+00.000 R1	85	85		39	106	
117+00.000 R1 TO 117+50.000 R1	110	86		42	106	
117+50.000 R1 TO 118+00.000 R1	134	88		45	106	
118+00.000 R1 TO 118+50.000 R1	133	89		44	106	
118+50.000 R1 TO 119+00.000 R1	127	88		43	106	
119+00.000 R1 TO 119+50.000 R1	115	88		39	106	
119+50.000 R1 TO 120+00.000 R1	145	109		26	118	
120+00.000 R1 TO 120+50.000 R1	150	106		23	118	
120+50.000 R1 TO 121+00.000 R1	136	85		42	98	
121+00.000 R1 TO 121+50.000 R1	136	84		48	97	
121+50.000 R1 TO 122+00.000 R1	164	73		56	97	
122+00.000 R1 TO 122+50.000 R1	164	83		56	97	
122+50.000 R1 TO 123+00.000 R1	140	80		50	97	
123+00.000 R1 TO 123+50.000 R1	121	85		44	97	
123+50.000 R1 TO 124+00.000 R1	118	81		48	97	
124+00.000 R1 TO 124+50.000 R1	158	85		63	97	
124+50.000 R1 TO 125+00.000 R1	118	81		71	100	
125+00.000 R1 TO 125+50.000 R1	101	73		79	103	
125+50.000 R1 TO 126+00.000 R1	131	78	146	94	106	146
126+00.000 R1 TO 126+50.000 R1	133	80	167	79	110	167
126+50.000 R1 TO 127+00.000 R1	153	95	130	73	113	130

EARTHWORK TABULATION — H

STATION	EXCAVATION COMMON (CU YD)	EXCAVATION SUBGRADE (CU YD)	EXCAVATION MUCK (CU YD)	EMBANKMENT COMMON (CU YD)	EMBANKMENT SELECT GRANULAR (CV) (CU YD)	EMBANKMENT AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION) (CU YD)
127+00.000 R1 TO 127+50.000 R1	121	79	86	119	116	86
127+50.000 R1 TO 128+00.000 R1	130	83	109	99	120	109
128+00.000 R1 TO 128+50.000 R1	199	88	128	80	121	128
128+50.000 R1 TO 129+00.000 R1	122	84	147	66	121	147
129+00.000 R1 TO 129+50.000 R1	184	103	110	45	121	110
129+50.000 R1 TO 130+00.000 R1	161	86	59	52	121	59
130+00.000 R1 TO 130+50.000 R1	121	61	61	56	121	61
130+50.000 R1 TO 131+00.000 R1	162	84	68	58	124	68
131+00.000 R1 TO 131+50.000 R1	170	157		21	159	
131+50.000 R1 TO 132+00.000 R1	157	117	117	34	131	117
132+00.000 R1 TO 132+50.000 R1	153	106	65	41	128	65
132+50.000 R1 TO 133+00.000 R1	158	108	15	37	124	15
133+00.000 R1 TO 133+50.000 R1	174	112		36	121	
133+50.000 R1 TO 134+00.000 R1	200	116		35	118	
134+00.000 R1 TO 134+50.000 R1	248	114		47	114	
134+50.000 R1 TO 135+00.000 R1	257	111		48	111	
135+00.000 R1 TO 135+50.000 R1	262	108		42	108	
135+50.000 R1 TO 136+00.000 R1	268	107		41	107	
136+00.000 R1 TO 136+50.000 R1	256	102		56	107	
136+50.000 R1 TO 137+00.000 R1	251	85		80	105	
137+00.000 R1 TO 137+50.000 R1	213	88		80	97	
137+50.000 R1 TO 138+00.000 R1	254	92		73	97	
138+00.000 R1 TO 138+50.000 R1	248	95		65	97	
138+50.000 R1 TO 139+00.000 R1	195	93		68	97	
139+00.000 R1 TO 139+50.000 R1	180	90		69	97	
139+50.000 R1 TO 140+00.000 R1	183	89		68	97	
140+00.000 R1 TO 140+50.000 R1	182	85		68	97	
140+50.000 R1 TO 141+00.000 R1	144	82		70	97	
141+00.000 R1 TO 141+50.000 R1	94	69		77	97	
141+50.000 R1 TO 142+00.000 R1	90	70		101	97	
142+00.000 R1 TO 142+50.000 R1	94	73		95	97	
142+50.000 R1 TO 143+00.000 R1	100	76		104	97	
143+00.000 R1 TO 143+50.000 R1	95	79		97	97	
143+50.000 R1 TO 144+00.000 R1	119	83		83	98	
144+00.000 R1 TO 144+50.000 R1	174	107		41	123	
144+50.000 R1 TO 145+00.000 R1	152	103		40	117	
145+00.000 R1 TO 145+50.000 R1	101	72		82	107	
145+50.000 R1 TO 146+00.000 R1	99	80		85	107	
146+00.000 R1 TO 146+50.000 R1	135	84		82	107	
146+50.000 R1 TO 147+00.000 R1	200	93		66	107	
147+00.000 R1 TO 147+50.000 R1	217	93		70	107	
147+50.000 R1 TO 148+00.000 R1	124	86		86	107	
148+00.000 R1 TO 148+50.000 R1	110	79		87	107	
148+50.000 R1 TO 149+00.000 R1	165	87		65	107	
149+00.000 R1 TO 149+50.000 R1	128	83		88	107	
149+50.000 R1 TO 150+00.000 R1	141	87		59	102	
150+00.000 R1 TO 150+50.000 R1	132	126		61	152	
150+50.000 R1 TO 151+00.000 R1	105	121		51	152	
151+00.000 R1 TO 151+50.000 R1	159	136		47	158	
151+50.000 R1 TO 152+00.000 R1	84	121		59	165	
152+00.000 R1 TO 152+50.000 R1	83	120		60	165	
152+50.000 R1 TO 153+00.000 R1	87	123		57	165	
153+00.000 R1 TO 153+50.000 R1	93	122		63	169	
153+50.000 R1 TO 154+00.000 R1	123	124		54	174	

NOTES:

1. EXISTING PAVEMENT DEPTHS VARY, 5"-7" ON CSAH 22. PAVEMENT REMOVAL HAS BEEN SUBTRACTED FROM THE COMMON EXCAVATION AND/OR SUBGRADE EXCAVATION QUANTITIES.
2. SOILS NOT USED ON THE PROJECT SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE OF THE RIGHT OF WAY. NO DIRECT COMPENSATION WILL BE PAID FOR THE PREPARATION OF AN ACCEPTABLE DISPOSAL PLAN OR FOR OFF-PROJECT DISPOSAL OF MATERIALS. DISPOSAL SITES SHALL BE LEFT IN A WELL GRADED CONDITION WITH ALL SOLID WASTES AND BOULDERS ADEQUATELY COVERED.
3. UNLESS DIRECTED OTHERWISE BY THE PROJECT ENGINEER, ANY MATERIAL THAT IS FOUND TO BE UNNECESSARY FOR THE CONSTRUCTION OF THE ROADWAY EMBANKMENT AND DISPOSAL OF SAME BECOMES NECESSARY, ON OR OFF THE PROJECT, THE DISPOSAL AND ALL RELATED ITEMS WILL BE CONSIDERED INCIDENTAL.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

EARTHWORK TABULATION

SAP 002-622-037

EARTHWORK TABULATION						H
	EXCAVATION			EMBANKMENT		
STATION	COMMON	SUBGRADE	MUCK	COMMON	SELECT GRANULAR (CV)	AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION)
	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
154+00.000 R1 TO 154+50.000 R1	122	129		53	179	
154+50.000 R1 TO 155+00.000 R1	125	133		70	184	
155+00.000 R1 TO 155+50.000 R1	130	139		67	189	
155+50.000 R1 TO 156+00.000 R1	138	138		57	194	
156+00.000 R1 TO 156+50.000 R1	167	147		56	199	
156+50.000 R1 TO 157+00.000 R1	183	215		30	240	
157+00.000 R1 TO 157+50.000 R1	166	151		50	197	
157+50.000 R1 TO 158+00.000 R1	209	147		60	188	
158+00.000 R1 TO 158+50.000 R1	247	150		60	188	
158+50.000 R1 TO 159+00.000 R1	157	130		65	188	
159+00.000 R1 TO 159+50.000 R1	147	136		62	188	
159+50.000 R1 TO 160+00.000 R1	164	146		59	188	
160+00.000 R1 TO 160+50.000 R1	124	129		65	185	
160+50.000 R1 TO 161+00.000 R1	113	132		64	180	
161+00.000 R1 TO 161+50.000 R1	113	131		69	175	
161+50.000 R1 TO 162+00.000 R1	124	134		63	170	
162+00.000 R1 TO 162+50.000 R1	132	139		66	165	
162+50.000 R1 TO 163+00.000 R1	136	143		61	160	
163+00.000 R1 TO 163+50.000 R1	145	140		70	155	
163+50.000 R1 TO 164+00.000 R1	158	134		74	152	
164+00.000 R1 TO 164+50.000 R1	174	130		90	152	
164+50.000 R1 TO 165+00.000 R1	205	125		124	152	
165+00.000 R1 TO 165+50.000 R1	180	122		171	152	
165+50.000 R1 TO 166+00.000 R1	162	110		183	148	
166+00.000 R1 TO 166+50.000 R1	159	107		188	148	
166+50.000 R1 TO 167+00.000 R1	213	106		152	152	
167+00.000 R1 TO 167+50.000 R1	226	108		128	152	
167+50.000 R1 TO 168+00.000 R1	211	108		116	152	
168+00.000 R1 TO 168+50.000 R1	218	105		117	152	
168+50.000 R1 TO 169+00.000 R1	226	103		100	152	
169+00.000 R1 TO 169+50.000 R1	208	101		99	152	
169+50.000 R1 TO 170+00.000 R1	194	100		107	152	
170+00.000 R1 TO 170+50.000 R1	182	65		100	100	
170+50.000 R1 TO 171+00.000 R1	187	65		81	97	
171+00.000 R1 TO 171+50.000 R1	197	67		66	97	
171+50.000 R1 TO 172+00.000 R1	233	68		60	97	
172+00.000 R1 TO 172+50.000 R1	262	71		59	97	
172+50.000 R1 TO 173+00.000 R1	254	74		50	97	
173+00.000 R1 TO 173+50.000 R1	244	78		42	97	
173+50.000 R1 TO 174+00.000 R1	229	81		39	97	
174+00.000 R1 TO 174+50.000 R1	231	85		38	97	
174+50.000 R1 TO 175+00.000 R1	280	91		40	97	
175+00.000 R1 TO 175+50.000 R1	260	91		39	97	
175+50.000 R1 TO 176+00.000 R1	270	95		43	97	
176+00.000 R1 TO 176+50.000 R1	252	94		46	97	
176+50.000 R1 TO 177+00.000 R1	233	96		41	97	
177+00.000 R1 TO 177+50.000 R1	205	97		29	97	
177+50.000 R1 TO 178+00.000 R1	179	95		30	97	
178+00.000 R1 TO 178+50.000 R1	281	97		46	97	
178+50.000 R1 TO 179+00.000 R1	144	89		47	97	
179+00.000 R1 TO 179+50.000 R1	103	80		70	97	
179+50.000 R1 TO 180+00.000 R1	85	73		81	100	
180+00.000 R1 TO 180+50.000 R1	89	70		106	103	
180+50.000 R1 TO 181+00.000 R1	78	69		91	107	

EARTHWORK TABULATION						H
	EXCAVATION			EMBANKMENT		
STATION	COMMON	SUBGRADE	MUCK	COMMON	SELECT GRANULAR (CV)	AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION)
	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
181+00.000 R1 TO 181+50.000 R1	92	69		93	114	
181+50.000 R1 TO 182+00.000 R1	114	80		95	117	
182+00.000 R1 TO 182+50.000 R1	133	87		92	120	
182+50.000 R1 TO 183+00.000 R1	175	99		44	123	
183+00.000 R1 TO 183+50.000 R1	166	100		40	124	
183+50.000 R1 TO 184+00.000 R1	159	107		49	124	
184+00.000 R1 TO 184+50.000 R1	106	88		52	124	
184+50.000 R1 TO 185+00.000 R1	112	87		66	124	
185+00.000 R1 TO 185+50.000 R1	117	82		79	125	
185+50.000 R1 TO 186+00.000 R1	178	144		28	165	
186+00.000 R1 TO 186+50.000 R1	158	136		38	163	
186+50.000 R1 TO 187+00.000 R1	121	81		113	132	
187+00.000 R1 TO 187+50.000 R1	140	83		126	131	
187+50.000 R1 TO 188+00.000 R1	149	84		125	131	
188+00.000 R1 TO 188+50.000 R1	147	86		78	131	
188+50.000 R1 TO 189+00.000 R1	158	91		61	131	
189+00.000 R1 TO 189+50.000 R1	160	92		92	130	
189+50.000 R1 TO 190+00.000 R1	293	101		96	127	
190+00.000 R1 TO 190+50.000 R1	250	98		102	123	
190+50.000 R1 TO 191+00.000 R1	239	99		78	116	
191+00.000 R1 TO 191+50.000 R1	168	92		49	107	
191+50.000 R1 TO 192+00.000 R1	172	94		39	103	
192+00.000 R1 TO 192+50.000 R1	184	94		41	100	
192+50.000 R1 TO 193+00.000 R1	194	94		44	97	
193+00.000 R1 TO 193+50.000 R1	229	93		47	97	
193+50.000 R1 TO 194+00.000 R1	260	96		48	101	
194+00.000 R1 TO 194+50.000 R1	238	132		28	132	
194+50.000 R1 TO 195+00.000 R1	172	99		36	107	
195+00.000 R1 TO 195+50.000 R1	183	91		46	107	
195+50.000 R1 TO 196+00.000 R1	128	85		52	107	
196+00.000 R1 TO 196+50.000 R1	130	79		62	107	
196+50.000 R1 TO 197+00.000 R1	140	77		63	107	
197+00.000 R1 TO 197+50.000 R1	210	87		50	91	
SAP 002-622-037 SUBTOTAL	**31365**	**19079**	**1408**	**12358**	**23485**	**1408**

EARTHWORK TABULATION - STORMWATER BMPS		H
	EXCAVATION - CHANNEL AND POND	COMMON EMBANKMENT
	(CU YD)	(CU YD)
INFILTRATION BASIN 100	568	282
POND 200	1870	13
POND 300	509	1039
SAP 002-622-037 SUBTOTAL	**2947**	**1334**

NOTES:

1. EXISTING PAVEMENT DEPTHS VARY, 5"-7" ON CSAH 22. PAVEMENT REMOVAL HAS BEEN SUBTRACTED FROM THE COMMON EXCAVATION AND/OR SUBGRADE EXCAVATION QUANTITIES.
2. SOILS NOT USED ON THE PROJECT SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE OF THE RIGHT OF WAY. NO DIRECT COMPENSATION WILL BE PAID FOR THE PREPARATION OF AN ACCEPTABLE DISPOSAL PLAN OR FOR OFF-PROJECT DISPOSAL OF MATERIALS. DISPOSAL SITES SHALL BE LEFT IN A WELL GRADED CONDITION WITH ALL SOLID WASTES AND BOULDERS ADEQUATELY COVERED.
3. UNLESS DIRECTED OTHERWISE BY THE PROJECT ENGINEER, ANY MATERIAL THAT IS FOUND TO BE UNNECESSARY FOR THE CONSTRUCTION OF THE ROADWAY EMBANKMENT AND DISPOSAL OF SAME BECOMES NECESSARY, ON OR OFF THE PROJECT, THE DISPOSAL AND ALL RELATED ITEMS WILL BE CONSIDERED INCIDENTAL.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

EARTHWORK TABULATION

SAP 002-622-037

SOILS AND CONSTRUCTION NOTES

1. STRIP ALL SOD AND TOPSOIL FROM AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS TOPSOIL. PAYMENT FOR TOPSOIL STRIPPING IS INCLUDED IN EXCAVATION-COMMON. PAYMENT FOR TOPSOIL INCLUDED IN COMMON EMBANKMENT (CV).

2. PROVIDE A SAW CUT WHERE PLACING NEW PAVEMENT NEXT TO IN-PLACE PAVEMENT TO ENSURE A UNIFORM JOINT.

3. WHEN CONNECTING TO EXISTING ROADWAYS AT THE TERMINI OF PROPOSED NEW CONSTRUCTION, CUT VERTICALLY TO THE BOTTOM OF THE EXISTING AGGREGATE BASE (OR TO THE BOTTOM OF THE NEW AGGREGATE BASE, WHICHEVER IS DEEPER); THEN AT A 1 VERTICAL (V) TO 20 HORIZONTAL (H) TAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION. AT THE NORTH END OF CONSTRUCTION ON CSAH 22, A 1:10 (V:H) TAPER SHALL BE USED.

4. IN GENERAL, PROVIDE 1:20 (V:H) TAPERS WHEN CHANGING SUB-CUT DEPTHS NEAR TRUNK HIGHWAYS, OR COUNTY, CITY OR TOWNSHIP ROADS, OR WHEN CHANGING SUBGRADE MATERIALS.

5. WHEN CONNECTING NEW SURFACING ADJACENT TO ANY EXISTING PAVEMENTS TO BE WIDENED, CUT VERTICALLY TO THE BOTTOM OF THE EXISTING SURFACING (OR TO THE BOTTOM OF THE NEW SURFACING DESIGN, WHICHEVER IS DEEPER, THEN DIAGONALLY AT A 1 VERTICAL (V) TO 1 HORIZONTAL (H) SLOPE TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

6. AS A PRECAUTIONARY MEASURE FROM A SOILS STANDPOINT, TRAFFIC LANES TO BE USED DURING CONSTRUCTION MUST BE DELINEATED TO KEEP VEHICLES A SAFE DISTANCE AWAY FROM THE ADJACENT EXCAVATION. THE DELINEATION SHOULD COINCIDE WITH POINTS ESTABLISHED BY PROJECTING A 1 VERTICAL (V) TO 2 HORIZONTAL (H) OR GREATER (FLATTER) SLOPE BETWEEN THE EDGE OF THE TRAFFIC SURFACE AND THE BOTTOM OF THE EXCAVATION. PROVIDE A 1:3 (V:H) OR FLATTER SLOPE IN MUCK EXCAVATION AREAS.

7. USE A TR10 ACCORDING TO TABLE 17 IN SECTION 5-692.270 OF THE MNDOT GRADING AND BASE MANUAL. COMPLY WITH TABLES 2106.3-1 AND TABLE 2106.3-4 AND THEN 2112 TEST ROLLING. TEST ROLLING OF THE EXISTING SUBGRADE WILL BE REQUIRED (INCIDENTAL).

8. OBTAIN DENSITY ON THE GRADING PORTIONS OF ANY EMBANKMENT CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF MNDOT SPECIFICATION 2106. OBTAIN COMPACTION ON GRADING PORTIONS OF TEMPORARY CONSTRUCTION THAT WILL NOT BE INCORPORATED INTO THE PERMANENT WORK IN ACCORDANCE WITH THE “QUALITY COMPACTION METHOD” REQUIREMENTS. TEMPORARY GRADING AND AGGREGATE BASE PORTIONS PLACED BY THE “QUALITY COMPACTION METHOD” SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

9. UNDER STATE LAW IT IS THE CONTRACTOR’S RESPONSIBILITY TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. CONTACT MUST BE MADE THROUGH GOPHER STATE ONE CALL.

10. PROVIDE A UNIFORM TACK COAT BETWEEN ALL BITUMINOUS LAYERS PRIOR TO PLACING ANY BITUMINOUS MIXTURES ON EXISTING PAVEMENT IN ACCORDANCE WITH SPECIFICATION 2357.

11. ALL BITUMINOUS MIXTURES SHALL BE COMPACTED MAXIMUM DENSITY METHOD IN ACCORDANCE WITH SPECIFICATION 2360.3D.1 UNLESS SPECIFIED OTHERWISE.

12. IN ANY PROPOSED WIDENING CONSTRUCTION, MATCH THE EXISTING SOIL IN THE UPPER 5 FEET OF ROADWAYS TO BE WIDENED WITH SOIL OF A SIMILAR CLASS, COLOR, MOISTURE CONTENT, AND PERFORMANCE CHARACTERISTICS. GRANULAR MATERIAL SHALL NOT BE PLACED ADJACENT TO NON-GRANULAR SOILS.

13. IN ANY CASE WHERE GRANULAR EMBANKMENTS JOIN NON-GRANULAR EMBANKMENTS, PROVIDE A 1:20 VERTICAL TO HORIZONTAL (V:H) TRANSITION BETWEEN THE CHANGE IN MATERIAL TO PREVENT AN ABRUPT SOILS DIFFERENTIAL. CONSTRUCT THE 1:20 VERTICAL TO HORIZONTAL (V:H) TRANSITION SUCH THAT THE GRANULAR MATERIAL OVERLAYS THE ADJACENT NON-GRANULAR SOIL.

14. CONSTRUCTION SLOPES MUST BE COVERED WITH 4" OF TOPSOIL MATERIAL. TOPSOIL SHALL MEET MNDOT STANDARD SPECIFICATION 3877 TABLE 3877-1. PAYMENT FOR TOPSOIL MATERIAL IS PAID FOR AS COMMON EMBANKMENT.

15. MINING OR OVER EXCAVATION BEYOND THE LINES AND GRADES SHOWN IN THE PLAN WILL NOT BE ALLOWED WITHIN PUBLIC RIGHT-OF-WAY.

16. NO EXTRA PAYMENT WILL BE MADE FOR TEMPORARY STOCKPILING OF EXCAVATION OR EMBANKMENT MATERIAL.

17. ANY EXCAVATED MATERIALS NOT USED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE RIGHT OF WAY, AT NO ADDITIONAL COMPENSATION, AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

18. TEMPORARY AND INTERMEDIATE EXCAVATION LIMITS AND SLOPES ARE TO BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. DEPENDING ON SOIL PROPERTIES AND SAFETY FACTORS, ADDITIONAL EXCAVATION AND BACKFILL BEYOND THE LIMITS SHOWN IN THE PLAN SHALL BE CONSIDERED THE CONTRACTOR EXPENSE.

19. WHEN REMOVING PAVEMENTS, FULL-DEPTH SAWCUTS SHALL BE MADE PERPENDICULAR TO THE ROADWAY CENTERLINE.

20. NON-STRUCTURAL GRADING MATERIAL ARE ALL MINERAL SOILS, EXCESS TOPSOIL, AND ORGANIC SOILS, CAPABLE OF SUPPORTING CONSTRUCTION EQUIPMENT. NON-STRUCTURAL GRADING MATERIAL SHALL ONLY BE PLACED OUTSIDE OF THE ROADWAY CORE AND IN A MANNER IN WHICH THE MATERIAL WILL MAINTAIN LONG TERM STABILITY.

21. THE TOP OF BACKSLOPES AND THE TOE OF FILL SLOPES SHALL BE ROUNDED TO NATURALIZE THE CONSTRUCTION EVEN THOUGH THE CROSS SECTIONS DO NOT SHOW ANY SUCH ROUNDING.

22. THE CONSTRUCTION LIMITS AS SHOWN IN THE PLANS REPRESENT THE POINT OF INTERSECTION BETWEEN THE REQUIRED FILL OR CUT SLOPE AND THE EXISTING GROUNDLINE AS DEPICTED ON THE CROSS SECTIONS. THE CONSTRUCTION LIMITS DO NOT INCLUDE AREAS REQUIRED FOR SLOPE ROUNDING.

23. UTILITY RELOCATIONS IN THE AREA WILL BE OCCURRING PRIOR TO AND DURING THE PROJECT. THE CONTRACTOR IS TO EXPECT UTILITY CONFLICTS AND ACCOUNT FOR THEM ACCORDINGLY IN THEIR WORK SCHEDULE AND ANTICIPATED PRODUCTION.

24. UNLESS SPECIFICALLY NOTED OTHERWISE, ANY USE OF BRACING, SHORING, SHEETING, OR OTHER MEANS AND METHODS OF CONSTRUCTION THAT ARE NECESSARY TO COMPLETE CONSTRUCTION WITHIN THE CONSTRUCTION LIMITS OR PROJECT EASEMENTS SHOWN IN THE PLANS WILL BE CONSIDERED INCIDENTAL.

25. THE EXISTING PAVEMENT THICKNESS VARIES THROUGHOUT THE PROJECT. SEE THE BORING LOGS FOR EXISTING PAVEMENT THICKNESSES AT BORING LOCATIONS. ALL INPLACE PAVEMENT REMOVAL ON THE PROJECT IS PAID FOR AS "REMOVE PAVEMENT" AND IS NOT INCLUDED IN THE EARTHWORK QUANTITIES.

26. PLACING, HAULING, AND DISPOSING OF EXCAVATED MATERIALS IS CONSIDERED INCIDENTAL.

27. ALL STOCKPILE AREAS SHALL BE APPROVED BY THE ENGINEER.

28. UNLESS APPROVED OTHERWISE BY THE PROJECT ENGINEER, ANY MATERIAL THAT IS FOUND TO BE UNNECESSARY FOR THE CONSTRUCTION OF THE ROADWAY EMBANKMENT AND DISPOSAL OF THE SAME BECOMES NECESSARY, ON OR OFF THE PROJECT, THE DISPOSAL AND ALL RELATED ITEMS WILL BE CONSIDERED INCIDENTAL.

29. PROVIDE A MINIMUM OVERLAP OF 3' OF GEOGRID TYPE 1 ONTO AND OVER EXISTING / "GOOD" SUBGRADE SOILS.

30. THE CONTRACTOR SHALL INSTALL TEMPORARY MAILBOX BANKS AT LOCATIONS DESIGNATED BY THE POST MASTER TO FACILITATE CONSTRUCTION OPERATIONS, INCIDENTAL.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

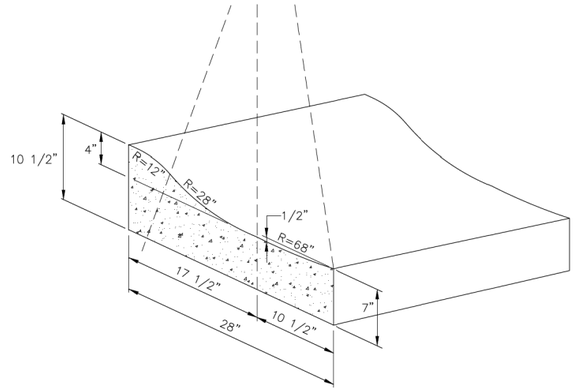
SOILS AND CONSTRUCTION NOTES

SAP 002-622-037

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLATES

PLATE NO.	DESCRIPTION
3000M	REINFORCED CONCRETE PIPE (6 SHEETS)
3006H	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
3007F	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
3022C	PRECAST CONCRETE SAFETY APRON (3 SHEETS)
3040F	CORRUGATED METAL PIPE CULVERT (STANDARD 2-2/3"×1/2" CORRUGATION)
3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3123J	METAL APRON FOR C.S. PIPE
3124B	METAL APRON CONNECTION
3128H	METAL SAFETY APRON & GRATE (2 SHEETS)
3133D	RIPRAP AT RCP OUTLETS
3134D	RIPRAP AT CSP OUTLETS
3145G	CONCRETE PIPE OR PRECAST BOX CULVERT TIES
3221D	CORRUGATED STEEL PIPE COUPLING BAND (3 SHEETS)
4011E	PRECAST CONCRETE BASE
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
4026B	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4108F	ADJUSTING RINGS FOR CATCH BASINS AND MANHOLES
4143E	STOOL GRATE & CONCRETE FRAME (MEDIAN DRAINS) - CASTING NO. 731
4154B	CATCH BASIN GRATE CASTING - CASTING NO. 816
4160D	CURB BOX CASTING FOR CATCH BASIN - CASTING NO. 823A AND 833A
4180J	MANHOLE OR CATCH BASIN STEP
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
8000K	TEMPORARY CHANNELIZERS (3 SHEETS)
9324C	BARBED WIRE FENCE (STEEL POST)



SURMOUNTABLE CONCRETE CURB AND GUTTER

NO SCALE

APPROVED

City of Nowthen

STANDARD PLATE NO. 701

THE FOLLOWING STANDARD PLANS, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLANS

INDEX NO.	SUBJECT	APPROVED	REVISED
5-297.115 (1 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.115 (2 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.220 (2 of 2)	SAFETY EDGE BITUMINOUS PAVEMENT	02-21-2024	
5-297.302	PROTECTION AND RESTORATION OF VEGETATION	12-11-2015	
5-297.404 (1 of 3)	PERMANENT EROSION CONTROL - ALONG ROADWAYS, DITCHES, AND FLUMES	02-28-2017	
5-297.404 (2 of 3)	PERMANENT EROSION CONTROL - TURF ESTABLISHMENT DETAIL AT CULVERT ENDS	01-08-2020	
5-297.404 (3 of 3)	PERMANENT EROSION CONTROL - REPP (BLANKET) STAPLE PATTERN FOR SLOPES	01-08-2020	
5-297.405 (1 of 8)	TEMPORARY SEDIMENT CONTROL - SILT CURTAIN OR SILT FENCE TYPE TB	02-28-2017	
5-297.405 (2 of 8)	TEMPORARY SEDIMENT CONTROL - FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS	01-08-2020	
5-297.405 (3 of 8)	TEMPORARY SEDIMENT CONTROL - DITCH CHECK	01-08-2020	
5-297.405 (4 of 8)	TEMPORARY SEDIMENT CONTROL - STORM DRAIN INLET PROTECTION	02-28-2017	
5-297.405 (5 of 8)	TEMPORARY SEDIMENT CONTROL - CONSTRUCTION EXITS	02-28-2017	
5-297.405 (6 of 8)	TEMPORARY SEDIMENT CONTROL - SILT FENCE	02-28-2017	
5-297.405 (8 of 8)	TEMPORARY SEDIMENT CONTROL - CULVERT END CONTROLS	02-28-2017	
5-297.433	SUBSURFACE DRAINS, OUTLET PIPES FOR EDGE AND SUBCUT DRAINS	08-06-2014	
5-297.440	STANDARD CULVERT BEDDING FOR FLEXIBLE PIPE (WITHOUT TREATMENTS)	11-15-2024	
5-297.441	STANDARD CULVERT BEDDING FOR RIGID PIPE (WITHOUT TREATMENTS)	11-15-2024	
5-297.442	STANDARD STORM SEWER BEDDING FOR RIGID AND FLEXIBLE PIPE	11-15-2024	

THE LISTED STANDARD PLANS AND/OR STANDARD PLAYES ARE INCORPORATED BY REFERENCE INTO THE PLAN SET. THE CERTIFICATION ON THIS SHEET SIGNIFIES THE ENGINEER SELECTED THE STANDARD PLANS AND/OR STANDARD PLATES AS APPROPRIATE FOR USE ON THE PROJECT.

DRAWN BY: AJF
DESIGNED BY: AJF
CHECKED BY: NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

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wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STANDARD PLATES AND STANDARD PLANS

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-145typ-001
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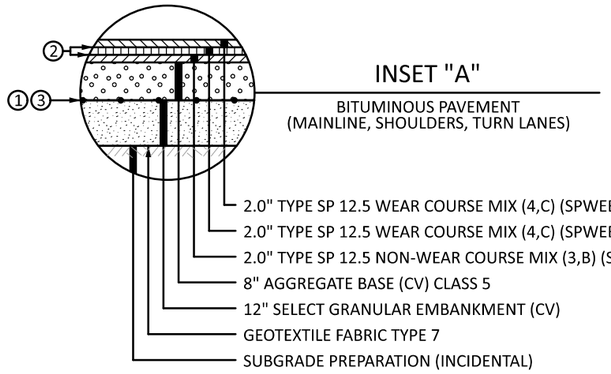
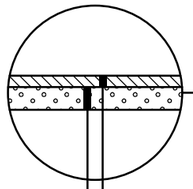


INSET "A"

BITUMINOUS PAVEMENT
(MAINLINE, SHOULDERS, TURN LANES)

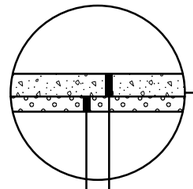
- 2.0" TYPE SP 12.5 WEAR COURSE MIX (4,C) (SPWEB440C)
- 2.0" TYPE SP 12.5 WEAR COURSE MIX (4,C) (SPWEB440C)
- 2.0" TYPE SP 12.5 NON-WEAR COURSE MIX (3,B) (SPNWB330B)
- 8" AGGREGATE BASE (CV) CLASS 5
- 12" SELECT GRANULAR EMBANKMENT (CV)
- GEOTEXTILE FABRIC TYPE 7
- SUBGRADE PREPARATION (INCIDENTAL)



INSET "B"

BITUMINOUS DRIVEWAY

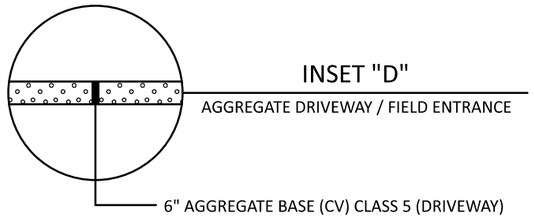
- 3.0" TYPE SP 9.5 WEAR COURSE MIX (3,C) SPWEA340C OR MATCH EXISTING
- 6" AGGREGATE BASE (CV) CLASS 5 (DRIVEWAY)



INSET "C"

CONCRETE DRIVEWAY

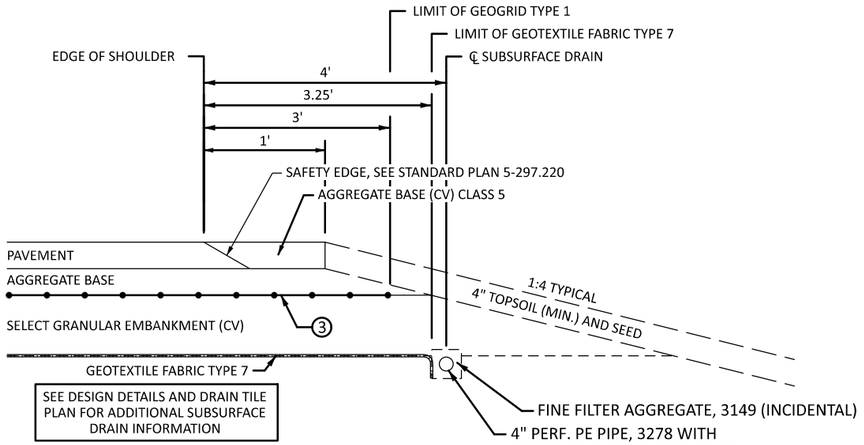
- 6" CONCRETE DRIVEWAY PAVEMENT OR MATCH EXISTING
- 4" AGGREGATE BASE (CV) CLASS 5 (DRIVEWAY)



INSET "D"

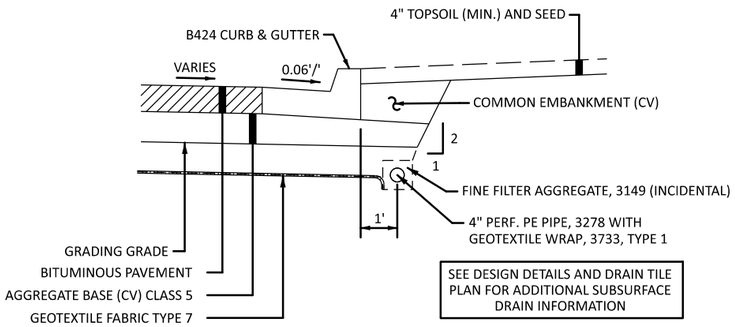
AGGREGATE DRIVEWAY / FIELD ENTRANCE

- 6" AGGREGATE BASE (CV) CLASS 5 (DRIVEWAY)



DETAIL "A"

RURAL SHOULDER
N.T.S.



DETAIL "B"

CONCRETE CURB & GUTTER
N.T.S.

GENERAL NOTES

1. UNLESS OTHERWISE SPECIFIED, THE SUBGRADE CROSS SLOPE WILL BE THE SAME AS THE FINISHED GRADE.
2. ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE ROADWAY.
3. ALL EDGE DIMENSIONS ARE TO THE EDGE OF THE PAVEMENT UNLESS OTHERWISE SPECIFIED.
4. COMMON TOPSOIL SHALL BE INCLUDED IN THE COMMON EMBANKMENT (CV) QUANTITY.
5. ALL EMBANKMENT MATERIAL SHALL BE APPROVED BY THE ENGINEER. ALL CONCRETE AND BITUMINOUS REMOVAL MUST BE DISPOSED OF OFF-SITE. REMOVAL AND DISPOSAL OF EXCESS MATERIAL SHALL BE INCIDENTAL.

NOTES

① GRADING GRADE

② TACK COAT

③ GEOGRID TYPE 1. SEE CONSTRUCTION PLAN FOR LOCATIONS

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

INSETS & DETAILS
TYPICAL SECTIONS

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-145typ-001
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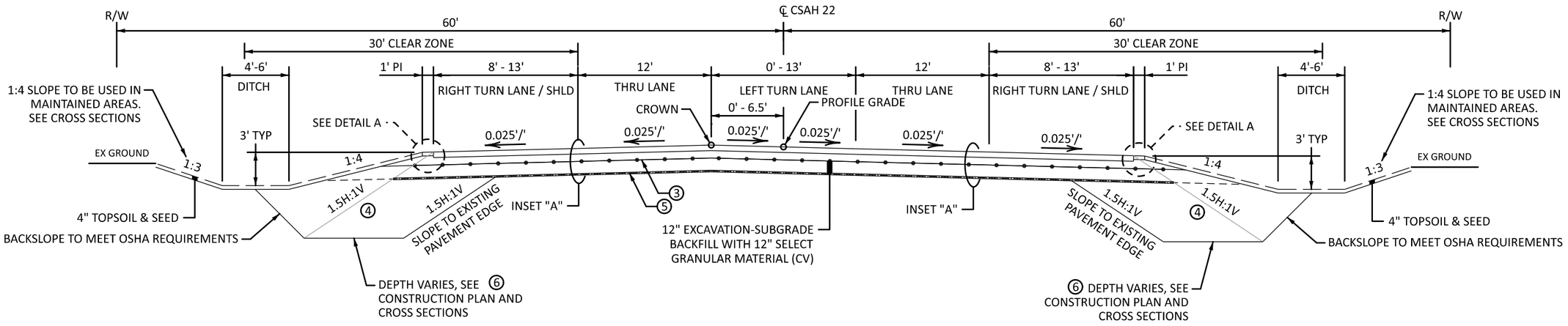
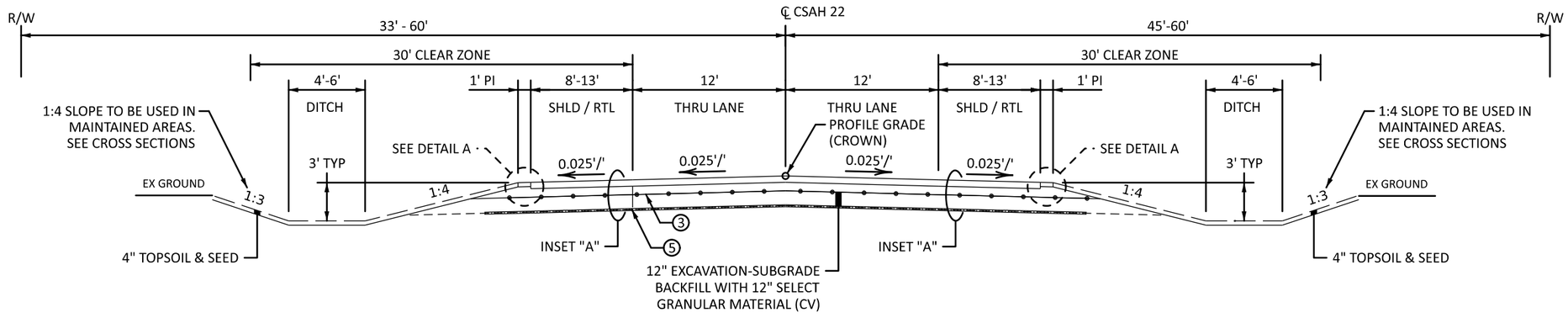


PROPOSED TYPICAL SECTION 2 - CSAH 22

STA 124+66 TO STA 135+34
STA 152+82 TO STA 163+59
STA 179+30 TO STA 181+34
STA 185+59 TO STA 192+69



PROPOSED TYPICAL SECTION 1 - CSAH 22

STA 100+52.18 TO STA 124+66
STA 135+34 TO STA 152+82
STA 163+59 TO STA 179+30
STA 192+69 TO STA 197+77.02

NOTES

③ GEOGRID TYPE 1. SEE CONSTRUCTION PLAN FOR LOCATIONS

④ VARIABLE DEPTH EXCAVATION-MUCK, BACKFILL WITH AGGREGATE BASE (CV) CLASS 5 (SUBGRADE CORRECTION). LIMITS MAY BE EXTENDED OR REDUCED BASED ON FIELD CONDITIONS.

⑤ GEOTEXTILE FABRIC TYPE 7

⑥ FIELD VERIFICATION BY GEOTECHNICAL ENGINEER

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: Cut G
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

PROPOSED
TYPICAL SECTIONS

SAP 002-622-037

Sheet No. 14 of 138 Sheets

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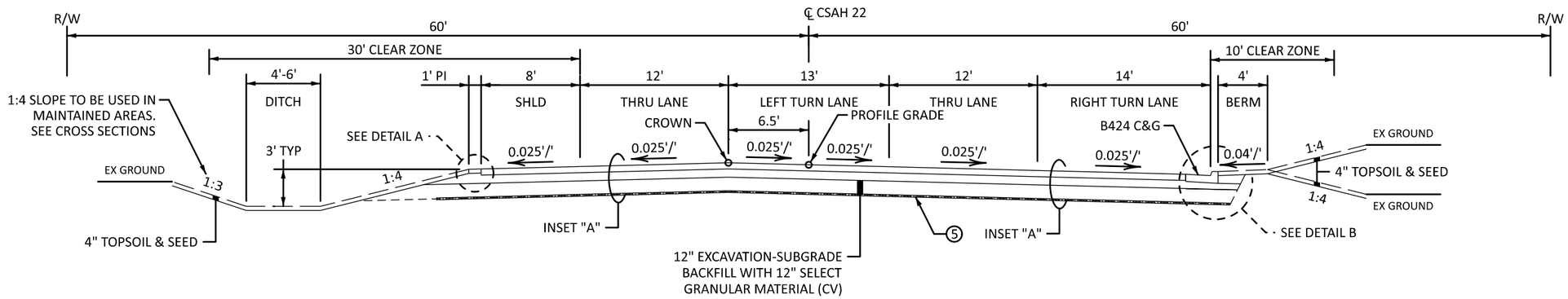

PROPOSED TYPICAL SECTION 4 - CSAH 22

STA 181+34 TO STA 185+59

NOTES

⑤ GEOTEXTILE FABRIC TYPE 7

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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DATE: 11/4/2025 LIC. NO. 61652

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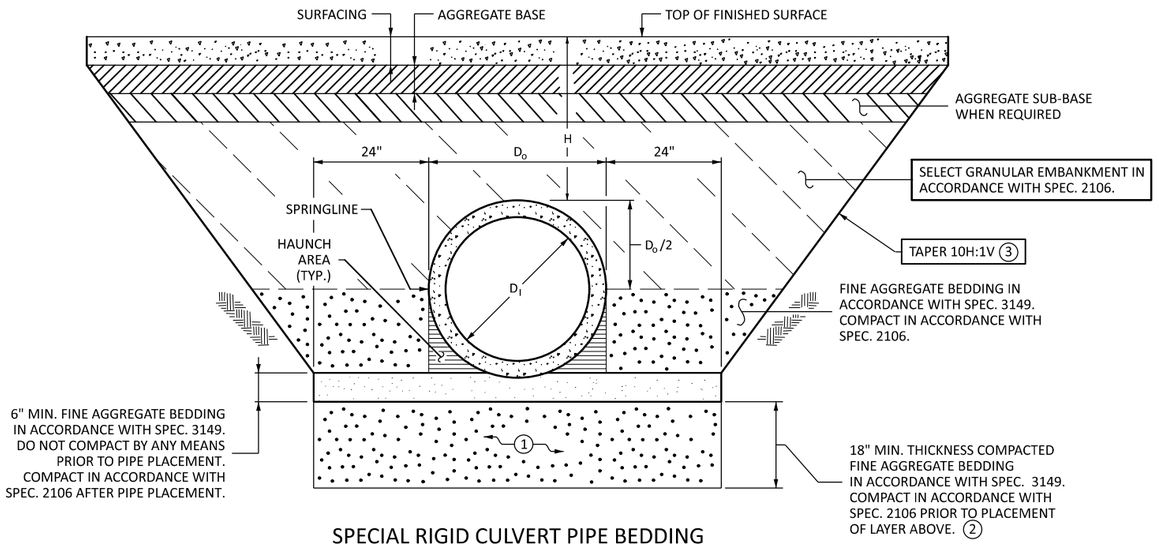
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

PROPOSED
TYPICAL SECTIONS

SAP 002-622-037



SPECIAL RIGID CULVERT PIPE BEDDING

CONSTRUCTION SEQUENCE

1. PLACE AND COMPACT 18" OF FINE AGGREGATE BEDDING TO THE REQUIREMENTS OF SPEC. 2106.
2. LOOSELY PLACE 6" OF FINE AGGREGATE BEDDING (SPEC. 3149) TO GRADE. DO NOT COMPACT PRIOR TO PIPE PLACEMENT.
3. FOR PIPES WITH BELL, REMOVE MATERIAL IN BELL AREA PRIOR TO PLACEMENT.
4. FURNISH AND INSTALL PIPE TO GRADE.
5. AFTER PLACEMENT OF THE PIPE, PLACE ADDITIONAL BEDDING AND COMPACT THE FULL LENGTH ON BOTH SIDES OF THE PIPE UNDERNEATH THE HAUNCH AREA BY FIRST SHOVEL SLICING (MANUALLY SHOVE THE BLADE END OF A SHOVEL AT AN ANGLE DOWN THE ENTIRE LENGTH OF THE PIPE IN THE HAUNCHH AREA) THEN COMPACT THE HAUNCH AT AN ANGLE USING A POWERED MECHANICAL OR PNEUMATIC DEVICE (I.E. POLE TAMPER, JUMPING JACK, OR SIMILAR).
6. COMPACT THE REMAINING MATERIAL OUTSIDE THE HAUNCH AREA TO THE REQUIREMENTS OF SPEC. 2106 ENSURING THAT THE ENTIRE LENGTH OF PIPE IS SUPPORTED UNIFORMLY BY BEDDING.
7. PLACE AND COMPACT BACKFILL EVENLY AND SIMULTANEOUSLY IN 6" LIFTS ON EACH SIDE OF THE PIPE UP TO THE SPRINGLINE WHEN COMPACTED.
8. COMPLETE REMAINING BACKFILL.

NOTES

STANDARD BEDDING FOR RIGID PIPE CULVERTS WITHOUT TREATMENTS.

RIGID PIPE INCLUDES CONCRETE.

ENTRANCE CULVERTS (FIELD AND DRIVEWAY CULVERTS) DO NOT NEED BEDDING UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

UNLESS OTHERWISE NOTED IN THE PLAN, BEDDING QUANTITIES ARE COMPUTED FOR THE FULL LENGTH OF THE PIPE AND APRON, AND WILL NOT BE ADJUSTED FOR CHANGES TO MEET OSHA REQUIREMENTS.

WHEN RIPRAP IS REQUIRED AT THE APRON END, SEE STANDARD PLATE OR PLAN FOR RIPRAP PLACEMENT AND QUANTITIES. FOR APRONS WITHOUT RIPRAP PLACE 6" MIN. FINE AGGREGATE BEDDING UNDER APRONS. USE A TRENCH WIDTH EQUAL TO THE PIPE TRENCH WIDTH.

CONTRACT PAY ITEM FOR FINE AGGREGATE BEDDING INCLUDES THE COST OF EXCAVATION, PLACEMENT AND COMPACTION.

RECYCLED CONCRETE AGGREGATE (RCA) IS PROHIBITED IN FINE AGGREGATE BEDDING AND BACKFILL.

EXCAVATION AND BACKFILL WITH COMMON EMBANKMENT ARE NOT TABULATED SEPARATELY BUT ARE INCLUDED IN THE CONTRACT UNIT PRICE OF THE RELEVANT CULVERT PAY ITEM.

EXCAVATE AND CONSTRUCT ALL TRENCHES AND SLOPES IN ACCORDANCE WITH OSHA REQUIREMENTS.

ALL SLOPES SHOWN AS (V):(H).

PIPE SIZE IS BASED ON THE NOMINAL INSIDE DIAMETER OR SPAN.

PROTECT ALL PIPE DURING CONSTRUCTION IN ACCORDANCE WITH SPEC. 2501.

PLACE MULTIPLE PIPE CULVERTS WITH A CLEARANCE OF 24" OR GREATER BETWEEN STRINGS OF PIPE.

(1) IF APPROVED BY THE ENGINEER, IN WET CONDITIONS THE CONTRACTOR MAY SUBSTITUTE 18" OF COARSE FILTER AGGREGATE IN ACCORDANCE WITH SPEC. 3149, COMPACTED TO THE QUALITY COMPACTION REQUIREMENTS OF SPEC. 2106. WRAP WITH GEOTEXTILE FABRIC TYPE 4 IN ACCORDANCE WITH SPEC. 3733. SEAM ALL FABRIC SIDES AND ENDS IN ACCORDANCE WITH SPEC. TABLE 3733-1 INCLUDING FOOTNOTE (e) OR OVERLAP A MINIMUM OF 3', ALL AT NO ADDITIONAL COST.

(2) FOR INSTALLATIONS ON INTACT BEDROCK, OMIT THIS LAYER.

(3) OVER-EXCAVATION BENEATH TAPERS IS NOT PERMITTED UNLESS REQUIRED BY OSHA. (TYP.)

LEGEND

D_I = INSIDE DIAMETER OF ROUND PIPE (INCHES).
D_b = OUTSIDE DIAMETER OF ROUND PIPE (INCHES).
S_I = INSIDE SPAN OF PIPE-ARCH (INCHES).
S_o = OUTSIDE SPAN OF PIPE-ARCH (INCHES).
H = FILL COVER HEIGHT OVER PIPE (FEET).

= UNDISTURBED SOIL

= COMPACTED BEDDING

= LOOSE BEDDING, COMPACTED AFTER PIPE PLACEMENT

CULVERT BEDDING IN PEAT MATERIALS (STRUCTURE 5074 TO 5075)

NOT TO SCALE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

DESIGN DETAILS

SAP 002-622-037

Sheet No. 16 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-150adt-001
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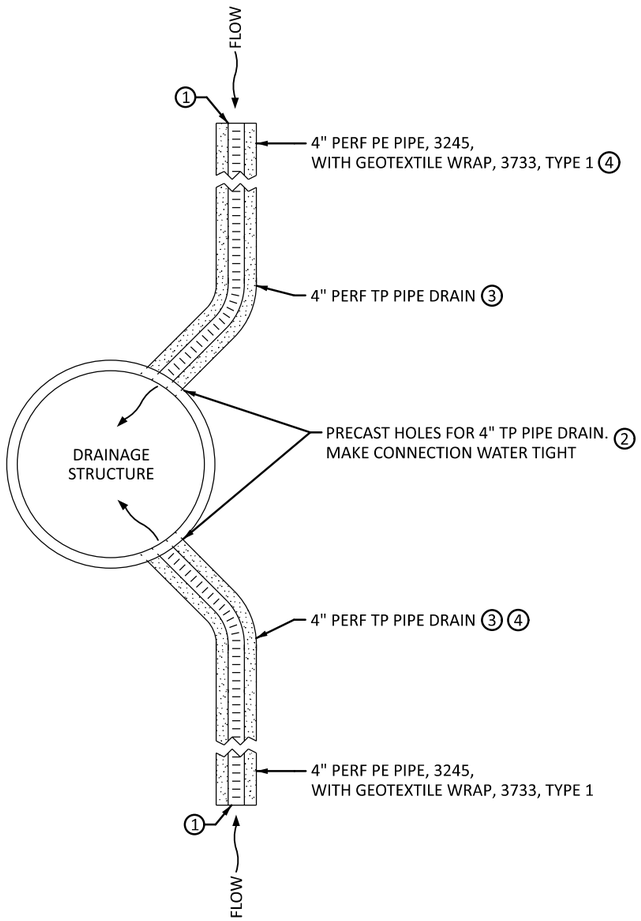
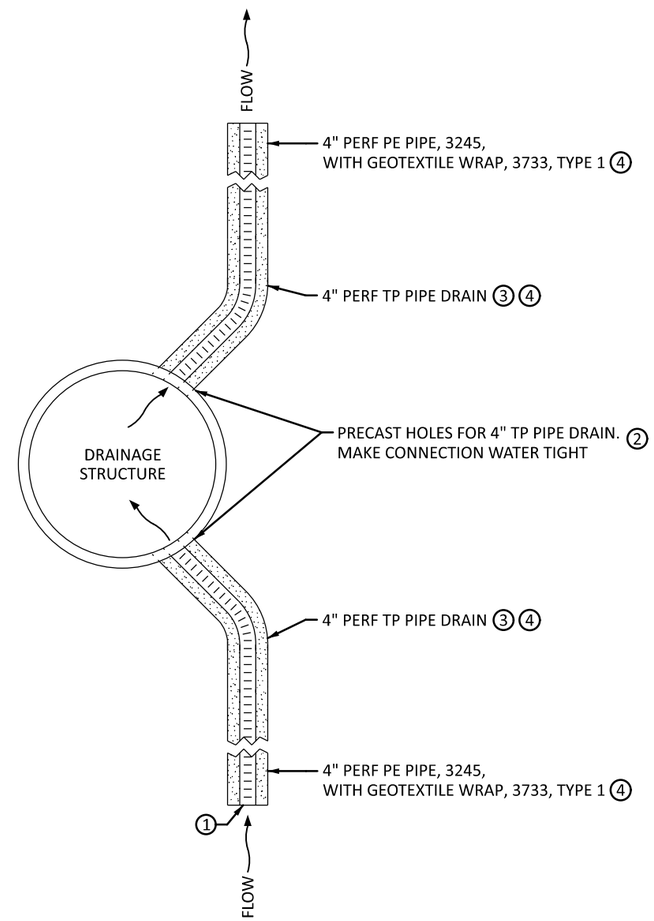


TYPICAL PLAN VIEW AT LOW POINT DRAINAGE STRUCTURE

NOT TO SCALE



TYPICAL PLAN VIEW AT ON GRADE DRAINAGE STRUCTURE

NOT TO SCALE

KEY NOTES:

1. THE UPSTEAM ENDS OF THE PERFORATED PIPE SHALL BE CAPPED AT EXCAVATION LIMITS OR AS APPROVED BY THE PROJECT ENGINEER. CAPS SHALL BE INCLUDED IN THE PRICE OF 4" PERF PE PIPE DRAIN. PIPE DRAIN SHALL MAINTAIN CONTINUOUS PIPING THROUGH HIGH POINTS OF ROADWAY GRADING.
2. SUBSURFACE DRAINAGE CONNECTION SHALL BE INCIDENTAL.
3. TP PERFORATED PIPE DRAIN SHALL BE USED WITHIN 5' OF CONNECTION.
4. ALL PIPE DRAIN TO BE PAID FOR AS 4" PERF PE PIPE DRAIN REGARDLESS OF TYPE USED. PLACE PERFORATED PIPE WITH THE PERFORATIONS DOWN

SUBSURFACE DRAINAGE CONNECTION TO DRAINAGE STRUCTURES (4" PERF PE PIPE DRAIN)

NOT TO SCALE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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CSAH 22 (Baugh Street NW) Reconstruction

DESIGN DETAILS

SAP 002-622-037

Sheet No. 17 of 138 Sheets

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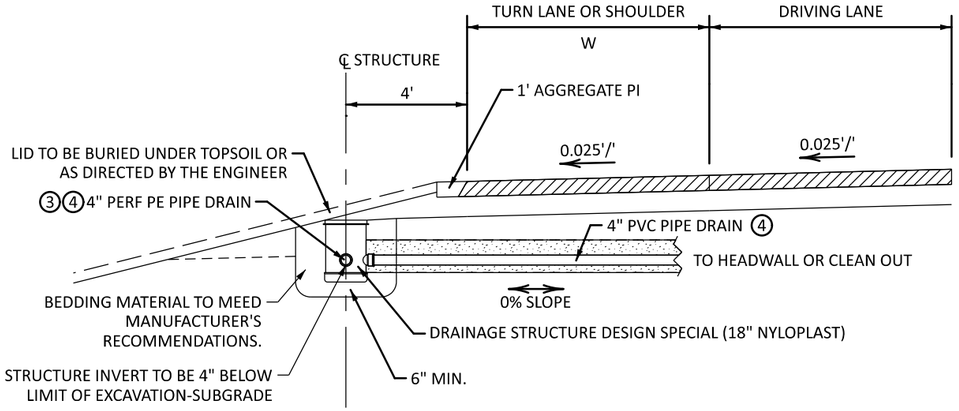
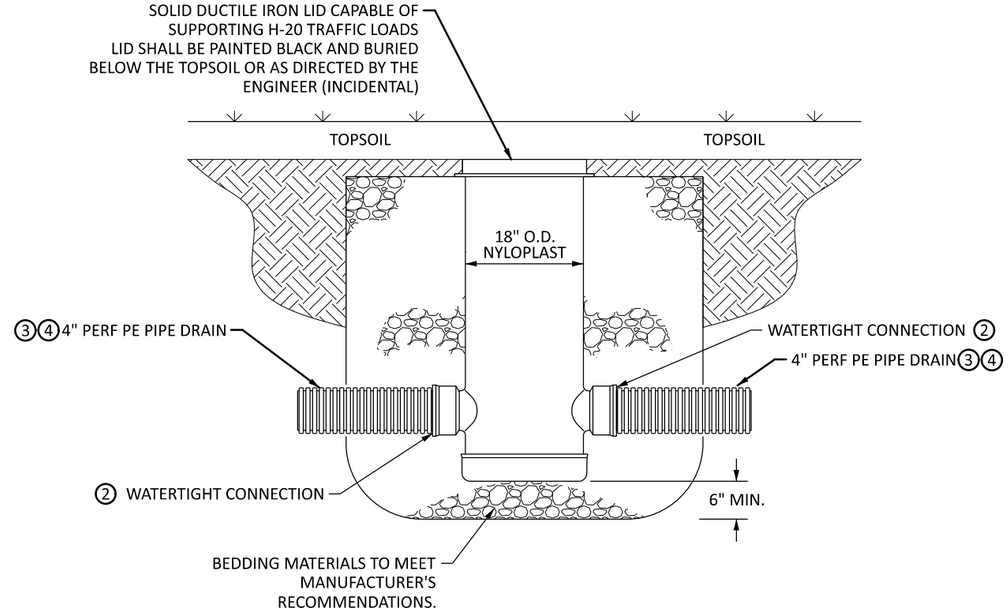


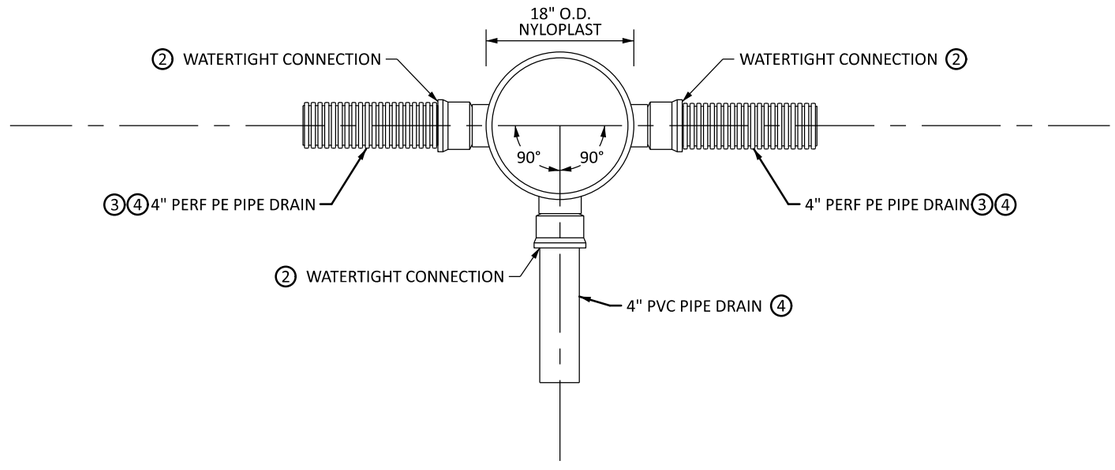
TYPICAL SECTION

NOT TO SCALE



ELEVATION VIEW

NOT TO SCALE



PLAN VIEW

NOT TO SCALE

KEY NOTES:

① THE UPSTEAM ENDS OF THE PERFORATED PIPE SHALL BE CAPPED AT EXCAVATION LIMITS OR AS APPROVED BY THE PROJECT ENGINEER. CAPS SHALL BE INCLUDED IN THE PRICE OF 4" PERF PE PIPE DRAIN. PIPE DRAIN SHALL MAINTAIN CONTINUOUS PIPING THROUGH HIGH POINTS OF ROADWAY GRADING.

② SUBSURFACE DRAINAGE CONNECTION SHALL BE INCIDENTAL.

③ PLACE PERFORATED PIPE WITH THE PERFORATIONS DOWN

④ SEE DETAIL ON SHEET 20 FOR PIPE DRAIN SECTION / PLACEMENT.

GENERAL NOTE:

SUBSURFACE DRAIN CLEAN OUTS WILL BE PAID FOR UNDER (2506) CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL BY THE EACH.

SUBSURFACE DRAIN CLEAN OUT

NOT TO SCALE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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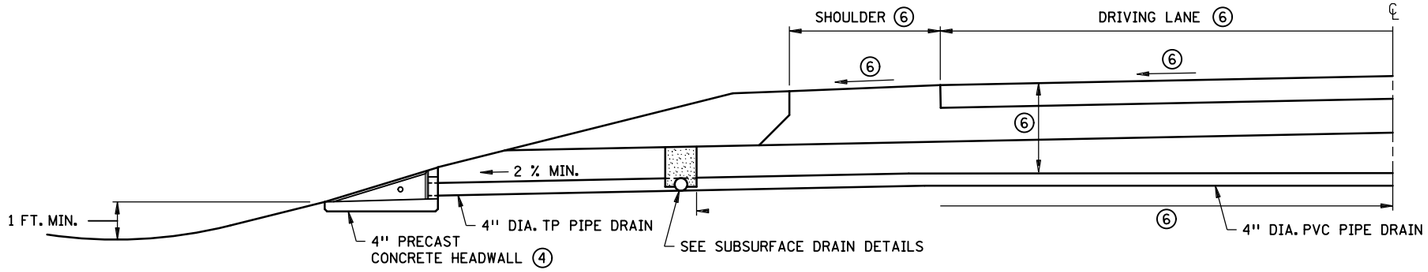
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

DESIGN DETAILS

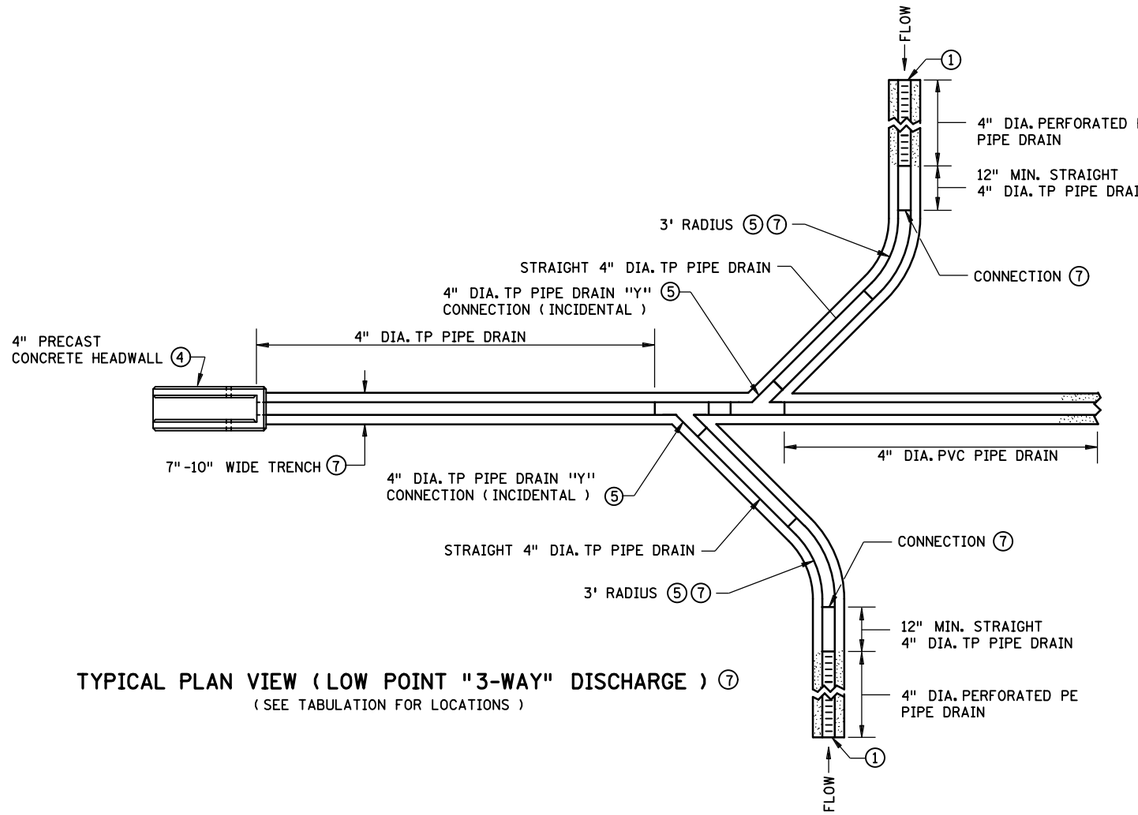
SAP 002-622-037



SECTION VIEW

TYPICAL EDGE DRAIN AND DISCHARGE CROSS SECTION (7)

(SEE TABULATION FOR LOCATIONS)



TYPICAL PLAN VIEW (LOW POINT "3-WAY" DISCHARGE) (7)

(SEE TABULATION FOR LOCATIONS)

NOTES:

(1) THE UPSTREAM ENDS OF THE PERFORATED PIPE SHALL BE CAPPED AS APPROVED BY THE PROJECT ENGINEER, THE CAPS ARE INCIDENTAL. PLACE PERFORATED PIPE WITH THE PERFORATIONS DOWN.

(4) PRECAST CONCRETE HEADWALL STANDARD PLATE 3131 PAID FOR AS SPEC. 2502, 4 INCH PRECAST CONCRETE HEADWALL.

(5) DETAILS OF CONNECTION AND COUPLING TO PIPE SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR "Y" AND EXTRA CONNECTION, 11 INCH TP PIPE AND COUPLING TO BE INCIDENTAL.

(6) SEE ROADWAY TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.

(7) SEE SPECIAL PROVISIONS FOR MATERIAL AND CONSTRUCTION DETAILS.

SEE STANDARD PLAN 5-297.433 FOR ADDITIONAL DETAILS

OUTLET PIPES FOR SUBSURFACE DRAINS

NOT TO SCALE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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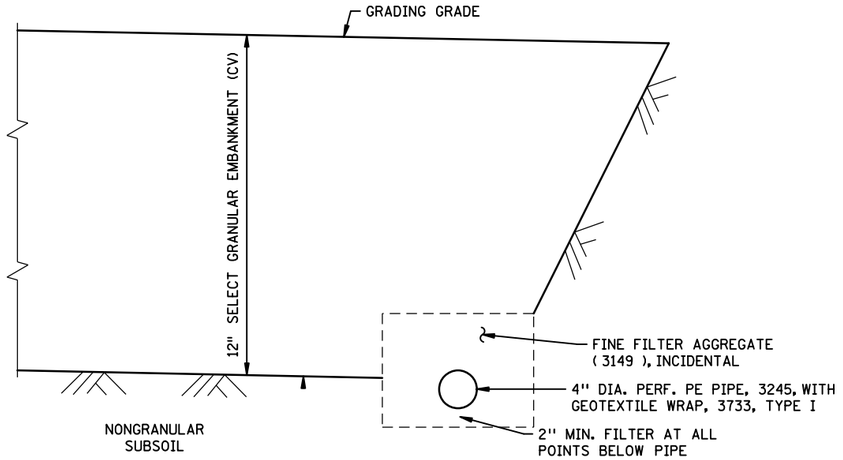
CSAH 22 (Baugh Street NW) Reconstruction

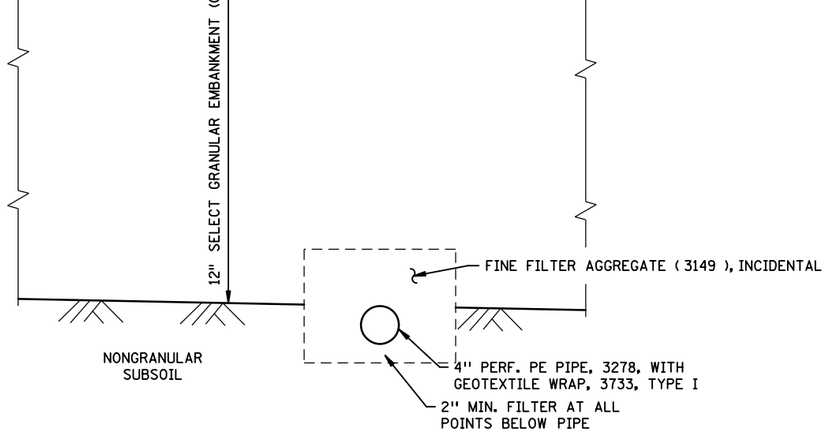
DESIGN DETAILS

SAP 002-622-037

Sheet No. 19 of 138 Sheets



TYPICAL SECTION (OPTION NO. 1) ①

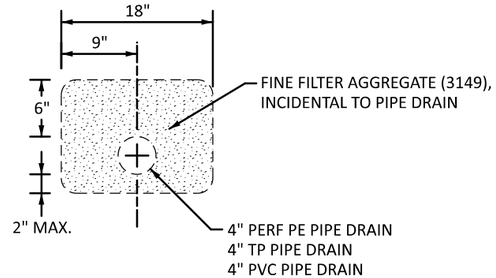


TYPICAL SECTION (OPTION NO. 2) ①

NOTES:

① SEE SPECIAL PROVISIONS FOR MATERIAL AND CONSTRUCTION DETAILS. OPTION NO. 2 MAY ONLY BE USED WHEN PIPE IS TO BE PLACED BY MACHINE TRENCHER.

② GRANULAR, SELECT GRANULAR OR SELECT GRANULAR MODIFIED. (AS SHOWN IN DESIGN RECOMMENDATION LETTER).



PIPE DRAIN TRENCH / BEDDING

NOT TO SCALE

SUBSURFACE DRAIN, SUBCUT DRAIN TYPE

NOT TO SCALE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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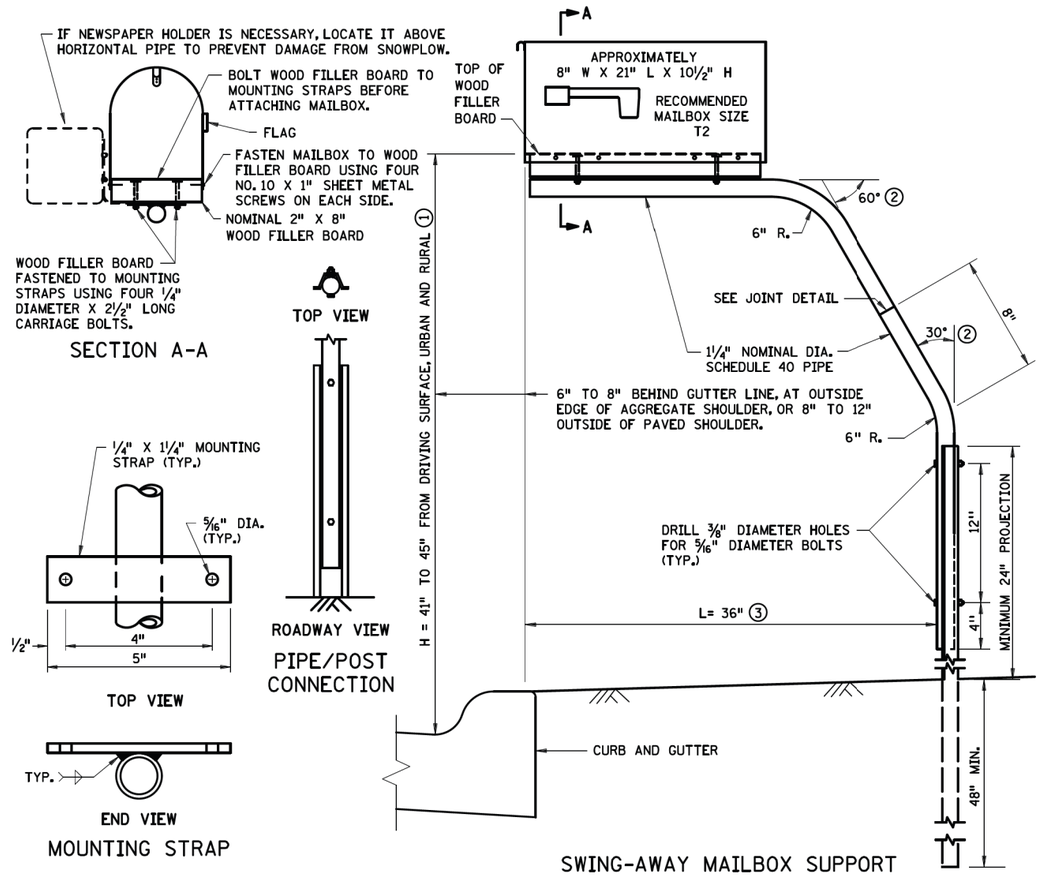
ANOKA COUNTY

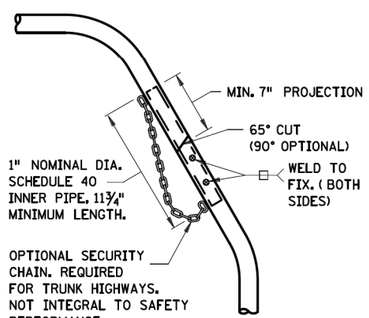
CSAH 22 (Baugh Street NW) Reconstruction

DESIGN DETAILS

SAP 002-622-037

Sheet No. 20 of 138 Sheets





NOTES:

STAKE MAILBOX LOCATIONS BEFORE INSTALLATION FOR PROPER HEIGHT AND DISTANCE FROM THE ROADWAY. ONCE STAKED, THE INSTALLER MUST NOTIFY THE ENGINEER AND THE POST OFFICE. THE ENGINEER AND THE POSTMASTER SHALL APPROVE THE STAKED LOCATIONS PRIOR TO FINAL INSTALLATION.

THE MINIMUM SPACING (CENTER TO CENTER) BETWEEN MULTIPLE MAILBOX SUPPORTS SHALL BE EQUAL TO THE HEIGHT OF THE MAILBOX SUPPORT.

OTHER MAILBOX SUPPORT DESIGNS MAY BE USED IF THEY SATISFY NCHRP REPORT 350 OR MASH CRITERIA IN ACCORDANCE WITH FHWA ACCEPTANCE LETTER, MEET MINNESOTA RULES 8818 AND U.S. POST OFFICE RECOMMENDATIONS AND ARE IN COMPLIANCE WITH MNDOT REQUIREMENTS WHICH MAY INCLUDE THE FOLLOWING (REQUIRED ON TRUNK HIGHWAYS):

PIPE SHALL CONFORM TO SPEC. 3362, SCHEDULE 40 OF ASTM A53/A53M.
ALL FASTENERS SHALL CONFORM TO SPEC. 3391.
PIPES, POST, AND OTHER STEEL COMPONENTS SHALL BE GALVANIZED PER SPEC. 3392

THE CONTRACTOR SHALL SEND THE SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. FOR QUESTIONS REGARDING DESIGN ELEMENTS AND BREAKAWAY FEATURES, CONTACT THE DESIGN STANDARDS UNIT.

(1) HEIGHT OUTSIDE THIS RANGE (H) MUST BE APPROVED BY LOCAL POSTMASTER.

(2) 45-DEGREE BENDS MAY BE USED AS AN OPTION.

(3) A 48" OR 53" CANTILEVER LENGTH (L) MAY BE USED AS AN OPTION FOR NON-TRUNK HIGHWAY USE.

MAILBOX SUPPORT
SWING-AWAY TYPE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: [signature]
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

DESIGN DETAILS

SAP 002-622-037

Sheet No. 21 of 138 Sheets

NOTES & GUIDELINES

GENERAL INFORMATION:

1. ALL DISTANCES ARE APPROXIMATE.

SIGNING:

1. ALL TEMPORARY SIGNS ARE REQUIRED TO BE CRASHWORTHY PER THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE 2016 (MASH-2016). TEMPORARY SIGN STRUCTURES THAT ARE CRASHWORTHY UNDER THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP-350) MAY BE USED PROVIDED THE DEVICES WERE ACQUIRED BY THE CONTRACTOR PRIOR TO DECEMBER 31ST, 2019. THE MINNESOTA TYPE "C" AND "D" BRACED LEG U-CHANNEL (KNEE BRACE) SIGN SUPPORT IS NOT ALLOWED.
2. **THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE PLACED AS NEEDED, OR PROVIDE TEMPORARY SIGNING UNTIL THE FINAL SIGNING IS PLACED.**
3. WHEN MULTIPLE GROUND MOUNTED SIGN STRUCTURES ARE PLACED ADJACENT TO EACH OTHER THERE SHOULD BE NO MORE THAN 2 POSTS WITHIN 84" OF EACH OTHER. WHEN THIS SPACING CAN NOT BE MAINTAINED, THEN SIGN STRUCTURES SHALL BE OFFSET, AND STAGGERED WITH A MINIMUM OF 4' BETWEEN SIGN STRUCTURES BOTH LATERALLY AND LONGITUDINALLY.
4. **WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO ROAD USERS INCLUDING BIKES AND PEDESTRIANS IS REDUCED ENOUGH TO CAUSE A HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.**
5. TEMPORARY SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE, BUT ARE NOT LIMITED TO, LIGHT POLES, TREES, SIGNS, AND BUILDINGS.
6. TEMPORARY SIGNS SHALL BE PLACED AND ORIENTED APPROXIMATELY AS SHOWN IN THE PLAN, AT RIGHT ANGLES TO DIRECTION OF AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE, UNLESS OTHERWISE SPECIFIED.
7. LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL" PAGES (6K-aj) THRU (6K-al) UNLESS OTHERWISE SPECIFIED IN THESE PLANS.
8. AFTER REMOVAL OF SIGN AND/OR SIGN BASE, BACK FILL, COMPACT, AND LEVEL SOIL TO MATCH SURROUNDING SOIL.

CONSTRUCTION INFORMATION SIGNING:

1. THE CONTRACTOR SHALL USE CONSTRUCTION INFORMATION SIGNING AS SHOWN IN THE PLAN WHICH ARE TO BE USED AS FOLLOWS:

   PLACE THE G20-X1 ADVANCE CLOSURE NOTICE SIGN(S) 10 DAYS PRIOR TO THE PLANNED CLOSURE DATE.

   PLACE G20-X2 ADVANCE NOTICE SIGNS 7 DAYS PRIOR TO THE WORK STARTING DATE. ONCE WORK BEGINS, COVER THE START DATE LEGEND WITH SUGGESTED PLAQUE CONTAINED IN THIS PLAN. IF NO ALTERNATE MESSAGE IS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER, DISPLAY THE CORRECT ESTIMATED FINISH DATE, MONTH, OR SEASON.

   IF CONSTRUCTION INFORMATION SIGNING IS NO LONGER VISIBLE TO THE MOTORING PUBLIC ONCE WORK BEGINS, MOVE SAID SIGNING TO A SITE IN ADVANCE OF THE WORK ZONE OR CLOSURE AS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER.

THE FOLLOWING STANDARD PLATES AND PLANS, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT			
STANDARD PLATES			
8000K	TEMPORARY CHANNELIZERS		
STANDARD PLANS			
		APPROVED	REVISED
5-297.718	SQUARE-TUBE SIGN MOUNTING DETAIL	8-9-2023	
5-297.719	SQUARE-TUBE SIDE-BY-SIDE SIGN MOUNTING DETAILS	8-9-2023	
5-297.720	SQUARE-TUBE NO PASSING ZONE SIGN MOUNTING DETAIL	8-9-2023	
5-297.721	THREE-WALL BASE FOR SQUARE-TUBE RISE POST	11-29-2022	
5-297.722	FIN BASE FOR SQUARE-TUBE RISE POST IN SOIL	8-9-2023	
5-297.724	SLIP BASE ASSEMBLY FOR SQUARE-TUBE RISE POST	8-9-2023	
5-297.801	INTERIM PAVEMENT MARKINGS AND SIGNING	10-10-2019	

UPDATED 11/02/2023 **THE LISTED STANDARD PLANS AND/OR PLATES ARE INCORPORATED BY REFERENCE INTO THE PLAN SET. THE CERTIFICATION ON THIS SHEET SIGNIFIES THE ENGINEER SELECTED THE STANDARD PLANS AND/OR PLATES AS APPROPRIATE FOR USE ON THIS PROJECT.**

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	AREA CLOSED TO TRAFFIC / WORK AREA
⊢	TRAFFIC CONTROL SIGN
⌊⌋	TYPE III BARRICADE =

INDEX

NARRATIVE

STAGE 1:

- TRAFFIC DETOURED. MAINTAIN TWO-WAY LOCAL TRAFFIC NORTH OF THE FULL CLOSURE.
- CONSTRUCT FROM 181ST AVE NW TO 184TH AVE NW UNDER FULL CLOSURE.

STAGE 2:

- TRAFFIC DETOURED. MAINTAIN TWO-WAY LOCAL TRAFFIC NORTH AND SOUTH OF THE FULL CLOSURE.
- CONSTRUCT FROM 184TH AVE NW TO 188TH AVE NW UNDER FULL CLOSURE.

STAGE 3:

- TRAFFIC DETOURED. MAINTAIN TWO-WAY LOCAL TRAFFIC NORTH AND SOUTH OF THE FULL CLOSURE.
- CONSTRUCT FROM 188TH AVE NW TO 194TH LN NW.
- CONSTRUCT INTERSECTION OF 194TH LN NW AND CSAH 22 UNDER TRAFFIC.

STAGE 4:

- TRAFFIC DETOURED. MAINTAIN TWO-WAY LOCAL TRAFFIC NORTH AND SOUTH OF THE FULL CLOSURE.
- CONSTRUCT FROM 194TH LN NW TO VIKING BLVD NW UNDER FULL CLOSURE.

STAGE 5:

- TRAFFIC DETOURED. MAINTAIN ACCESS FOR LOCAL TRAFFIC.
- PAVE FINAL WEAR COURSE.

DRAWN BY:	LS
DESIGNED BY:	MJS
CHECKED BY:	MJS

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Michael Shomion
PRINTED NAME: MICHAEL J. SHOMION, PE
DATE: 11/17/2025 LIC. NO. 50488

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TEMPORARY TRAFFIC CONTROL TITLE SHEET
CONSTRUCTION STAGING AND TRAFFIC CONTROL

SAP 002-622-037

"M" SERIES

SIGN	SIGN NO.	COLOR	SIZE (IN. X IN.) (WxH)	ASSEMBLY (IN. X IN.) (WxH)	NUMBER OF POST
DETOUR	M4-8	BLACK ON ORANGE	24X12	24X51	1
EAST WEST	M3-2 M3-4	WHITE ON BLUE	24X12		
ANOKA 22 COUNTY	M1-6M	WHITE ON BLUE	24X24		
⇧	M6-3 M6-1 R/L M5-1 R/L	WHITE ON BLUE	21X15		
END DETOUR	M4-8a	BLACK ON ORANGE	24X18	24X69	1
EAST WEST	M3-2 M3-4	WHITE ON BLUE	24X12		
ANOKA 22 COUNTY	M1-6M	WHITE ON BLUE	24X24		
⇧	M6-3 M6-1 R/L M5-1 R/L	WHITE ON BLUE	21X15		

"W" SERIES

SIGN	SIGN NO.	COLOR	SIZE (IN. X IN.) (WxH)	ASSEMBLY (IN. X IN.) (WxH)	NUMBER OF POST
ROAD CLOSED AHEAD	W20-3	BLACK ON ORANGE	48X48	48X72	1
MILE	W16-3P	BLACK ON ORANGE	36X24		
EAST WEST	M3-2 M3-4	WHITE ON BLUE	24X12	24X84	1
ANOKA 22 COUNTY	M1-6M	WHITE ON BLUE	24X24		
ROAD CLOSED AHEAD	W20-3	BLACK ON ORANGE	48X48		
EAST WEST	M3-2 M3-4	WHITE ON BLUE	24X12	24X84	1
ANOKA 22 COUNTY	M1-6M	WHITE ON BLUE	24X24		
DETOUR AHEAD	W20-2	BLACK ON ORANGE	48X48		

BARRICADE MOUNTED SIGNS

SIGN	SIGN NO.	COLOR	SIZE (IN. X IN.) (WxH)
ROAD CLOSED TO THRU TRAFFIC	R11-4	BLACK ON WHITE	60X30

"SPECIAL" SERIES

SIGN	SIGN NO.	COLOR	SIZE (IN. X IN.) (WxH)	ASSEMBLY (IN. X IN.) (WxH)	NUMBER OF POST	SPACING OF POST
CSAH 22 ROAD CLOSED 181st Ave TO Viking Blvd BEGINS MTH DY	SPECIAL SIGN Ⓐ	BLACK ON ORANGE	96X84	96X84	2	48
ROAD CLOSED BEGINNING XXXX XX Ⓑ	G20-X1	BLACK ON ORANGE	72X60	72X60	2	42

SPECIFIC NOTES:

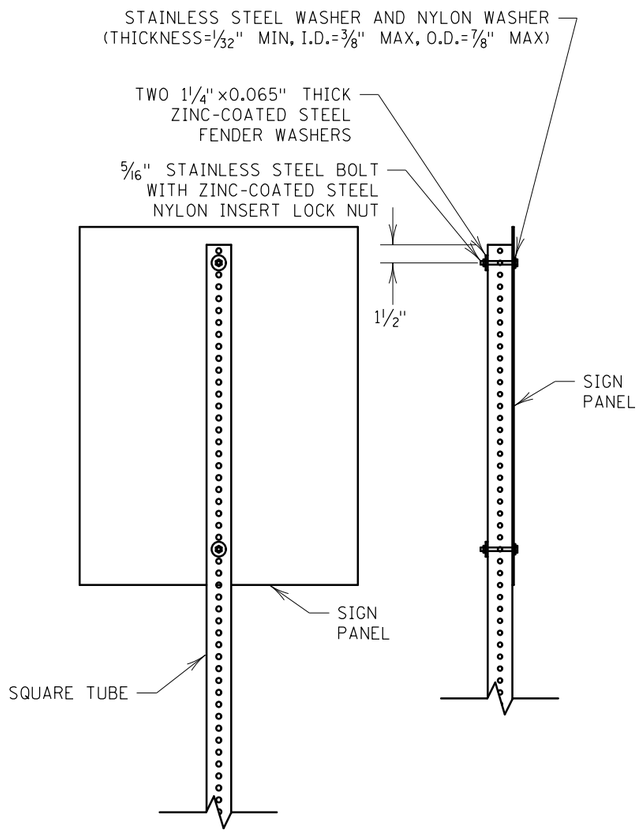
Ⓐ SEE SPECIAL SIGN DETAILS SHEET FOR SIGN DETAILS.

Ⓑ INSTALL AT POINT OF CLOSURE, IN BOTH DIRECTIONS, 10 DAYS PRIOR TO THE COMMENCEMENT OF WORK.

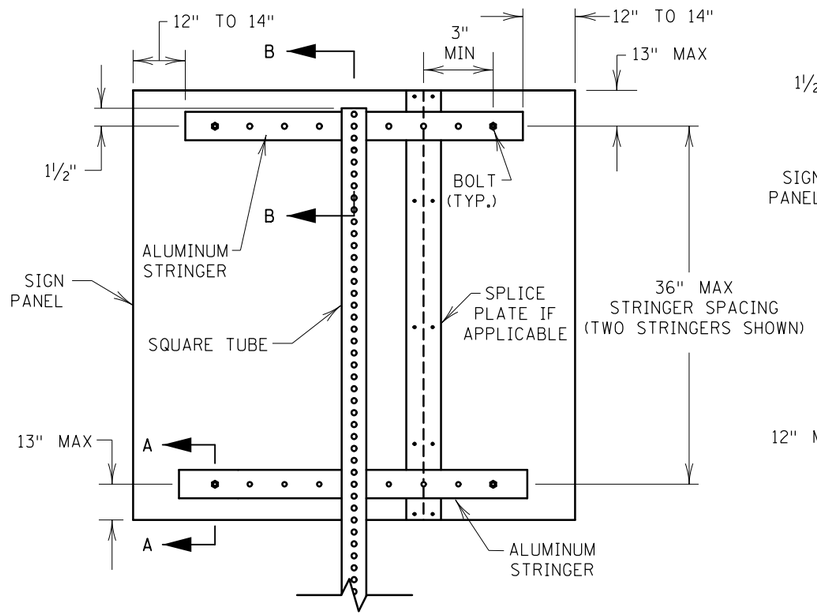
GENERAL NOTES:

1. SIGN STRUCTURE TABULATIONS INDICATE SQUARE TUBE GROUND MOUNTED SIGN STRUCTURES THAT ARE MASH-16 COMPLIANT.
2. USE PRODUCTS FROM THE BASES FOR SQUARE TUBE SIGN STRUCTURES APPROVED/QUALIFIED PRODUCTS LIST FOR THE INDICATED SQUARE TUBE RISER POST SIZE. PLACE PER THE MANUFACTURER'S SPECIFICATIONS.
3. ALUMINUM STRINGERS SHALL BE USED FOR SIGNS 36 INCHES AND WIDER. SEE MANUFACTURER'S SPECIFICATIONS FOR SQUARE TUBE MOUNTING DETAILS. STRINGERS ON SINGLE POST ASSEMBLIES ARE REQUIRED TO BE AT LEAST 9 INCHES IN FROM THE EDGE OF THE SIGN.
4. UNLESS OTHERWISE INDICATED, USE 2-1/2 INCH RISER POSTS FOR GROUND MOUNTED SIGN STRUCTURES.

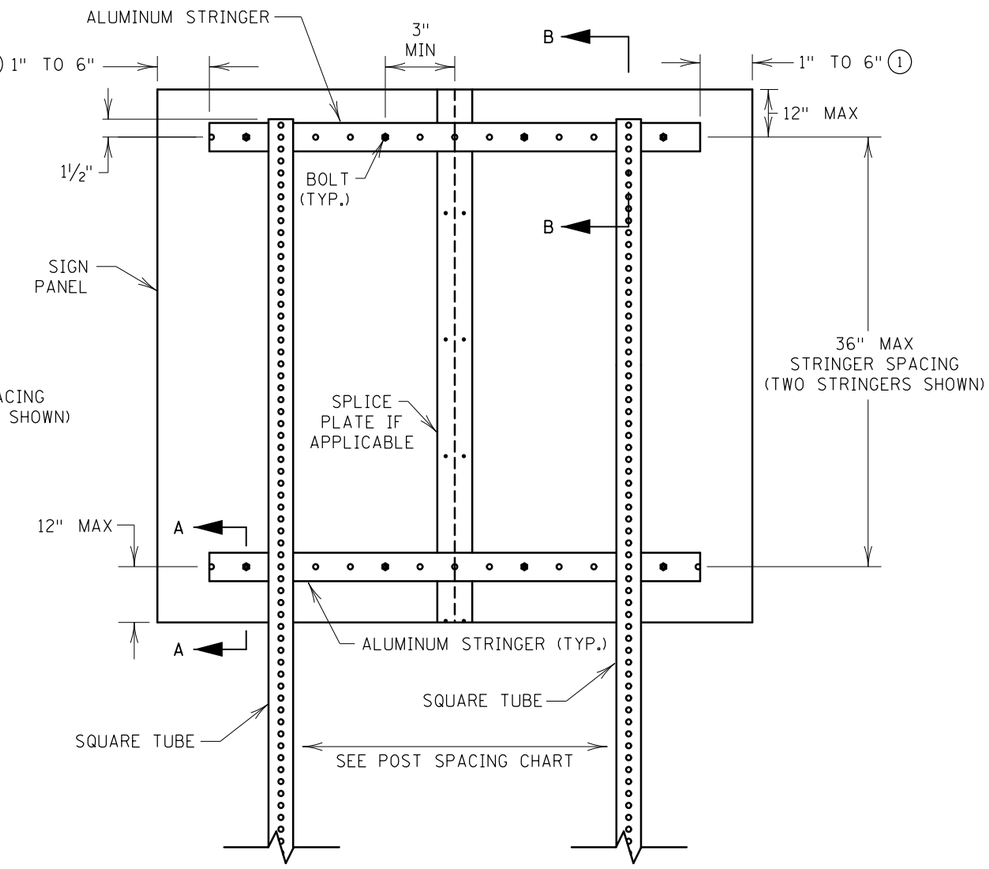
DRAWN BY: LS DESIGNED BY: MJS CHECKED BY: MJS	I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Michael Shomion PRINTED NAME: MICHAEL J. SHOMION, PE DATE: 11/18/2025 LIC. NO. 50488	wsb	ANOKA COUNTY **CSAH 22 (Baugh Street NW) Reconstruction**	TRAFFIC CONTROL TABULATION SHEET CONSTRUCTION STAGING AND TRAFFIC CONTROL	SAP 002-622-037 Sheet No. 23 of 138 Sheets



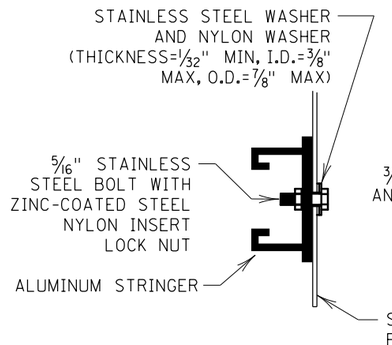
FOR SIGN PANELS UP TO 30" WIDE



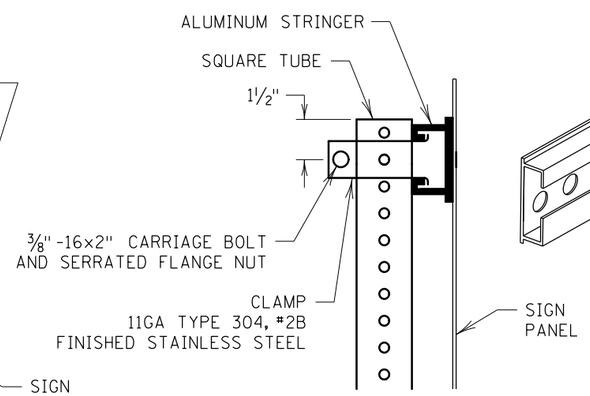
FOR SIGN PANELS 36" WIDE OR GREATER ON ONE POST



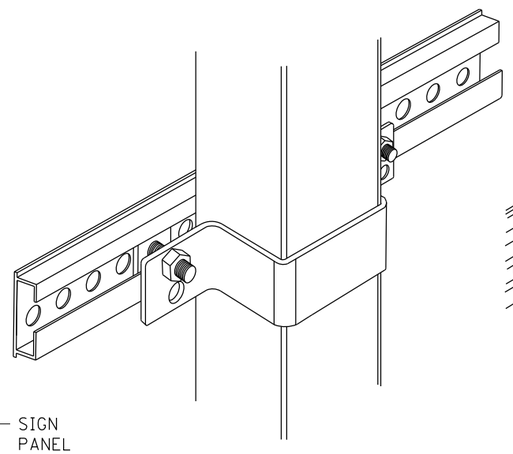
FOR SIGN PANELS ON TWO OR MORE POSTS



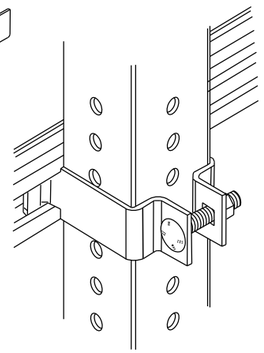
VIEW A-A



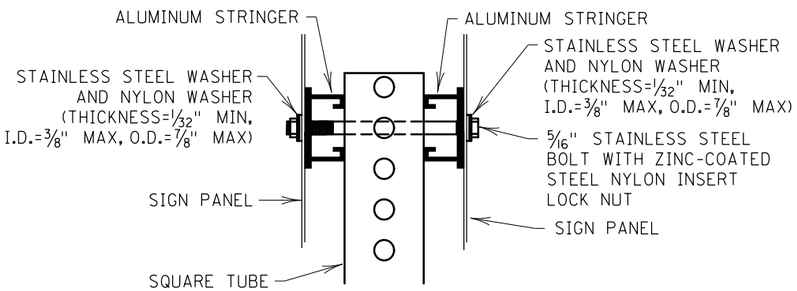
VIEW B-B



CLAMP DETAIL
4" SQUARE TUBE



CLAMP DETAIL
2" AND 2 1/2" SQUARE TUBE



BACK-TO-BACK SIGN MOUNTING WITH STRINGERS

NOTES:

BOLT SIGN PANELS TO STRINGERS OR RISER POSTS AT NO GREATER THAN 24" SPACING OR ACCORDING TO THE MNDOT STANDARD SIGNS AND MARKINGS MANUAL FOR MOUNTING HOLES (PUNCH CODES) INFORMATION.

CENTER STRINGERS ON SIGN PANEL.

(1) IF POST SPACING REQUIRES PLACEMENT OF A POST WITHIN THIS AREA, EXTEND STRINGERS AS NEEDED TO ACCOMMODATE THE STRINGER TO POST CLAMP.

DRAWN BY:	LS
DESIGNED BY:	MJS
CHECKED BY:	MJS

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Michael Shomion
PRINTED NAME: MICHAEL J. SHOMION, PE
DATE: 11/17/2025 LIC. NO. 50488

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

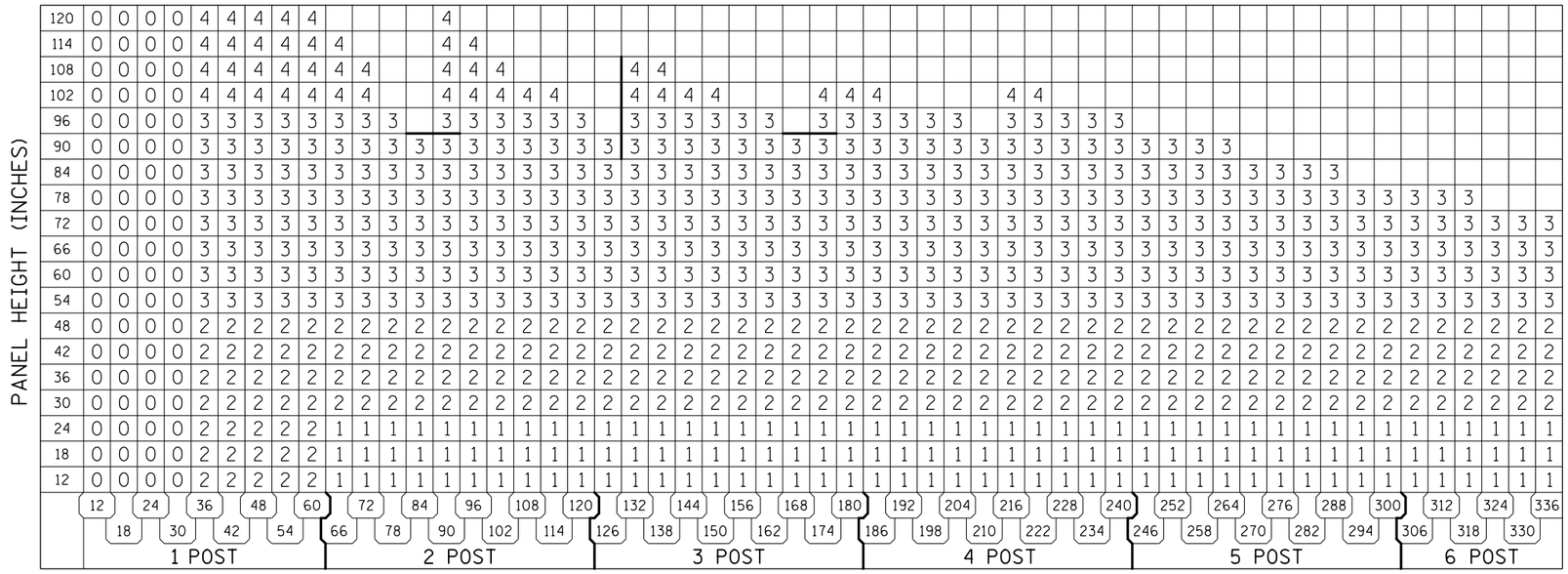
SQUARE-TUBE SIGN MOUNTING DETAIL
CONSTRUCTION STAGING AND TRAFFIC CONTROL

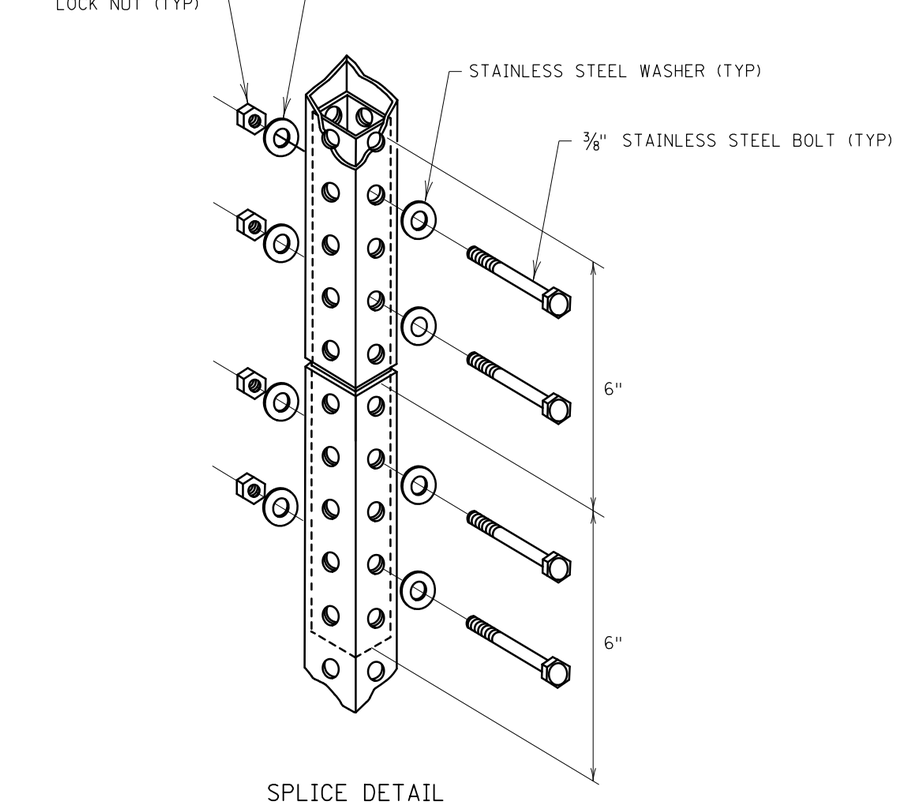
SAP 002-622-037

PANEL WIDTH	SQUARE TUBE POST SPACING						
	2 POSTS	3 POSTS	4 POSTS	5 POSTS	6 POSTS	7 POSTS	8 POSTS
(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)
42	15						
48	21						
54	30						
60	36						
66	36						
72	42						
78	42						
84	48						
90	48	42					
96	48	42					
102	54	42					
108	54	42					
114	60	42					
120	60	48					
126	66	48					
132	66	48	42				
138	72	48	42				
144	72	48	42				
150	78	54	42				
156	78	54	42				
162	84	54	42				
168	84	60	48				
174	90	60	48	42			
180	90	60	48	42			
186	96	66	48	42			
192	96	66	48	42			
198	102	66	54	42			
204	102	72	54	42			
210	108	72	54	42			
216	108	72	54	48	42		
222	114	78	60	48	42		
228	114	78	60	48	42		
234	120	78	60	48	42		
240	120	84	60	48	42		
246		84	66	54	42		
252		84	66	54	42		
258		90	66	54	42	42	
264		90	66	54	48	42	
270		90	72	54	48	42	
276		96	72	60	48	42	
282		96	72	60	48	42	
288		96	72	60	48	42	
294		102	78	60	54	42	
300		102	78	60	54	42	42
306		102	78	66	54	42	42
312		108	78	66	54	48	42
318		108	84	66	54	48	42
324		108	84	66	54	48	42
330		114	84	66	60	48	42
336		114	84	72	60	48	42

DISTANCES ARE CENTER-TO-CENTER OF POSTS

NUMBER OF ALUMINUM STRINGERS FOR 2½" OR SMALLER POSTS





SPLICE DETAIL

NOTES:

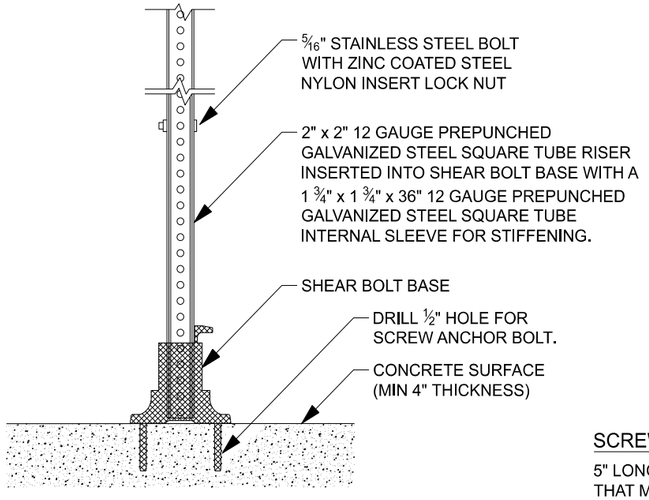
NO MORE THAN ONE SPLICE PER POST.

WHEN USED, THE SPLICE MUST BE PLACED AT LEAST 8' ABOVE GROUND. THE PREFERRED PLACEMENT LOCATION IS BEHIND THE SIGN PANEL.

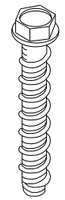
INTERIOR POST STUD SHALL BE ONE SIZE SMALLER FOR TIGHT FIT. IF RISER POST IS 2½", INTERIOR POST IS 2 3/16". IF RISER POST IS 2", INTERIOR POST IS 1¾".

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-425tcp-DETAIL.dgn
PLOTTED/REVISED: 11/17/2025 1:19:43 PM

DRAWN BY: LS DESIGNED BY: MJS CHECKED BY: MJS	I HEREBY CERTIFY THAT THIS SHEET 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.	SIGNATURE: Michael Shomion PRINTED NAME: MICHAEL J. SHOMION, PE DATE: 11/17/2025 LIC. NO. 50488	wsb	ANOKA COUNTY **CSAH 22 (Baugh Street NW) Reconstruction**	SQUARE-TUBE SIGN MOUNTING DETAIL CONSTRUCTION STAGING AND TRAFFIC CONTROL	SAP 002-622-037 Sheet No. 25 of 138 Sheets

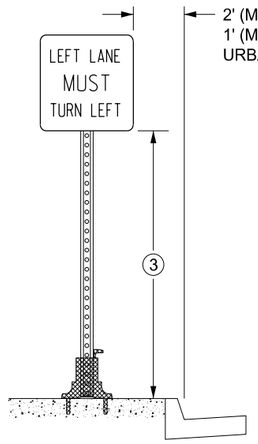


SHEAR BOLT BASE MOUNTED
CONCRETE SURFACE

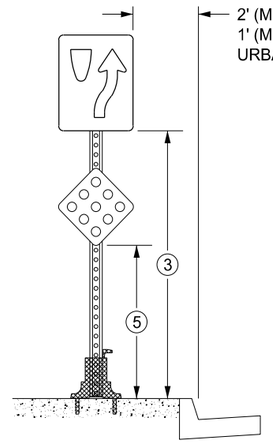


SCREW ANCHOR BOLT

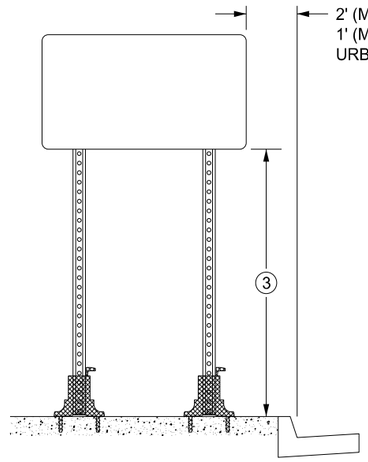
5" LONG CARBON STEEL THAT MUST MEET A MINIMUM ALLOWABLE TENSION LOAD OF 2270 PSI.



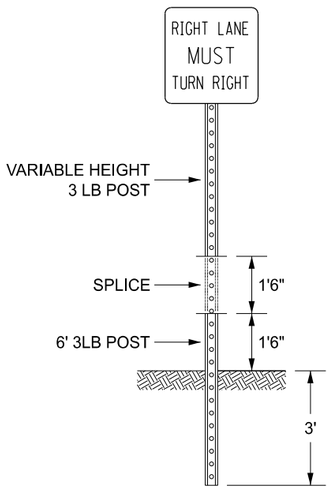
SHEAR BOLT BASE
CONCRETE SURFACE



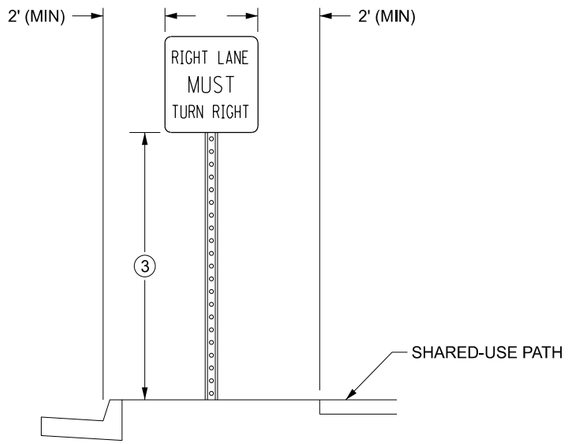
KEEP RIGHT & TYPE ONE OBJECT MARKER
SHEAR BOLT BASE
CONCRETE SURFACE



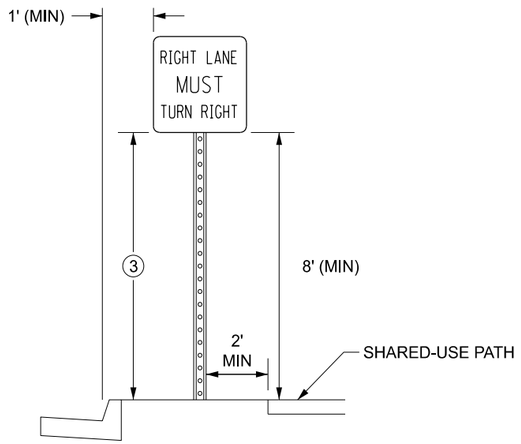
2-POST FOR SIGNS 66"-126" WIDE
SHEAR BOLT BASE
CONCRETE SURFACE



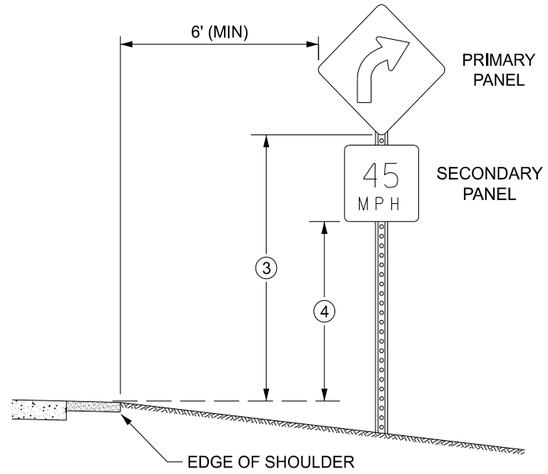
U-CHANNEL POST
SOIL SURFACE



BOULEVARD LOCATIONS
6' TO 12' WIDE



BOULEVARD LOCATIONS (2)
LESS THAN 6' WIDE



SHEAR BOLT BASE NOTES:

1. INSTALLATION OF SHEAR BOLT BASE MUST NOT BE EARLIER THAN 3 DAYS AFTER CONCRETE IS PLACED.
2. FOR SHEAR BOLT BASE USE APPROVED PRODUCT FROM MnDOT APPROVED PRODUCTS LIST.
3. USE ANTI-SEIZE ON THE SHEAR BOLT CONNECTIONS.
4. FOR SIGN MOUNTING DETAILS SEE SQUARE TUBE SIGN MOUNTING DETAILS.
5. SQUARE TUBE SIGN POSTS PER MnDOT SPEC. 3402.

NOTES:

1. ALL DIMENSIONS ARE MINIMUMS.
2. USE ONLY WHEN BOULEVARD IS TOO NARROW TO OBTAIN ADEQUATE SIGN OFFSETS.
3. MOUNTING HEIGHT (PRIMARY PANEL):
   - 5 FEET IN RURAL AREAS.
   - 7 FEET IN BUSINESS, COMMERCIAL OR RESIDENTIAL AREAS WITH PARKING OR PEDESTRIANS AND IN SIDEWALK AREAS.
   - 8 FEET WHEN SIGN IS MOUNTED ABOVE OR WITHIN 2 FEET OF A SHARED-USE PATH.
4. SECONDARY PANEL MOUNTING HEIGHT MAY BE ONE FOOT LESS THAN THAT SHOWN IN NOTE 3.
5. OBJECT MARKER MAY BE INSTALLED AT A MININUM 4 FEET.

DRAWN BY:	LS
DESIGNED BY:	MJS
CHECKED BY:	MJS

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Michael Shomion
PRINTED NAME: MICHAEL J. SHOMION, PE
DATE: 11/17/2025 LIC. NO. 50488

wsb

ANOKA COUNTY

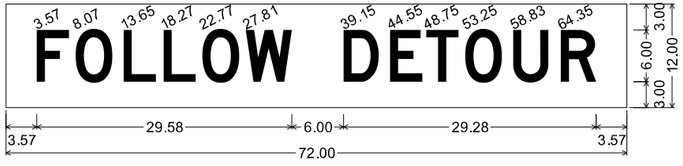
CSAH 22 (Baugh Street NW) Reconstruction

SIGN INSTALLATION AND PLACEMENT DETAIL
CONSTRUCTION STAGING AND TRAFFIC CONTROL

SAP 002-622-037

9.00" Radius, 1.50" Border, 1.00" Indent, Black on Orange;
"CSAH 22", D 2K 60% spacing; "ROAD", D 2K; "CLOSED", D 2K; "181st Ave", D 2K; "TO", D 2K;
"Viking Blvd", D 2K; "BEGINS MTH DY", D 2K;

9.00" Radius, 1.50" Border, 1.00" Indent, Black on Orange;
"CSAH 22", D 2K 60% spacing; "ROAD", D 2K; "CLOSED", D 2K; "Viking Blvd", D 2K; "TO", D 2K;
"181st Ave", D 2K; "BEGINS MTH DY", D 2K;



No border, White on Orange;
"FOLLOW DETOUR" Black, D 2K;

NOTE: ALL DIMENSIONS ARE IN INCHES

DRAWN BY: LS DESIGNED BY: MJS CHECKED BY: MJS	I HEREBY CERTIFY THAT THIS SHEET 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.	SIGNATURE: Michael Shomion PRINTED NAME: MICHAEL J. SHOMION, PE DATE: 11/17/2025 LIC. NO. 50488	wsb	ANOKA COUNTY **CSAH 22 (Baugh Street NW) Reconstruction**	SPECIAL SIGN DETAIL CONSTRUCTION STAGING AND TRAFFIC CONTROL	SAP 002-622-037 Sheet No. 27 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-425tcp-DETAIL.dgn
PLOTTED/REVISED: 11/17/2025 1:19:45 PM

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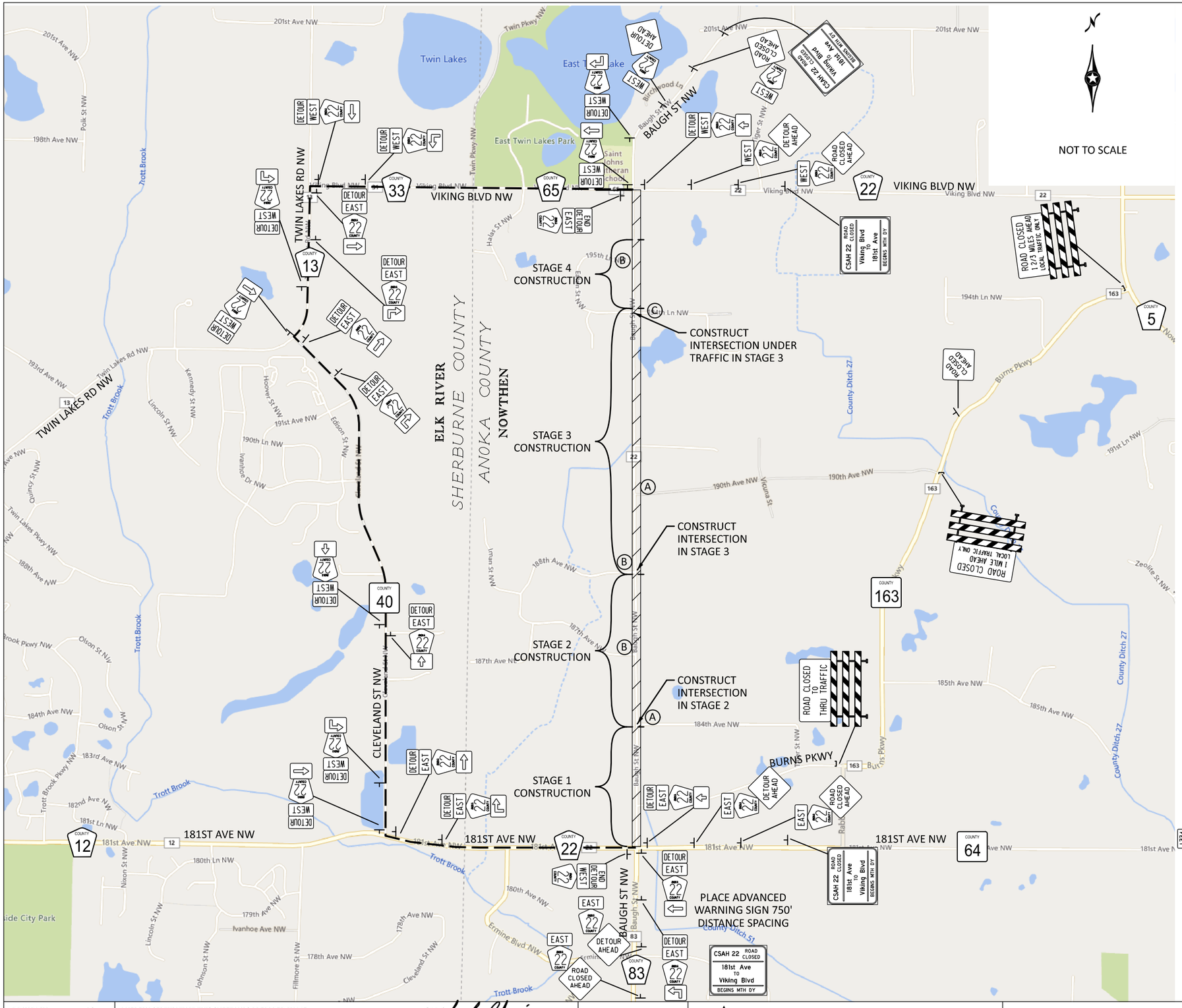


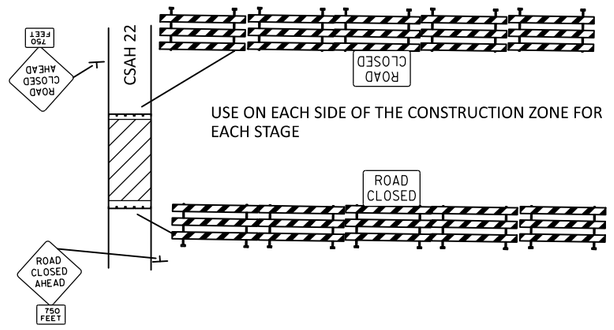
LEGEND:

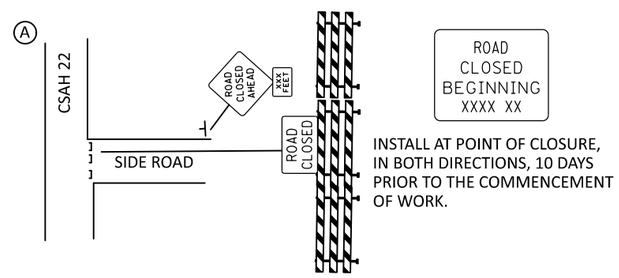
DETOUR ROUTE:

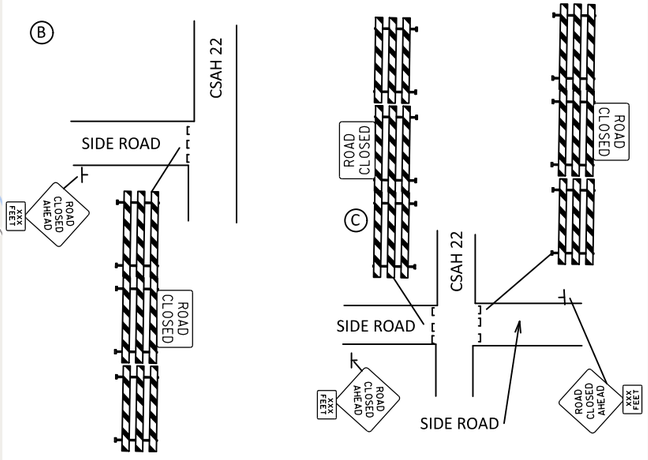
WORK AREA:

NOTES:

1. SIGN LOCATIONS SHOWN ARE FOR ILLUSTRATION ONLY. SPACING SHALL FOLLOW SPACING REQUIREMENTS AS SET FORTH IN THE MNMUTCD FIELD MANUAL.
2. THE CONTRACTOR IS REQUIRED TO ACQUIRE A SHERBURNE COUNTY RIGHT OF WAY PERMIT FOR THE PORTION OF THE DETOUR LOCATED WITHIN SHERBURNE COUNTY.
3. DETOUR TO REMAIN IN PLACE DURING ALL STAGES OF CONSTRUCTION.
4. PROVIDE PCMS ON EACH END OF PROJECT FOR EVERY STAGE FOR 10 DAYS





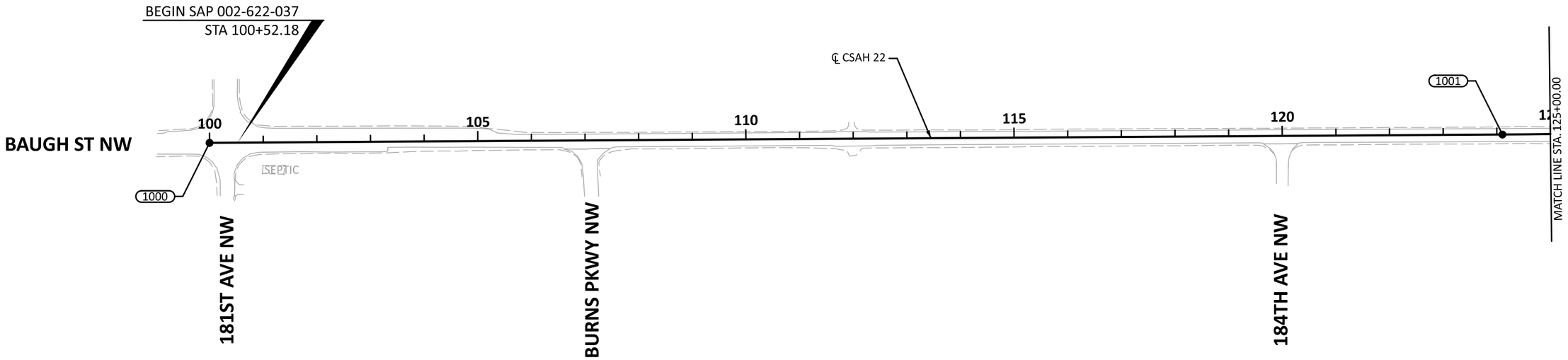


DRAWN BY:	LS	I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Michael Shomion PRINTED NAME: MICHAEL J. SHOMION, PE DATE: 11/17/2025 LIC. NO. 50488	wsb / ANOKA COUNTY **CSAH 22 (Baugh Street NW) Reconstruction**	DETOUR TEMPORARY TRAFFIC CONTROL PLAN
DESIGNED BY:	MJS				SAP 002-622-037
CHECKED BY:	MJS				Sheet No. 28 of 138 Sheets

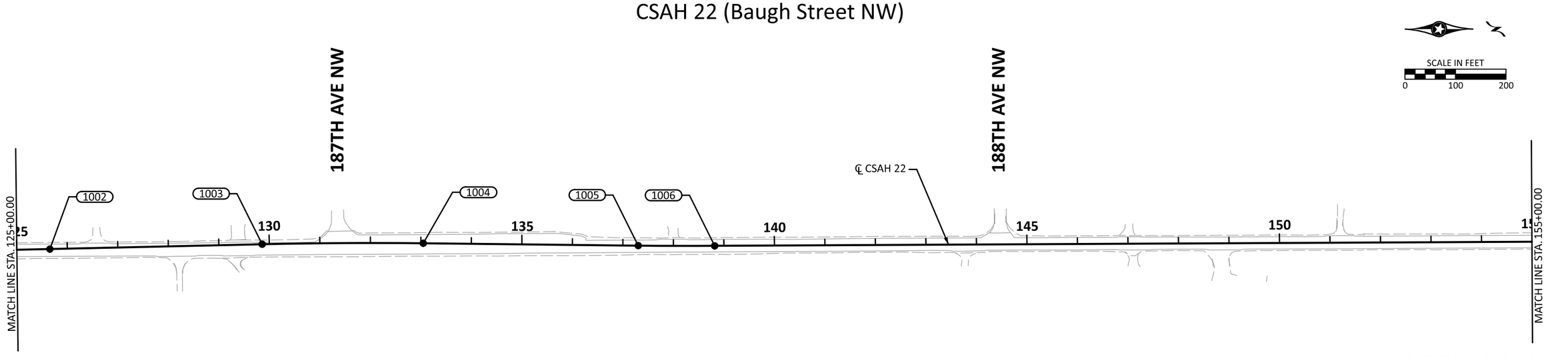
PATH & FILENAME: P:\Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-170alj-001

PLOTTED/REVISED: 11/4/2025 12:40:59 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



HORIZONTAL CONTROL FOR THIS PLAN IS ANOKA COUNTY COORDINATE SYSTEM, NAD 83 (2011 ADJUSTMENT)

ELEVATIONS FOR THIS PLAN ARE BASED ON NAVD 88 DATUM

LEGEND

XXXX	POINT NUMBER (DETAILS FOUND ON ALIGNMENT TABULATION SHEETS)

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 155+00.00
ALIGNMENT PLAN

SAP 002-622-037

Sheet No. 29 of 138 Sheets

PATH & FILENAME: P:\Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-170alj-001
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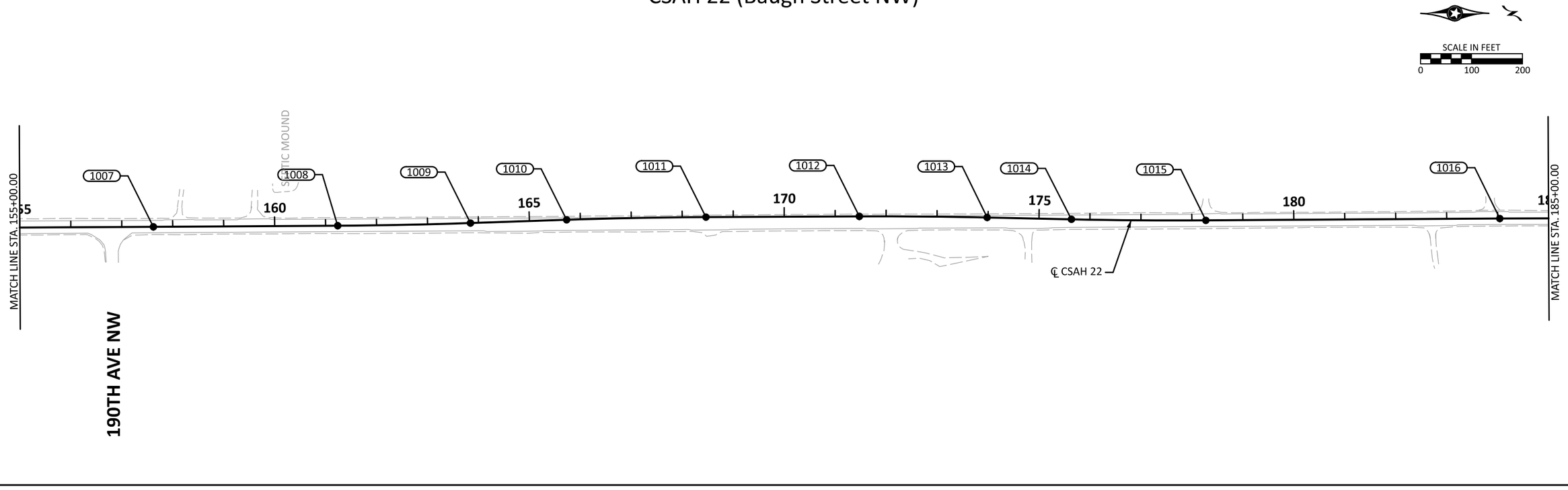
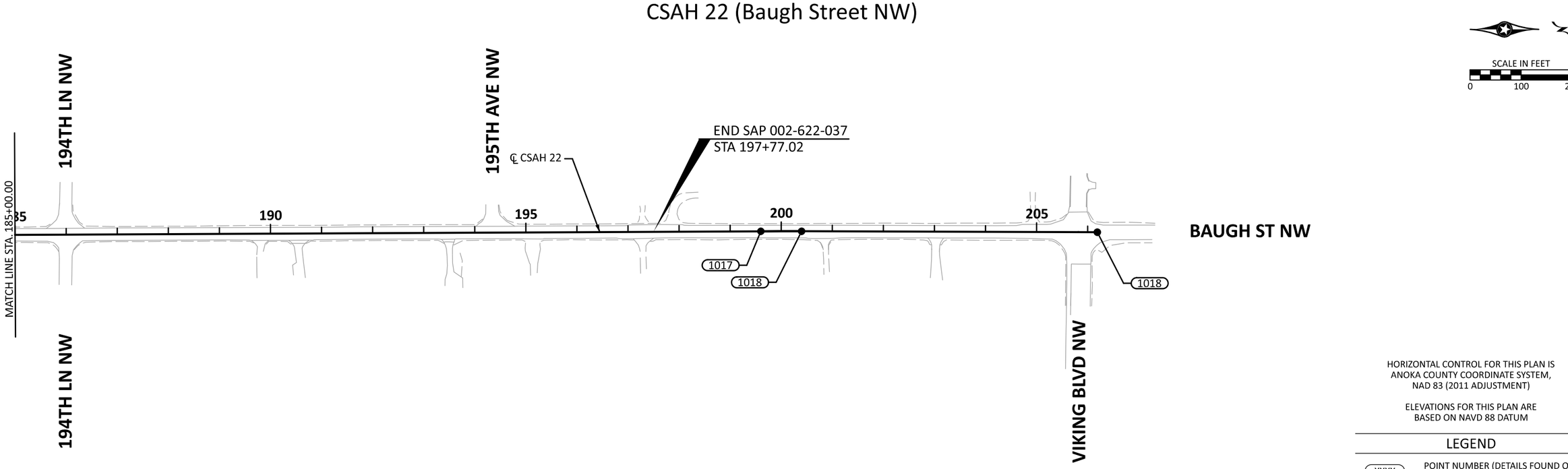
CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



HORIZONTAL CONTROL FOR THIS PLAN IS ANOKA COUNTY COORDINATE SYSTEM, NAD 83 (2011 ADJUSTMENT)

ELEVATIONS FOR THIS PLAN ARE BASED ON NAVD 88 DATUM

LEGEND

XXXX — POINT NUMBER (DETAILS FOUND ON ALIGNMENT TABULATION SHEETS)

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 155+00.00 TO STA 197+77.02
ALIGNMENT PLAN

SAP 002-622-037

Sheet No. 30 of 138 Sheets

ALIGNMENT TABULATION

POINT NUMBER	POINT TYPE	STATION	CIRCULAR CURVE DATA / SPIRAL CURVE DATA					COORDINATES		DIRECTION AZIMUTH
			DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
			THETA	DEGREE	ST	LT	LS			
ALIGNMENT: CSAH-22										
1000	START	100+00.000 R1						439862.48	196341.04	
1001	PC	124+10.579 R1						439847.00	198751.57	N0.368°W
	HPI	124+88.006 R1	0.941° LT	0.608°	9430	77.427	154.85	439846.51	198828.99	PI
	CC							430417.20	198691.02	
1002	PT	125+65.429 R1						439844.74	198906.40	N1.309°W
1003	PC	129+85.861 R1						439835.14	199326.72	N1.309°W
	HPI	131+45.347 R1	1.938° RT	0.608°	9430	159.485	318.94	439831.49	199486.17	PI
	CC							449262.68	199542.10	
1004	PT	133+04.801 R1						439833.24	199645.64	N0.629°E
1005	PC	137+30.462 R1						439837.92	200071.28	N0.629°E
	HPI	138+06.115 R1	0.919° LT	0.608°	9430	75.653	151.302	439838.75	200146.93	PI
	CC							430408.49	200174.82	
1006	PT	138+81.764 R1						439838.36	200222.58	N0.290°W
1007	HPI	157+62.077 R1						439828.84	202102.87	N0.290°W
1008	PC	161+23.771 R1						439826.61	202464.55	N0.353°W
	HPI	162+54.058 R1	1.583° LT	0.608°	9430	130.286	260.556	439825.81	202594.84	PI
	CC							430396.79	202406.48	
1009	PT	163+84.328 R1						439821.41	202725.05	N1.936°W
1010	PC	165+73.052 R1						439815.03	202913.67	N1.936°W
	HPI	167+09.806 R1	1.662° RT	0.608°	9430	136.754	273.489	439810.41	203050.34	PI
	CC							449239.65	203232.24	
1011	PT	168+46.541 R1						439809.76	203187.09	N0.274°W
1012	PC	171+47.513 R1						439808.32	203488.06	N0.274°W
	HPI	172+72.915 R1	1.524° RT	0.608°	9430	125.401	250.788	439807.72	203613.46	PI
	CC							449238.21	203533.21	
1013	PT	173+98.301 R1						439810.45	203738.83	N1.249°E
1014	PC	175+63.710 R1						439814.06	203904.20	N1.249°E
	HPI	176+95.579 R1	1.602° LT	0.608°	9430	131.869	263.721	439816.94	204036.04	PI
	CC							430386.30	204109.83	
1015	PT	178+27.430 R1						439816.12	204167.91	N0.353°W
1016	HPI	184+04.245 R1						439812.57	204744.71	N0.353°W
1017	PC	199+60.146 R1						439805.12	206300.59	N0.274°W
	HPI	200+00.043 R1	0.457° RT	0.573°	10000	39.897	79.793	439804.93	206340.49	PI
	CC							449805.01	206348.47	
1018	PT	200+39.939 R1						439805.06	206380.39	N0.183°E
1019	END	206+18.926 R1						439806.91	206959.37	N0.183°E

PATH & FILENAME: *Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-170ali-TAB-002*
PLOTTED/REVISED: *11/4/2025 12:41:02 PM*

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

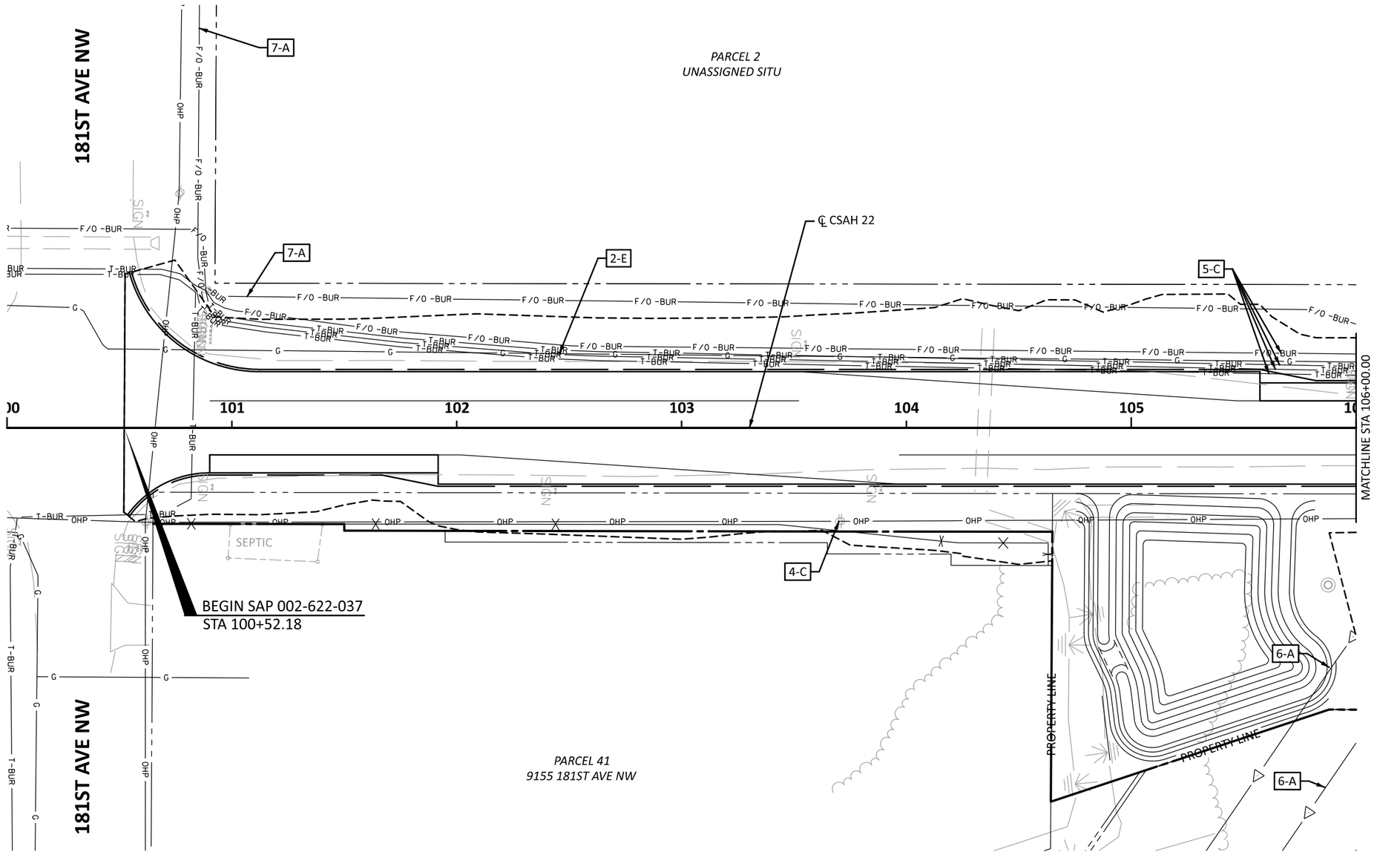
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
ALIGNMENT PLAN

SAP 002-622-037

CSAH 22 (Baugh Street NW)



LEGEND

- T-BUR — BURIED TELEPHONE LINE
- TV-BUR — BURIED TELEVISION LINE
- OHU — OVERHEAD UTILITY LINE
- F/O -BUR — BURIED FIBER OPTIC LINE
- P-BUR — BURIED POWER LINE
- UTILITY IN CONDUIT
- OHP — OVERHEAD POWER LINE
- OVERHEAD TRANSMISSION LINE
- BURIED SIGNAL LINE
- G — BURIED GAS MAIN/SERVICE
- G-A — BURIED GAS - ABANDONED
- SANITARY SEWER LINE
- STORM SEWER LINE
- CULVERT
- WATER MAIN
- UTILITY PEDESTAL
- HH — HANDHOLE
- POWER/UTILITY POLE
- LIGHT POLE
- CABINET
- VALVE (GAS)
- M — MANHOLE
- CATCH BASIN
- CONCRETE APRON
- HYDRANT
- GV — VALVE (WATER)
- VALVE (GAS)
- VEGETATION
- SIGN POST
- RETAINING WALL
- XC — EXISTING FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
(B) ADJUST - VERTICAL LOWER,
(C) RELOCATE

GENERAL NOTES

1. THE EXISTING SUBSURFACE UTILITY INFORMATION IS QUALITY LEVEL D IN ACCORDANCE WITH THE GUIDELINES OF ASCE/UESI/CI 38-22.
2. THE OWNER AND IMPACT NOTES ARE BASED UPON THE BEST INFORMATION AVAILABLE DURING DESIGN AND MAY NOT REFLECT THE ACTUAL EFFECTS ON THE UTILITIES BY CONSTRUCTION. FINAL DETERMINATIONS WILL BE MADE IN THE FIELD DURING CONSTRUCTION.
3. ALL UTILITY WORK SHOWN SHALL BE DONE BY OTHERS UNLESS SHOWN IN THE PLAN TO BE PERFORMED BY THE CONTRACTOR. SEE DRAINAGE PLAN FOR MORE INFORMATION.
3. UTILITIES MAY HAVE RELOCATED PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE THEIR WORK AND COOPERATE WITH THE UTILITY OWNERS AND THEIR FORCES. SOME UTILITIES MAY NEED TO BE RECLOATED CONCURRENTLY WITH THE CONTRACTOR'S WORK.
5. CALL GOPHER STATE ONE CALL (GSOC) AT LEAST 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001
PLOTTED/REVISED: 11/4/2025 12:41:05 PM

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DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 106+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 32 of 138 Sheets

CSAH 22 (Baugh Street NW)

PLOTTED/REVISED: 11/4/2025 12:41:06 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

SCALE IN FEET
0 25 50

XCEL ENERGY TRANSMISSION LINE: 345 KV

PARCEL 2
UNASSIGNED SITU

PARCEL 40
COUNTY OWNED

PARCEL 39
9157 BURNS PKWY NW

BURNS PKWY NW
(CR 163)

℄ CSAH 22

MATCHLINE STA 106+00.00

MATCHLINE STA 112+00.00

106 107 108 109 110 111 112

6-A 6-A 4-C 4-C 5-C 2-C 7-A 5-B 2-C 7-B 2-C 4-C 4-C 2-A 1-A 1-A

F/O -BUR G T-BUR OHP P-BUR SIGN

LEGEND

- T-BUR — BURIED TELEPHONE LINE
- TV-BUR — BURIED TELEVISION LINE
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- HYDRANT
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- VALVE (GAS)
- VEGETATION
- SIGN POST
- RETAINING WALL
- XC — EXISTING FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
(B) ADJUST - VERTICAL LOWER,
(C) RELOCATE

GENERAL NOTES

1. THE EXISTING SUBSURFACE UTILITY INFORMATION IS QUALITY LEVEL D IN ACCORDANCE WITH THE GUIDELINES OF ASCE/UESI/CI 38-22.
2. THE OWNER AND IMPACT NOTES ARE BASED UPON THE BEST INFORMATION AVAILABLE DURING DESIGN AND MAY NOT REFLECT THE ACTUAL EFFECTS ON THE UTILITIES BY CONSTRUCTION. FINAL DETERMINATIONS WILL BE MADE IN THE FIELD DURING CONSTRUCTION.
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5. CALL GOPHER STATE ONE CALL (GSOC) AT LEAST 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 106+00 TO STA 112+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 33 of 138 Sheets

CSAH 22 (Baugh Street NW)

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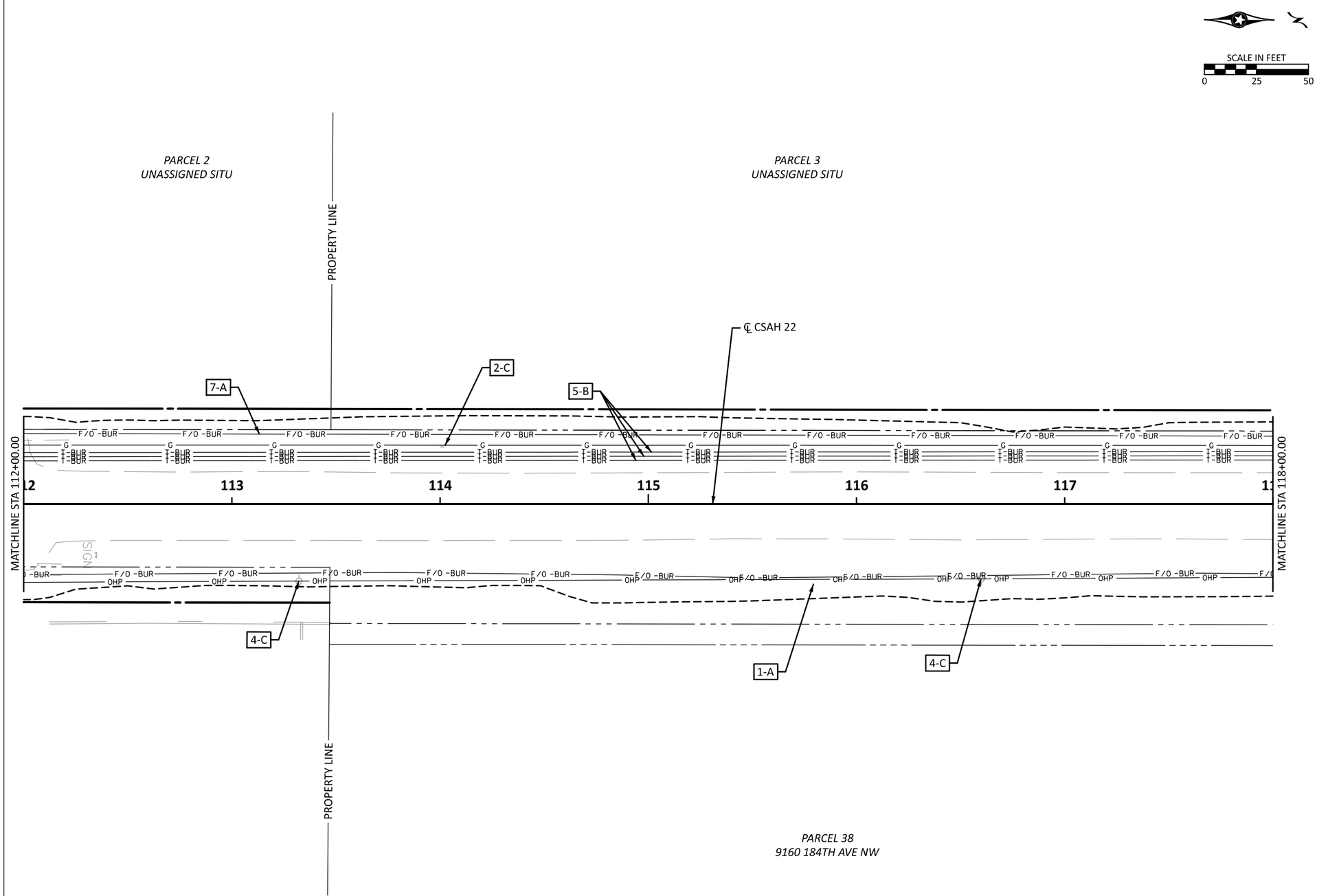
PATH & FILENAME: Projects\Minnesota\026054-000-175top-001 Sheets\026054-000\03_Sheets\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001



LEGEND

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- BURIED TELEVISION LINE
- OVERHEAD UTILITY LINE
- BURIED FIBER OPTIC LINE
- BURIED POWER LINE
- UTILITY IN CONDUIT
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- RETAINING WALL
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- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

1-A UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
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(3) COMCAST
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(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
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DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 112+00 TO STA 118+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

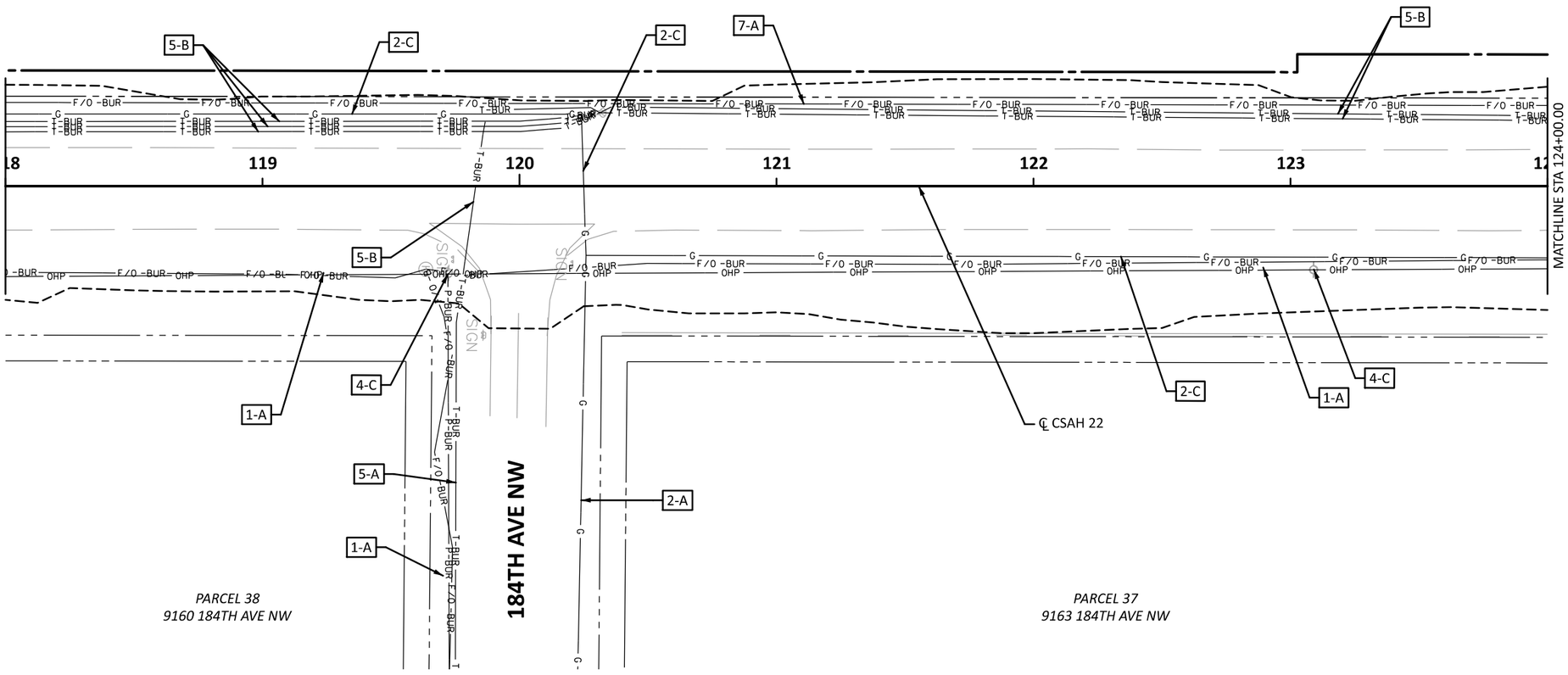
PLOTTED/REVISED: 11/4/2025 12:41:09 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

CSAH 22 (Baugh Street NW)

SCALE IN FEET
0 25 50

PARCEL 3
UNASSIGNED SITU



LEGEND

- T-BUR — BURIED TELEPHONE LINE
- TV-BUR — BURIED TELEVISION LINE
- OHU — OVERHEAD UTILITY LINE
- F/O -BUR — BURIED FIBER OPTIC LINE
- P-BUR — BURIED POWER LINE
- UTILITY IN CONDUIT
- OHP — OVERHEAD POWER LINE
- OVERHEAD TRANSMISSION LINE
- BURIED SIGNAL LINE
- G — BURIED GAS MAIN/SERVICE
- G-A — BURIED GAS - ABANDONED
- SANITARY SEWER LINE
- STORM SEWER LINE
- CULVERT
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- CABINET
- VALVE (GAS)
- M — MANHOLE
- CATCH BASIN
- CONCRETE APRON
- HYDRANT
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- VEGETATION
- SIGN POST
- RETAINING WALL
- XC — EXISTING FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
(B) ADJUST - VERTICAL LOWER,
(C) RELOCATE

GENERAL NOTES

1. THE EXISTING SUBSURFACE UTILITY INFORMATION IS QUALITY LEVEL D IN ACCORDANCE WITH THE GUIDELINES OF ASCE/UESI/CI 38-22.
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5. CALL GOPHER STATE ONE CALL (GSOC) AT LEAST 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

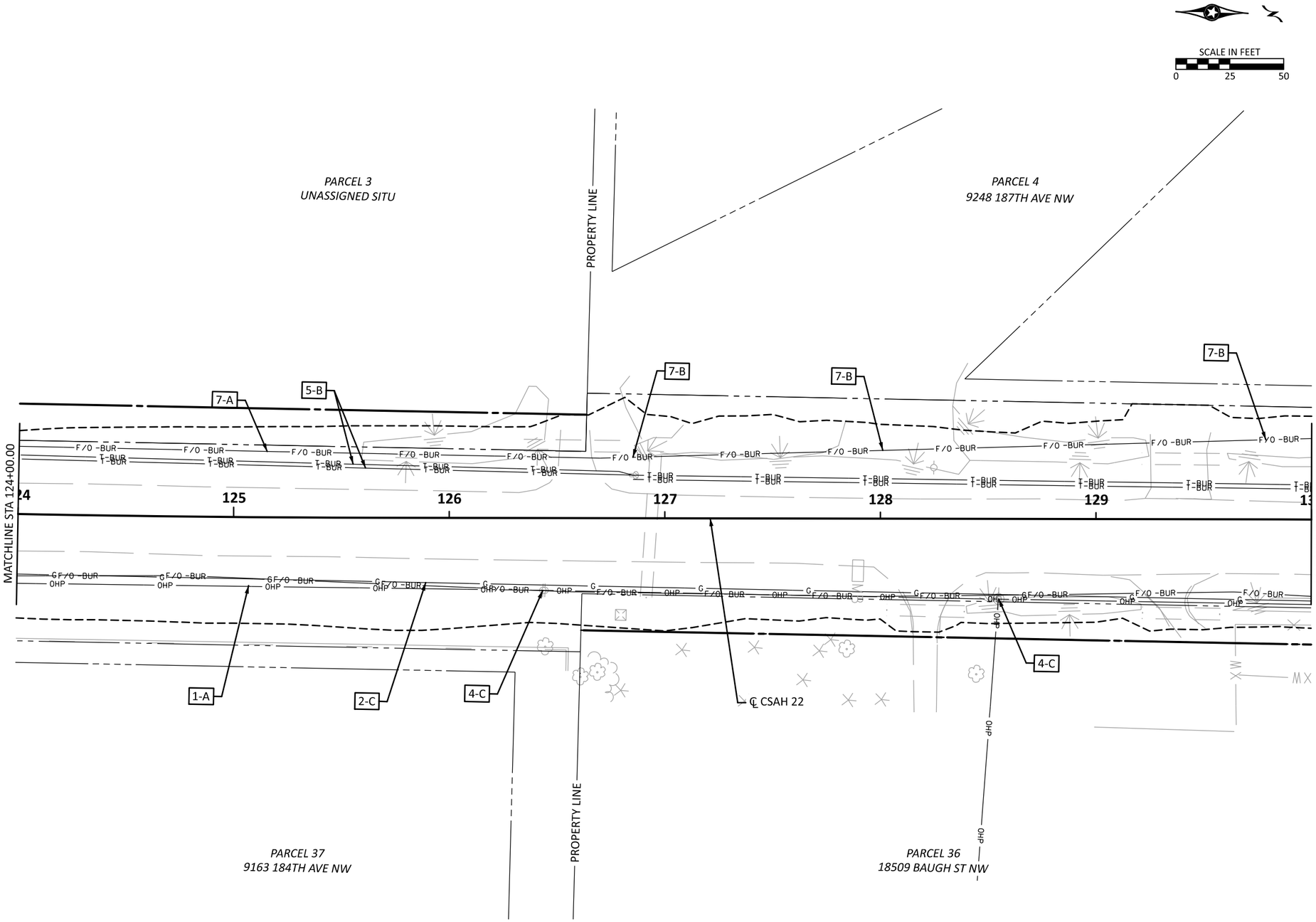
CSAH 22 (Baugh Street NW) Reconstruction

STA 118+00 TO STA 124+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 35 of 138 Sheets

CSAH 22 (Baugh Street NW)



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PLOTTED/REVISED: 11/4/2025 12:41:10 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
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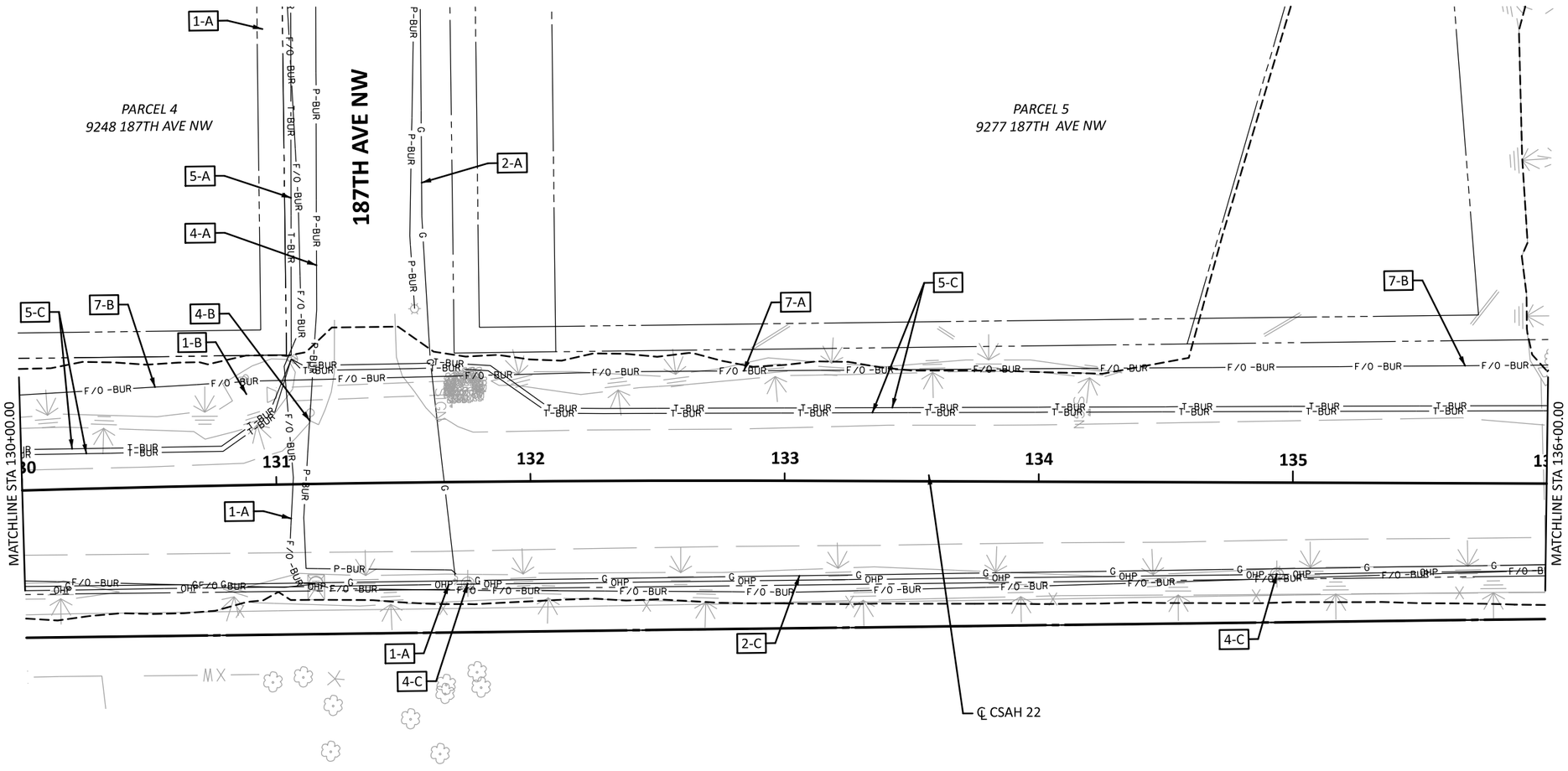
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 124+00 TO STA 130+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

CSAH 22 (Baugh Street NW)



LEGEND

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PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001
PLOTTED/REVISED: 11/4/2025 12:41:11 PM

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 130+00 TO STA 136+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 37 of 138 Sheets

CSAH 22 (Baugh Street NW)

PLOTTED/REVISED: 11/4/2025 12:41:12 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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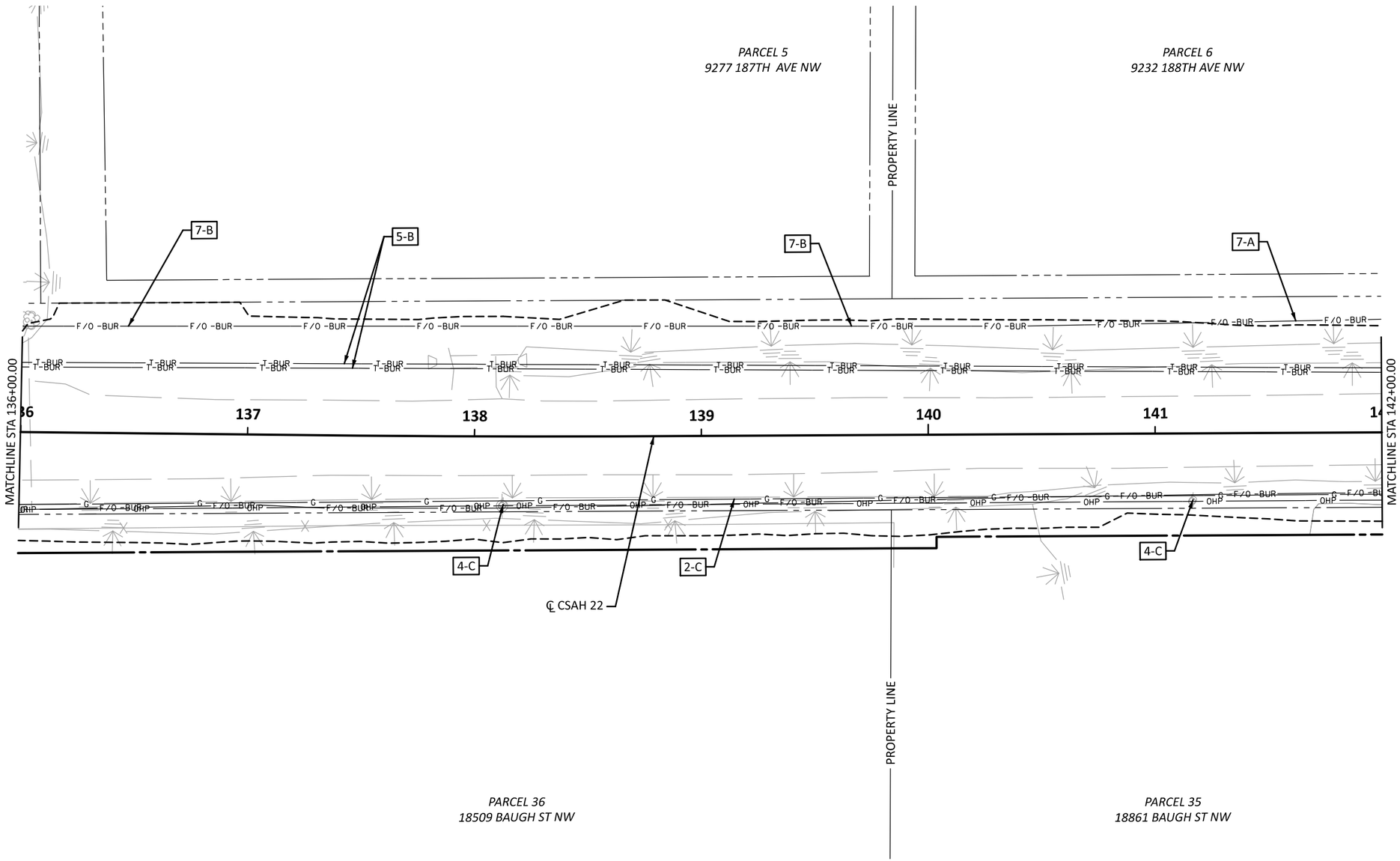

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IMPACT:
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DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 136+00 TO STA 142+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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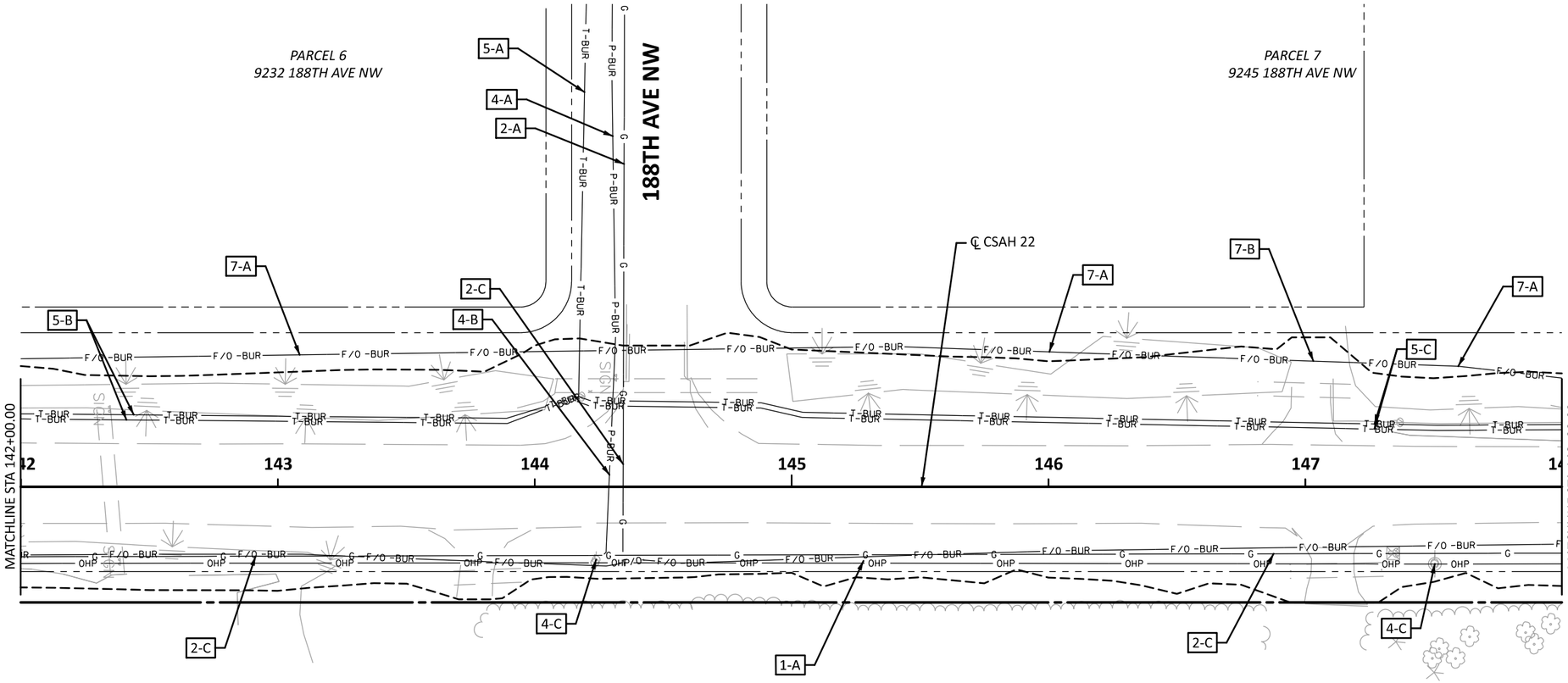
CSAH 22 (Baugh Street NW)



PARCEL 35
18861 BAUGH ST NW

LEGEND

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 142+00 TO STA 148+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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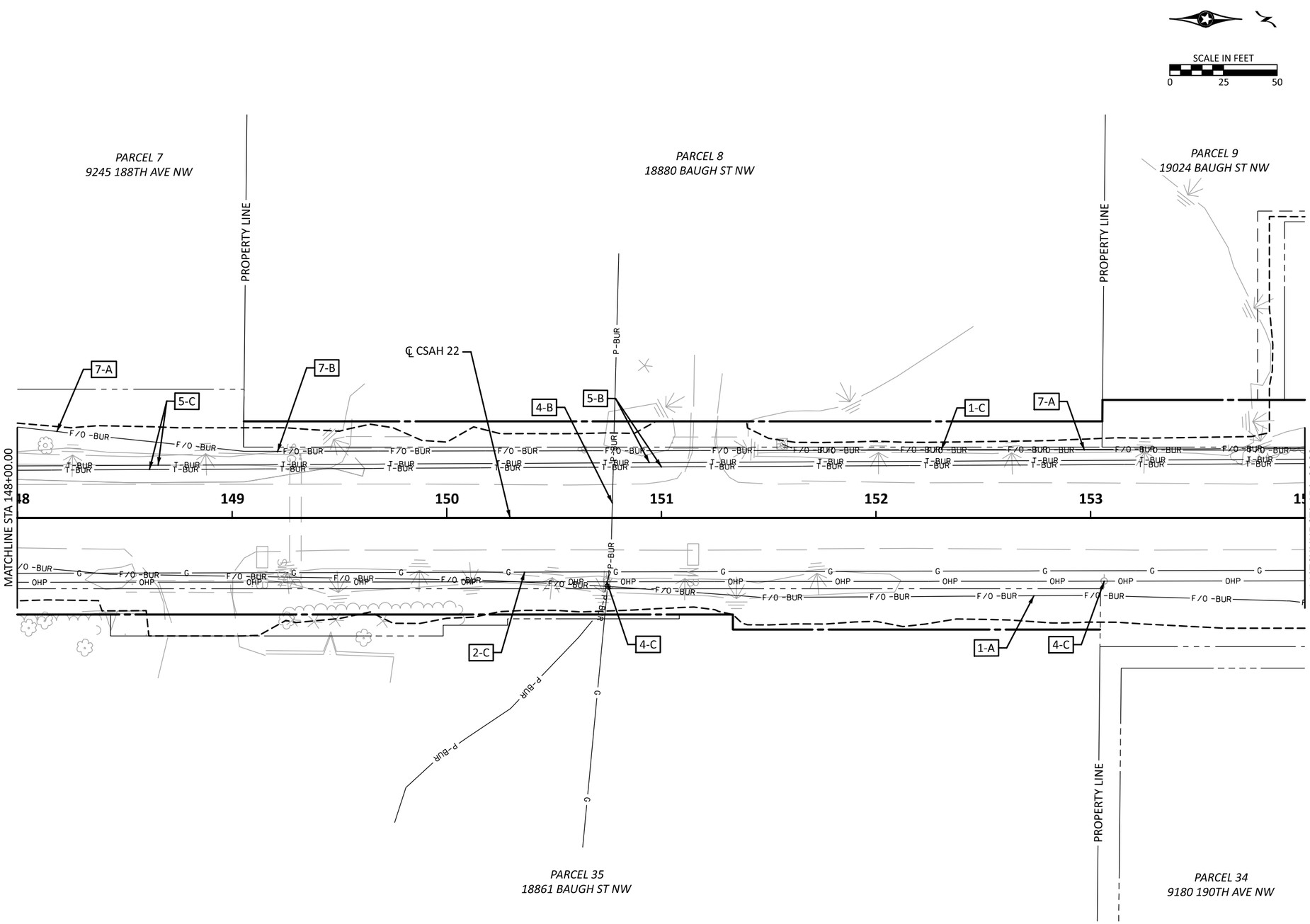
CSAH 22 (Baugh Street NW)



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CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 154+00
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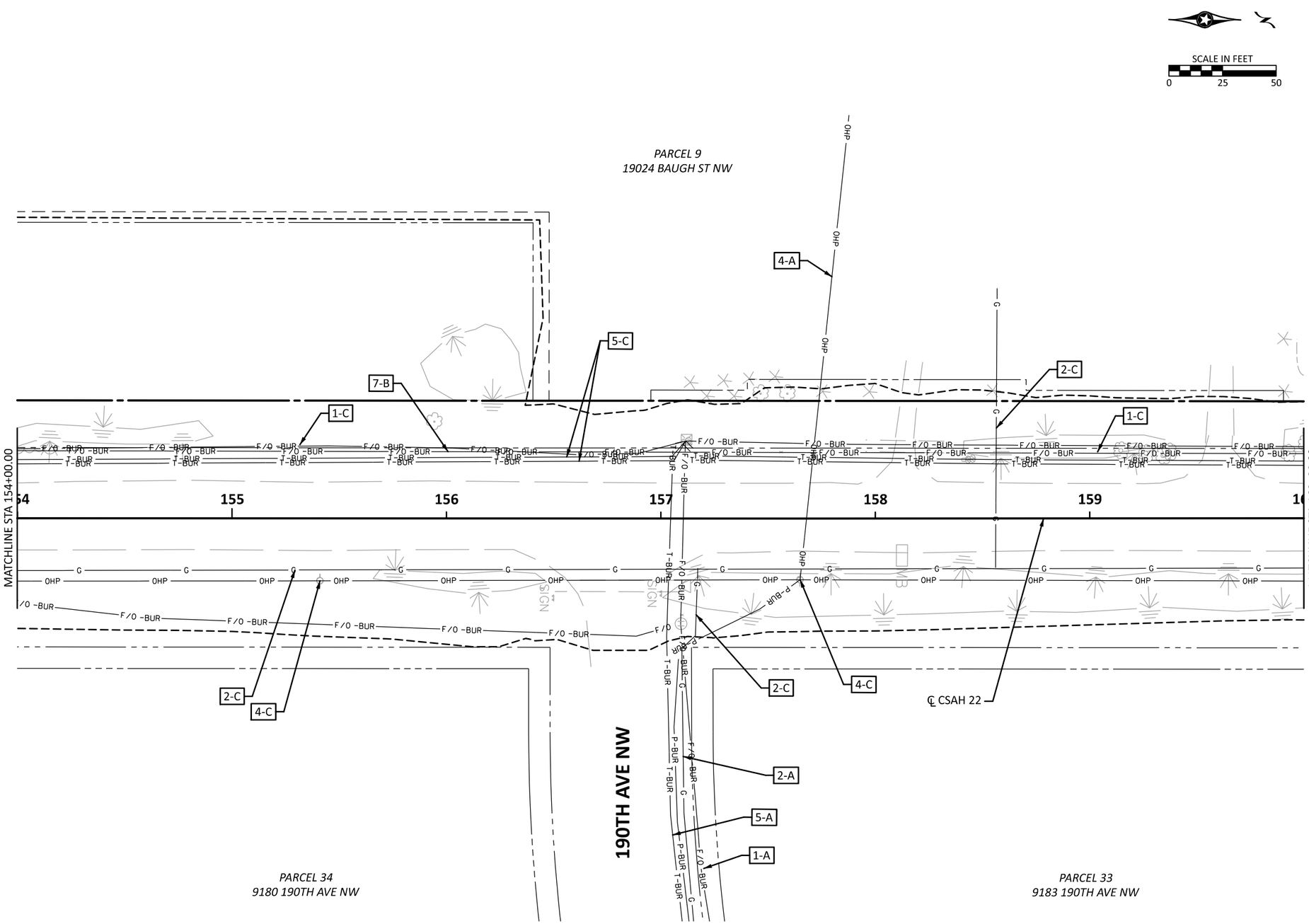
SAP 002-622-037

CSAH 22 (Baugh Street NW)



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5. CALL GOPHER STATE ONE CALL (GSOC) AT LEAST 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001
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CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 154+00 TO STA 160+00
INPLACE TOPOGRAPHY & UTILITIES

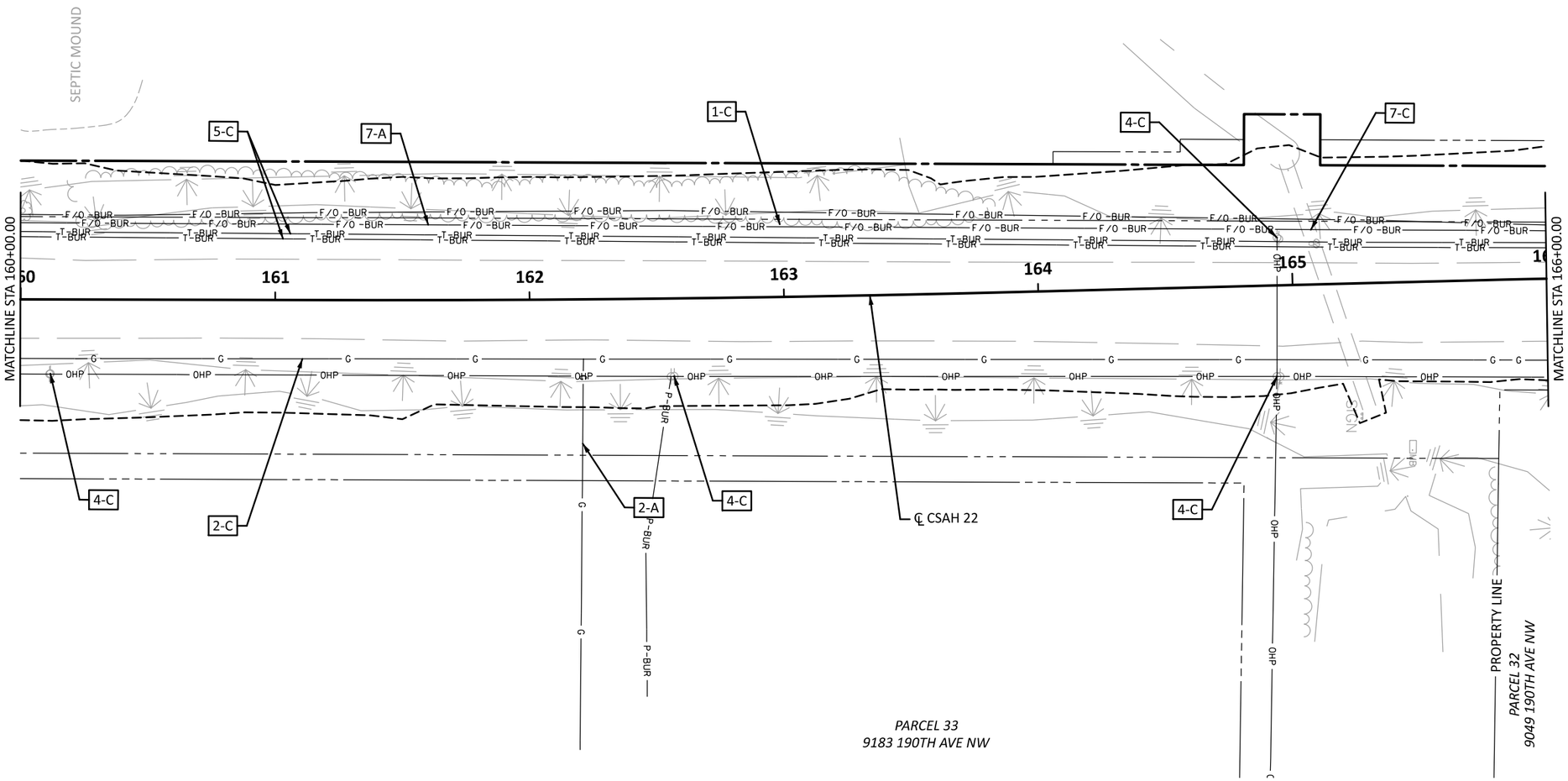
SAP 002-622-037

Sheet No. 41 of 138 Sheets

CSAH 22 (Baugh Street NW)

SCALE IN FEET
0 25 50

PARCEL 9
19024 BAUGH ST NW



LEGEND

- T-BUR — BURIED TELEPHONE LINE
- TV-BUR — BURIED TELEVISION LINE
- OHU — OVERHEAD UTILITY LINE
- F/O -BUR — BURIED FIBER OPTIC LINE
- P-BUR — BURIED POWER LINE
- UTILITY IN CONDUIT
- OHP — OVERHEAD POWER LINE
- OVERHEAD TRANSMISSION LINE
- BURIED SIGNAL LINE
- G — BURIED GAS MAIN/SERVICE
- G-A — BURIED GAS - ABANDONED
- SANITARY SEWER LINE
- STORM SEWER LINE
- CULVERT
- WATER MAIN
- UTILITY PEDESTAL
- HH — HANDHOLE
- POWER/UTILITY POLE
- LIGHT POLE
- CABINET
- VALVE (GAS)
- M — MANHOLE
- CATCH BASIN
- CONCRETE APRON
- HYDRANT
- GV — VALVE (WATER)
- VALVE (GAS)
- VEGETATION
- SIGN POST
- RETAINING WALL
- XC — EXISTING FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
(B) ADJUST - VERTICAL LOWER,
(C) RELOCATE

GENERAL NOTES

1. THE EXISTING SUBSURFACE UTILITY INFORMATION IS QUALITY LEVEL D IN ACCORDANCE WITH THE GUIDELINES OF ASCE/UESI/CI 38-22.
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PATH & FILENAME: *Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001*
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SIGNATURE: *Austin J. Frosig*
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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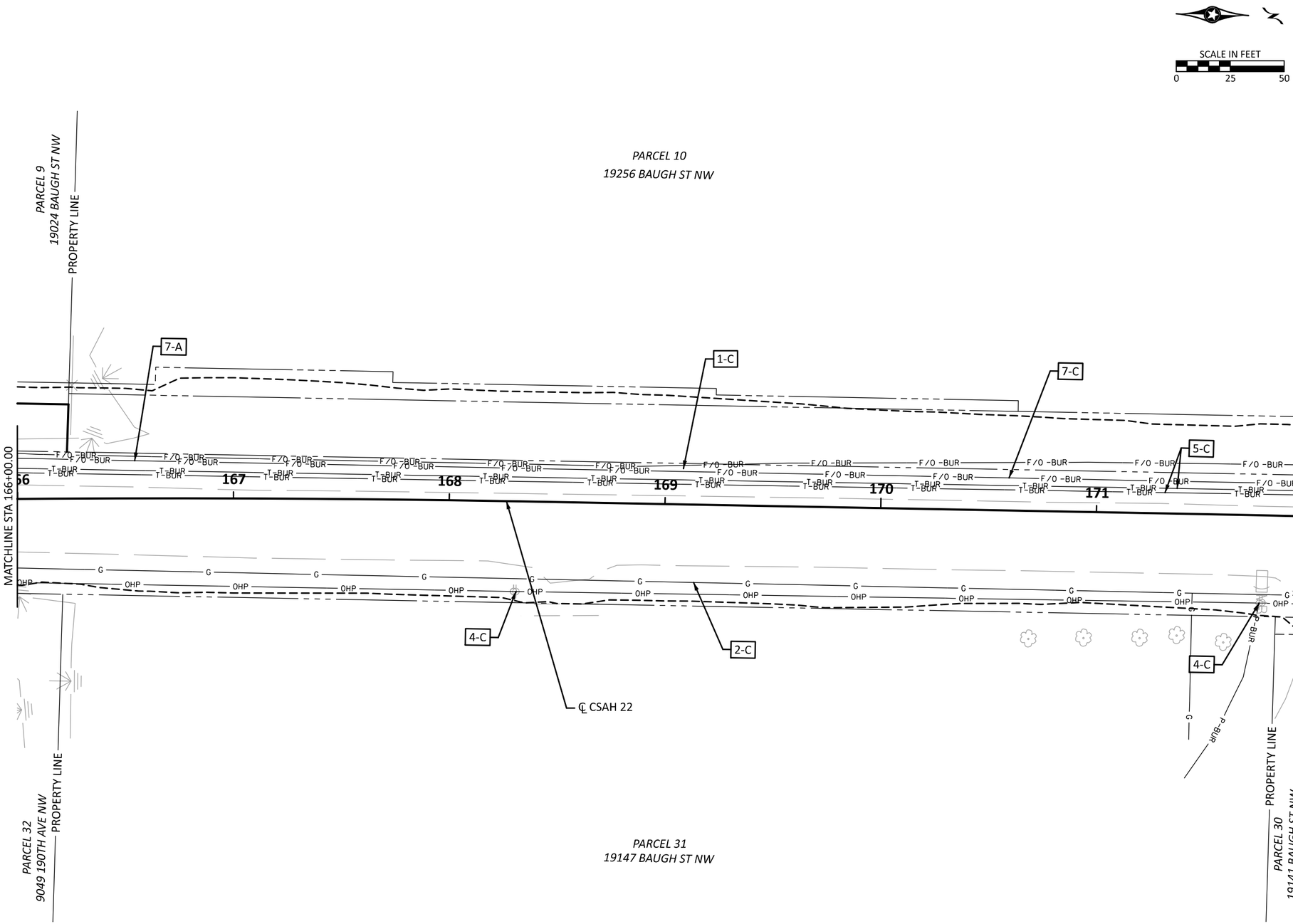
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 160+00 TO STA 166+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

CSAH 22 (Baugh Street NW)



LEGEND

- BURIED TELEPHONE LINE
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- OVERHEAD UTILITY LINE
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- UTILITY IN CONDUIT
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IMPACT:
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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 166+00 TO STA 172+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 43 of 138 Sheets

CSAH 22 (Baugh Street NW)

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SCALE IN FEET
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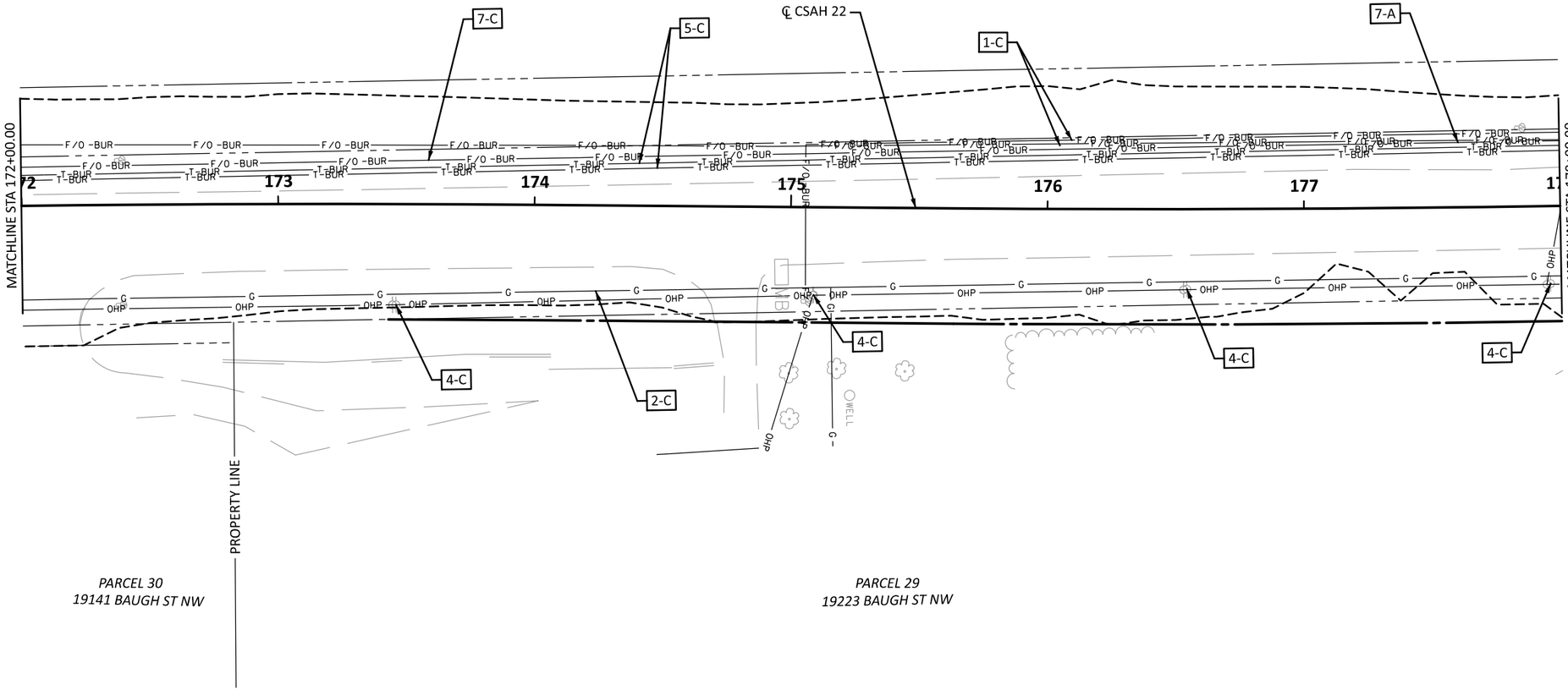

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- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
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(C) RELOCATE

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ANOKA COUNTY

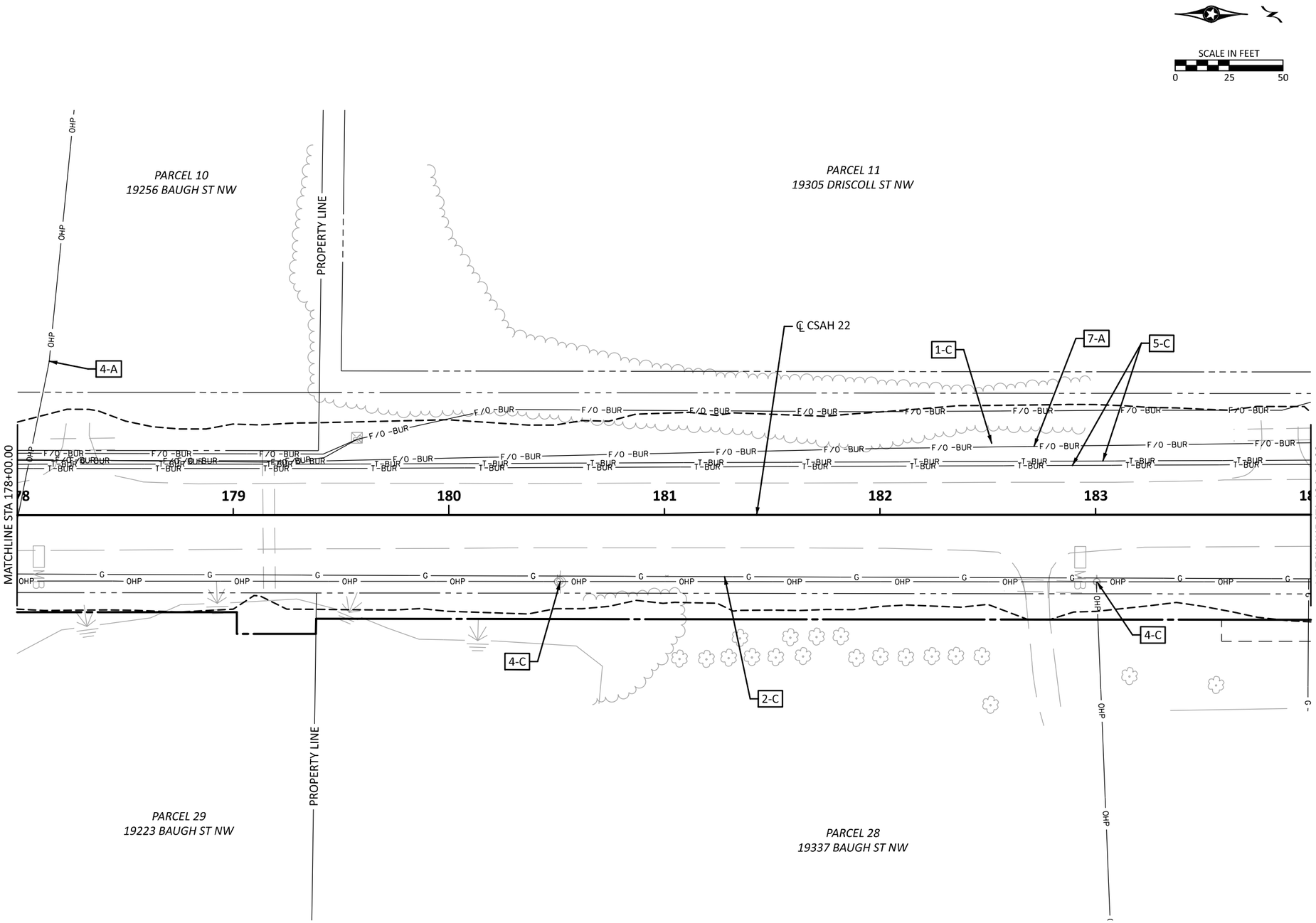
CSAH 22 (Baugh Street NW) Reconstruction

STA 172+00 TO STA 178+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 44 of 138 Sheets

CSAH 22 (Baugh Street NW)



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PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 178+00 TO STA 184+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 45 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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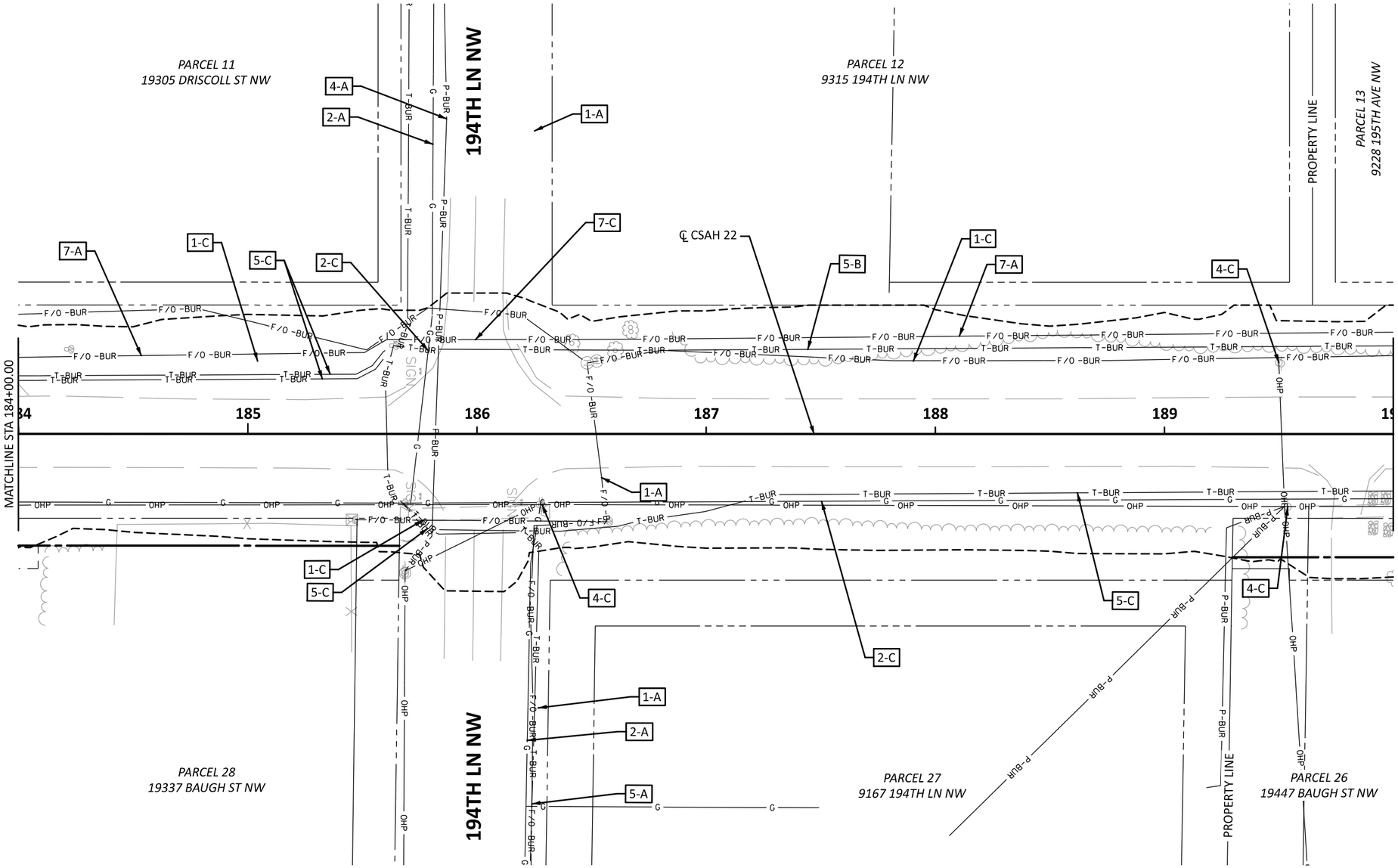
CSAH 22 (Baugh Street NW)



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IMPACT:
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PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

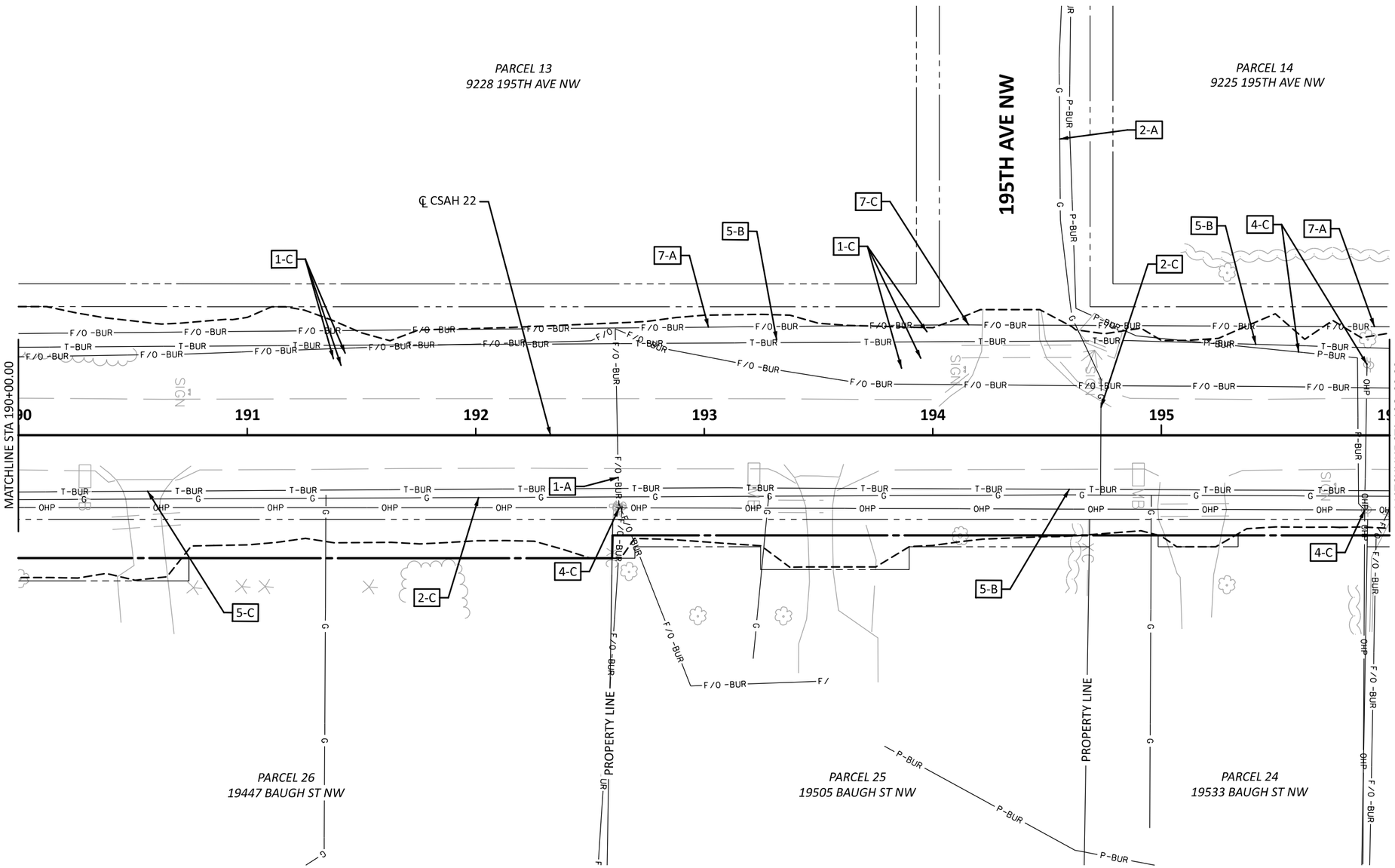
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 184+00 TO STA 190+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

CSAH 22 (Baugh Street NW)



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ANOKA COUNTY

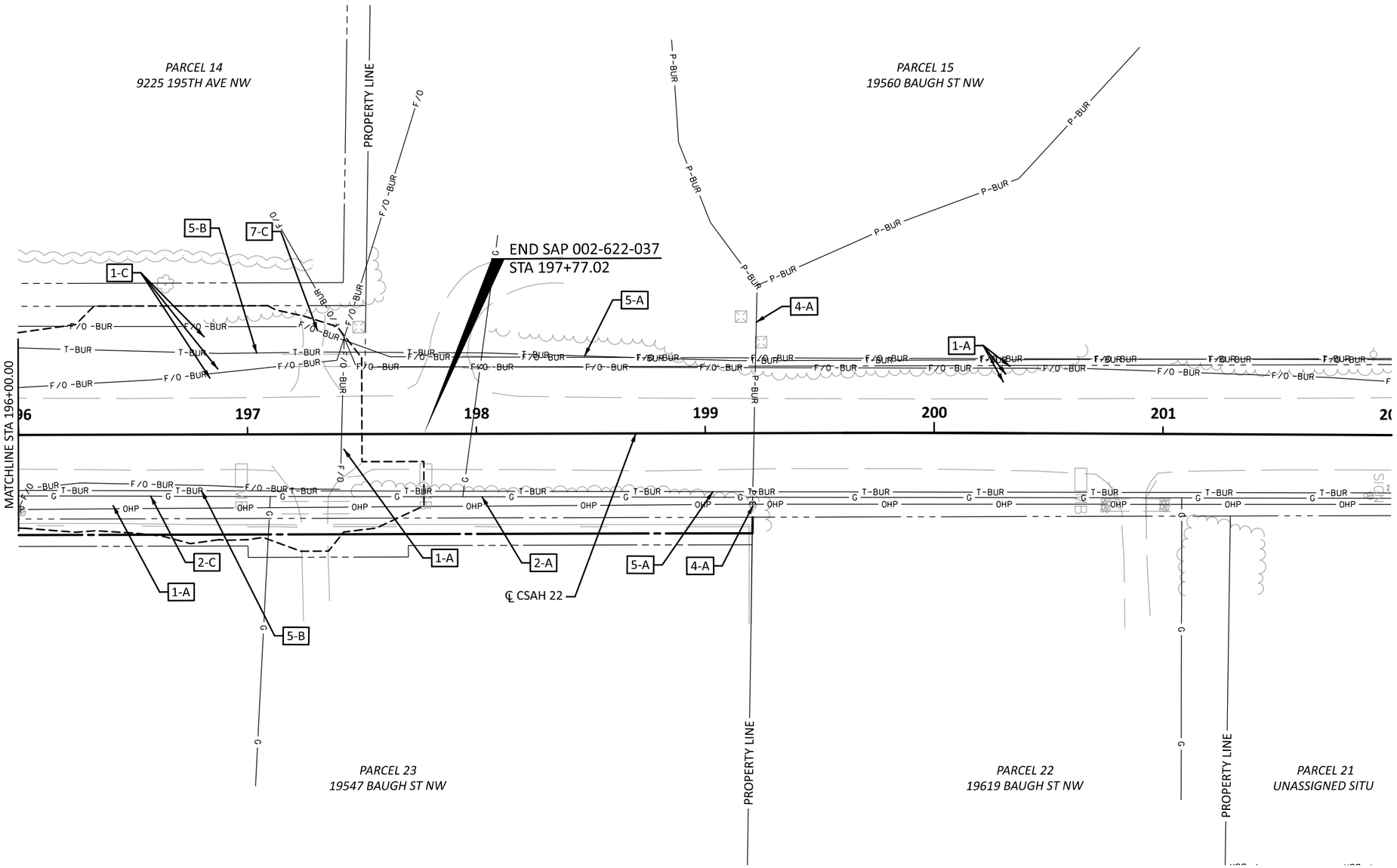
CSAH 22 (Baugh Street NW) Reconstruction

STA 190+00 TO STA 196+00
INPLACE TOPOGRAPHY & UTILITIES

SAP 002-622-037

Sheet No. 47 of 138 Sheets

CSAH 22 (Baugh Street NW)



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- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE EASEMENT
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- 1-A — UTILITY CONFLICT AREA (OWNER-IMPACT)

OWNERSHIP:
(1) ARVIG
(2) CENTERPOINT ENERGY
(3) COMCAST
(4) CONNEXUS ENERGY
(5) LUMEN TECHNOLOGIES (CENTURYLINK)
(6) XCEL ENERGY ELECTRIC (TRANSMISSION)
(7) ZAYO

IMPACT:
(A) LEAVE AS IS,
(B) ADJUST - VERTICAL LOWER,
(C) RELOCATE

GENERAL NOTES

1. THE EXISTING SUBSURFACE UTILITY INFORMATION IS QUALITY LEVEL D IN ACCORDANCE WITH THE GUIDELINES OF ASCE/UESI/CI 38-22.
2. THE OWNER AND IMPACT NOTES ARE BASED UPON THE BEST INFORMATION AVAILABLE DURING DESIGN AND MAY NOT REFLECT THE ACTUAL EFFECTS ON THE UTILITIES BY CONSTRUCTION. FINAL DETERMINATIONS WILL BE MADE IN THE FIELD DURING CONSTRUCTION.
3. ALL UTILITY WORK SHOWN SHALL BE DONE BY OTHERS UNLESS SHOWN IN THE PLAN TO BE PERFORMED BY THE CONTRACTOR. SEE DRAINAGE PLAN FOR MORE INFORMATION.
3. UTILITIES MAY HAVE RELOCATED PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE THEIR WORK AND COOPERATE WITH THE UTILITY OWNERS AND THEIR FORCES. SOME UTILITIES MAY NEED TO BE RECLOATED CONCURRENTLY WITH THE CONTRACTOR'S WORK.
5. CALL GOPHER STATE ONE CALL (GSOC) AT LEAST 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

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PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-175top-001

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

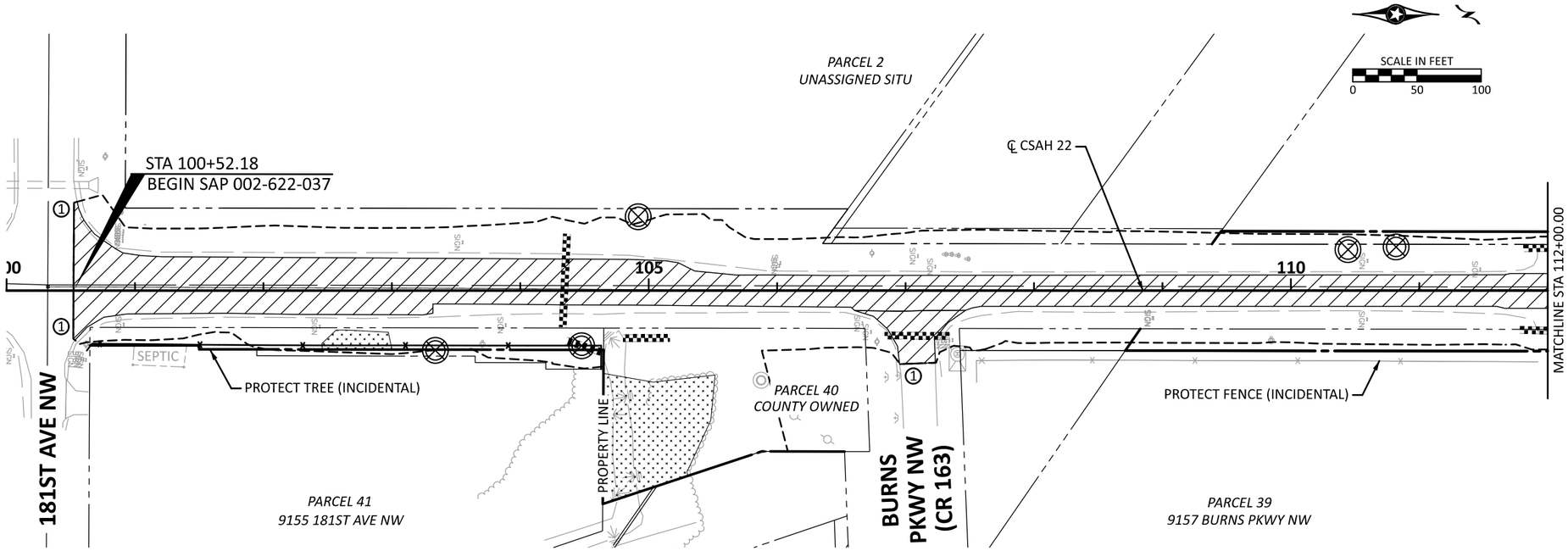
CSAH 22 (Baugh Street NW) Reconstruction

STA 196+00 TO STA 197+77.02
INPLACE TOPOGRAPHY & UTILITIES

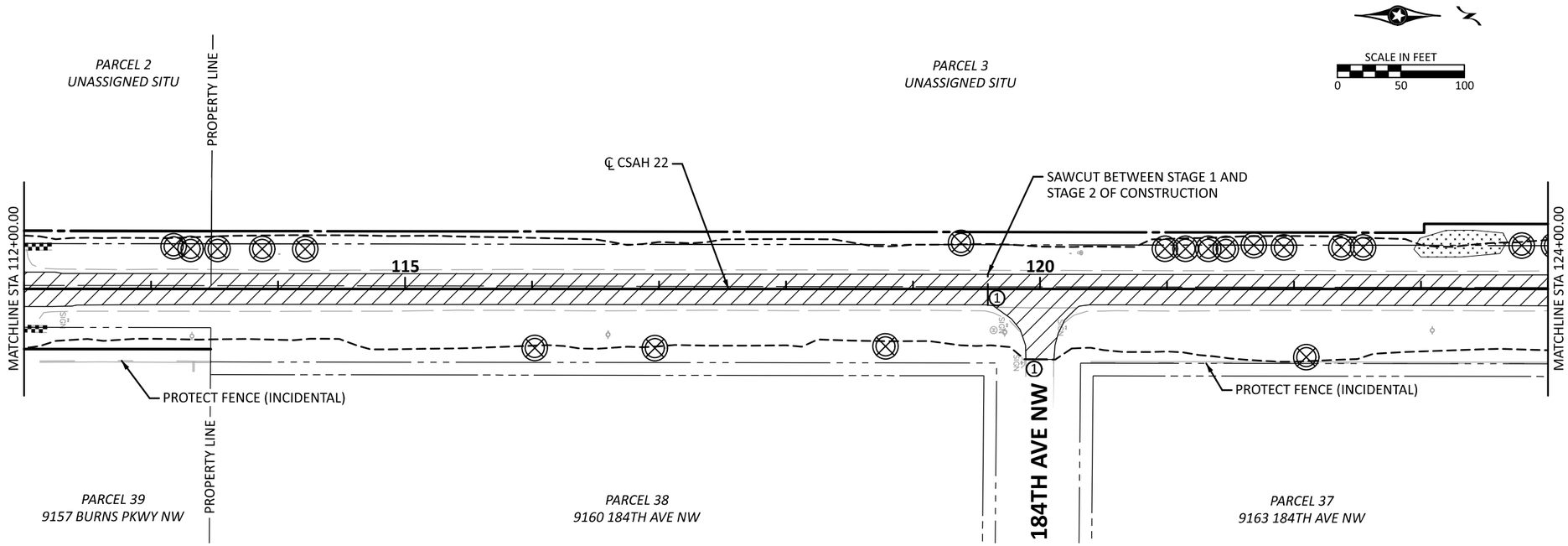
SAP 002-622-037

NOTE: IT IS THE INTENT OF THIS PLAN THAT ALL TREES LOCATED WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY WILL BE CLEARED AND GRUBBED BY THE CONTRACTOR.

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- REMOVE CONCRETE DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE (ACRE)
- CLEAR AND GRUB TREE (EACH)
- ① SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
- ② SAWCUT CONCRETE PAVEMENT (FULL DEPTH)
- (MB) SALVAGE MAIL BOX SUPPORT (1)
- REMOVE CURB & GUTTER
- REMOVE CULVERT
- REMOVE FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

GENERAL NOTES

1. ALL REMOVAL ITEMS SHALL BE DISPOSED OF OFF THE PROJECT SITE IN ACCORDANCE WITH THE SPECIFICATIONS. (INCIDENTAL)
2. REMOVAL OF ALL AGGREGATE SURFACING REGARDLESS OF THICKNESS SHALL BE INCLUDED IN EXCAVATION-COMMON.
4. UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF ALL BURIED UTILITIES IN THE FIELD (INCIDENTAL).

NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

PLOTTED/REVISED: 12/18/2025 1:33:58 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-180rem-001

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

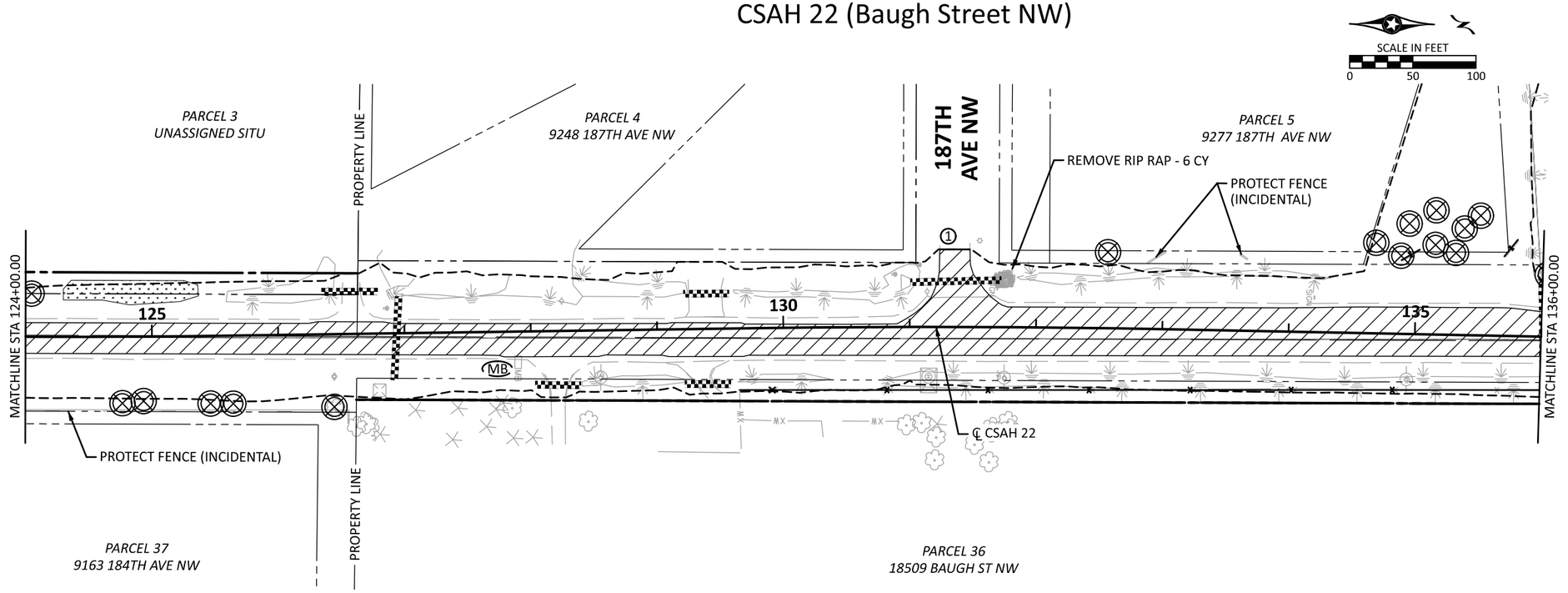
STA 100+52.18 TO STA 124+00

REMOVAL PLAN

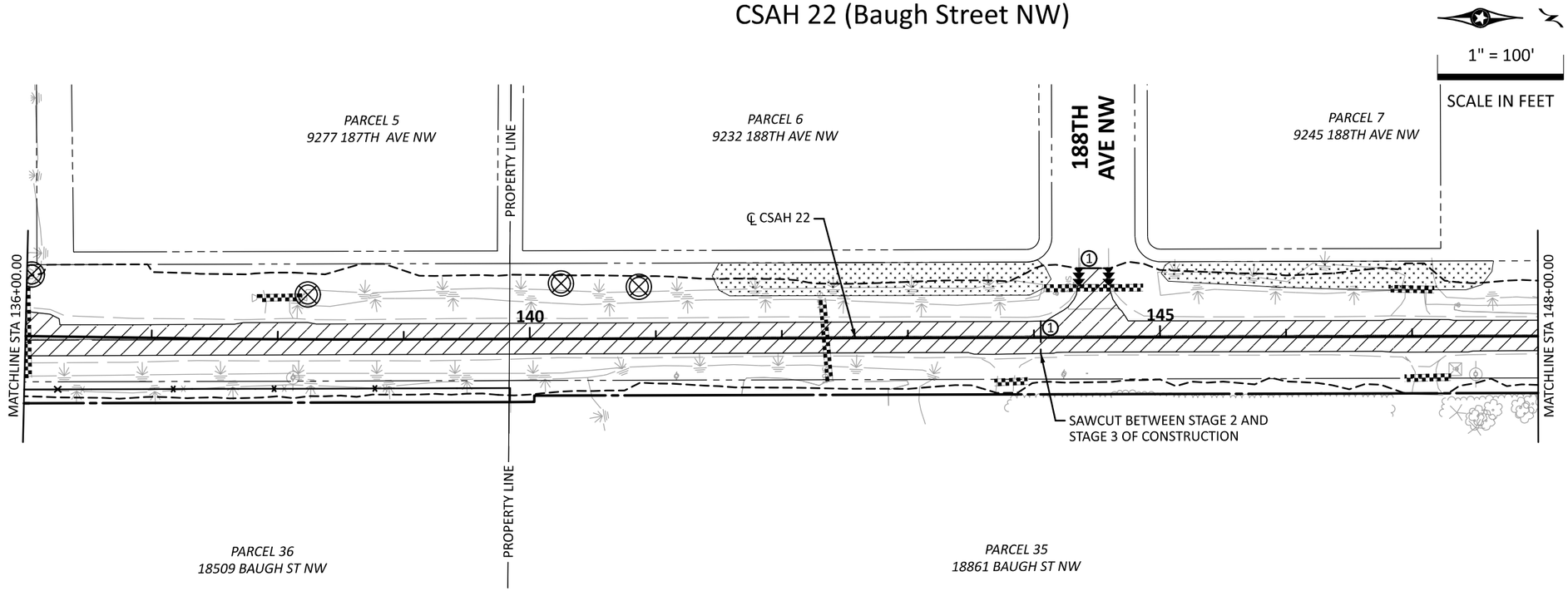
SAP 002-622-037

Sheet No. 49R of 138 Sheets

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- REMOVE CONCRETE DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE (ACRE)
- CLEAR AND GRUB TREE (EACH)
- (1) SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
- (2) SAWCUT CONCRETE PAVEMENT (FULL DEPTH)
- (MB) SALVAGE MAIL BOX SUPPORT (1)
- REMOVE CURB & GUTTER
- REMOVE CULVERT
- REMOVE FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
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- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

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NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

DRAWN BY:	AJF
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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

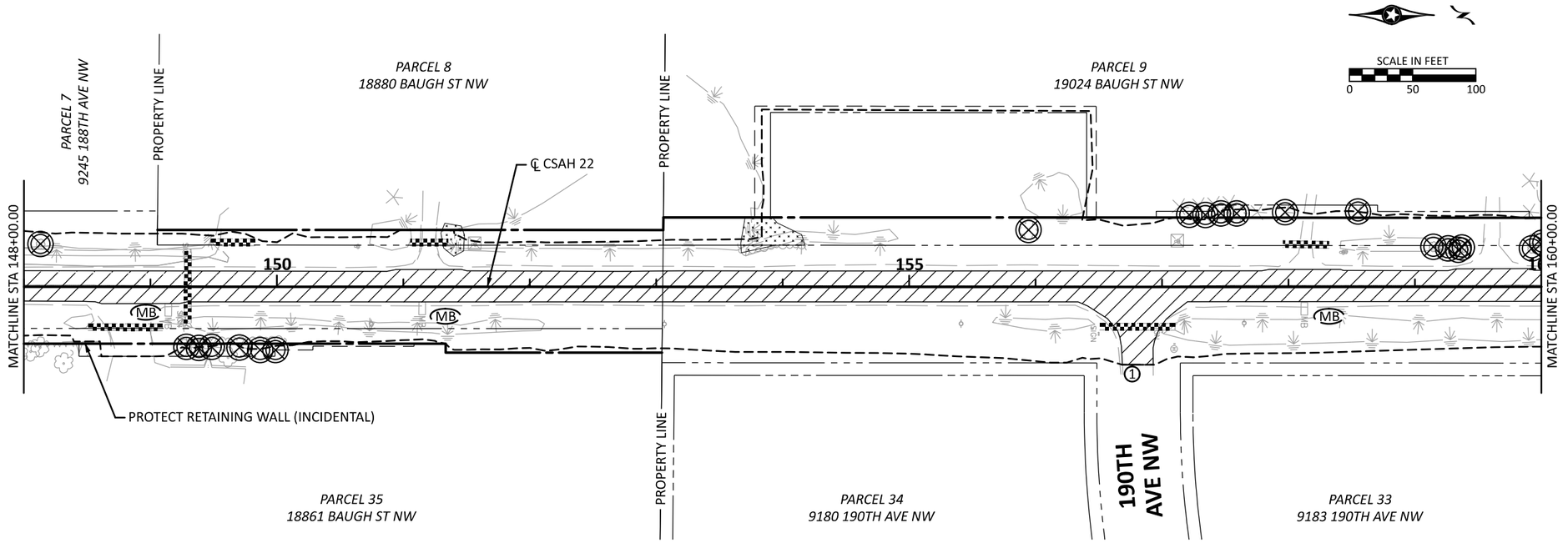
STA 124+00 TO STA 148+00
REMOVAL PLAN

SAP 002-622-037

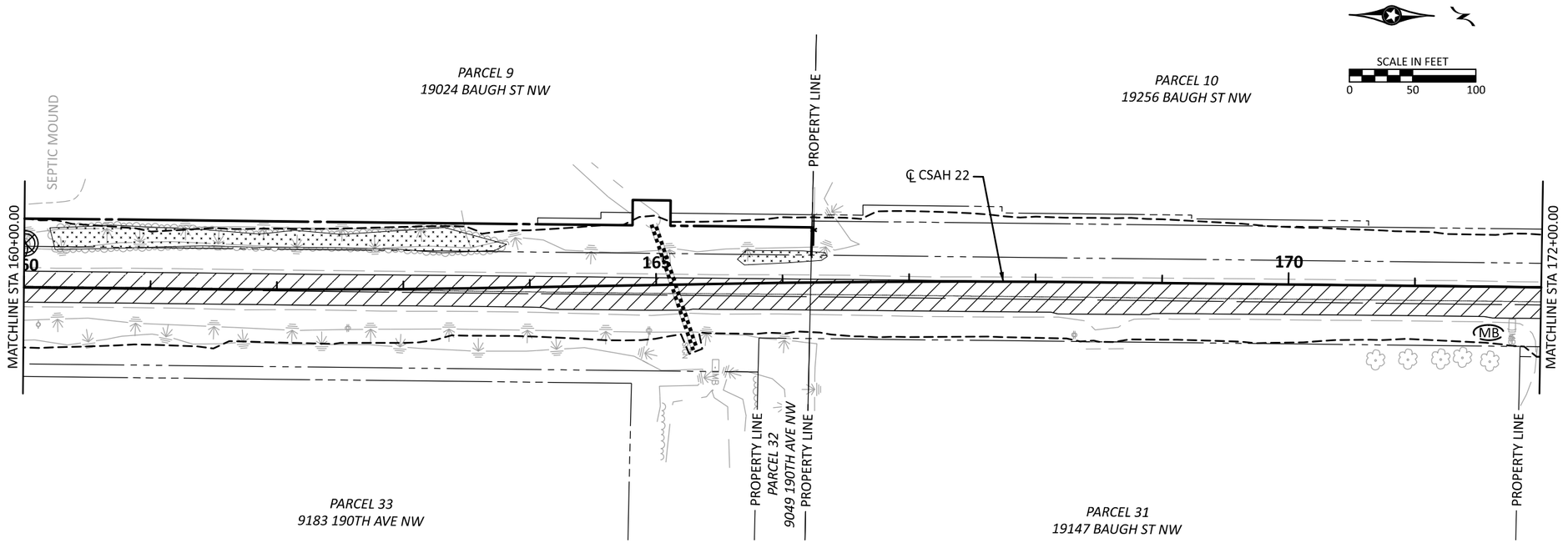
Sheet No. 50R of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-180rem-001
PLOTTED/REVISED: 12/18/2025 1:34:01 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- REMOVE CONCRETE DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE (ACRE)
- CLEAR AND GRUB TREE (EACH)
- ① SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
- ② SAWCUT CONCRETE PAVEMENT (FULL DEPTH)
- MB SALVAGE MAIL BOX SUPPORT ①
- REMOVE CURB & GUTTER
- REMOVE CULVERT
- REMOVE FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
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- PROPOSED RIGHT-OF-WAY

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NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 172+00
REMOVAL PLAN

SAP 002-622-037

Sheet No. 51R of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-180rem-001
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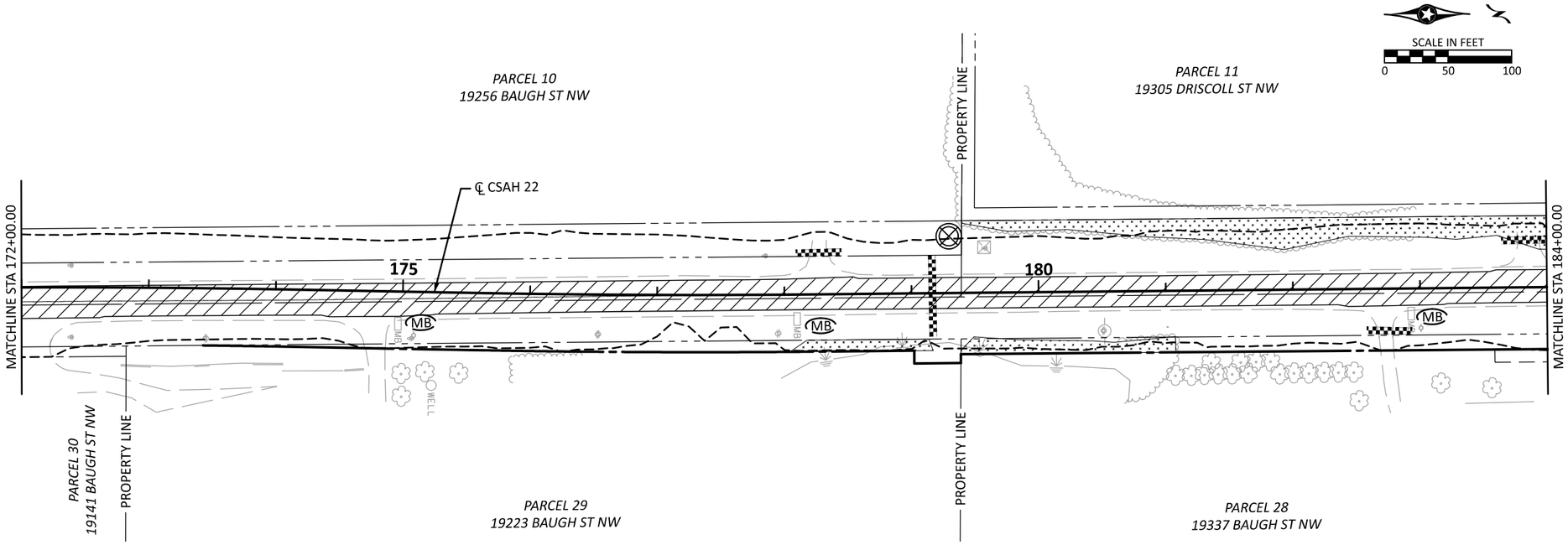
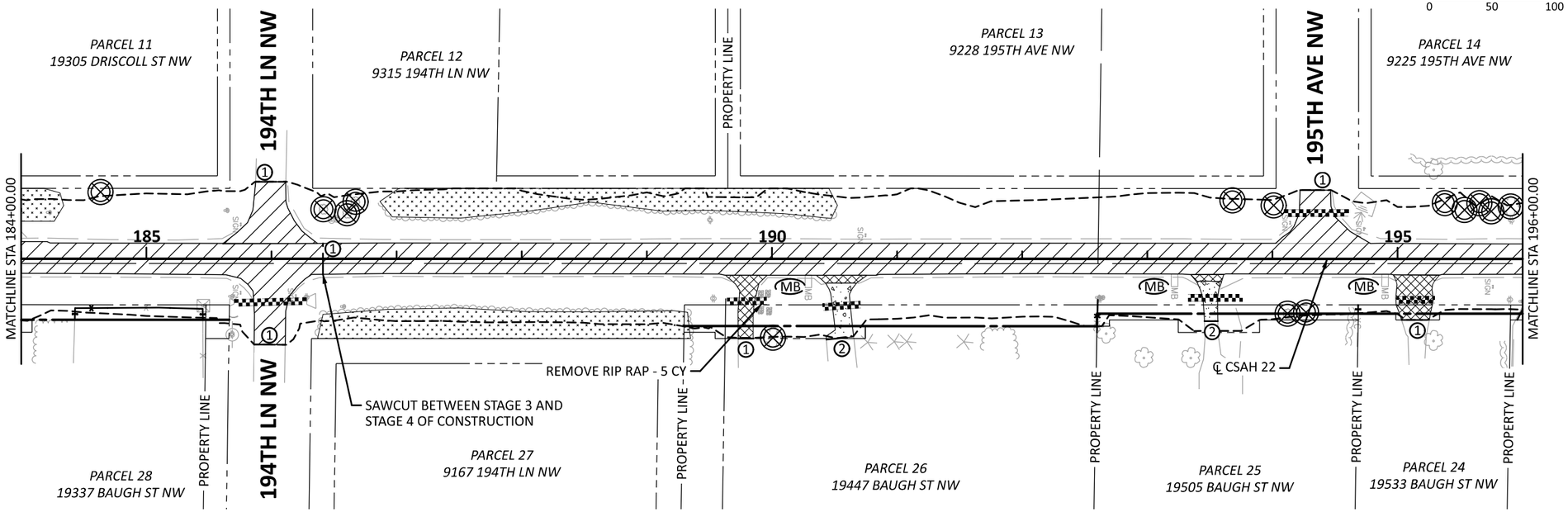
CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- REMOVE CONCRETE DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE (ACRE)
- CLEAR AND GRUB TREE (EACH)
- ① SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
- ② SAWCUT CONCRETE PAVEMENT (FULL DEPTH)
- MB SALVAGE MAIL BOX SUPPORT ①
- REMOVE CURB & GUTTER
- REMOVE CULVERT
- REMOVE FENCE
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
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GENERAL NOTES

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NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

DRAWN BY:	AJF
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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 12/18/2025 LIC. NO. 61652

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ANOKA COUNTY

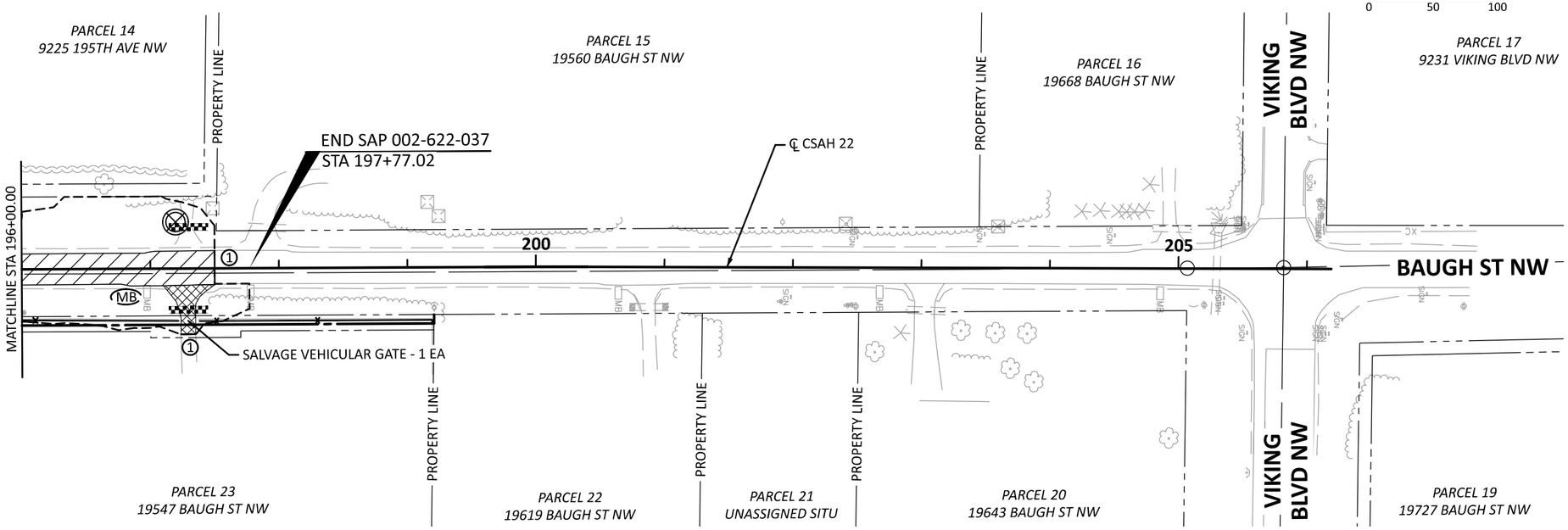
CSAH 22 (Baugh Street NW) Reconstruction

STA 172+00 TO STA 196+00
REMOVAL PLAN

SAP 002-622-037

Sheet No. 52R of 138 Sheets

CSAH 22 (Baugh Street NW)



LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- REMOVE CONCRETE DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE (ACRE)
- CLEAR AND GRUB TREE (EACH)
- ① SAWCUT BITUMINOUS PAVEMENT (FULL DEPTH)
- ② SAWCUT CONCRETE PAVEMENT (FULL DEPTH)
- MB SALVAGE MAIL BOX SUPPORT ①
- REMOVE CURB & GUTTER
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- AREA OF ENVIRONMENTAL SENSITIVITY
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NO	DATE	DWN	CKD	REVISIONS
1	12/19/2025	JB	AJF	SALVAGE MAIL BOX SUPPORT

PATH & FILENAME: Projects\Minnesota\026054-000\180rem-001\05_Discipline\Roadway\03_Sheets\026054-000-180rem-001
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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

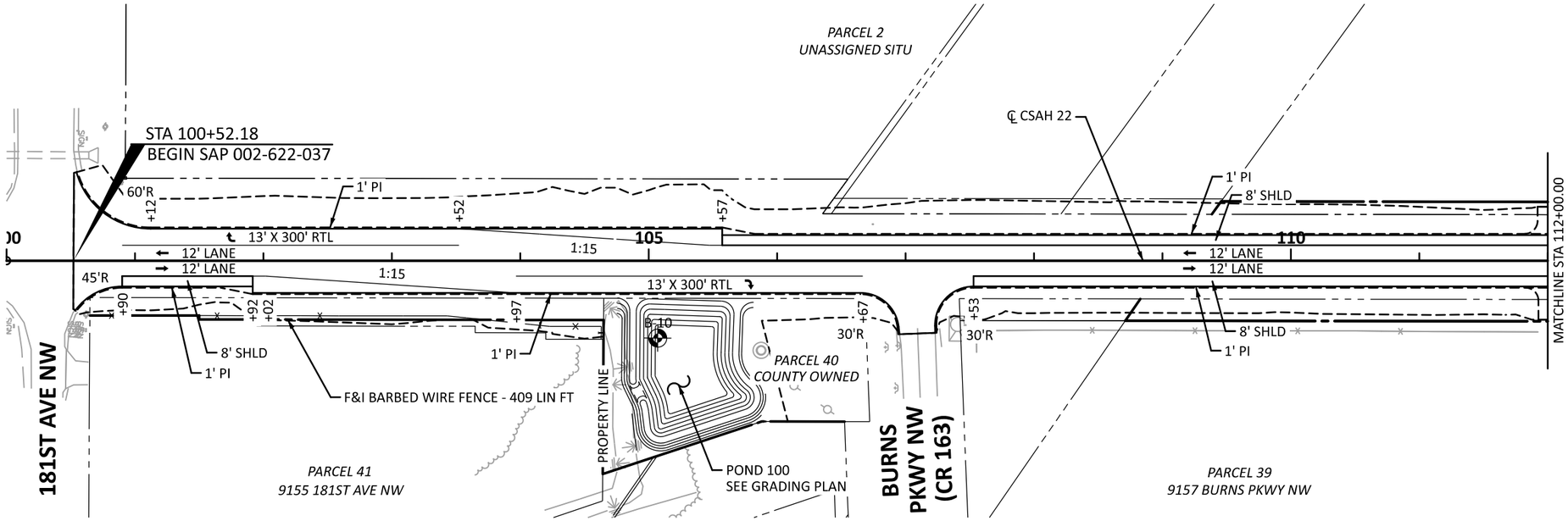
STA 196+00 TO STA 197+77.02

REMOVAL PLAN

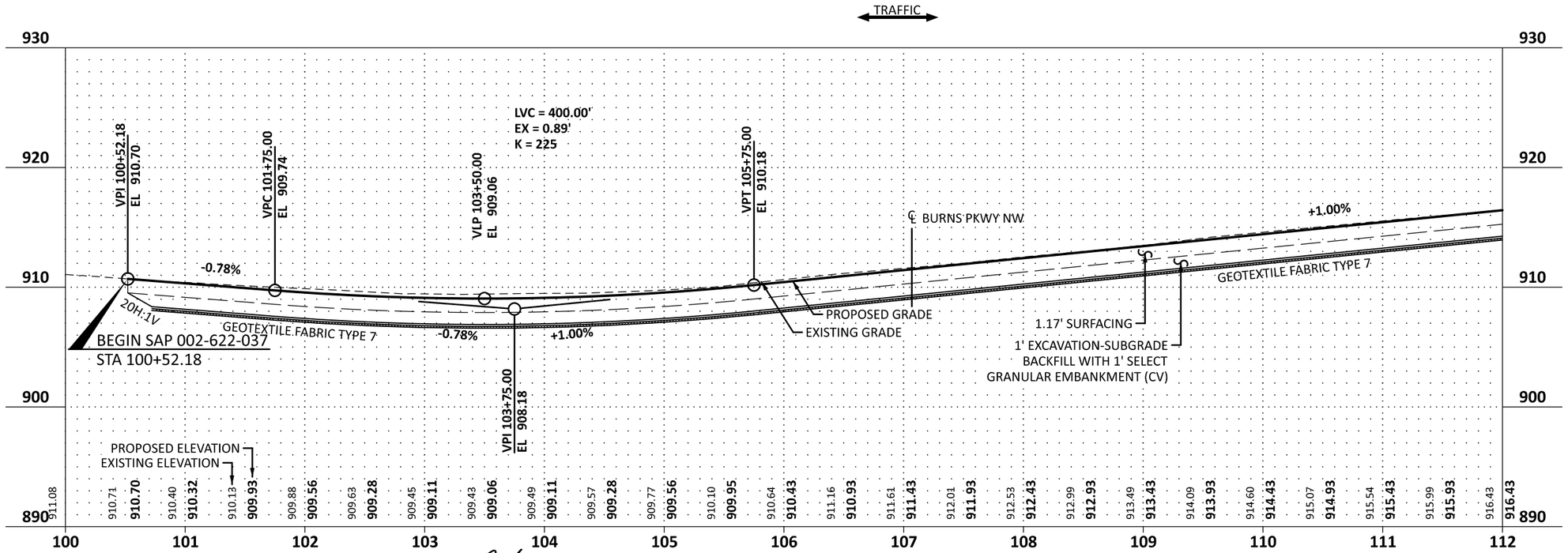
SAP 002-622-037

Sheet No. 53R of 138 Sheets

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW) Profile



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- (1) TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF BITUMINOUS UNLESS OTHERWISE NOTED.
2. SEE DRIVEWAY DETAILS FOR ADDITIONAL INFORMATION AT DRIVEWAYS.
3. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION AT ROADWAY INTERSECTIONS.
4. SEE ALIGNMENT PLAN FOR CURVE DATA.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001
PLOTTED/REVISED: 11/4/2025 12:41:33 PM

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 112+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001
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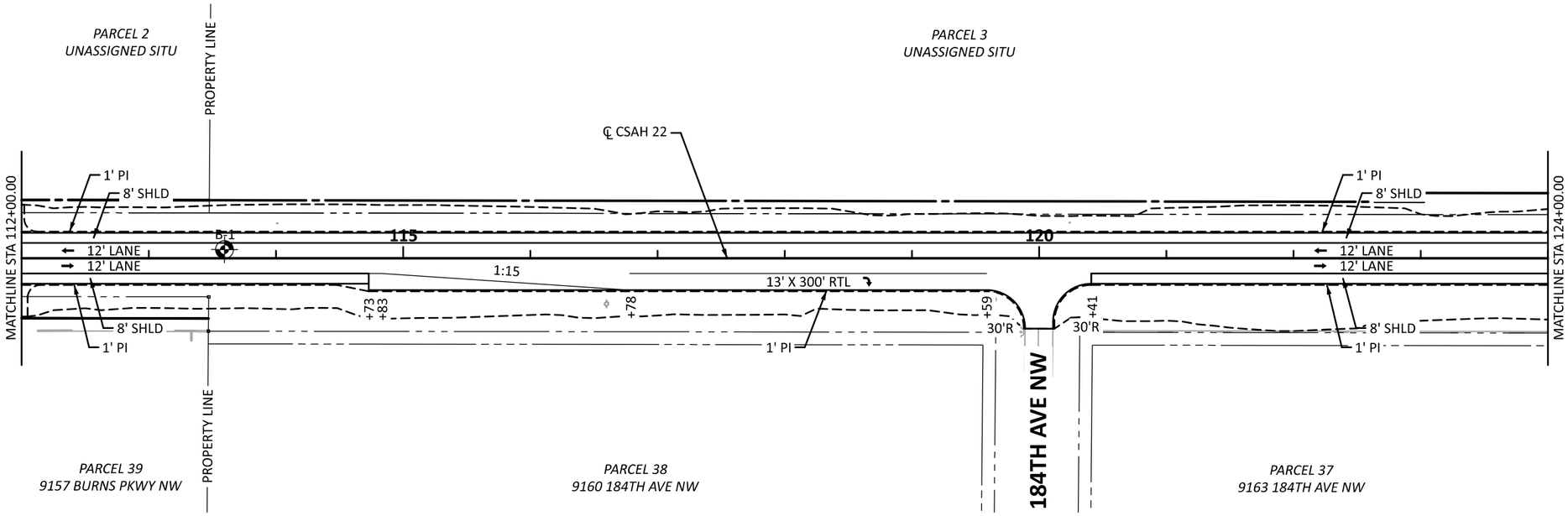
CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
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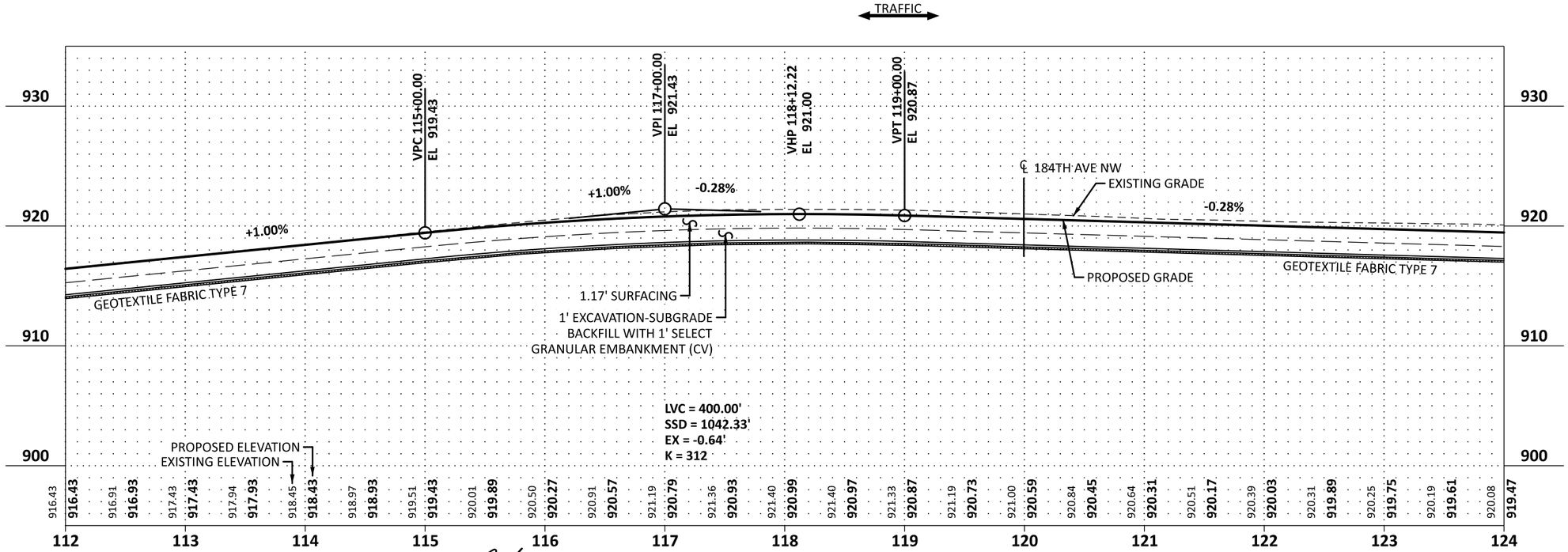
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

CSAH 22 (Baugh Street NW) Profile



GENERAL NOTES

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 112+00 TO STA 124+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

Sheet No. 55 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001
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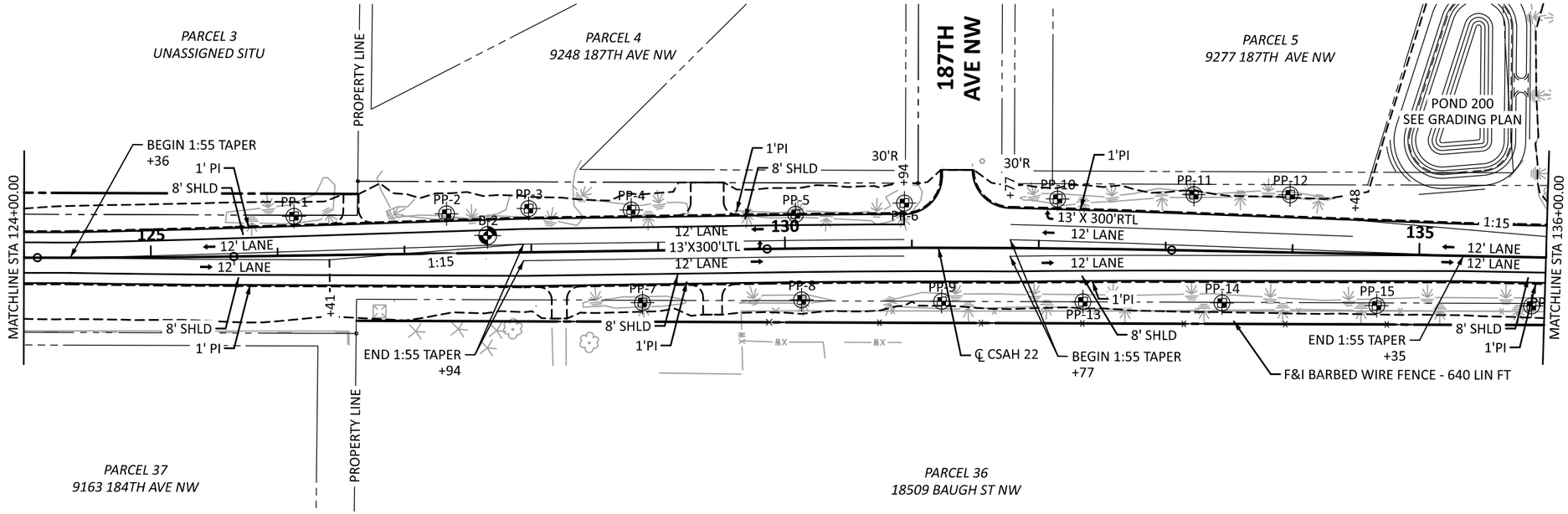
CSAH 22 (Baugh Street NW)

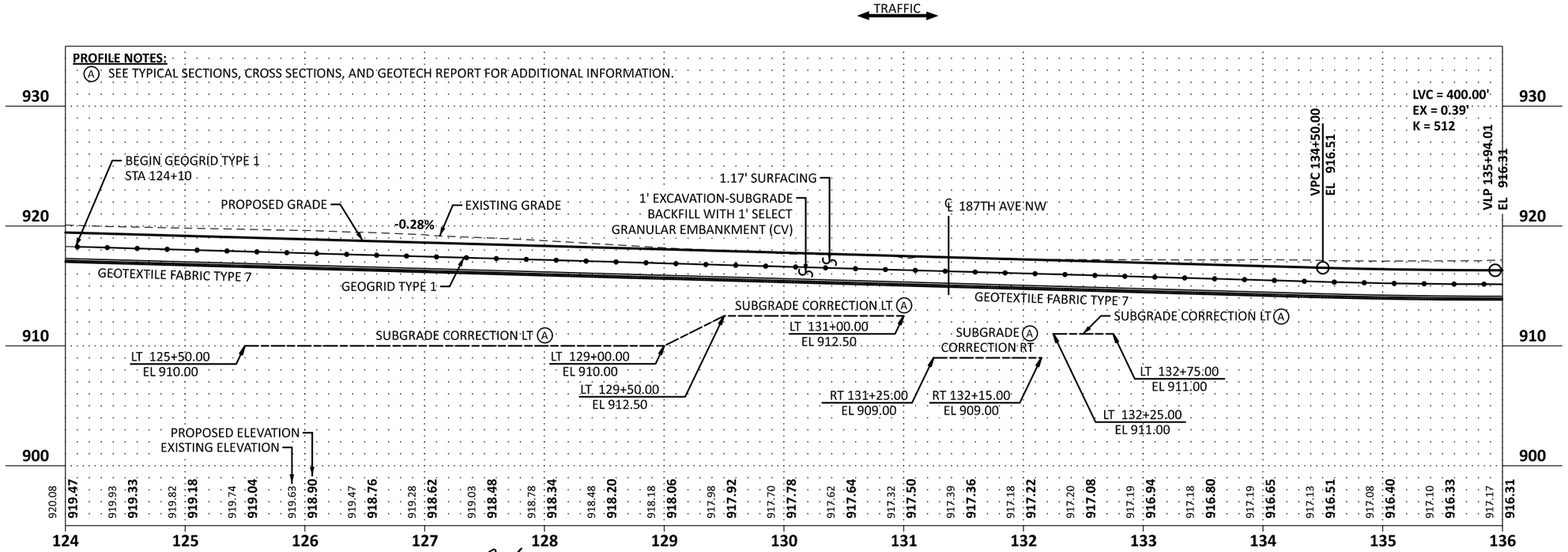


LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

SCALE IN FEET
0 50 100

CSAH 22 (Baugh Street NW) Profile



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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 124+00 TO STA 136+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001
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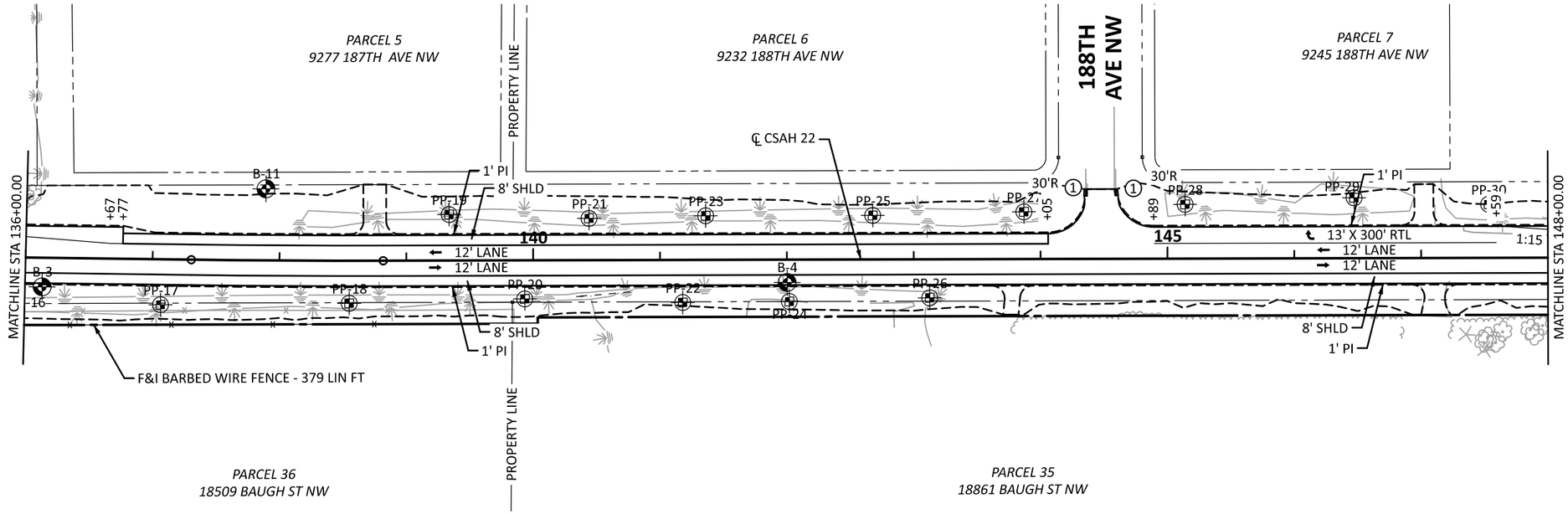
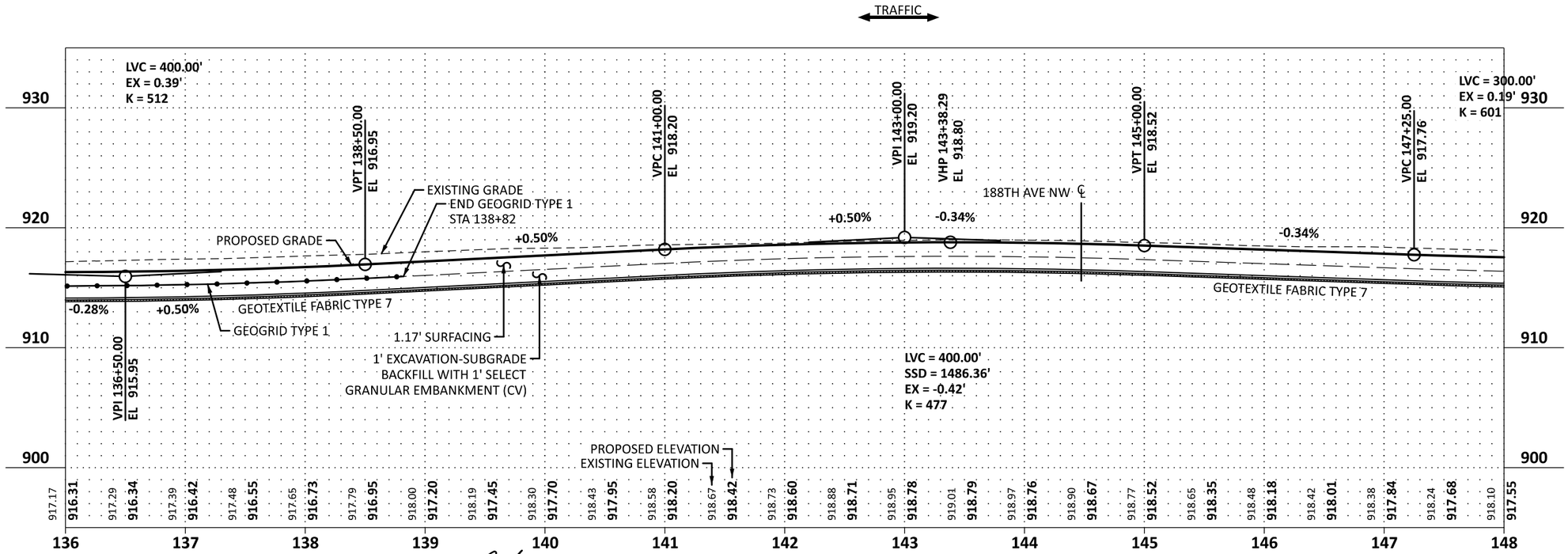
CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW) Profile



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF BITUMINOUS UNLESS OTHERWISE NOTED.
2. SEE DRIVEWAY DETAILS FOR ADDITIONAL INFORMATION AT DRIVEWAYS.
3. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION AT ROADWAY INTERSECTIONS.
4. SEE ALIGNMENT PLAN FOR CURVE DATA.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 136+00 TO STA 148+00
CONSTRUCTION PLAN & PROFILE

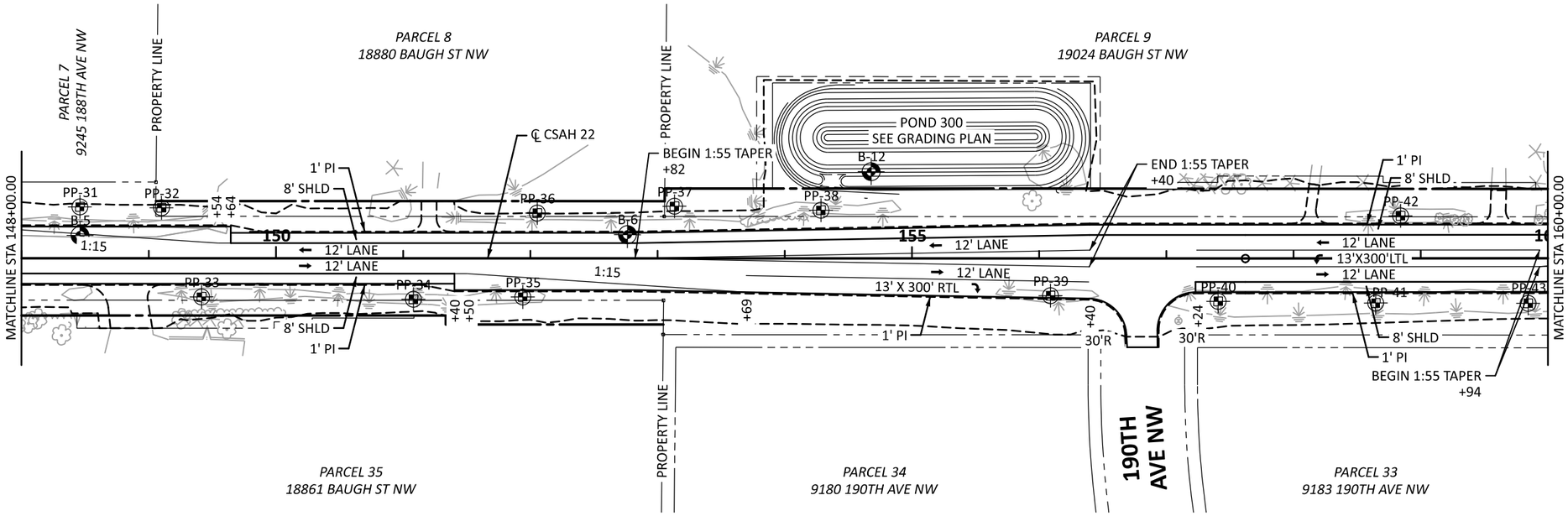
SAP 002-622-037

Sheet No. 57 of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:41:38 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001

CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- (1) TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
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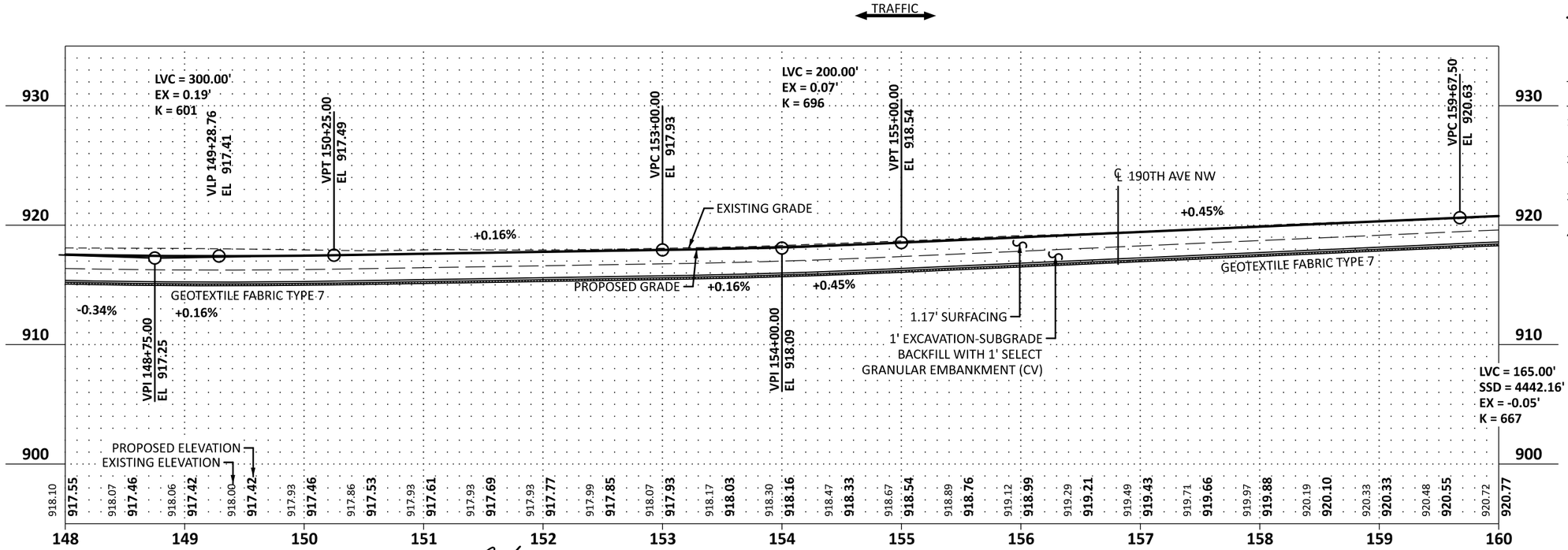
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

CSAH 22 (Baugh Street NW) Profile



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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 160+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

Sheet No. 58 of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:41:40 PM

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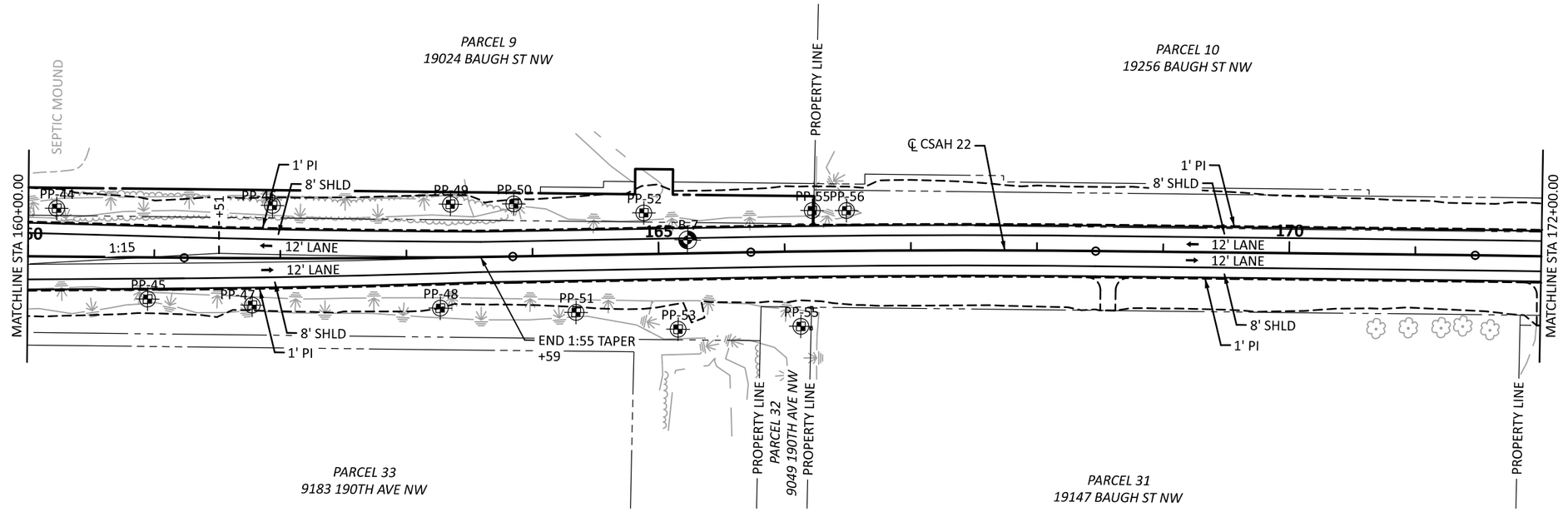
CSAH 22 (Baugh Street NW)

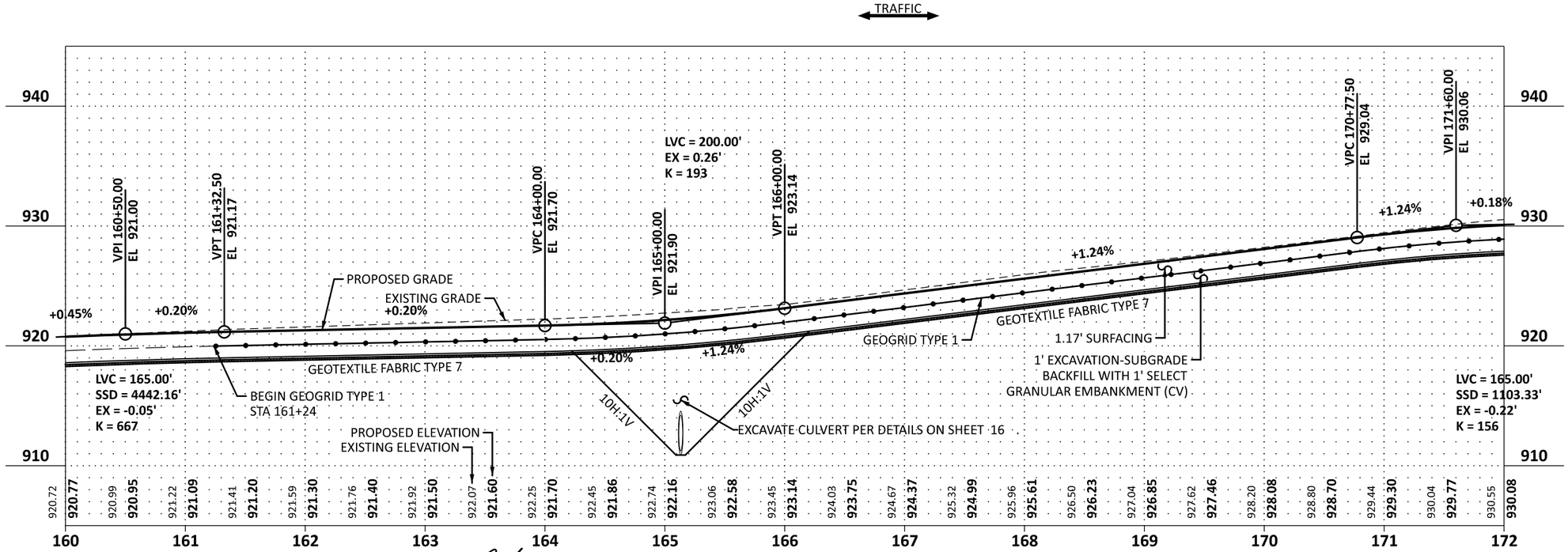


SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- (1) TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

CSAH 22 (Baugh Street NW) Profile



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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 160+00 TO STA 172+00
CONSTRUCTION PLAN & PROFILE

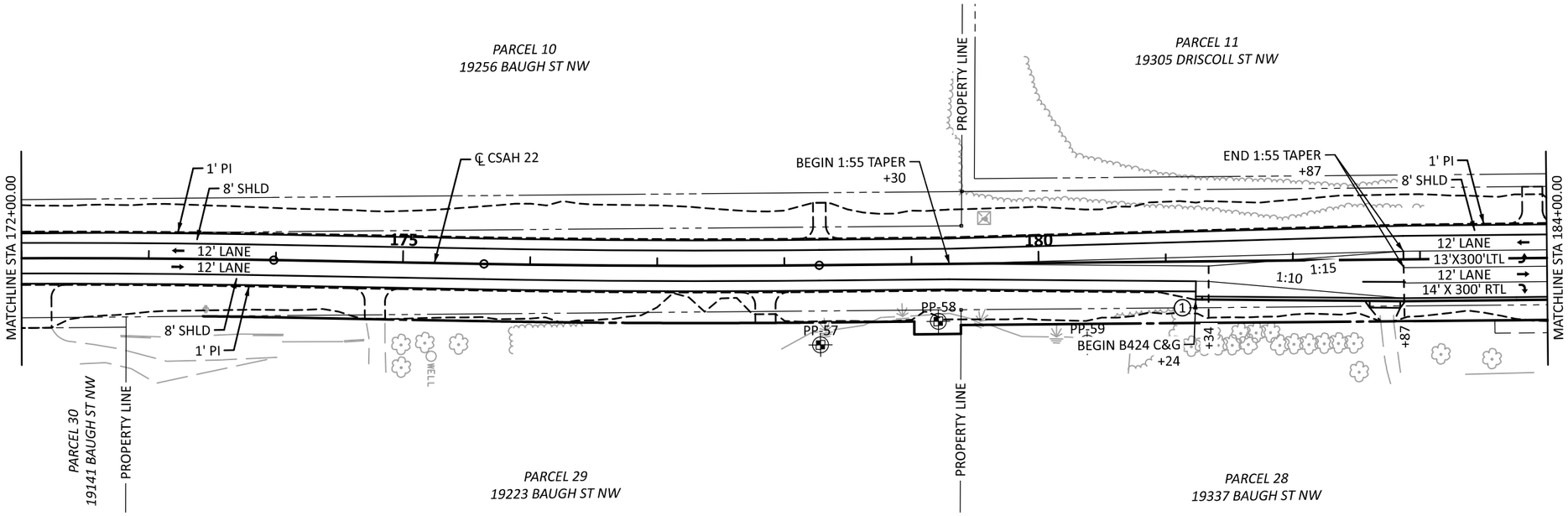
SAP 002-622-037

Sheet No. 59 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001

PLOTTED/REVISED: 11/4/2025 12:41:41 PM

CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
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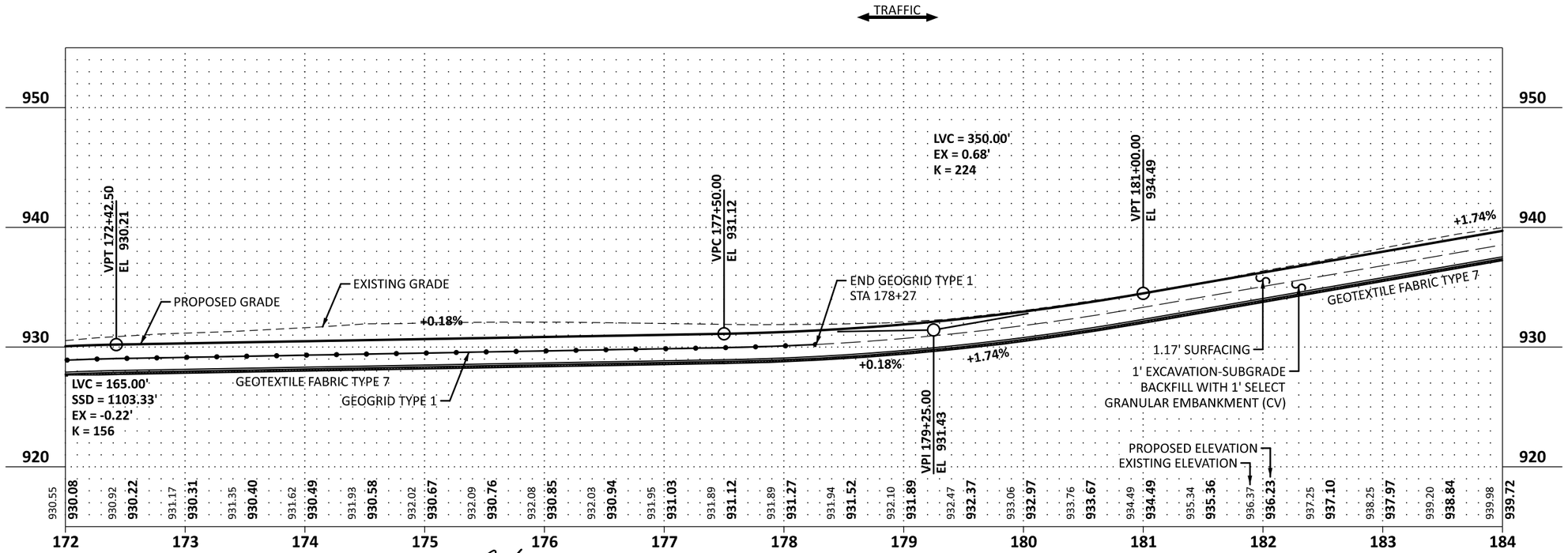
- PROPOSED RIGHT-OF-WAY

CSAH 22 (Baugh Street NW) Profile



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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

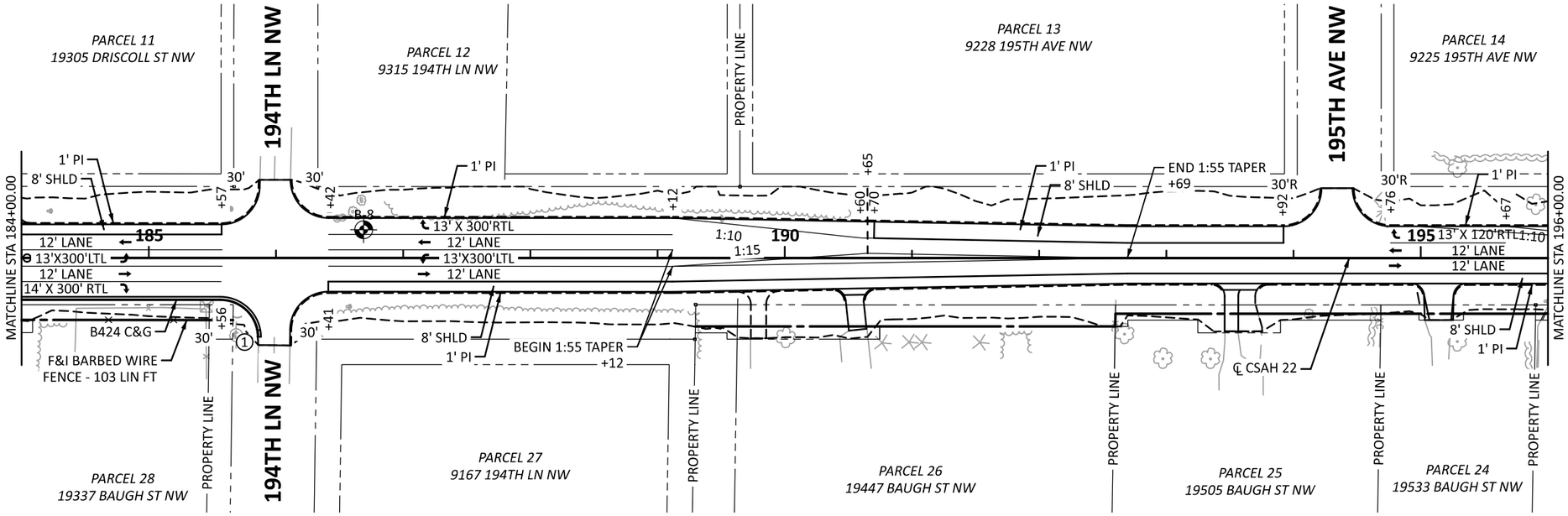
STA 172+00 TO STA 184+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

Sheet No. 60 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001 PLOTTED/REVISED: 11/4/2025 12:41:42 PM

CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
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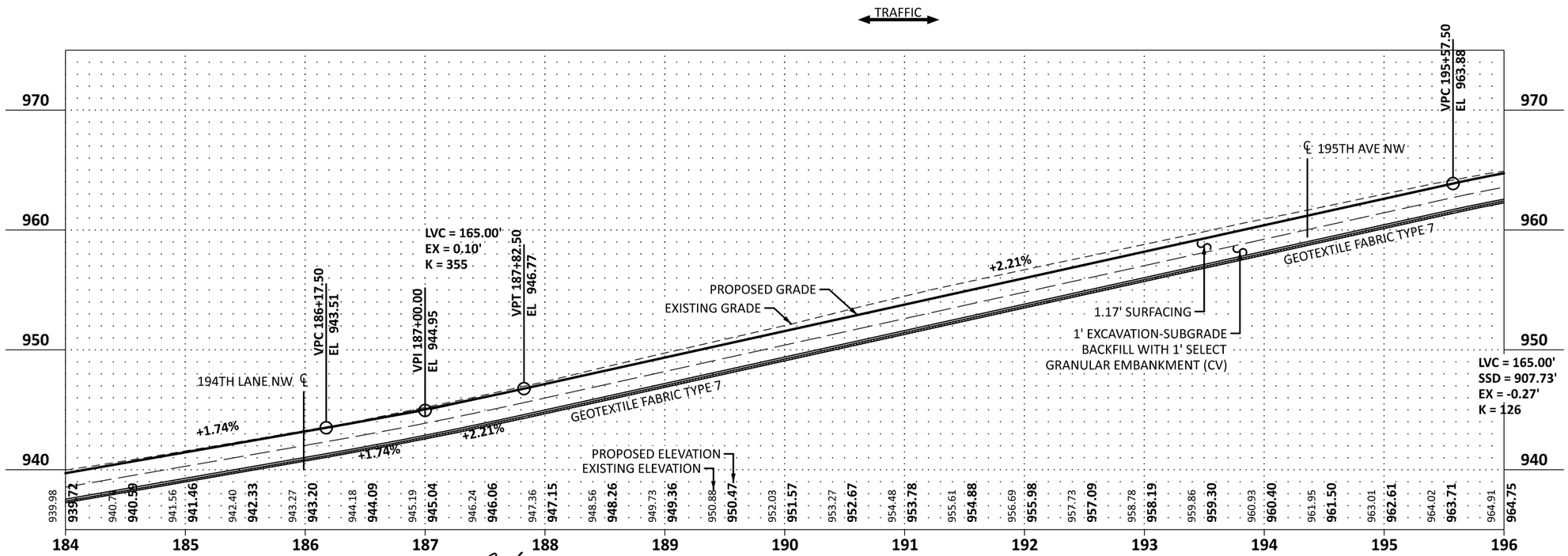
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

CSAH 22 (Baugh Street NW) Profile



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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

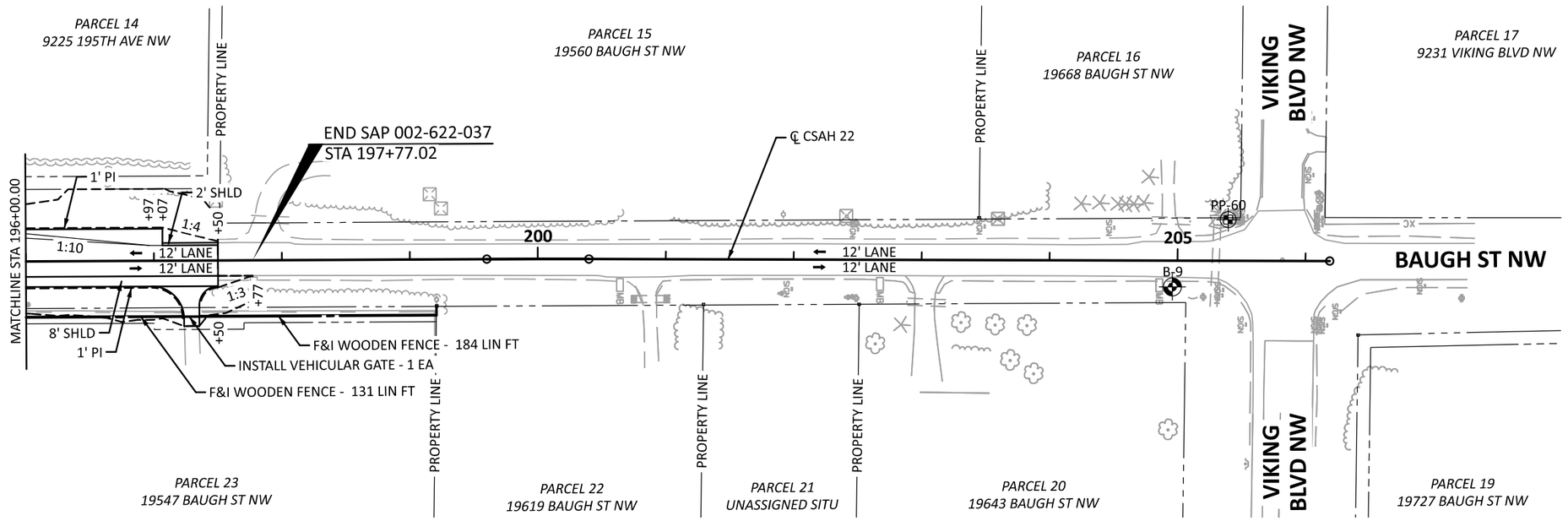
STA 184+00 TO STA 196+00
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

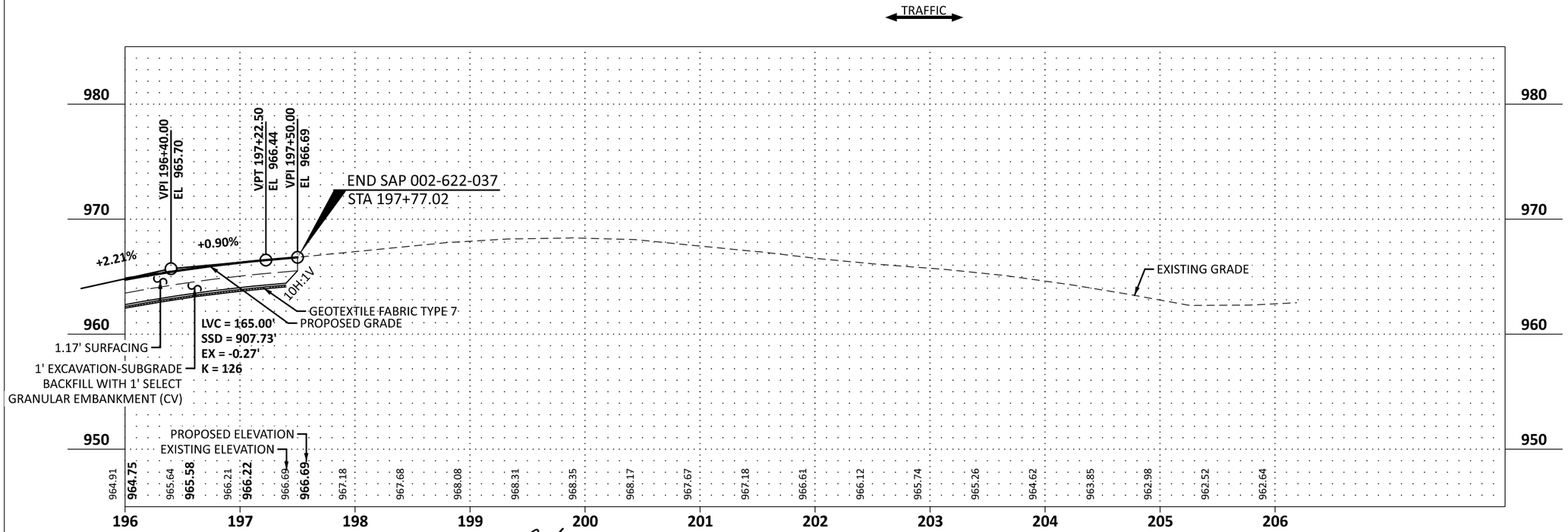
Sheet No. 61 of 138 Sheets

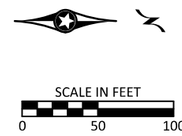
PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-001 Sheets\026054-000-185cpp-001\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-001 PLOTTED/REVISED: 11/4/2025 12:41:43 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW) Profile





LEGEND

- TRAFFIC DIRECTION
- ① TRANSITION CURB TO 0" (WITHIN 5')
- B-X — BORING - SEE GEOTECHNICAL REPORT FOR INFORMATION
- PP-X — PUSH PROBE - SEE GEOTECHNICAL REPORT FOR INFORMATION
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

GENERAL NOTES

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DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 196+00 TO STA 197+77.02

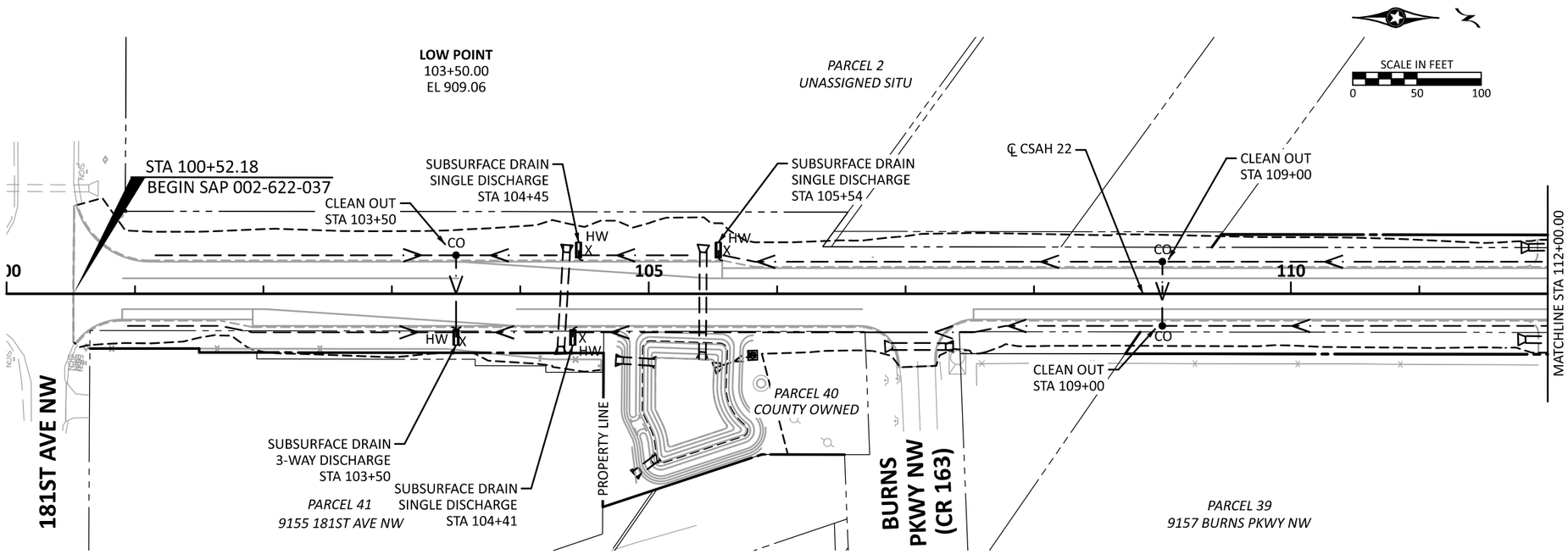
CONSTRUCTION PLAN & PROFILE

SAP 002-622-037

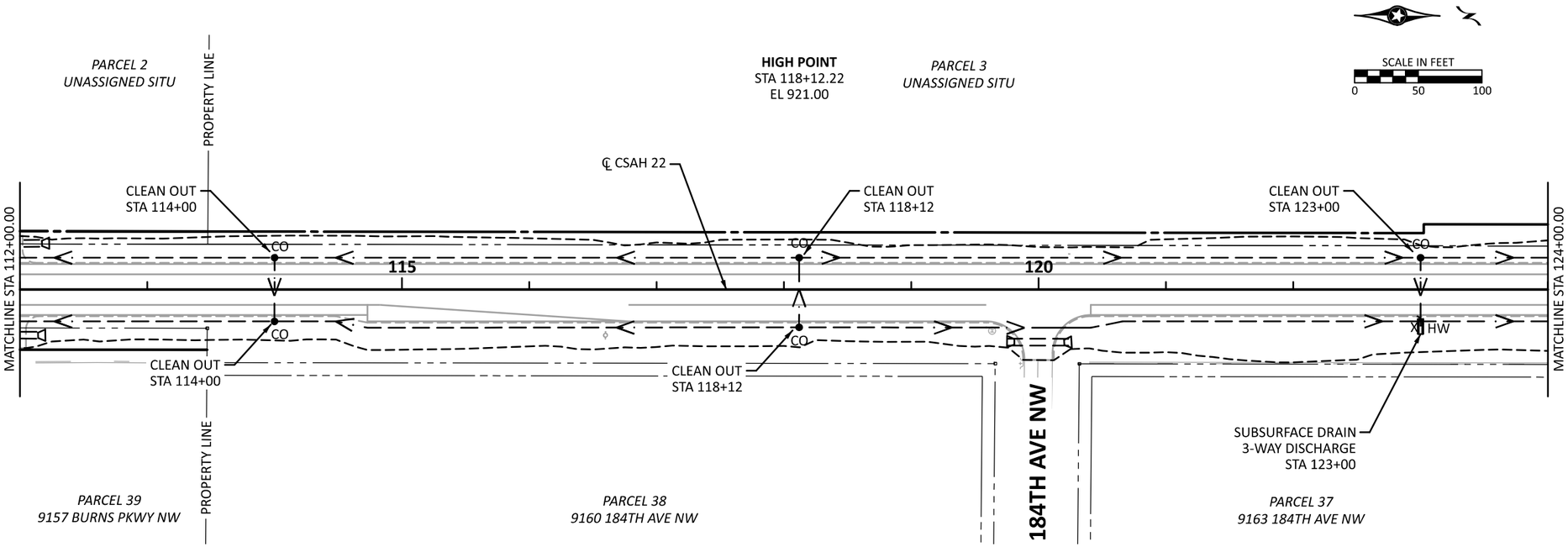
Sheet No. 62 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-det1-001-DRAINTILE.dgn
PLOTTED/REVISED: 11/4/2025 12:41:46 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- HW — 4" PRECAST CONCRETE HEADWALL
- X — GUIDEPOST TYPE B
- CO — CLEAN OUT (CONST. DRAINAGE STRUCTURE DESIGN SPECIAL)
- XXXX — DRAINAGE STRUCTURE NUMBER
- ① — CONNECT SUBSURFACE DRAIN TO DRAINAGE STRUCTURE (INCIDENTAL)
- 4" DIA. PERF. PE PIPE DRAIN, 3245 WITH GEOTEXTILE WRAP, 3733, TYPE 1
- 4" PVC PIPE DRAIN
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

NOTES

- THIS PLAN IS SCHEMATIC. INSTALL SUBSURFACE DRAINS AND HEADWALLS PER THE DETAILS IN THE TYPICAL SECTIONS, DESIGN DETAILS, AND STANDARD PLANS.
- DRAIN TILE CLEANOUTS SHALL BE PLACED BELOW THE BOTTOM OF THE TOPSOIL GRADE AND AS DIRECTED BY THE ENGINEER.

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

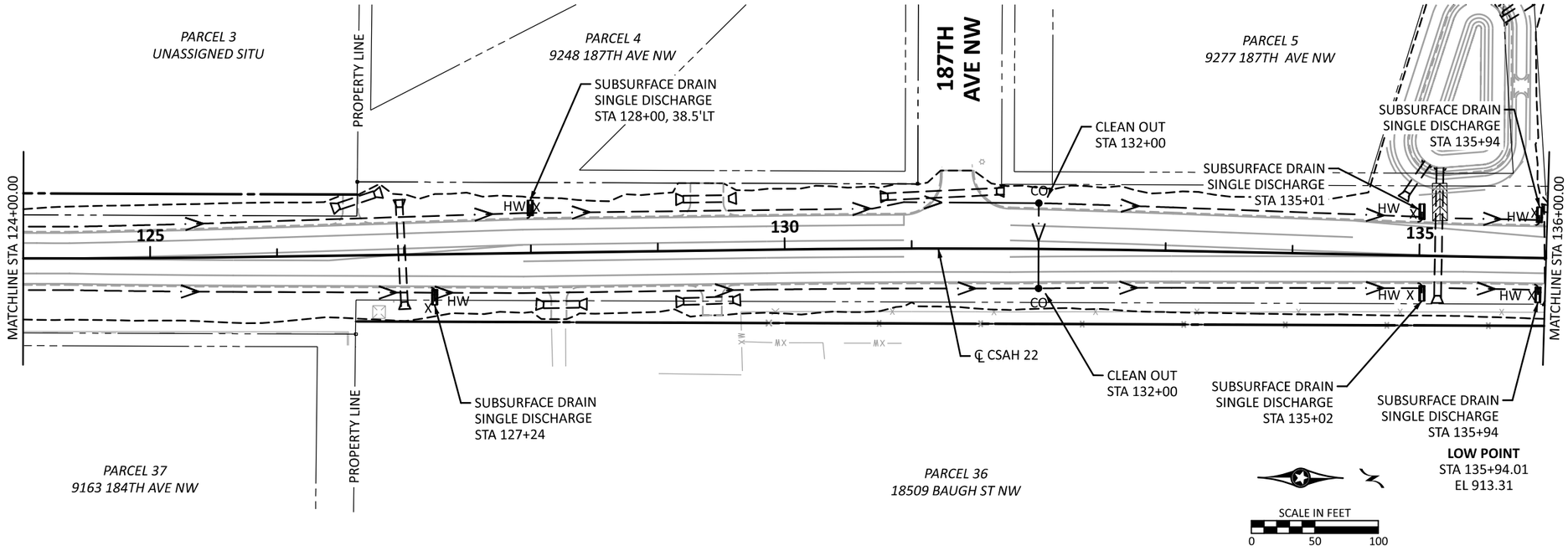
STA 100+52.18 TO STA 124+00
DRAIN TILE PLAN

SAP 002-622-037

Sheet No. 63 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-det\-001-DRAINTILE.dgn PLOTTED/REVISED: 11/4/2025 12:41:47 PM

CSAH 22 (Baugh Street NW)



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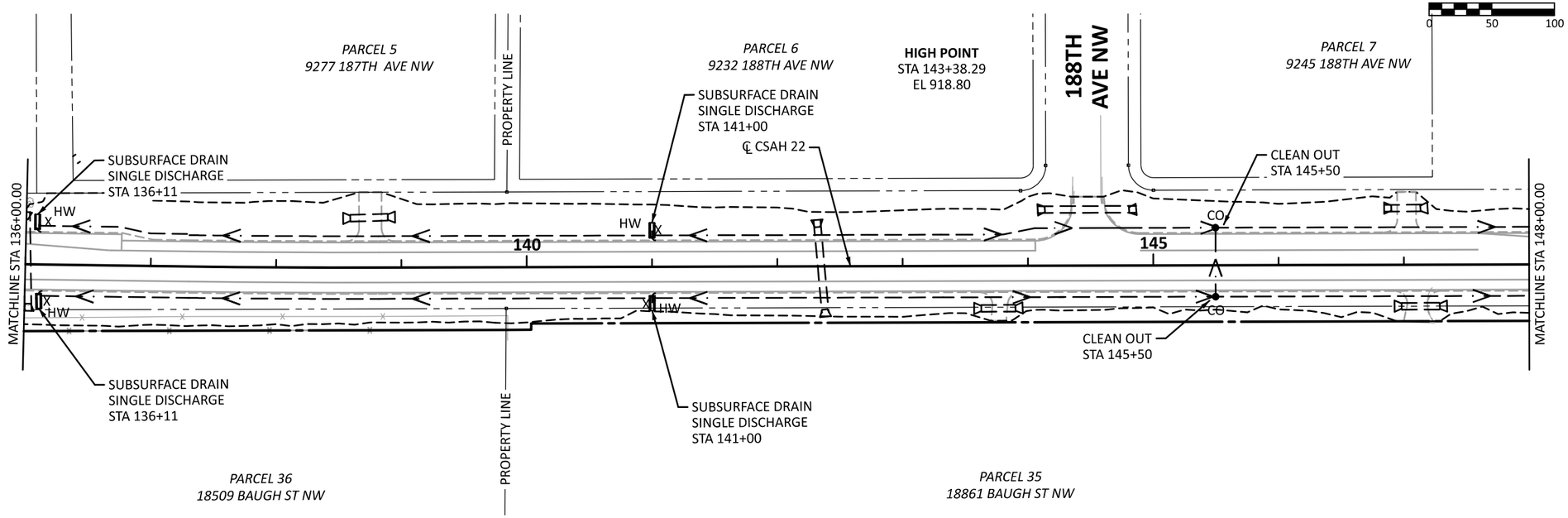

LEGEND

- HW — 4" PRECAST CONCRETE HEADWALL
- X — GUIDEPOST TYPE B
- CO — CLEAN OUT (CONST. DRAINAGE STRUCTURE DESIGN SPECIAL)
- XXXX — DRAINAGE STRUCTURE NUMBER
- ① — CONNECT SUBSURFACE DRAIN TO DRAINAGE STRUCTURE (INCIDENTAL)
- 4" DIA. PERF. PE PIPE DRAIN, 3245 WITH GEOTEXTILE WRAP, 3733, TYPE 1
- 4" PVC PIPE DRAIN
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
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- PERMANENT EASEMENT
- RIGHT-OF-WAY

NOTES

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

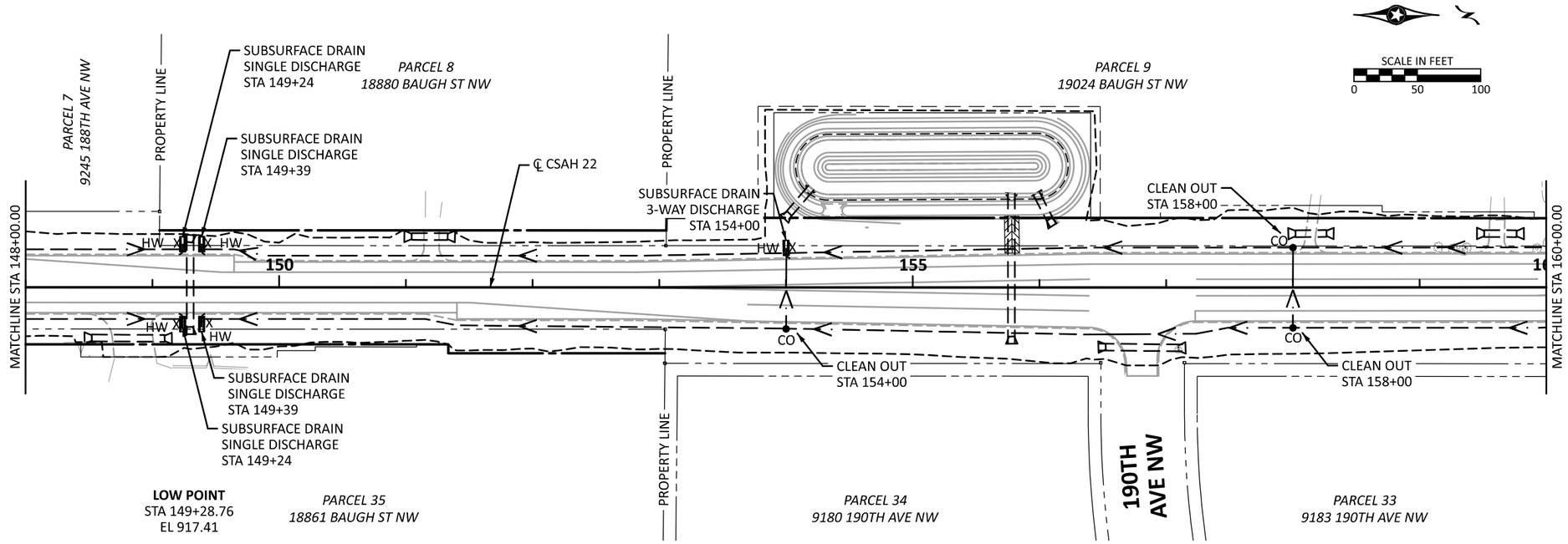
STA 124+00 TO STA 148+00
DRAIN TILE PLAN

SAP 002-622-037

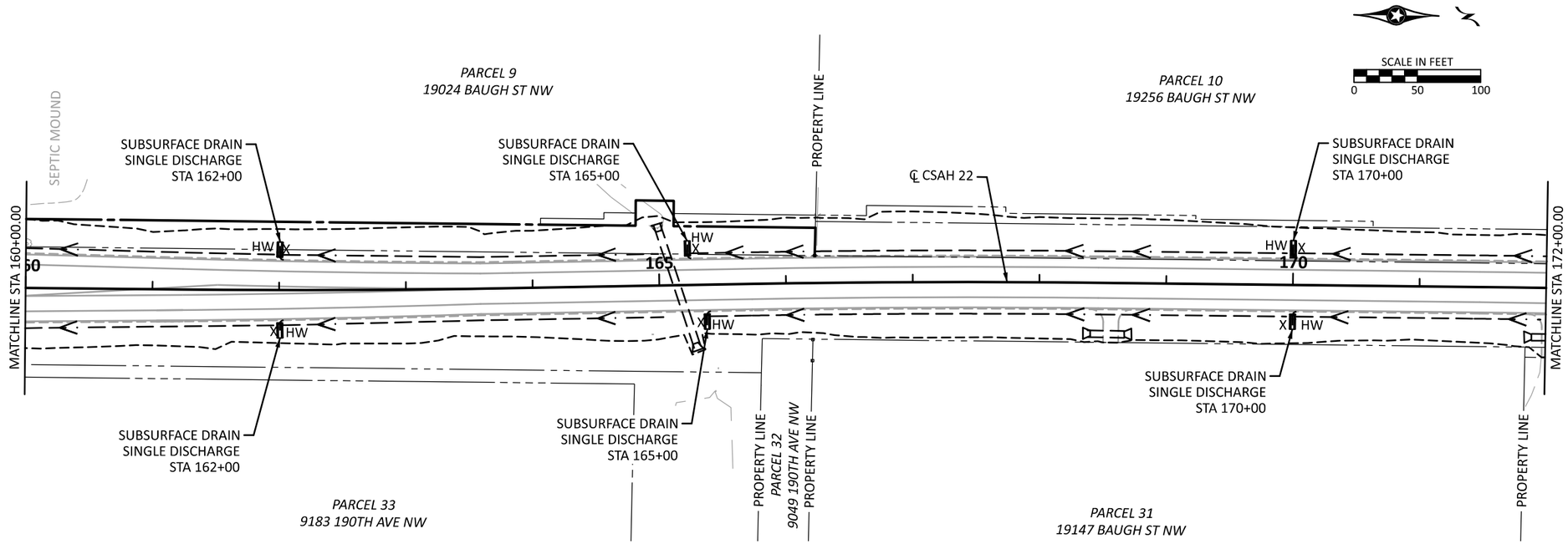
Sheet No. 64 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-det\-001-DRAINTILE.dgn PLOTTED/REVISED: 11/4/2025 12:41:48 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- HW — 4" PRECAST CONCRETE HEADWALL
- X — GUIDEPOST TYPE B
- CO — CLEAN OUT (CONST. DRAINAGE STRUCTURE DESIGN SPECIAL)
- XXXX — DRAINAGE STRUCTURE NUMBER
- ① — CONNECT SUBSURFACE DRAIN TO DRAINAGE STRUCTURE (INCIDENTAL)
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- 4" PVC PIPE DRAIN
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

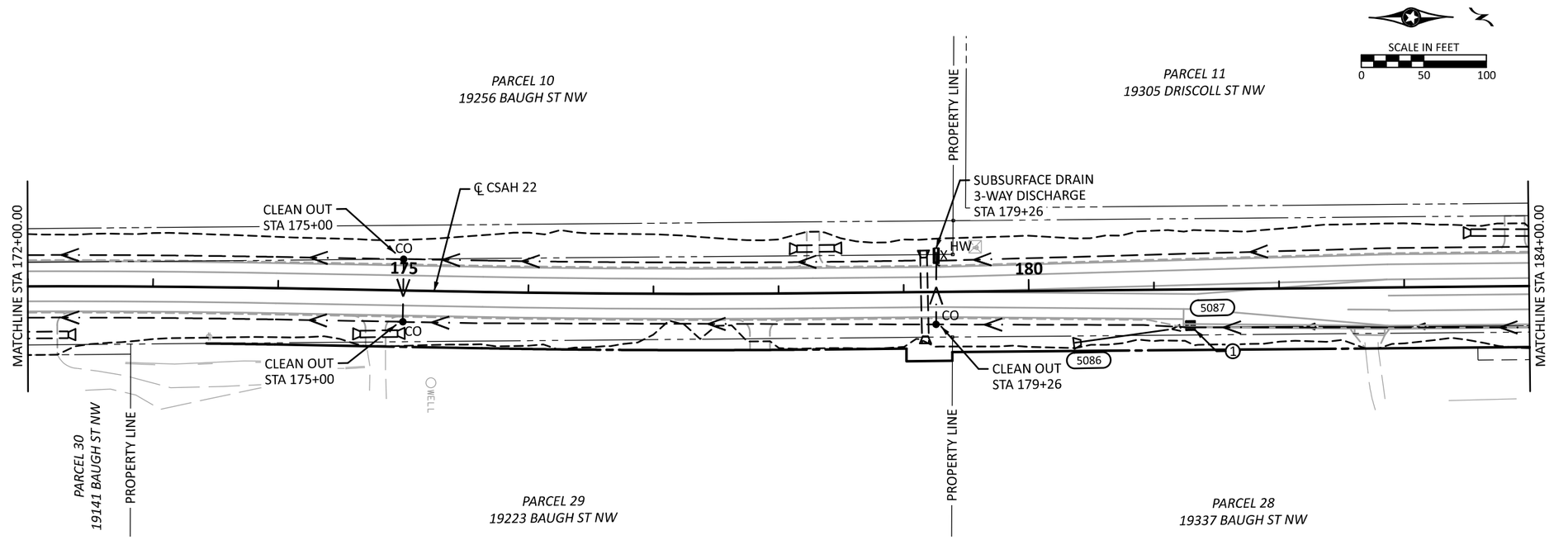
STA 148+00 TO STA 172+00
DRAIN TILE PLAN

SAP 002-622-037

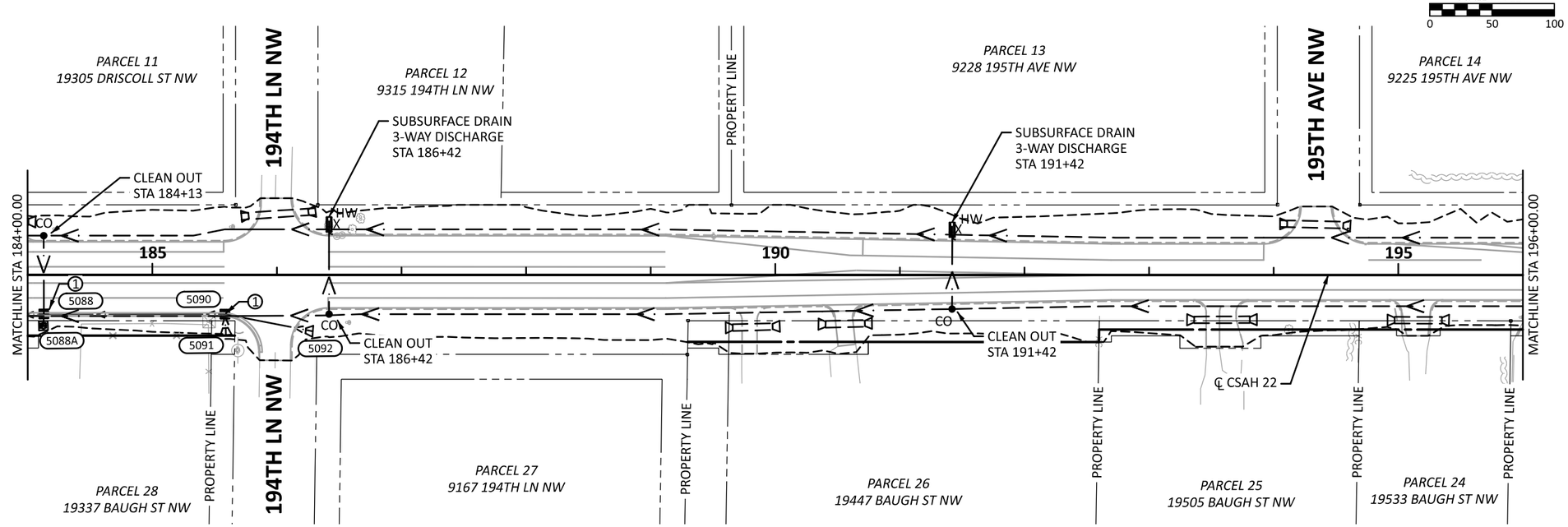
Sheet No. 65 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-det\-001-DRAINTILE.dgn
PLOTTED/REVISED: 11/4/2025 12:41:50 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- HW — 4" PRECAST CONCRETE HEADWALL
- X — GUIDEPOST TYPE B
- CO — CLEAN OUT (CONST. DRAINAGE STRUCTURE DESIGN SPECIAL)
- (XXXX) — DRAINAGE STRUCTURE NUMBER
- (1) — CONNECT SUBSURFACE DRAIN TO DRAINAGE STRUCTURE (INCIDENTAL)
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- 4" PVC PIPE DRAIN
- CONSTRUCTION LIMITS
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ANOKA COUNTY

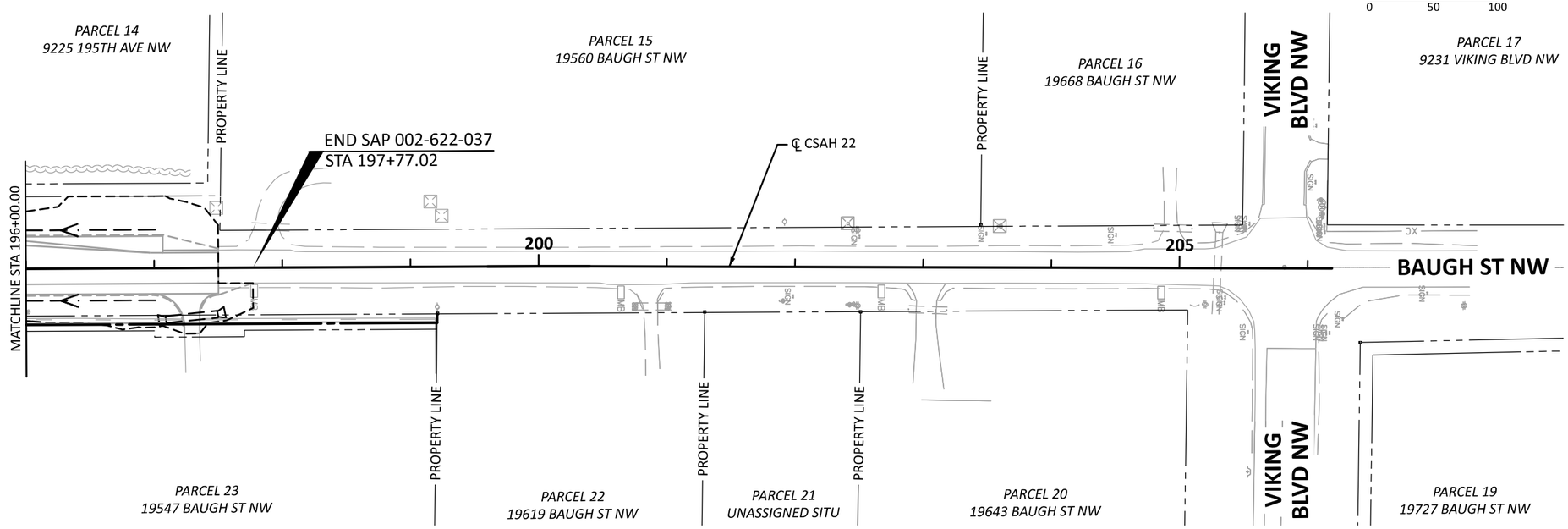
CSAH 22 (Baugh Street NW) Reconstruction

STA 172+00 TO STA 196+00
DRAIN TILE PLAN

SAP 002-622-037

Sheet No. 66 of 138 Sheets

CSAH 22 (Baugh Street NW)



LEGEND

- HW — 4" PRECAST CONCRETE HEADWALL
- X — GUIDEPOST TYPE B
- CO — CLEAN OUT (CONST. DRAINAGE STRUCTURE DESIGN SPECIAL)
- XXXX — DRAINAGE STRUCTURE NUMBER
- ① — CONNECT SUBSURFACE DRAIN TO DRAINAGE STRUCTURE (INCIDENTAL)
- 4" DIA. PERF. PE PIPE DRAIN, 3245 WITH GEOTEXTILE WRAP, 3733, TYPE 1
- 4" PVC PIPE DRAIN
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

NOTES

- THIS PLAN IS SCHEMATIC. INSTALL SUBSURFACE DRAINS AND HEADWALLS PER THE DETAILS IN THE TYPICAL SECTIONS, DESIGN DETAILS, AND STANDARD PLANS.
- DRAIN TILE CLEANOUTS SHALL BE PLACED BELOW THE BOTTOM OF THE TOPSOIL GRADE AND AS DIRECTED BY THE ENGINEER.

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-det\-001-DRAINTILE.dgn
PLOTTED/REVISED: 11/4/2025 12:41:51 PM

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 196+00 TO STA 197+77.02

DRAIN TILE PLAN

SAP 002-622-037

CSAH 22 (Baugh ST NW) at 181ST AVE NW

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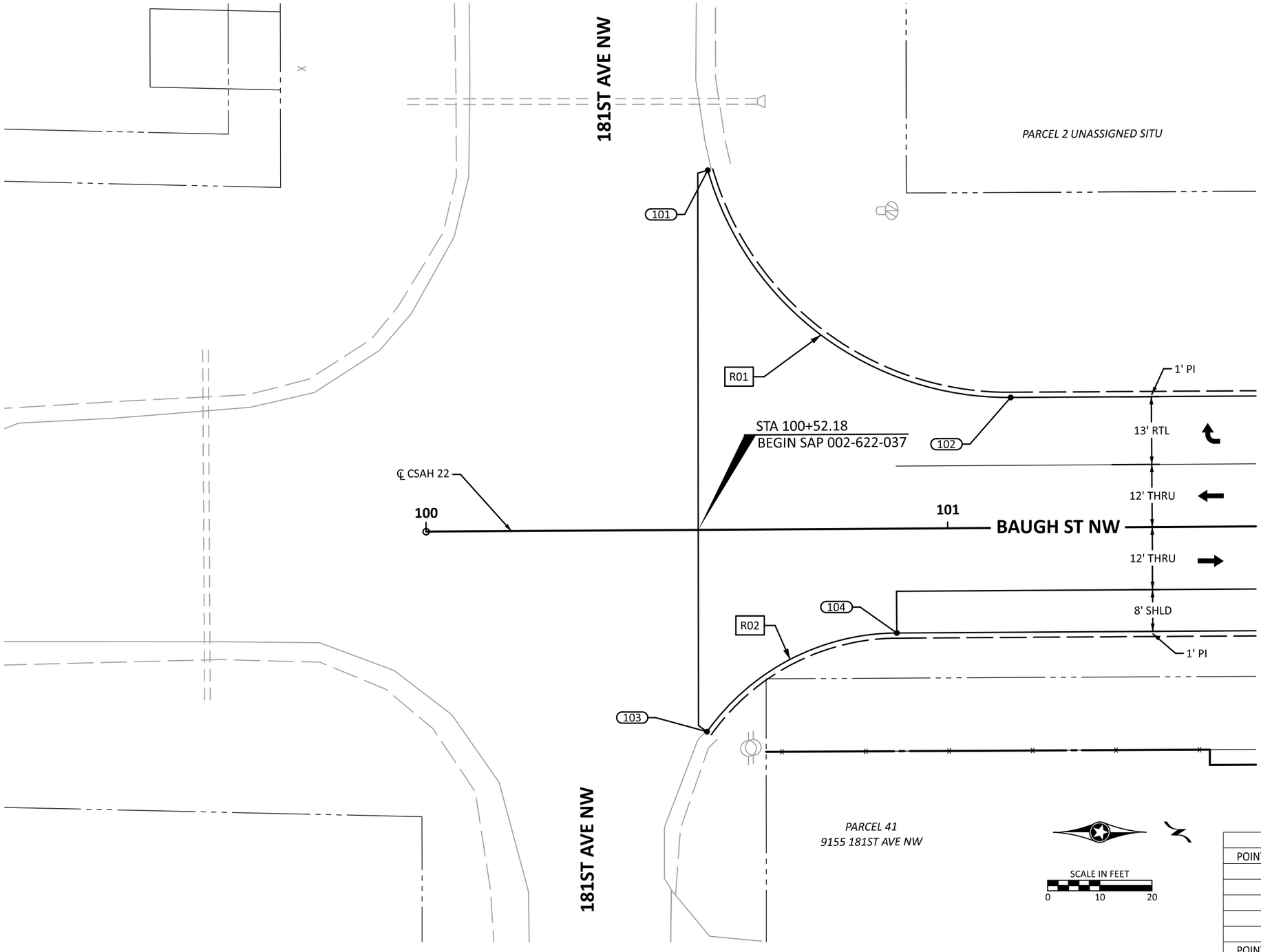
PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
101	439793.19	196395.04	910.21
102	439836.76	196453.13	909.60
103	439900.83	196394.90	909.68
104	439881.90	196431.29	909.90
RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R01	439776.76	196452.74	60
R02	439926.90	196431.58	45

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 181ST AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at BURNS PKWY NW

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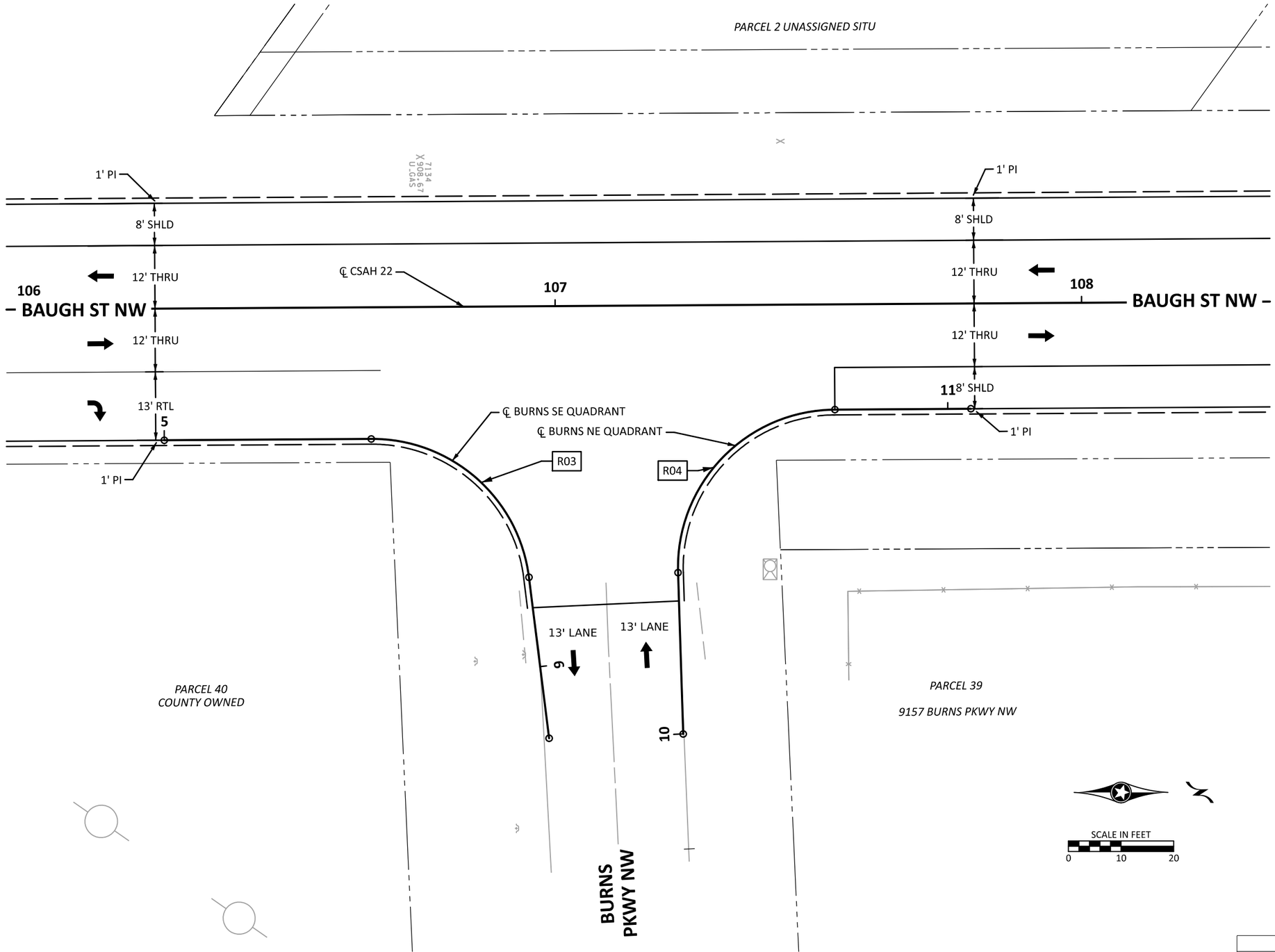

LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R03	439913.21	197006.28	30
R04	439907.64	197094.36	30

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at BURNS PKWY NW
INTERSECTION DETAILS

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001
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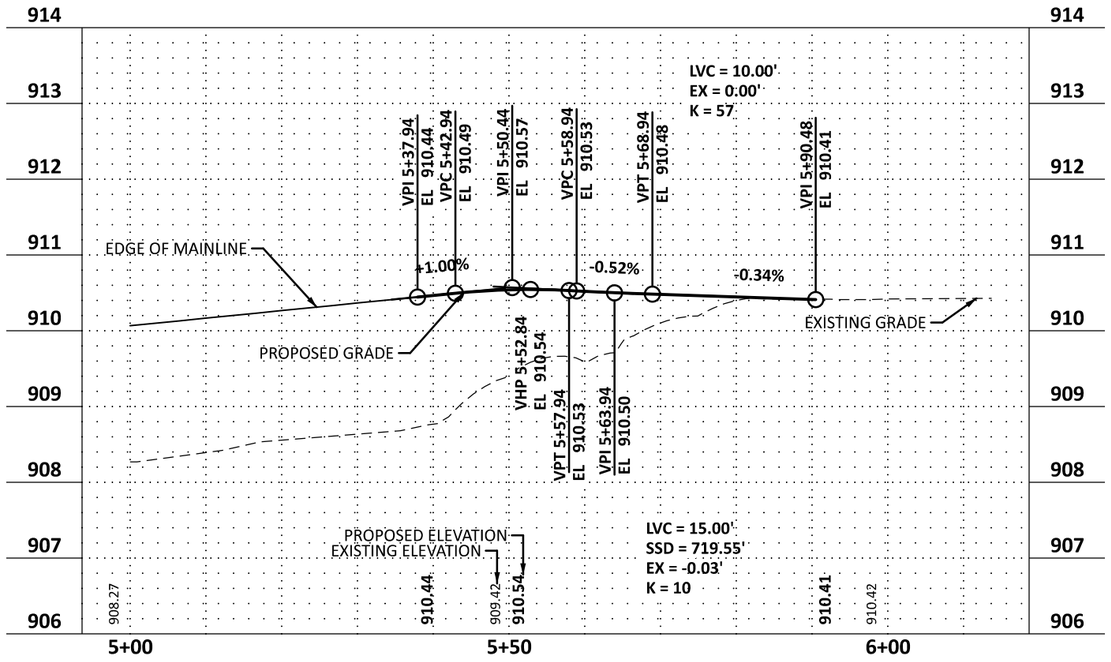
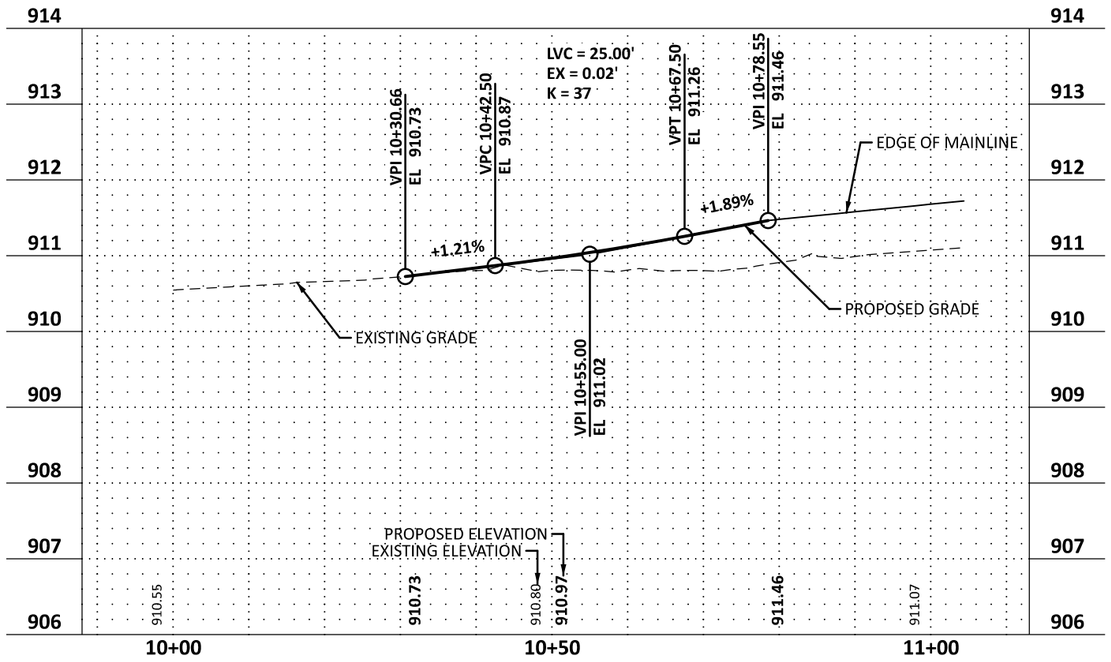
BURNS PKWY SE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA					COORDINATES		DIRECTION AZIMUTH
		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
		SPIRAL CURVE DATA							
		THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_BURNS_SE									
START	5+00.000 R1						439883.46	196966.78	
PC	5+39.310 R1						439883.21	197006.09	N0.368°W
HPI	5+65.961 R1	83°14'04" RT	190°59'09"	30	26.651	43.582	439883.04	197032.74	PI
CC							439913.21	197006.28	
PT	5+82.892 R1						439909.48	197036.05	N82.867°E
END	6+13.709 R1						439940.06	197039.88	N82.867°E

BURNS PKWY NE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA					COORDINATES		DIRECTION AZIMUTH
		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
		SPIRAL CURVE DATA							
		THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_BURNS_NE									
START	10+00.000 R1						439939.25	197065.35	
PC	10+30.658 R1						439908.6	197064.37	N88.167°E
HPI	10+61.435 R1	91°27'54" RT	190°59'09"	30	30.777	47.891	439877.84	197063.39	PI
CC							439907.64	197094.36	
PT	10+78.549 R1						439877.64	197094.16	N0.368°W
END	11+04.383 R1						439877.48	197120	N0.368°W

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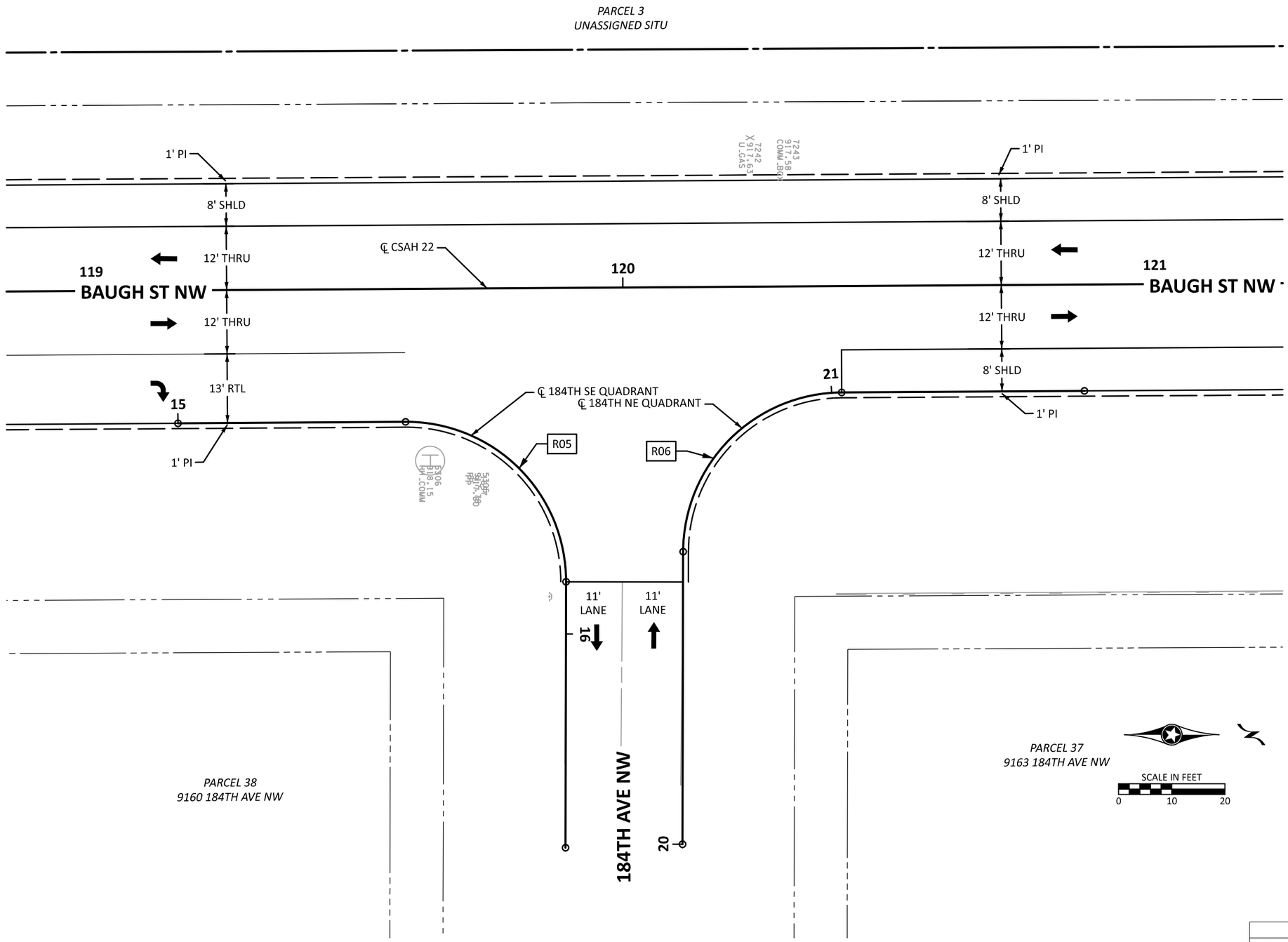
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at BURNS PKWY NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 184TH AVE NW



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R05	439904.90	198300.33	30
R06	439899.37	198382.34	30

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001
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ANOKA COUNTY

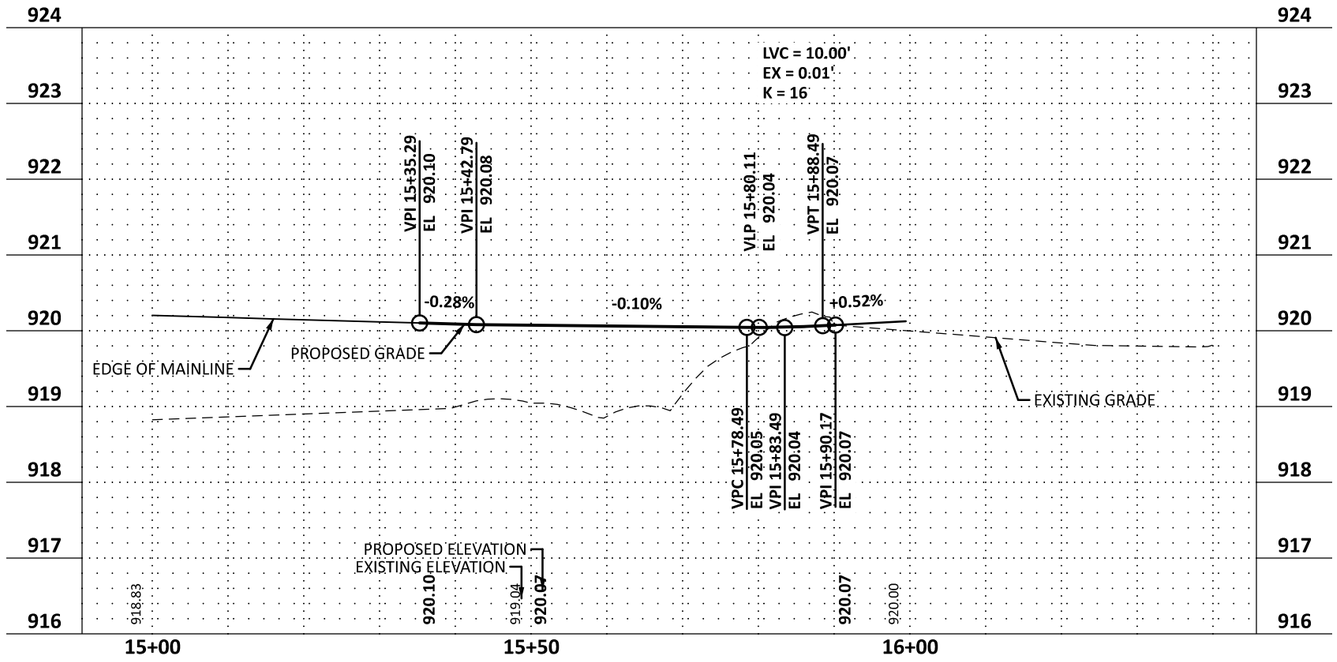
CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 184TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

Sheet No. 71 of 138 Sheets

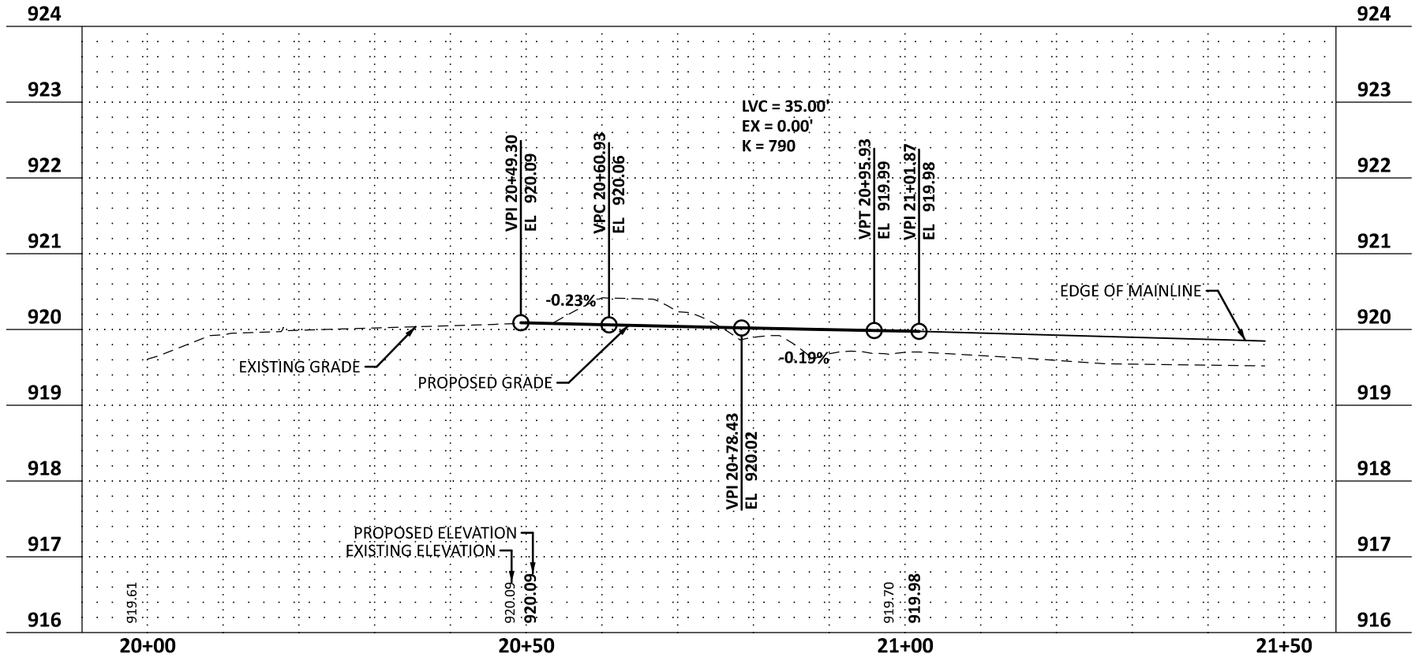
184TH AVE SE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_184TH_SE									
START	15+00.000 R1						439875.18	198257.35	
PC	15+42.795 R1						439874.9	198300.14	N0.368°W
HPI	15+73.050 R1	90°29'10" RT	190°59'09"	30	30.256	47.378	439874.71	198330.4	PI
CC							439904.9	198300.33	
PT	15+90.173 R1						439904.96	198330.33	N89.882°W
END	16+40.176 R1						439954.97	198330.23	N89.882°W

184TH AVE NE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_184TH_NE									
START	20+00.000 R1						439954.31	198352.22	
PC	20+55.000 R1						439899.31	198352.34	N89.877°W
HPI	20+84.744 R1	89°30'32" RT	190°59'09"	30	29.744	46.867	439869.57	198352.41	PI
CC							439899.37	198382.34	
PT	21+01.867 R1						439869.37	198382.15	N0.368°W
END	21+47.509 R1						439869.08	198427.79	N0.368°W

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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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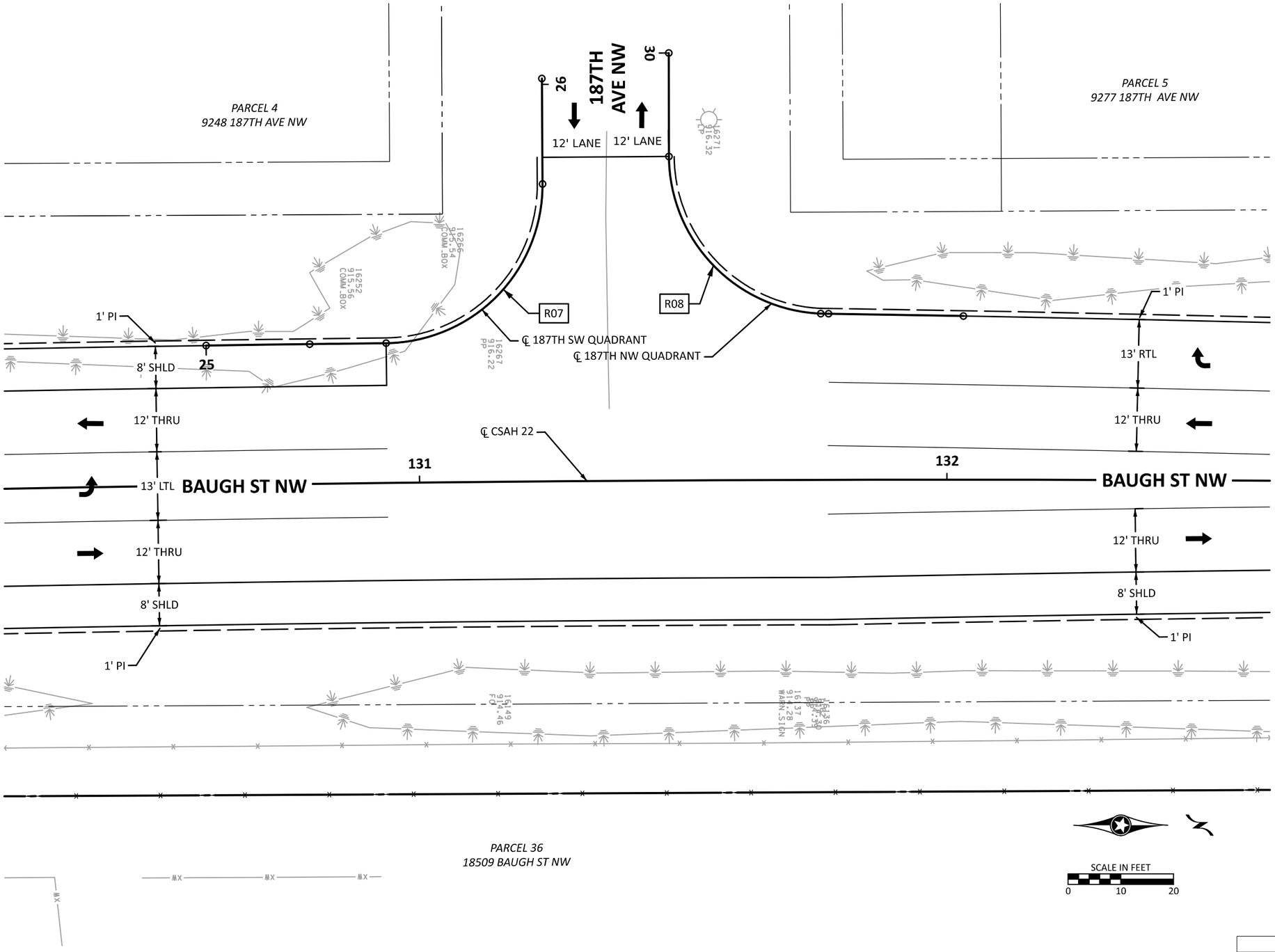
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 184TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 187TH AVE NW



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R07	439776.79	199434.16	30
R08	439771.21	199518.13	30

PATH & FILENAME: *Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001*
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DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

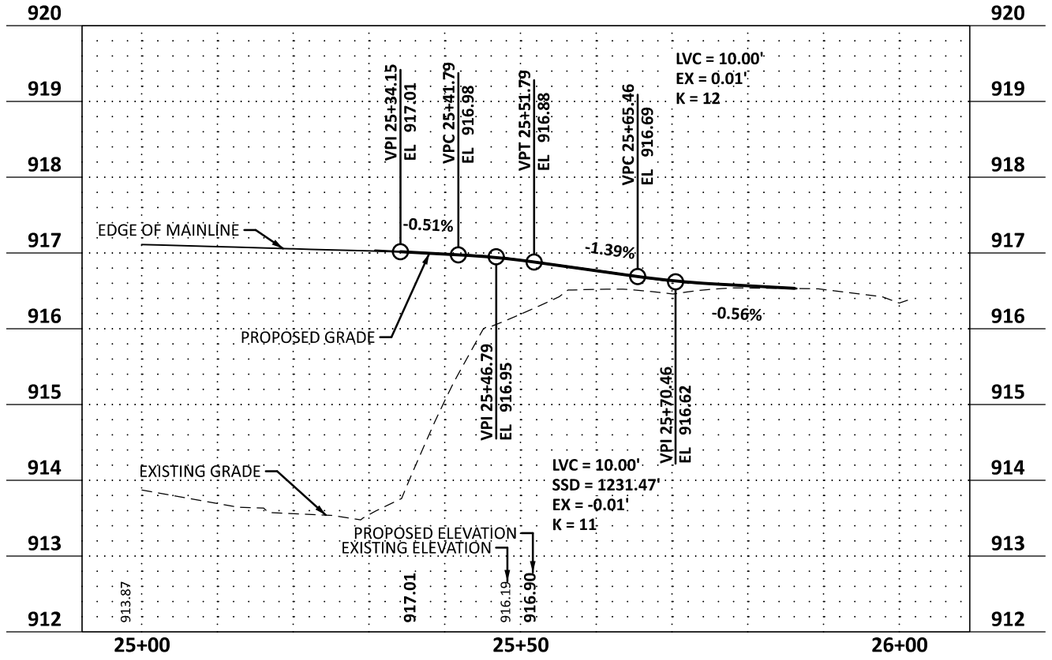
CSAH 22 (BAUGH ST NW) at 187TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

Sheet No. 73 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001 PLOTTED/REVISED: 11/4/2025 12:41:59 PM

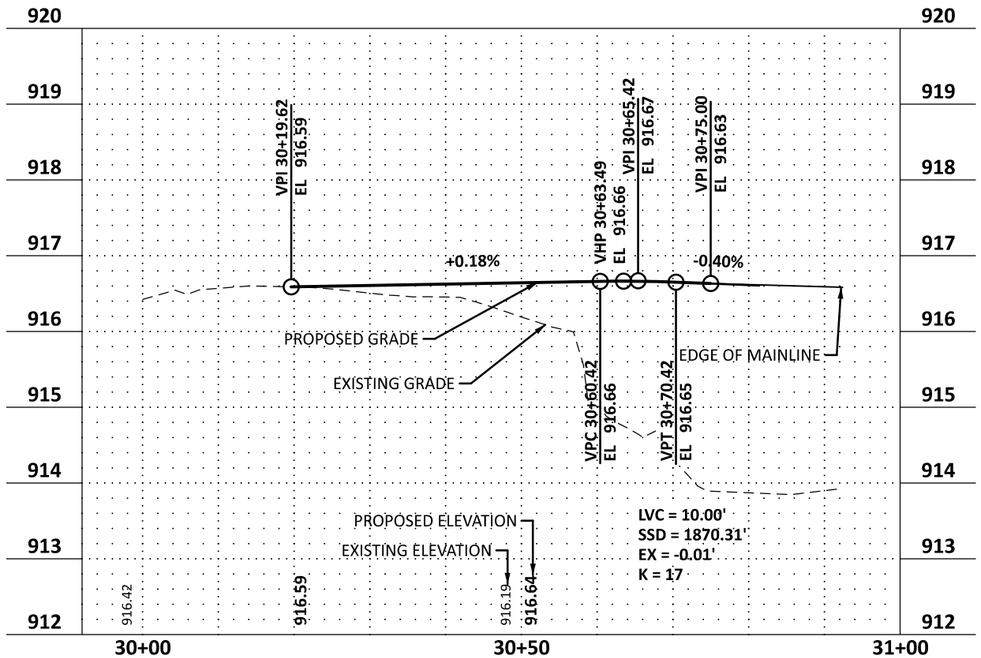
187TH AVE SW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_187TH_SW									
PC	25+00.000 R1						439807.24	199400.35	N0.859°W
HPI	25+09.823 R1	00°07'09" RT	00°36'21"	9456.5	9.823	19.646	439807.09	199410.17	PI
CC							449262.67	199542.1	
PCC	25+19.646 R1						439806.96	199420	N0.740°W
HPI	25+26.898 R1	00°05'16" RT	00°36'21"	9456.5	7.251	14.503	439806.87	199427.25	PI
CC							449262.67	199542.1	
PRC	25+34.149 R1						439806.79	199434.5	N0.652°W
HPI	25+64.001 R1	89°42'57" LT	190°59'09"	30	29.852	46.975	439806.45	199464.35	PI
CC							439776.79	199434.16	
PT	25+81.124 R1						439776.6	199464.15	N89.632°E

187TH AVE NW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_187TH_NW									
START	30+00.000 R1						439751.76	199488.09	
PC	30+19.624 R1						439771.39	199488.13	N89.907°E
HPI	30+48.273 R1	87°21'36" LT	190°59'09"	30	28.649	45.742	439800.03	199488.3	PI
CC							439771.2	199518.13	
PT	30+65.366 R1						439801.18	199516.93	N2.293°E
PC	30+66.835 R1						439801.2	199518.39	N0.890°E
PC	30+66.835 R1						439801.2	199518.39	N0.895°E
HPI	30+79.627 R1	00°09'18" RT	00°36'21"	9458.944	12.792	25.584	439801.4	199531.18	PI
CC							449258.99	199370.71	
PT	30+92.419 R1						439801.64	199543.97	N1.050°E

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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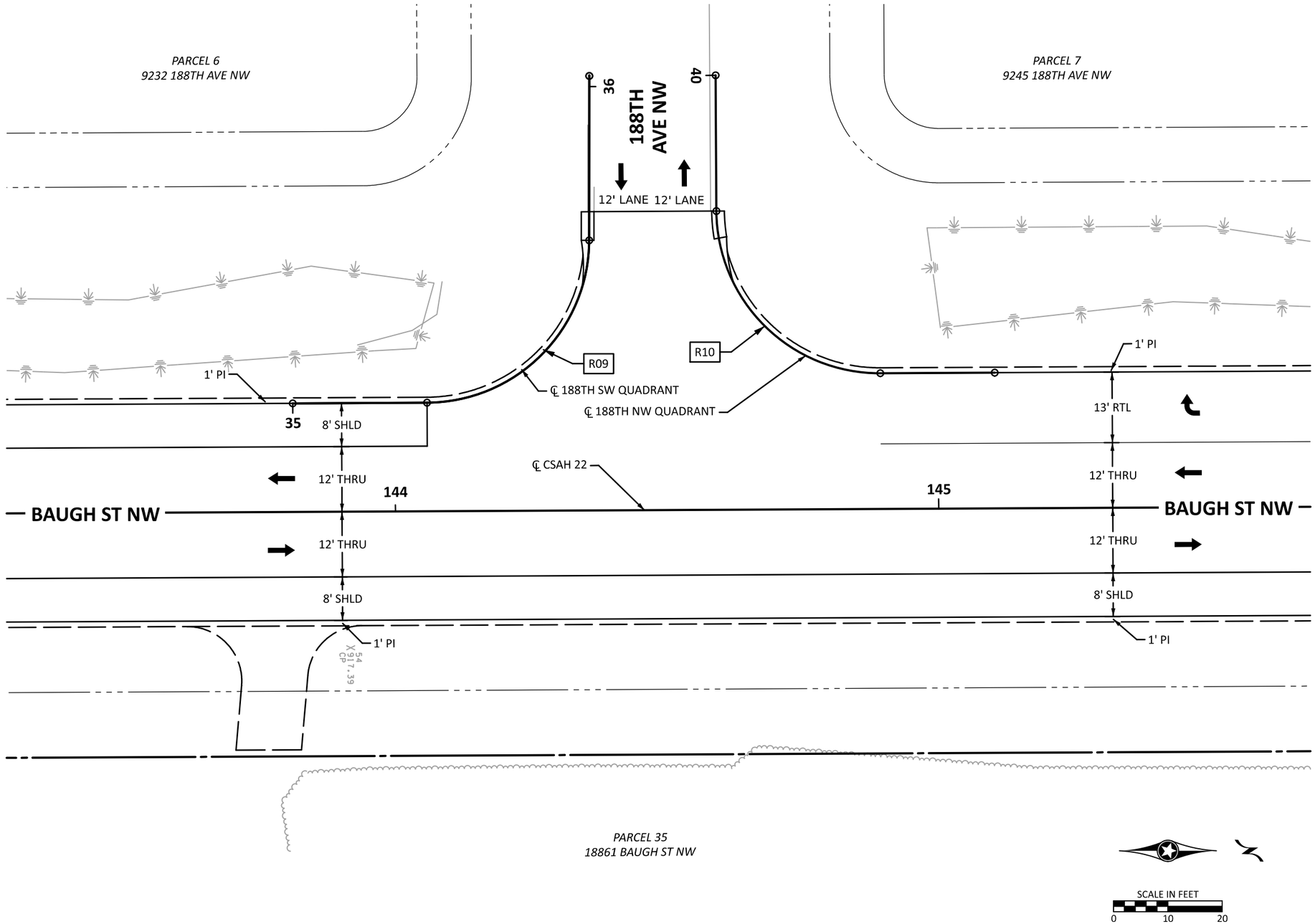
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 187TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 188TH AVE NW



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R09	439785.71	200745.92	30
R10	439780.29	200829.89	30

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001
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ANOKA COUNTY

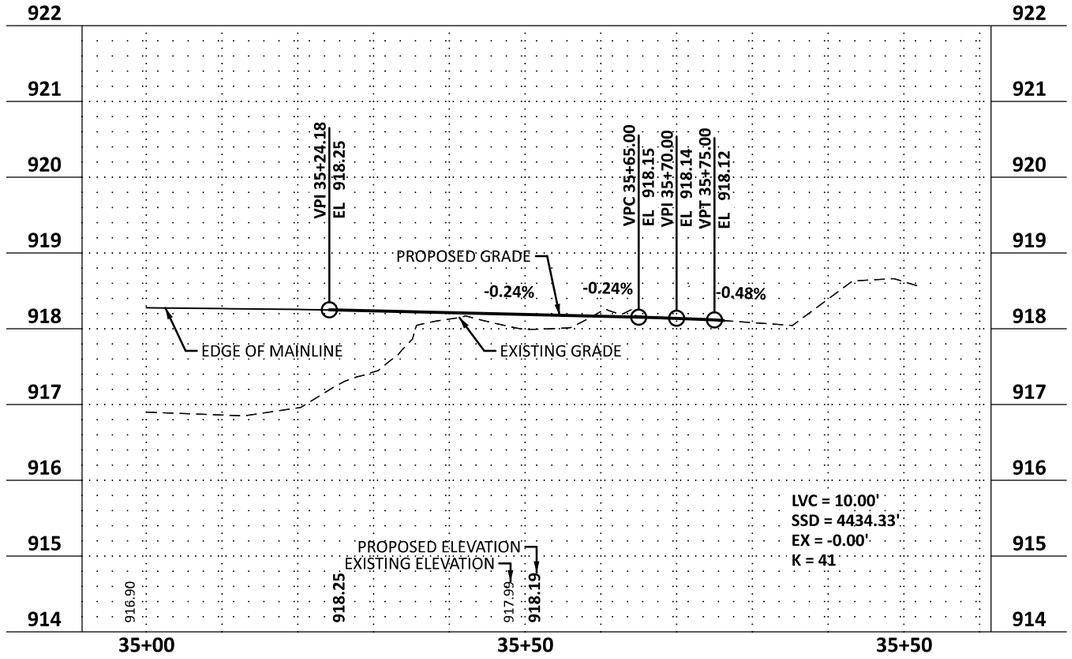
CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 188TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

Sheet No. 75 of 138 Sheets

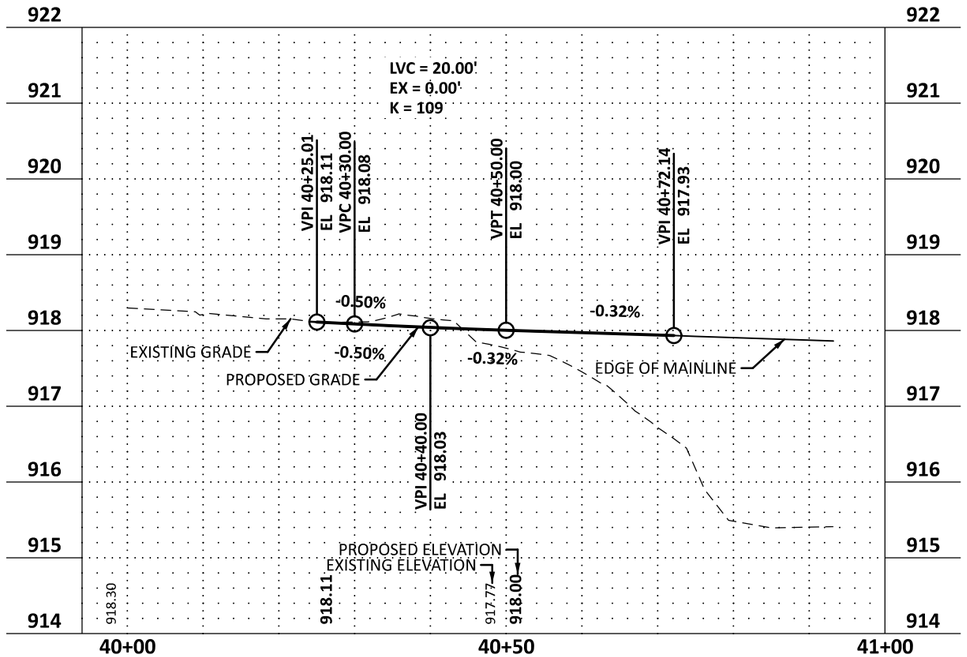
188TH AVE SW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_188TH_SW									
START	35+00.000 R1						439815.84	200721.89	
PC	35+24.722 R1						439815.71	200746.61	N0.288°W
HPI	35+54.459 R1	89°29'42" LT	190°59'09"	30	29.737	46.859	439815.56	200776.35	PI
CC							439785.71	200746.46	
PT	35+71.581 R1						439785.82	200776.46	N89.783°W
END	35+71.581 R1						439755.56	200776.48	N89.962°W

188TH AVE NW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_188TH_NW									
START	40+00.000 R1						439755.44	200799.74	
PC	40+24.991 R1						439780.43	200799.88	N89.686°E
HPI	40+55.000 R1	89°58'35" LT	190°51'06"	30.021	30.009	47.145	439810.44	200800.05	PI
CC							439780.27	200829.9	
PT	40+72.136 R1						439810.29	200830.05	N0.290°W
END	40+93.198 R1						439810.18	200851.12	N0.290°W

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

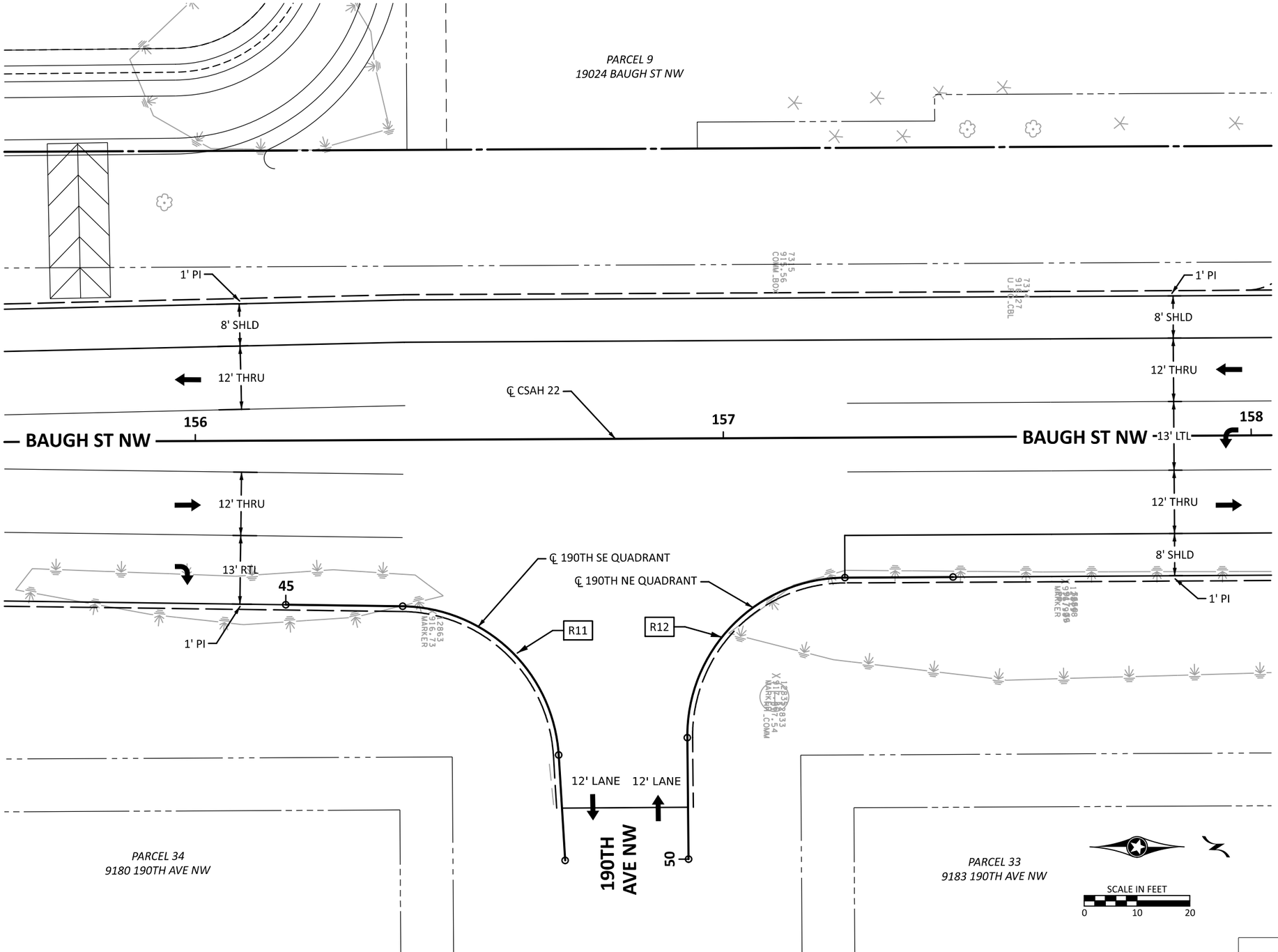
CSAH 22 (BAUGH ST NW) at 188TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 190TH AVE NW

PLOTTED/REVISED: 11/4/2025 12:42:02 PM

PATH & FILENAME: Projects\Minnesota\026054-000\185int-001\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R11	439890.97	201980.47	30
R12	439885.54	202063.98	30

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 190TH AVE NW
INTERSECTION DETAILS

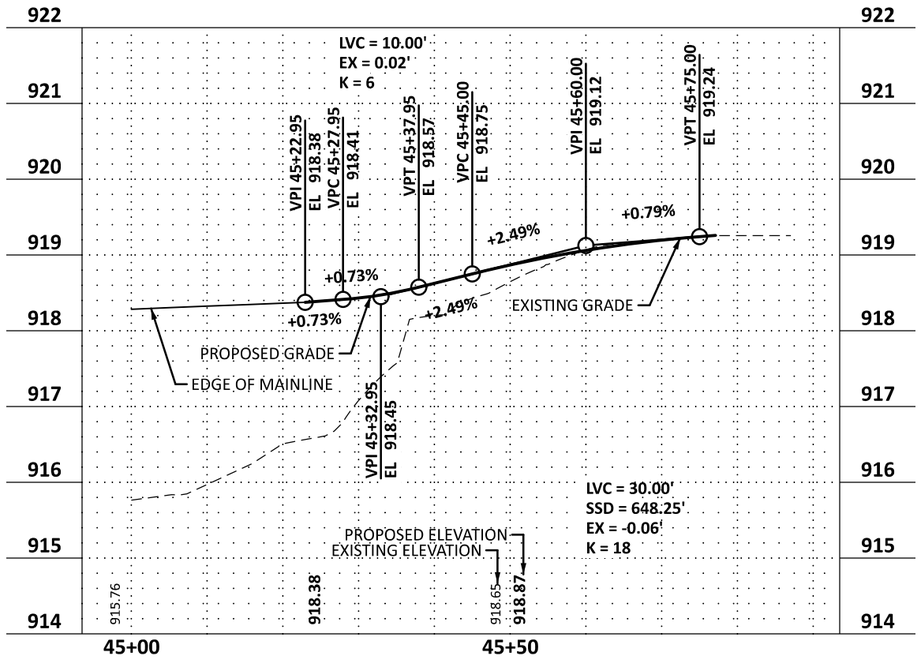
SAP 002-622-037

Sheet No. 77 of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:42:04 PM

PATH & FILENAME: Projects\Minnesota\026054-000\185int-001 Sheets\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001

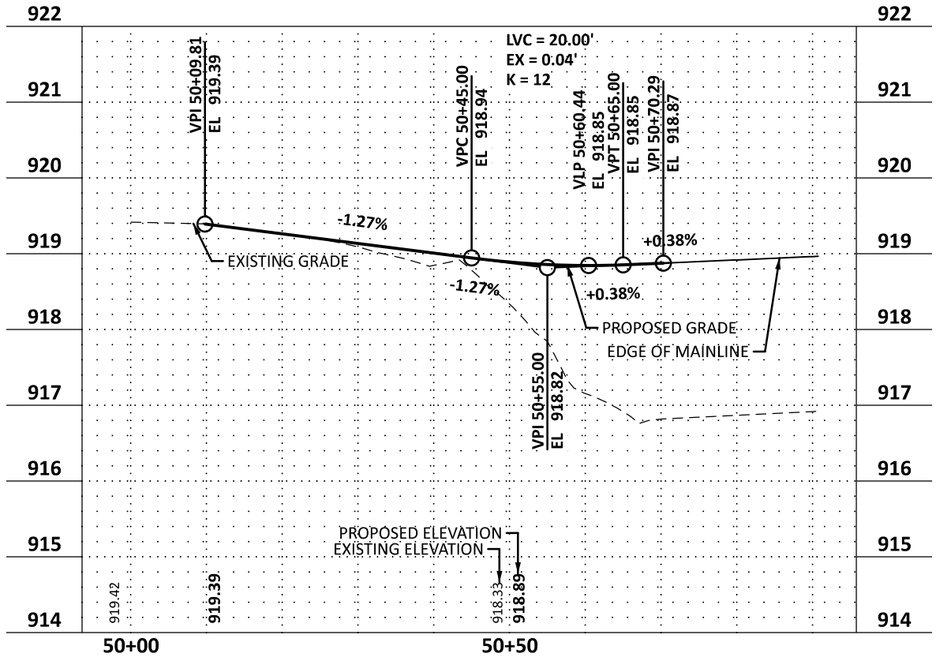
190TH AVE SE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_190TH_SE									
START	45+00.000 R1						439860.67	201957.92	
PC	45+22.146 R1						439860.96	201980.07	N0.751°E
HPI	45+49.998 R1	85°44'48" RT	190°59'09"	30	27.852	44.897	439861.33	202007.92	PI
CC							439890.96	201979.67	
PT	45+67.043 R1						439889.13	202009.62	N86.498°E
END	45+87.043 R1						439909.09	202010.84	N86.498°E

190TH AVE NE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_190TH_NE									
START	50+00.000 R1						439908.85	202034.22	
PC	50+23.009 R1						439885.84	202033.98	N89.416°E
HPI	50+53.163 R1	90°17'38" RT	190°59'09"	30	30.154	47.278	439855.69	202033.68	PI
CC							439885.54	202063.98	
PT	50+70.287 R1						439855.54	202063.83	N0.290°W
END	50+90.755 R1						439855.44	202084.3	N0.290°W

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

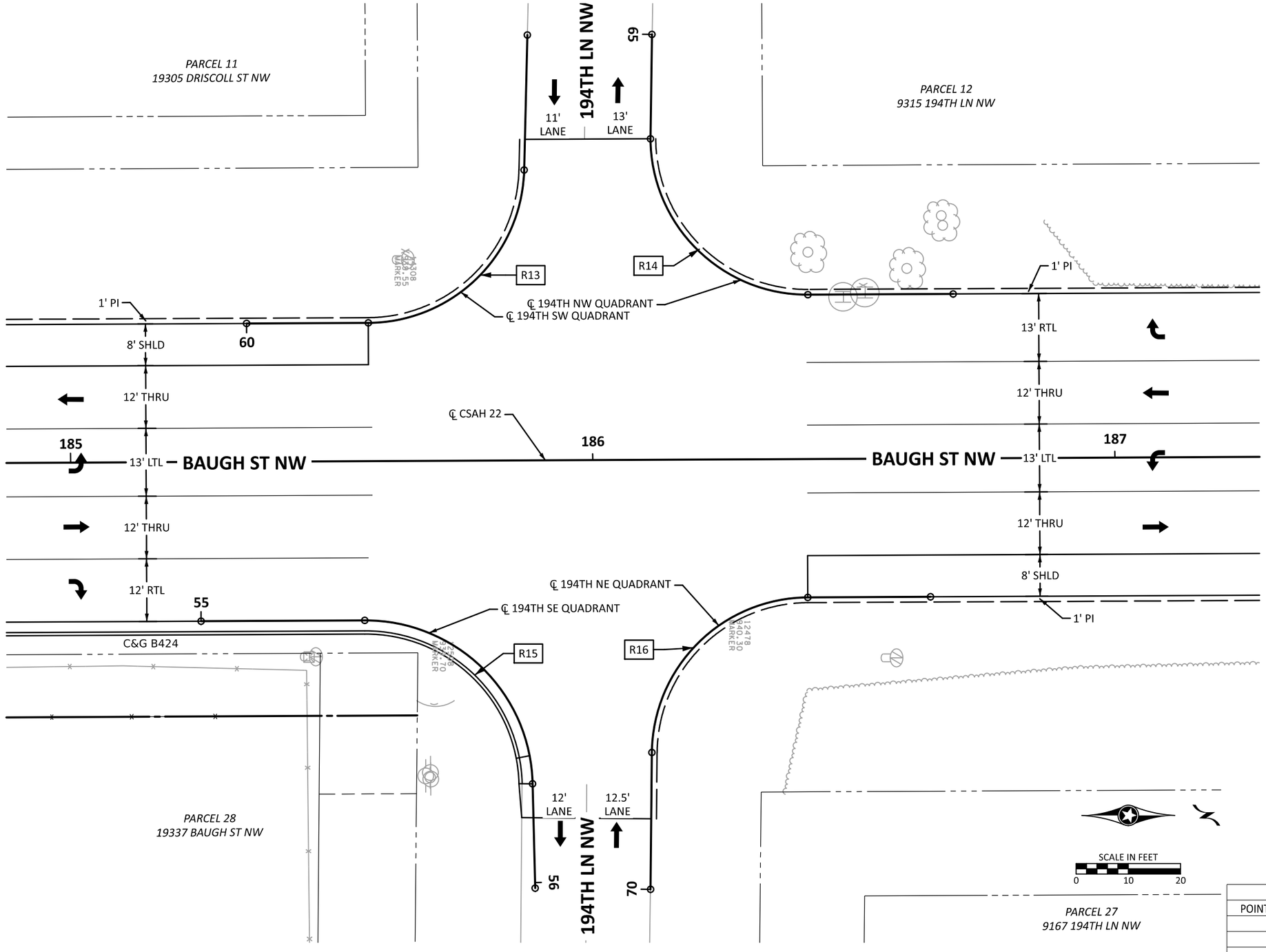
CSAH 22 (BAUGH ST NW) at 190TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 194TH AVE NW

PLOTTED/REVISED: 11/4/2025 12:42:06 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R13	439755.34	204897.33	30
R14	439749.93	204981.96	30
R15*	439874.34	204896.95	30
R16	439867.94	204981.79	30

*TAKEN AT FLOW LINE

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE:
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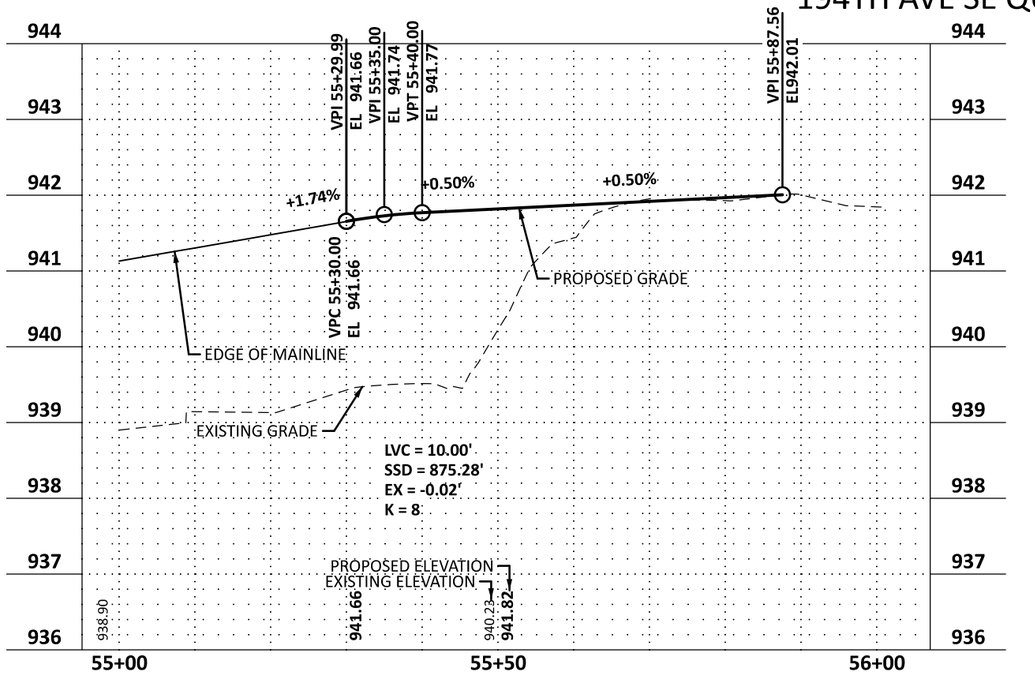
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 194TH AVE NW
INTERSECTION DETAILS

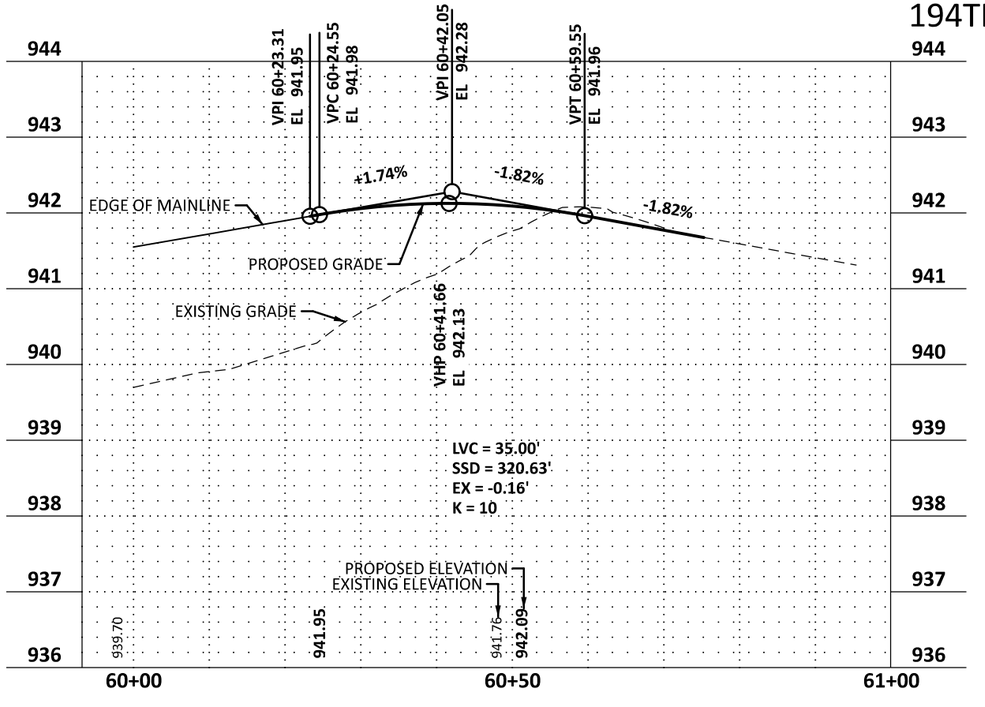
SAP 002-622-037

194TH AVE SE QUADRANT TOE OF GUTTER



ALIGNMENT TABULATION									
POINT TYPE	STATION	CIRCULAR CURVE DATA					COORDINATES		DIRECTION AZIMUTH
		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
		SPIRAL CURVE DATA							
		THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_194TH_SE									
START	55+00.000 R1						439842.49	204865.45	
PC	55+31.345 R1						439842.34	204896.8	N0.274°W
HPI	55+62.803 R1	89°01'19" RT	179°02'58"	32	31.458	49.719	439842.19	204928.25	PI
CC							439874.34	204896.95	
PT	55+81.064 R1						439873.64	204928.94	N88.748°E
END	56+01.064 R1						439893.64	204929.44	N88.582°E

194TH AVE SW QUADRANT



ALIGNMENT TABULATION									
POINT TYPE	STATION	CIRCULAR CURVE DATA					COORDINATES		DIRECTION AZIMUTH
		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
		SPIRAL CURVE DATA							
		THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_194TH_SW									
START	60+00.000 R1						439785.45	204874.17	
PC	60+23.310 R1						439785.34	204897.48	N0.274°W
HPI	60+52.467 R1	88°22'05" LT	190°59'09"	30	29.157	46.269	439785.2	204926.63	PI
CC							439755.34	204897.33	
PT	60+69.579 R1						439756.05	204927.32	N88.642°W
END	60+95.443 R1						439730.19	204927.94	N88.642°W

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

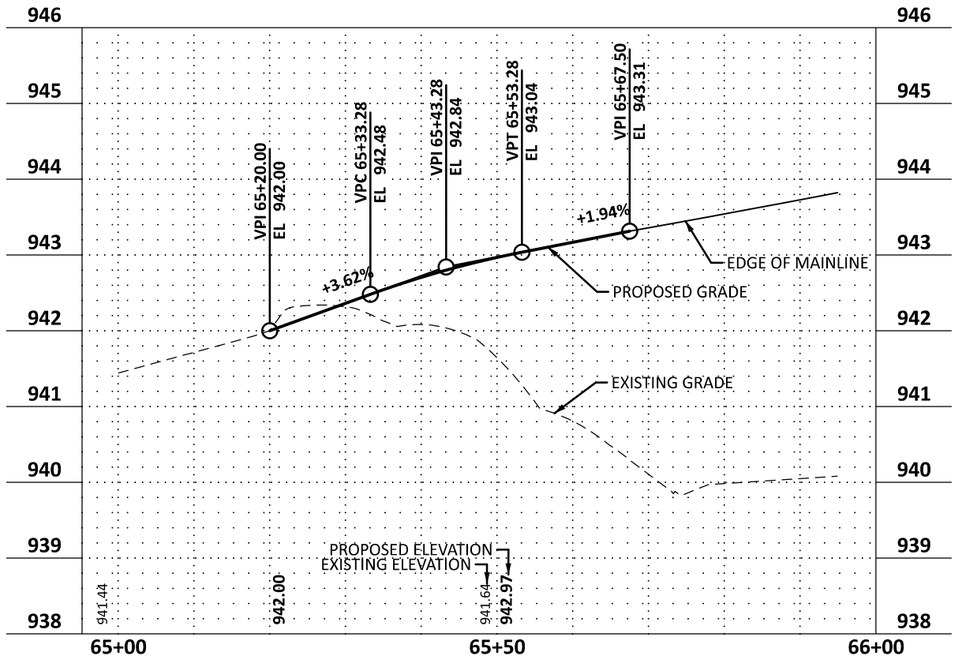
CSAH 22 (BAUGH ST NW) at 194TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

PLOTTED/REVISED: 11/4/2025 12:42:08 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001

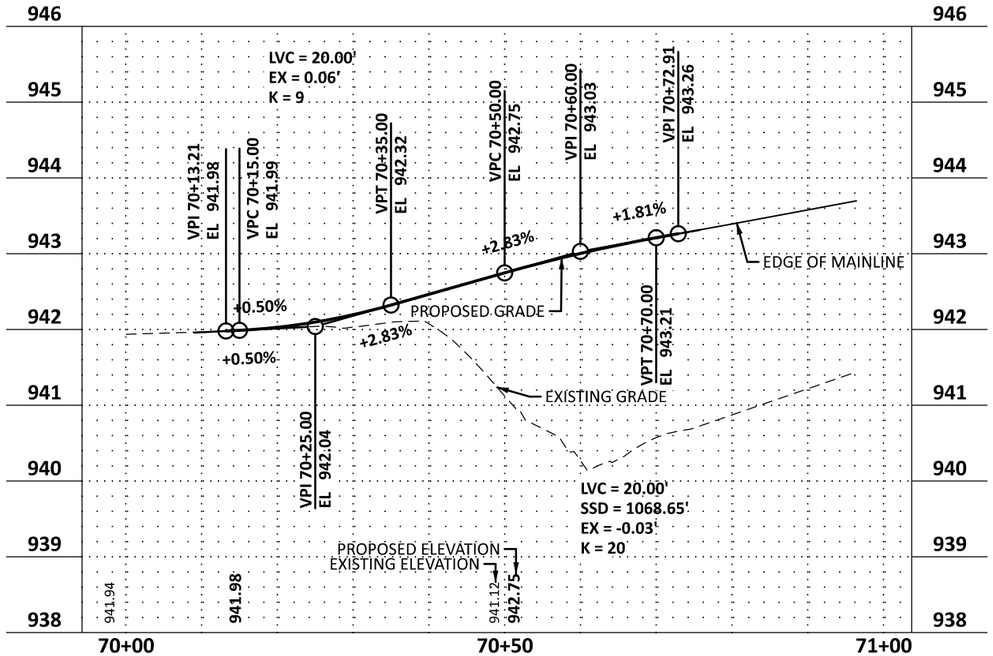
194TH AVE NW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_194TH_NW									
START	65+00.000 R1						439730.08	204951.8	
PC	65+20.003 R1						439750.08	204951.52	N89.207°W
PC	65+20.003 R1						439750.08	204951.52	N89.720°E
HPI	65+50.002 R1	89°59'34" LT	190°58'18"	30.002	29.998	47.124	439780.08	204951.67	PI
CC							439749.93	204981.52	
PT	65+67.127 R1						439779.94	204981.67	N0.273°W
END	65+94.949 R1						439779.8	205009.49	N0.273°W

194TH AVE NE QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_194TH_NE									
START	70+00.000 R1						439893.86	204951.54	
PC	70+26.222 R1						439867.64	204951.79	N89.441°W
HPI	70+55.789 R1	89°10'01" RT	190°59'09"	30	29.567	46.688	439838.08	204952.08	PI
CC							439867.94	204981.79	
PT	70+72.910 R1						439837.94	204981.65	N0.274°W
END	70+96.419 R1						439837.82	205005.15	N0.274°W

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

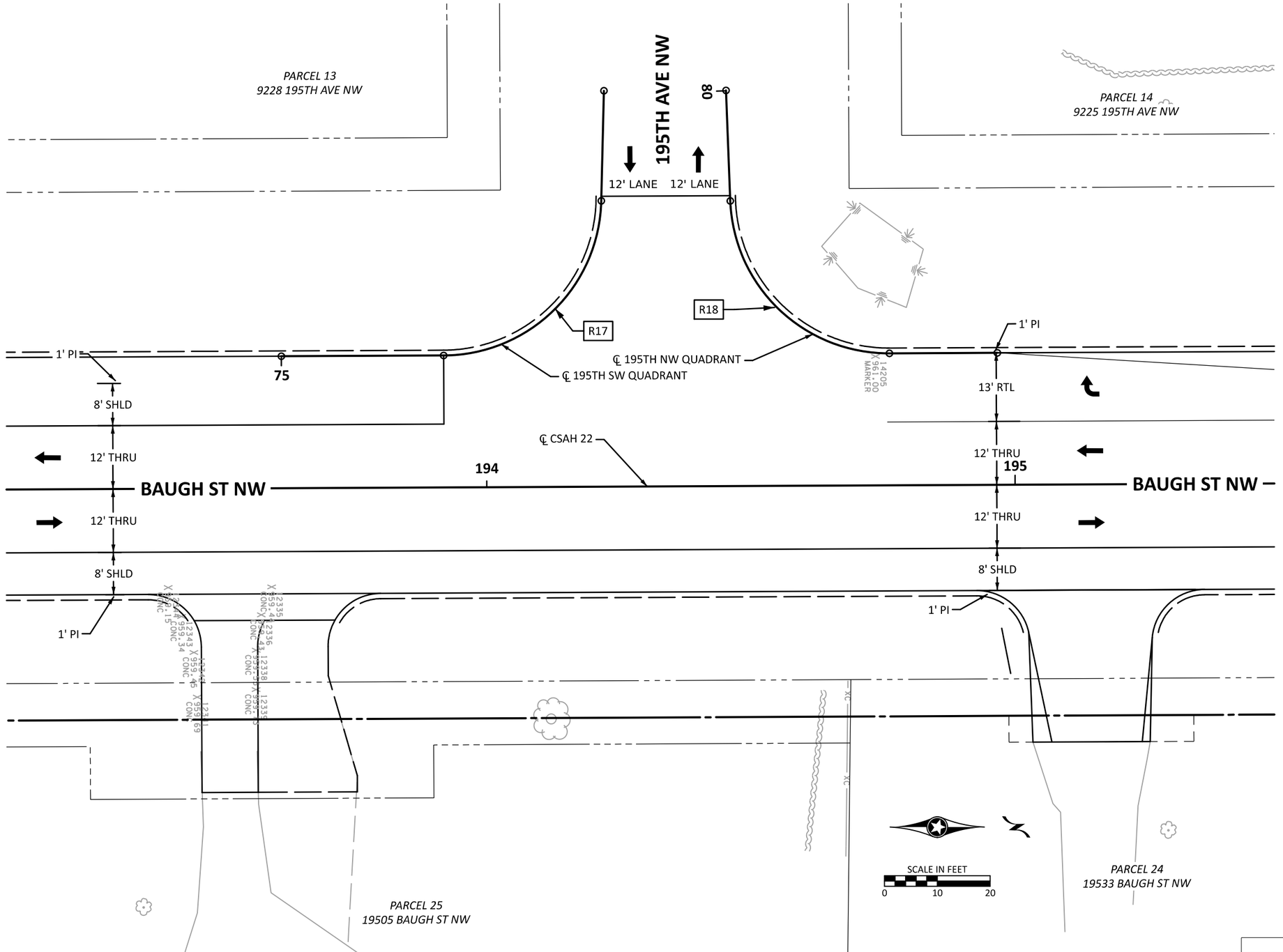
CSAH 22 (BAUGH ST NW) at 194TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

CSAH 22 (BAUGH ST NW) at 195TH AVE NW

PLOTTED/REVISED: 11/4/2025 12:42:09 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185int-001



LEGEND

- TRAFFIC DIRECTION
- XXX — INTERSECTION CONTROL POINTS
- XXX — RADIUS CONTROL POINTS
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

RADIUS CONTROL POINTS			
POINT NUMBER	X	Y	RADIUS (FT)
R17	439752.84	205732.05	30
R18	439752.44	205816.05	30

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

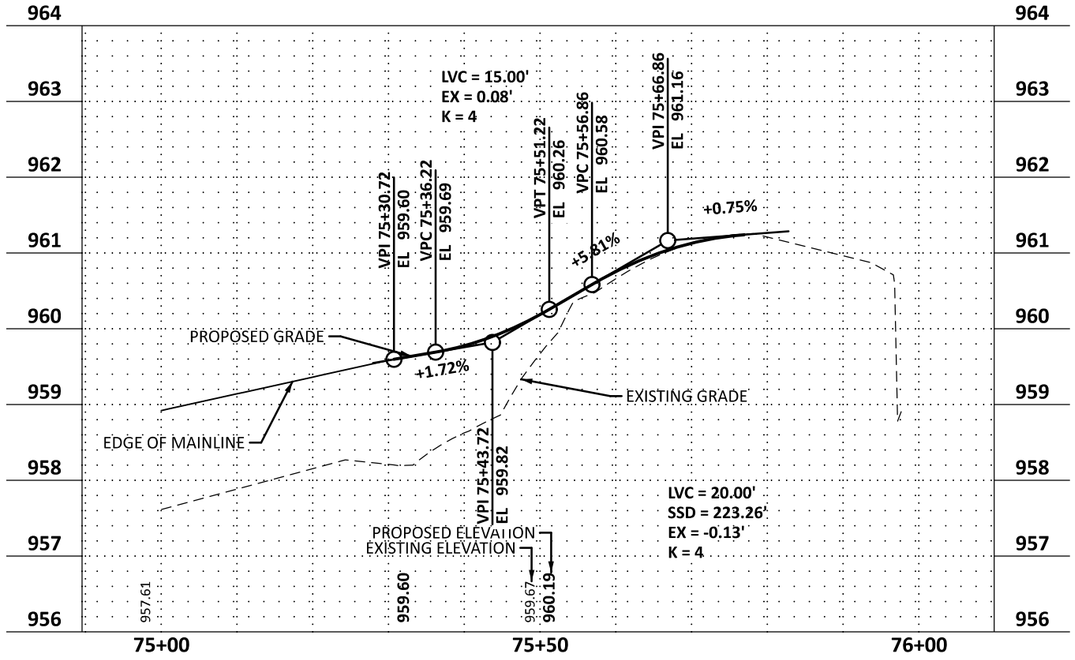
CSAH 22 (BAUGH ST NW) at 195TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037

Sheet No. 82 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\185int-001 PLOTTED/REVISED: 11/4/2025 12:42:10 PM

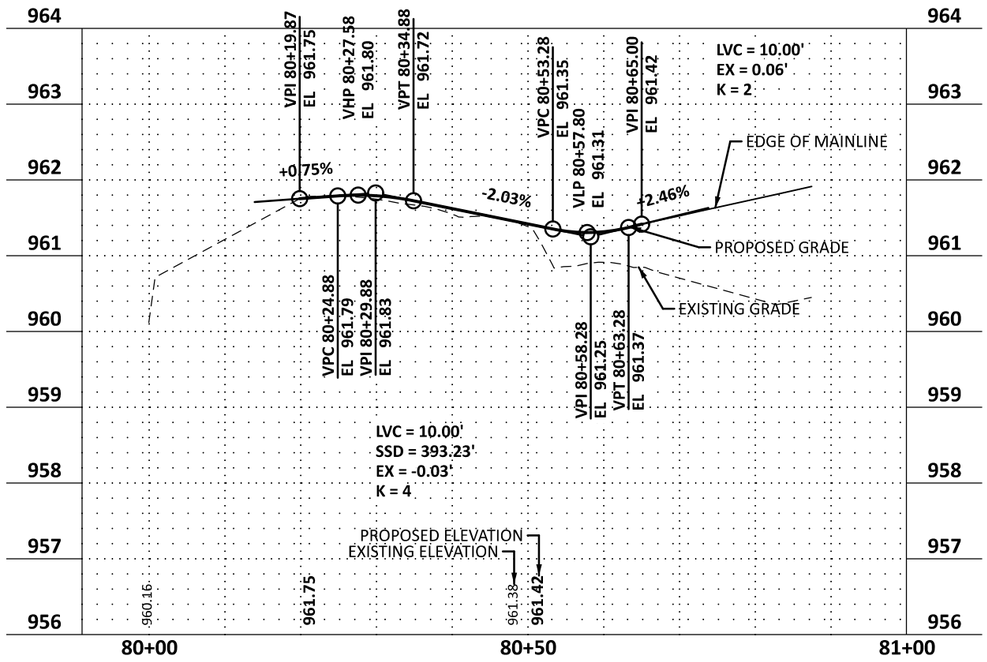
195TH AVE SW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_195TH_SW									
START	75+00.000 R1						439782.99	205701.57	
PC	75+30.716 R1						439782.84	205732.29	N0.274°W
HPI	75+59.869 R1	88°21'32" LT	190°59'09"	30	29.153	46.265	439782.7	205761.44	PI
CC							439752.84	205732.14	
PT	75+76.981 R1						439753.56	205762.14	N88.633°W
END	75+97.830 R1						439732.71	205762.63	N88.633°W

195TH AVE NW QUADRANT



ALIGNMENT TABULATION

POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
		SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS			
ALIGNMENT: Q_195TH_NW									
START	79+99.933 R1						439732.65	205785.75	
PC	80+20.881 R1						439753.58	205786.55	N87.812°E
HPI	80+49.896 R1	88°05'11" LT	190°59'09"	30	29.014	46.122	439782.58	205787.65	PI
CC							439752.44	205816.52	
PT	80+67.003 R1						439782.44	205816.67	N0.274°W
END	80+87.431 R1						439782.34	205837.09	N0.274°W

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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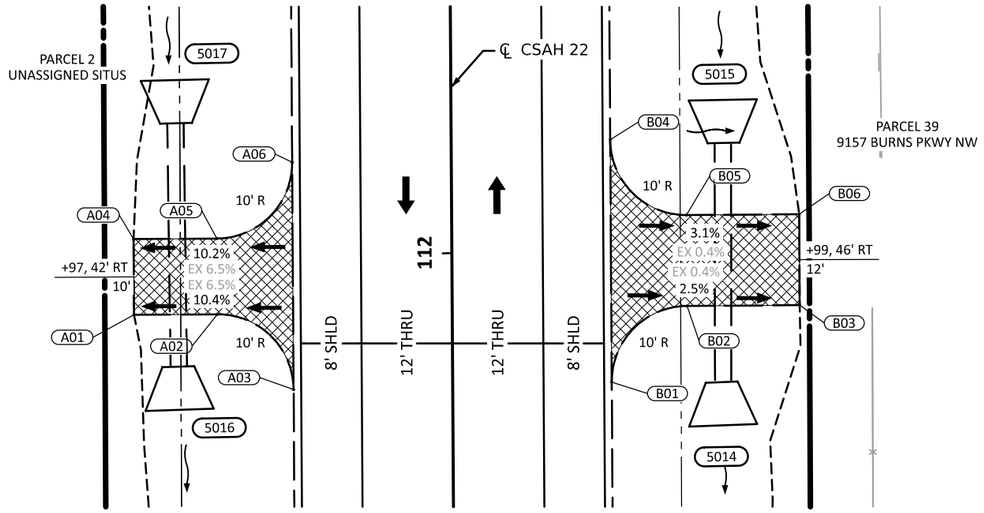
ANOKA COUNTY

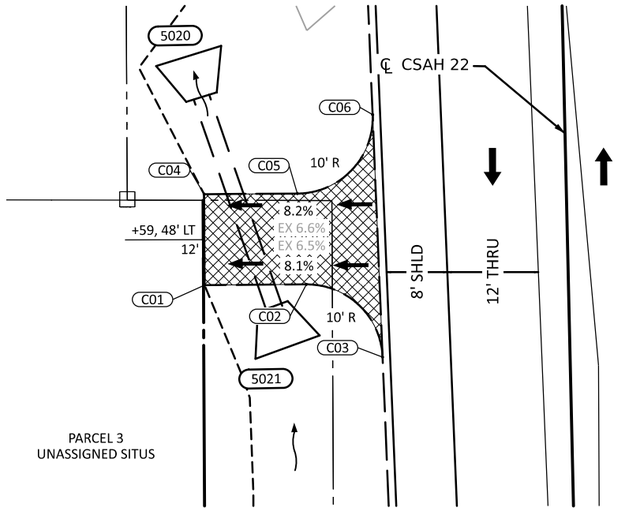
CSAH 22 (Baugh Street NW) Reconstruction

CSAH 22 (BAUGH ST NW) at 195TH AVE NW
INTERSECTION DETAILS

SAP 002-622-037



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
A01	439812.82	197532.88	913.55
A02	439823.73	197532.95	914.70
A03	439833.89	197523.02	915.73
A04	439812.77	197542.88	913.70
A05	439823.77	197542.95	914.83
A06	439833.70	197553.02	916.03
B01	439875.89	197523.99	915.74
B02	439885.82	197534.05	915.58
B03	439900.69	197534.15	915.21
B04	439875.68	197555.99	916.06
B05	439885.74	197546.05	915.64
B06	439900.63	197546.15	915.17



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
C01	439794.75	198992.37	916.41
C02	439808.18	198992.46	917.49
C03	439818.23	198982.87	918.34
C04	439794.69	199004.37	916.39
C05	439806.99	199004.45	917.39
C06	439816.92	199014.86	918.27

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
- EXISTING DRIVEWAY SLOPE, IF DIFFERENT THAN PROPOSED
- CULVERT / DITCH FLOW DIRECTION
- CONCRETE DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- BITUMINOUS DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- AGGREGATE DRIVEWAY/FIELD ENTRANCE, SEE INSET ON SHEET 13.
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- INPLACE EASEMENT
- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 2, UNASIGNED SITUS
PARCEL 39, 9157 BURNS PKWY NW
PARCEL 3, UNASIGNED SITUS

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-DRWY-DET
PLOTTED/REVISED: 11/4/2025 12:42:14 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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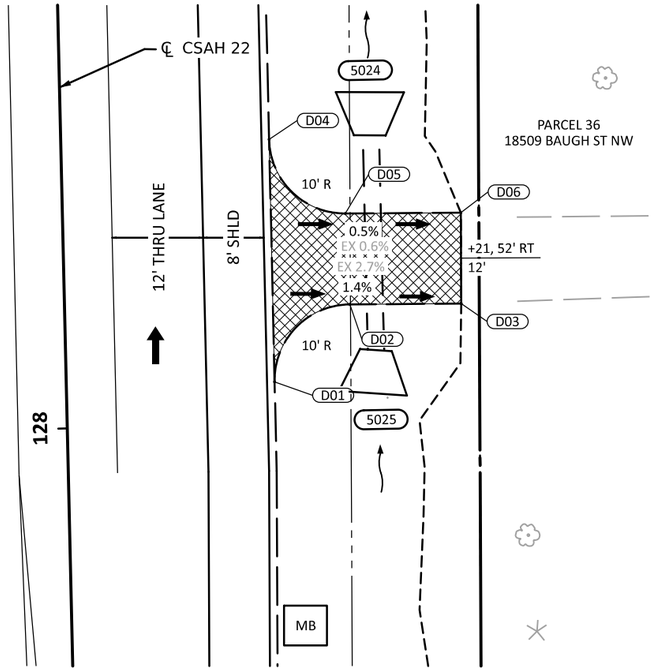
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

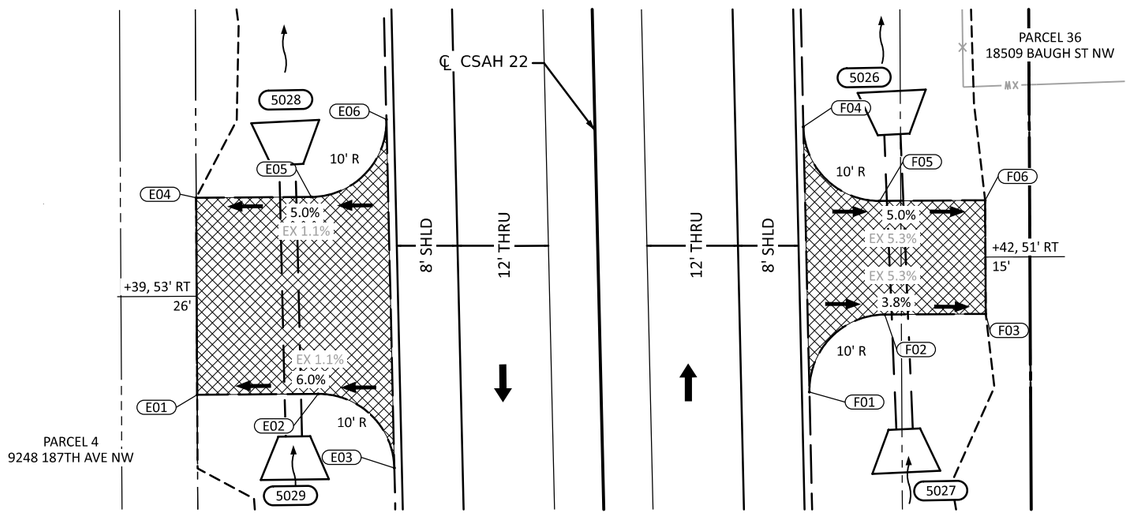
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 84 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
D01	439866.75	199147.05	917.64
D02	439876.68	199157.27	917.48
D03	439891.38	199157.37	917.28
D04	439866.02	199179.04	917.55
D05	439876.08	199169.27	917.54
D06	439891.31	199169.37	917.46



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
E01	439783.21	199266.07	916.03
E02	439799.17	199266.17	916.99
E03	439809.23	199256.40	917.65
E04	439783.08	199292.07	916.26
E05	439798.25	199292.16	917.01
E06	439808.18	199302.39	917.52
F01	439864.02	199266.42	917.30
F02	439873.95	199276.65	916.88
F03	439887.28	199276.73	916.37
F04	439863.22	199301.42	917.20
F05	439873.28	199291.65	916.72
F06	439887.20	199291.73	916.03

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
- EXISTING DRIVEWAY SLOPE, IF DIFFERENT THAN PROPOSED
- CULVERT / DITCH FLOW DIRECTION
- CONCRETE DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- BITUMINOUS DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- AGGREGATE DRIVEWAY/FIELD ENTRANCE, SEE INSET ON SHEET 13.
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- INPLACE EASEMENT
- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 36, 18509 BAUGH ST NW
PARCEL 4, 9248 187TH AVE NW

PATH & FILENAME: P:\Projects\Minnesota\026054-000\185cpp-DRWY-DET\05_Discipline\Roadway\03_Sheets\026054-000-

PLOTTED/REVISED: 11/4/2025 12:42:15 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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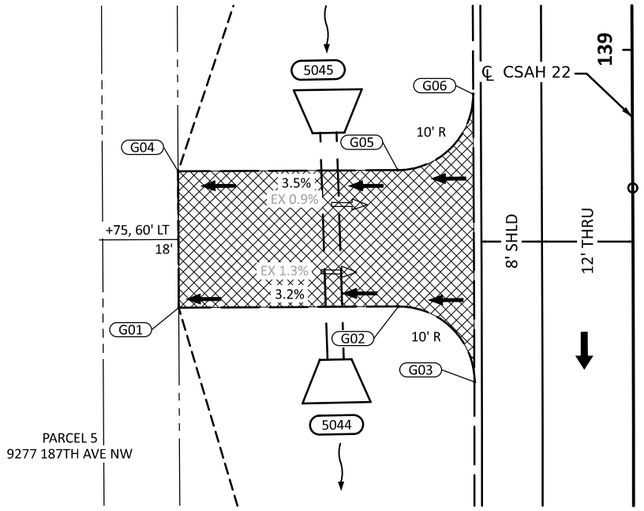
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

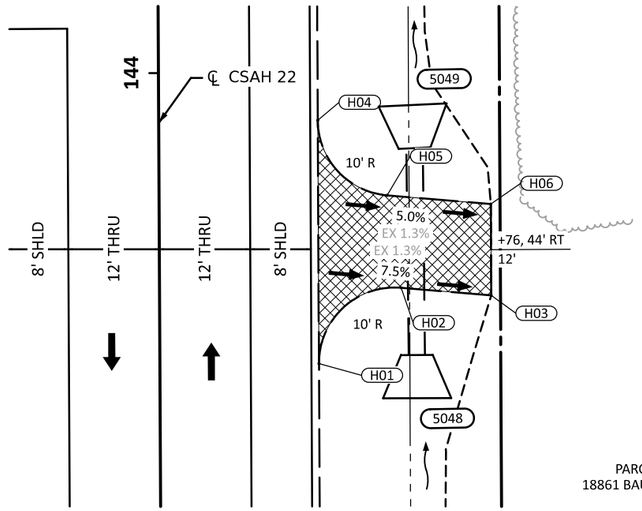
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 85 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
G01	439778.44	200206.78	915.25
G02	439807.44	200206.93	916.18
G03	439817.49	200196.98	916.46
G04	439778.35	200224.78	915.24
G05	439807.35	200224.92	916.24
G06	439817.30	200234.98	916.65



PARCEL 35
18861 BAUGH ST NW

CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
H01	439856.93	200702.46	918.27
H02	439867.78	200712.47	917.39
H03	439879.68	200711.47	916.50
H04	439856.77	200734.59	918.24
H05	439865.93	200724.67	917.76
H06	439879.62	200723.51	917.08

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
- EXISTING DRIVEWAY SLOPE, IF DIFFERENT THAN PROPOSED
- CULVERT / DITCH FLOW DIRECTION
- CONCRETE DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- BITUMINOUS DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
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- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- INPLACE EASEMENT
- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 5, 9277 187TH AVE NW
PARCEL 35, 18861 BAUGH ST NW

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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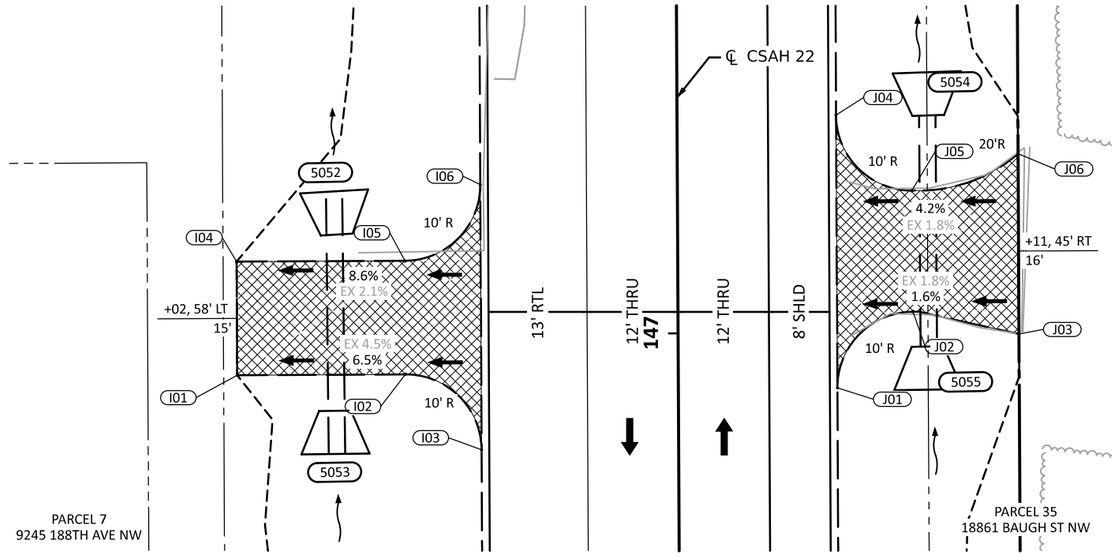
ANOKA COUNTY

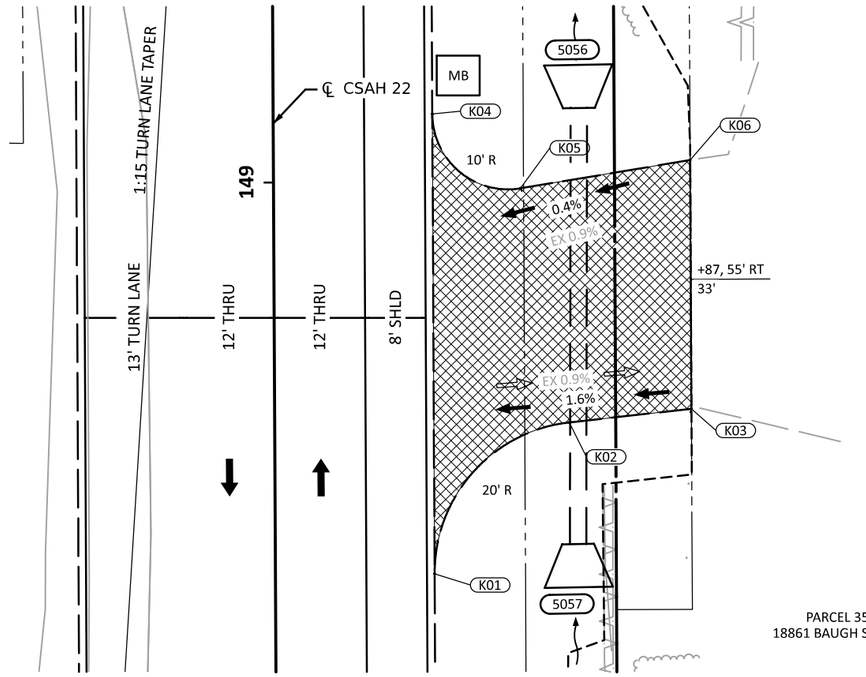
CSAH 22 (Baugh Street NW) Reconstruction

DRIVEWAY DETAILS

SAP 002-622-037



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
I01	439776.04	201035.26	915.07
I02	439798.25	201035.38	916.53
I03	439808.30	201025.43	917.25
I04	439775.96	201050.26	915.05
I05	439798.17	201050.38	916.26
I06	439808.12	201060.43	917.13
J01	439855.26	201033.59	917.34
J02	439865.24	201043.64	917.51
J03	439879.22	201040.71	917.54
J04	439855.08	201069.59	917.22
J05	439865.09	201059.64	917.74
J06	439879.10	201064.51	917.75



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
K01	439854.47	201189.16	916.94
K02	439872.25	201209.14	917.26
K03	439888.36	201210.93	917.52
K04	439854.16	201249.84	916.89
K05	439865.80	201240.03	916.97
K06	439888.19	201243.75	917.05

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
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- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 7, 9245 188TH AVE NW
PARCEL 35, 18861 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-DRWY-DET . PLOTTED/REVISED: 11/4/2025 12:42:17 PM

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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

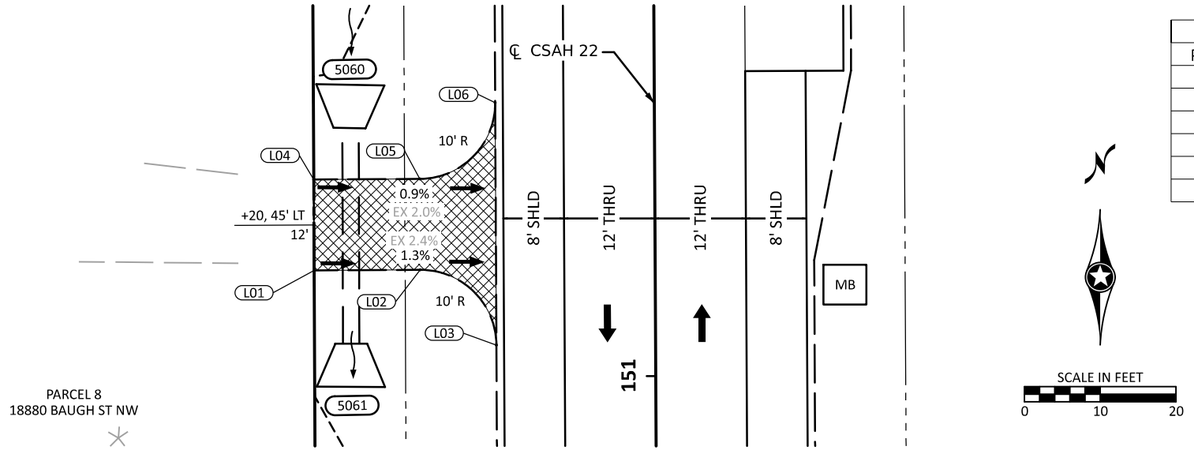
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

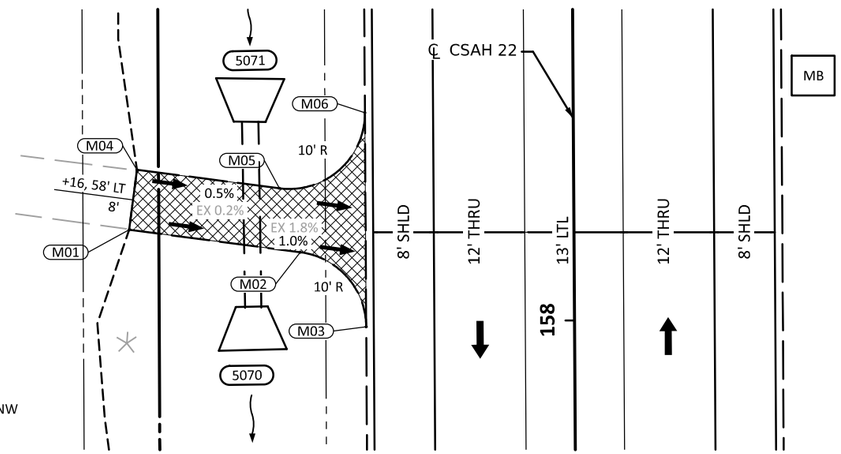
DRIVEWAY DETAILS

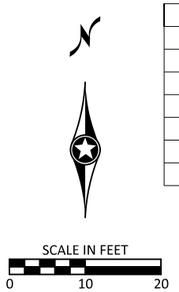
SAP 002-622-037

Sheet No. 87 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
L01	439787.12	201454.74	917.46
L02	439801.12	201454.81	917.28
L03	439811.17	201444.86	917.10
L04	439787.06	201466.74	917.38
L05	439801.06	201466.81	917.25
L06	439811.01	201476.86	917.14





CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
M01	439769.82	202152.74	919.90
M02	439792.41	202149.79	919.68
M03	439801.11	202139.93	919.52
M04	439770.85	202160.67	919.78
M05	439789.64	202158.22	919.68
M06	439800.94	202168.19	919.64

LEGEND

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- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 8, 18880 BAUGH ST NW
PARCEL 9, 19024 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-DRWY-DET
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DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

DRIVEWAY DETAILS

SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET\03_Sheets\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-DRWY-DET
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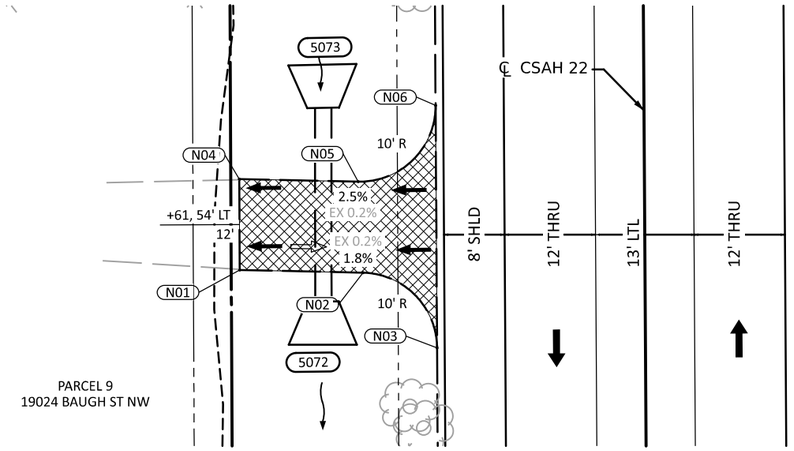
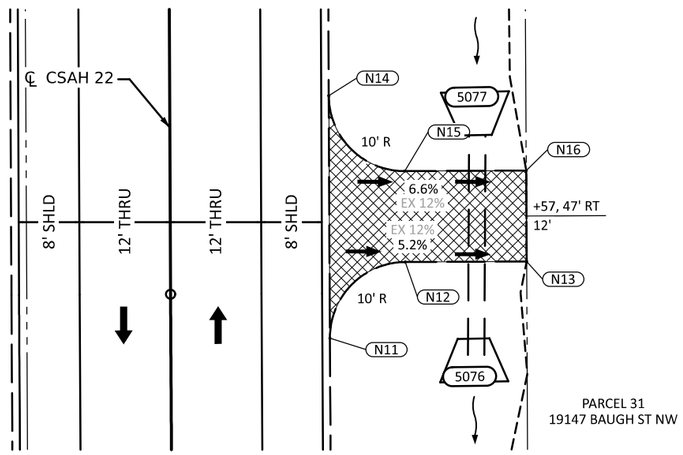


CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
N01	439774.17	202295.66	919.73
N02	439790.43	202295.30	920.03
N03	439800.22	202285.37	920.17
N04	439774.11	202307.66	919.61
N05	439789.80	202307.32	920.01
N06	439800.02	202317.38	920.31



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
N11	439830.79	203181.28	925.59
N12	439840.74	203191.34	925.16
N13	439856.76	203191.41	924.32
N14	439830.64	203213.29	925.98
N15	439840.68	203203.34	925.16
N16	439856.70	203203.41	924.11

LEGEND

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- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 9, 19024 BAUGH ST NW
PARCEL 31, 19147 BAUGH ST NW

DRAWN BY:	AJF
DESIGNED BY:	AJF
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I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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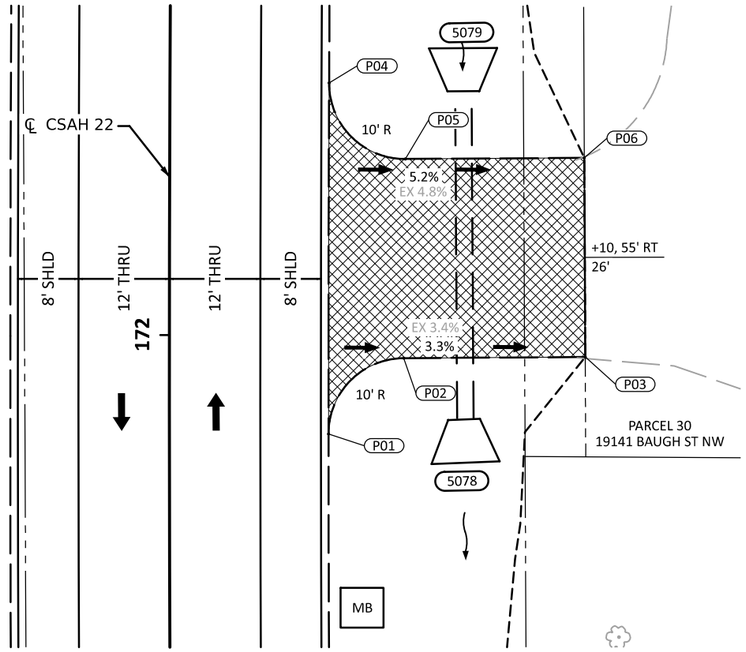
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

DRIVEWAY DETAILS

SAP 002-622-037



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
P01	439829.21	203527.49	929.49
P02	439839.15	203537.50	929.20
P03	439863.10	203537.65	928.42
P04	439829.30	203573.83	929.67
P05	439839.36	203563.78	929.09
P06	439862.97	203563.93	927.87

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
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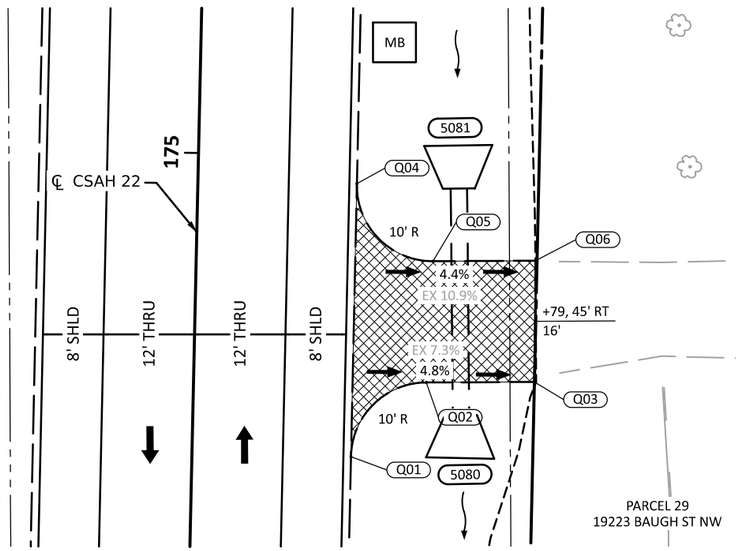

CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
Q01	439832.80	203800.45	930.08
Q02	439842.75	203810.23	929.60
Q03	439857.02	203810.30	928.91
Q04	439833.59	203836.46	930.14
Q05	439843.63	203826.24	929.66
Q06	439857.17	203826.30	929.07

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 30, 19141 BAUGH ST NW
PARCEL 29, 19223 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET . PLOTTED/REVISED: 11/4/2025 12:42:20 PM

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

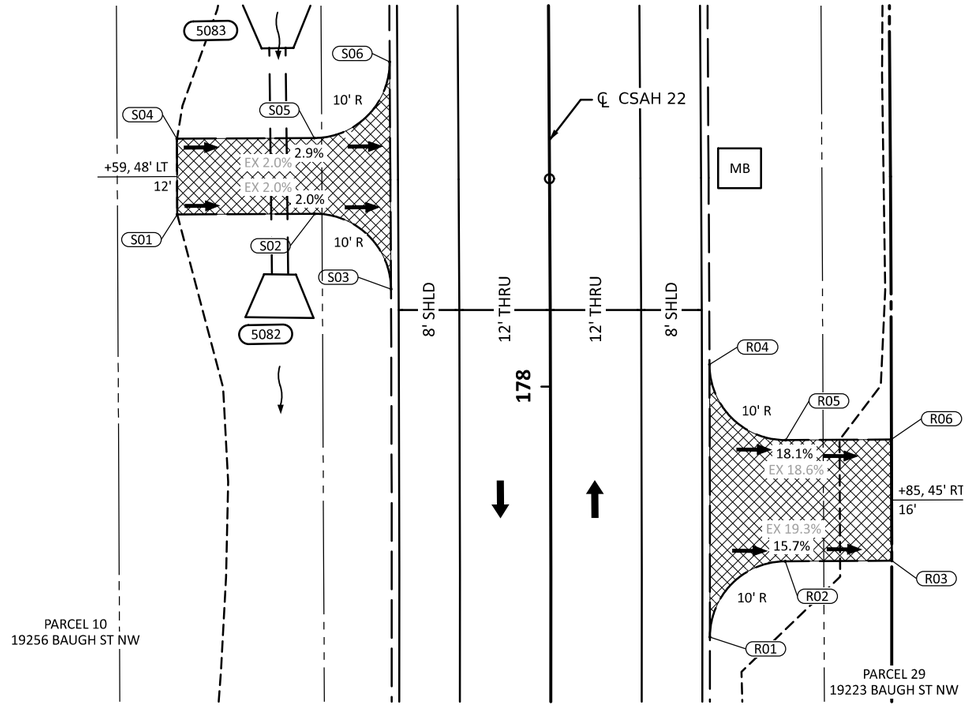
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

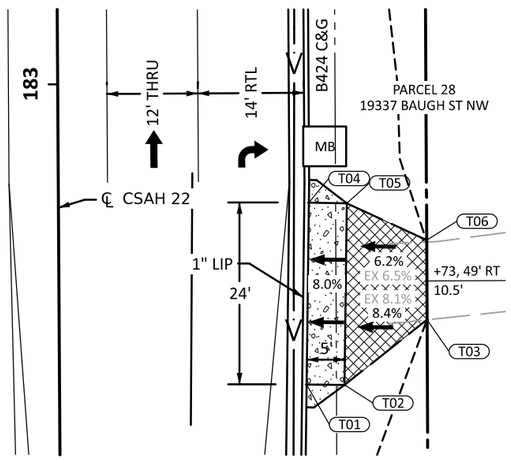
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 90 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
R01	439837.30	204107.42	930.63
R02	439847.25	204117.41	928.96
R03	439854.49	204117.45	926.75
R04	439837.24	204143.38	930.75
R05	439847.29	204133.42	928.75
R06	439854.41	204133.45	926.23
S01	439767.00	204163.19	931.46
S02	439785.17	204163.28	931.09
S03	439795.21	204153.34	930.80
S04	439766.95	204173.19	931.76
S05	439785.08	204173.27	931.24
S06	439795.03	204183.34	930.96



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
T01	439846.08	204600.84	936.57
T02	439851.10	204600.79	936.97
T03	439861.97	204609.40	938.01
T04	439846.37	204624.84	936.90
T05	439851.37	204624.78	937.38
T06	439861.92	204619.90	937.96

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
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- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 29, 19223 BAUGH ST NW
PARCEL 10, 19256 BAUGH ST NW
PARCEL 28, 19337 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET\03_Sheets\026054-000\05_Discipline\Roadway\ PLOTTED/REVISED: 11/4/2025 12:42:21 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

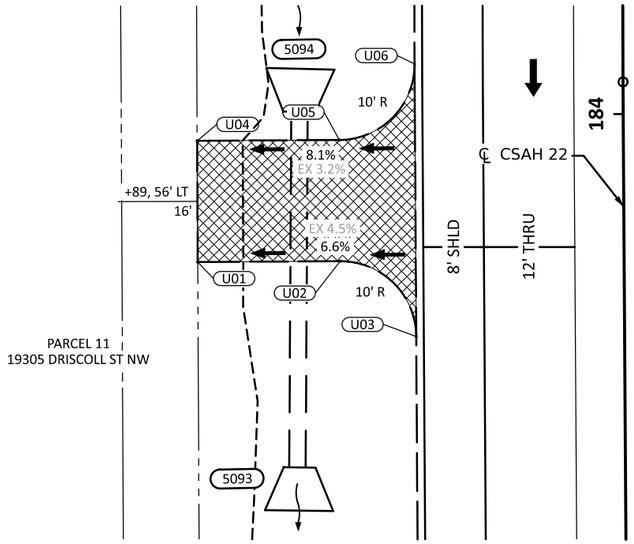
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

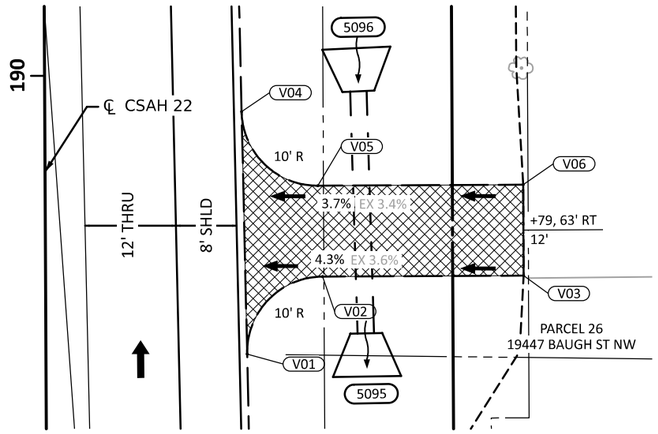
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 91 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
U01	439756.43	204720.95	937.08
U02	439775.25	204721.07	938.32
U03	439785.28	204711.11	938.84
U04	439756.36	204736.95	936.92
U05	439775.11	204737.04	938.43
U06	439785.06	204747.10	939.47



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
V01	439836.47	205303.73	950.09
V02	439846.41	205313.96	950.83
V03	439872.96	205314.09	951.97
V04	439835.73	205335.73	950.81
V05	439845.78	205325.96	951.02
V06	439872.90	205326.09	952.02

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
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- INPLACE EASEMENT
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- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 11, 19305 DRISCOLL ST NW
PARCEL 26, 19447 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET
PLOTTED/REVISED: 11/4/2025 12:42:22 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

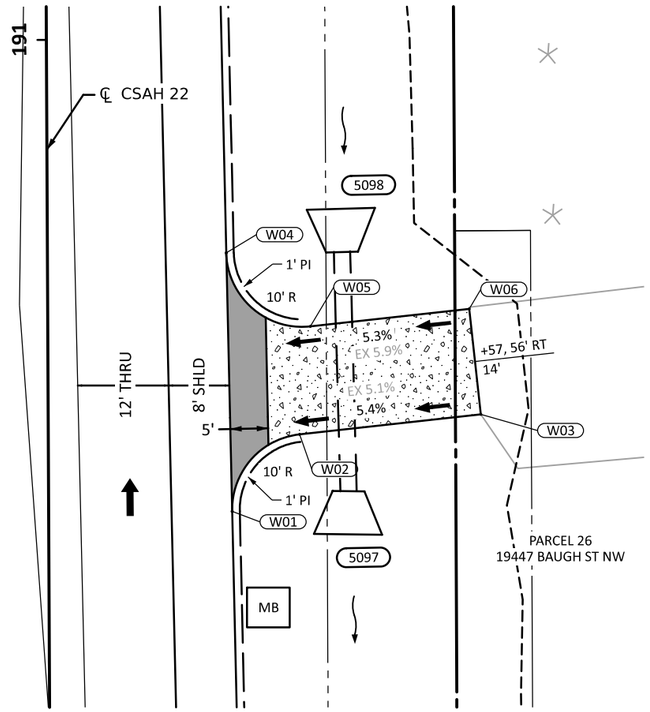
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

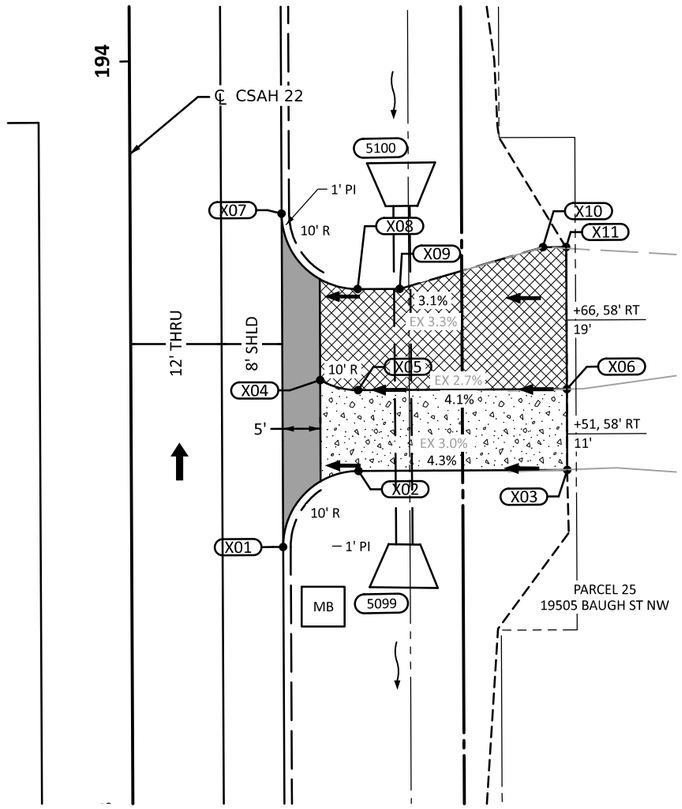
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 92 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
W01	439833.75	205378.24	951.80
W02	439842.65	205388.41	952.50
W03	439866.57	205391.05	953.81
W04	439832.97	205412.36	952.56
W05	439844.06	205402.65	952.90
W06	439865.04	205404.97	954.01



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
X01	439828.11	205676.38	958.48
X02	439838.06	205686.42	959.13
X03	439865.61	205686.55	960.33
X04	439833.01	205698.40	959.18
X05	439838.01	205697.08	959.35
X06	439865.56	205697.21	960.49
X07	439827.90	205720.37	959.46
X08	439837.95	205710.42	959.54
X09	439843.49	205710.45	923.49
X10	439862.40	205715.95	960.14
X11	439865.47	205715.96	960.36

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
- EXISTING DRIVEWAY SLOPE, IF DIFFERENT THAN PROPOSED
- CULVERT / DITCH FLOW DIRECTION
- CONCRETE DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- BITUMINOUS DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
- AGGREGATE DRIVEWAY/FIELD ENTRANCE, SEE INSET ON SHEET 13.
- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- INPLACE EASEMENT
- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 26, 19447 BAUGH ST NW
PARCEL 25, 19505 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-185cpp-DRWY-DET
PLOTTED/REVISED: 11/4/2025 12:42:22 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

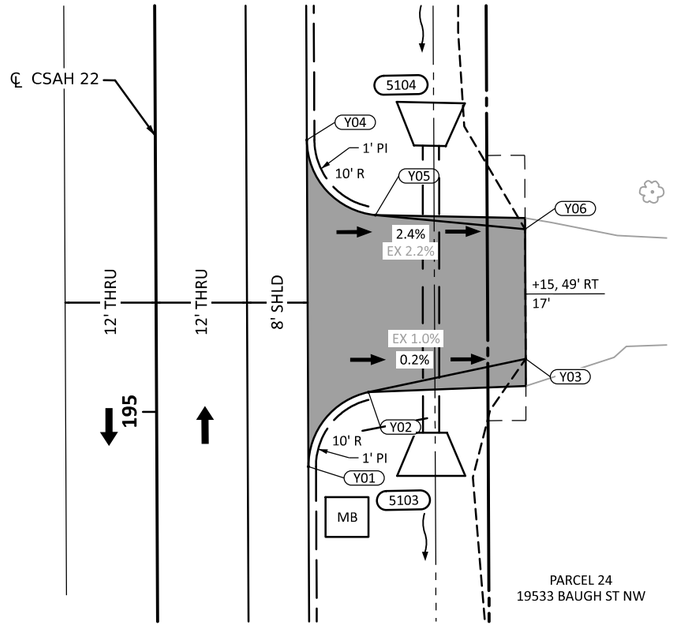
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

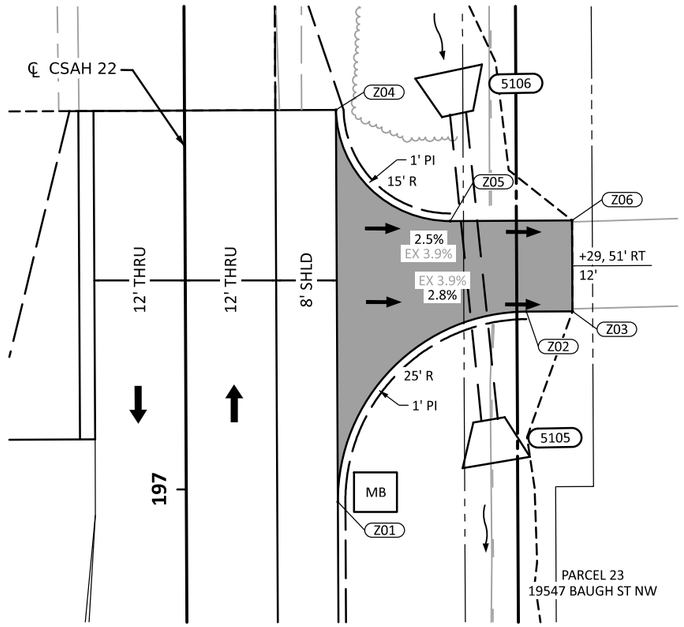
DRIVEWAY DETAILS

SAP 002-622-037

Sheet No. 93 of 138 Sheets



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
Y01	439827.36	205833.21	961.95
Y02	439835.29	205843.04	962.15
Y03	439856.04	205847.43	962.21
Y04	439827.15	205876.32	962.90
Y05	439836.21	205866.42	962.47
Y06	439855.96	205864.54	961.96



CONTROL POINTS			
POINT NUMBER	X	Y	ELEV
Z01	439826.38	206038.81	995.70
Z02	439851.26	206063.93	965.25
Z03	439857.35	206063.96	965.08
Z04	439826.13	206090.55	966.19
Z05	439841.20	206075.88	965.68
Z06	439857.30	206075.96	965.28

LEGEND

- TRAFFIC DIRECTION ARROW
- XXX — CONTROL POINT, SEE CONTROL POINT TABLE
- DRIVEWAY SLOPE DIRECTION
- EXISTING DRIVEWAY SLOPE, IF DIFFERENT THAN PROPOSED
- CULVERT / DITCH FLOW DIRECTION
- CONCRETE DRIVEWAY PAVEMENT, SEE INSET ON SHEET 13.
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- CONSTRUCTION LIMITS
- INPLACE RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- INPLACE EASEMENT
- PIPE APRONS
- MB — INSTALL MAILBOX, SEE MAILBOX SCHEDULE

DRIVEWAYS INCLUDED ON THIS PAGE:

PARCEL 24, 19533 BAUGH ST NW
PARCEL 23, 19547 BAUGH ST NW

PATH & FILENAME: Projects\Minnesota\026054-000\185cpp-DRWY-DET\03_Sheets\026054-000\05_Discipline\Roadway\ PLOTTED/REVISED: 11/4/2025 12:42:23 PM

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

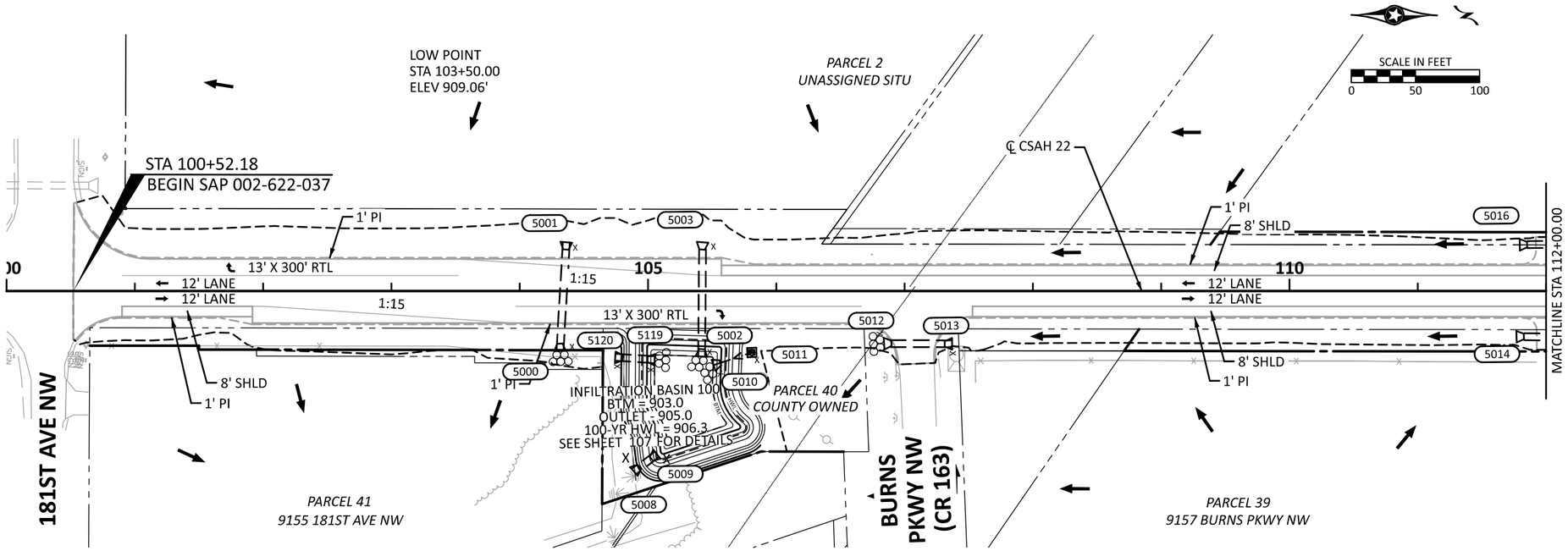
CSAH 22 (Baugh Street NW) Reconstruction

DRIVEWAY DETAILS

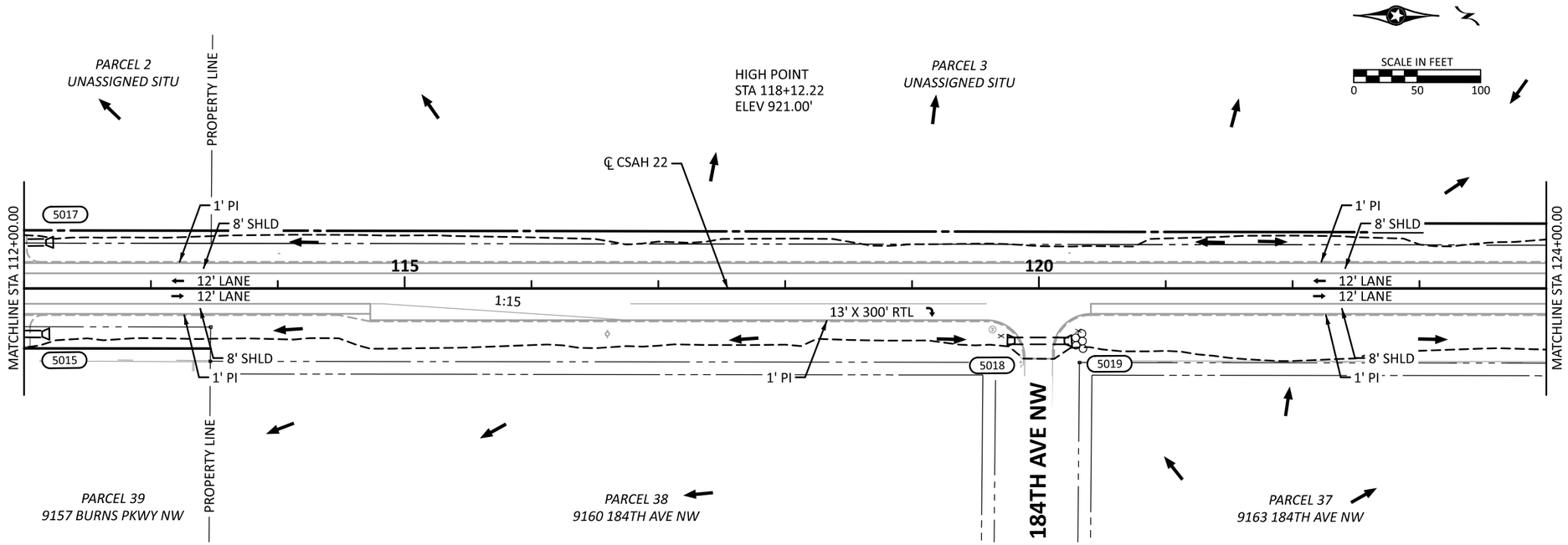
SAP 002-622-037

Sheet No. 94 of 138 Sheets

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- GUIDE POST TYPE B
- CATCH BASIN
- APRON
- XXXX STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
- CULVERT PIPE
- INPLACE CULVERT
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

GENERAL NOTES

1. ROADWAY DIMENSIONS ARE TO FACE OF CURB OR EDGE OF BITUMINIOUS UNLESS OTHERWISE NOTED.
2. SEE SHEETS 100 TO 105 FOR DRAINAGE PROFILES AND TABULATIONS.
3. SEE SHEETS 107 TO 109 FOR POND GRADING.

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: BARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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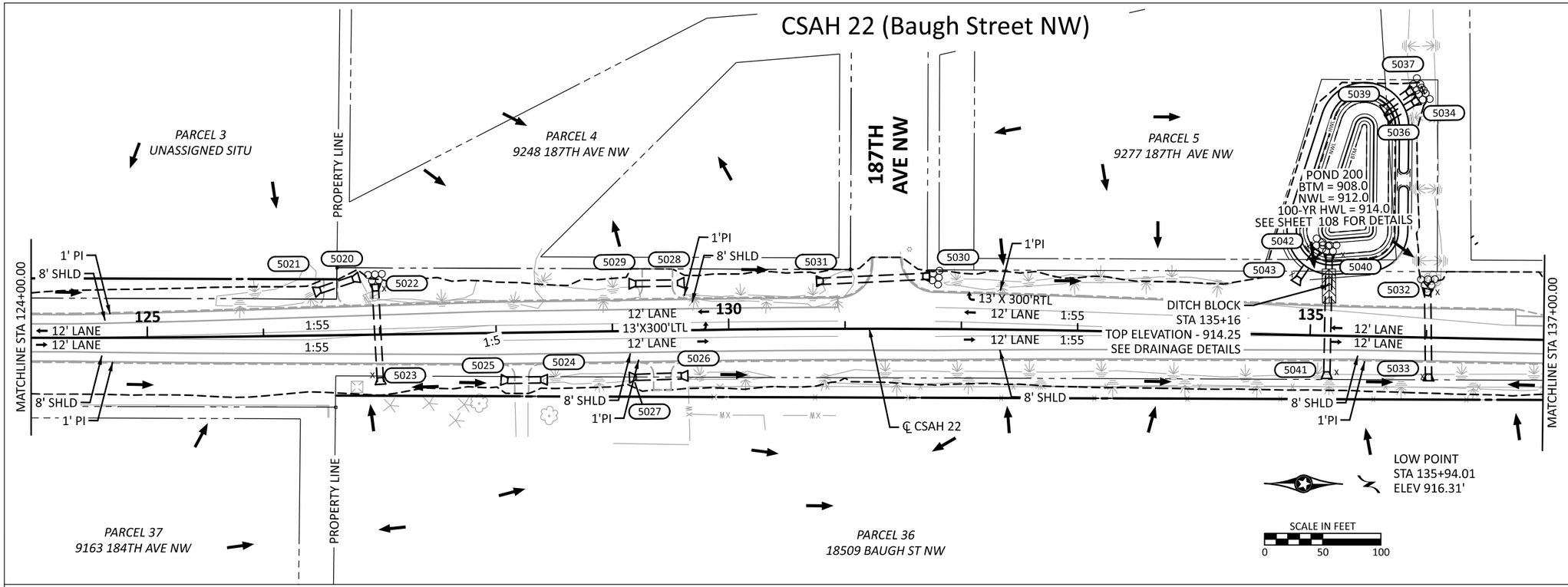
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

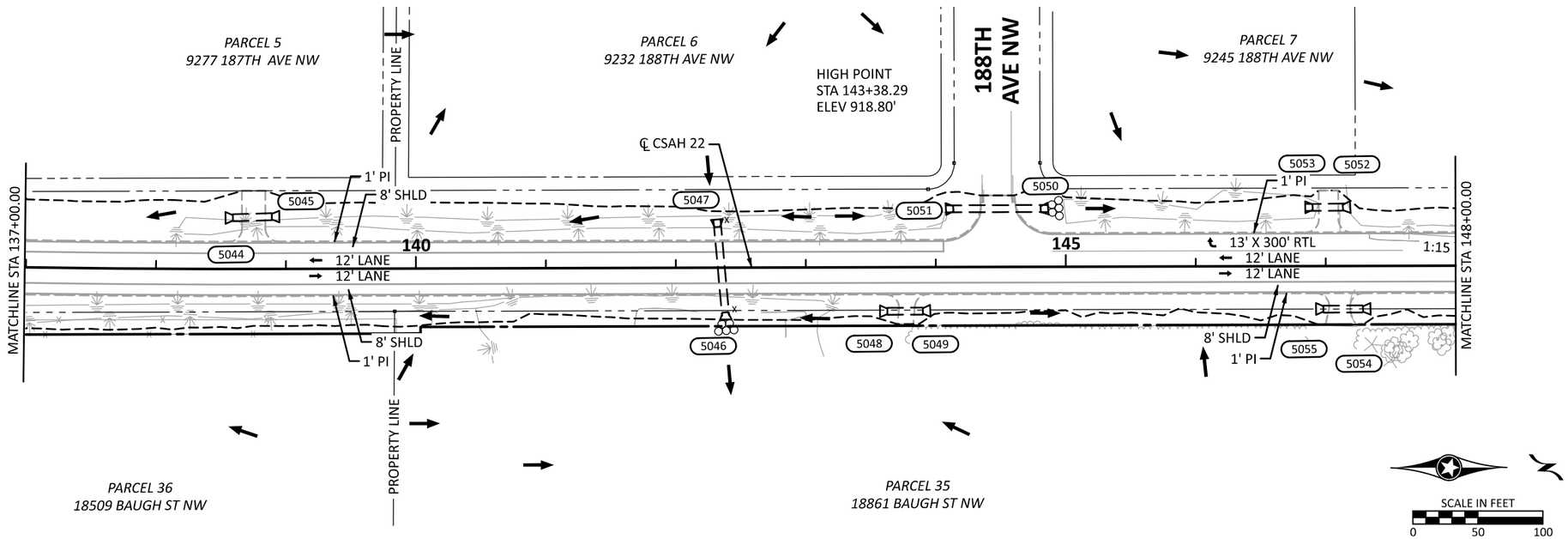
STA 100+52.18 TO STA 124+00
DRAINAGE PLAN

SAP 002-622-037

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- GUIDE POST TYPE B
- CATCH BASIN
- APRON
- STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
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DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: BARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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ANOKA COUNTY

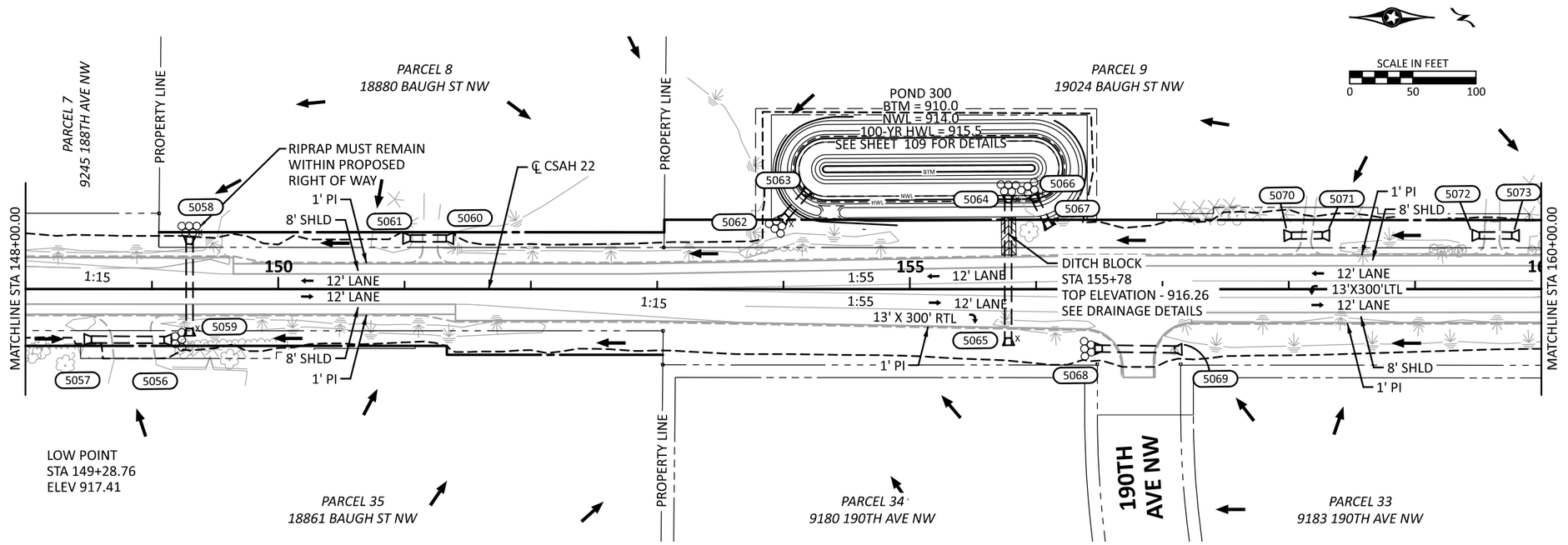
CSAH 22 (Baugh Street NW) Reconstruction

STA 124+00 TO STA 148+00
DRAINAGE PLAN

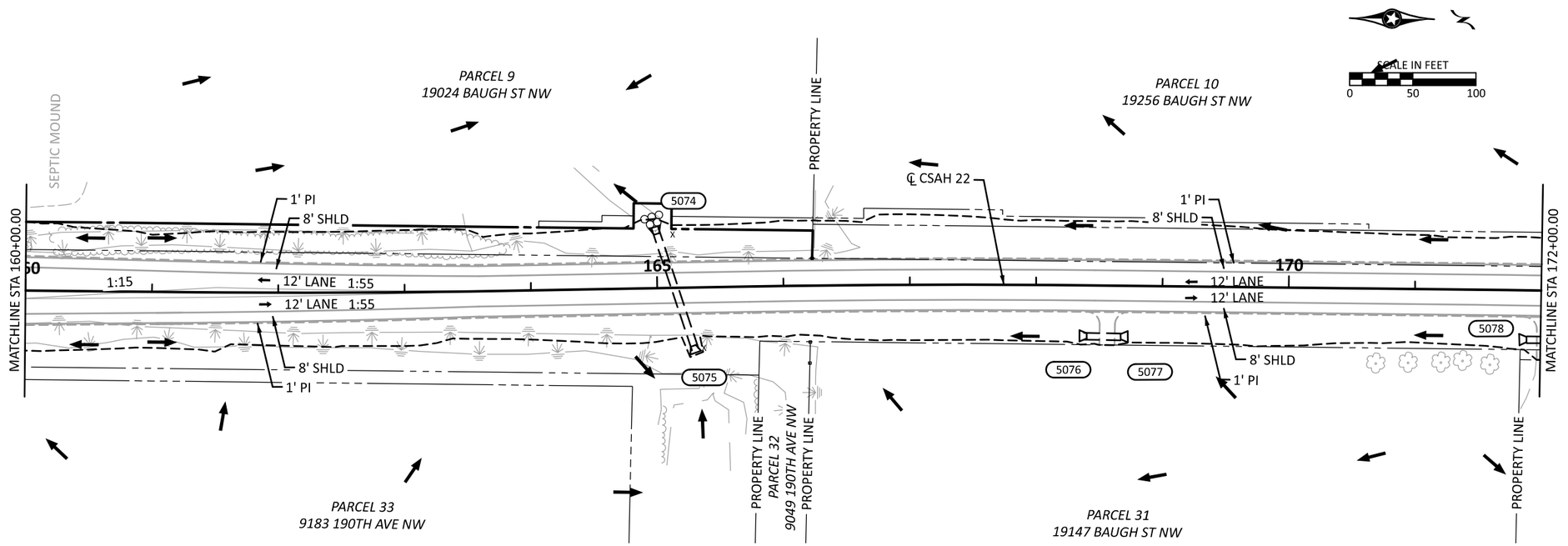
SAP 002-622-037

PATH & FILENAME: P:\Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-301drp-001 PLOTTED/REVISED: 11/4/2025 12:42:29 PM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- GUIDE POST TYPE B
- CATCH BASIN
- APRON
- STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
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DESIGNED BY:	ZHH
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SIGNATURE:
PRINTED NAME: GARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 172+00
DRAINAGE PLAN

SAP 002-622-037

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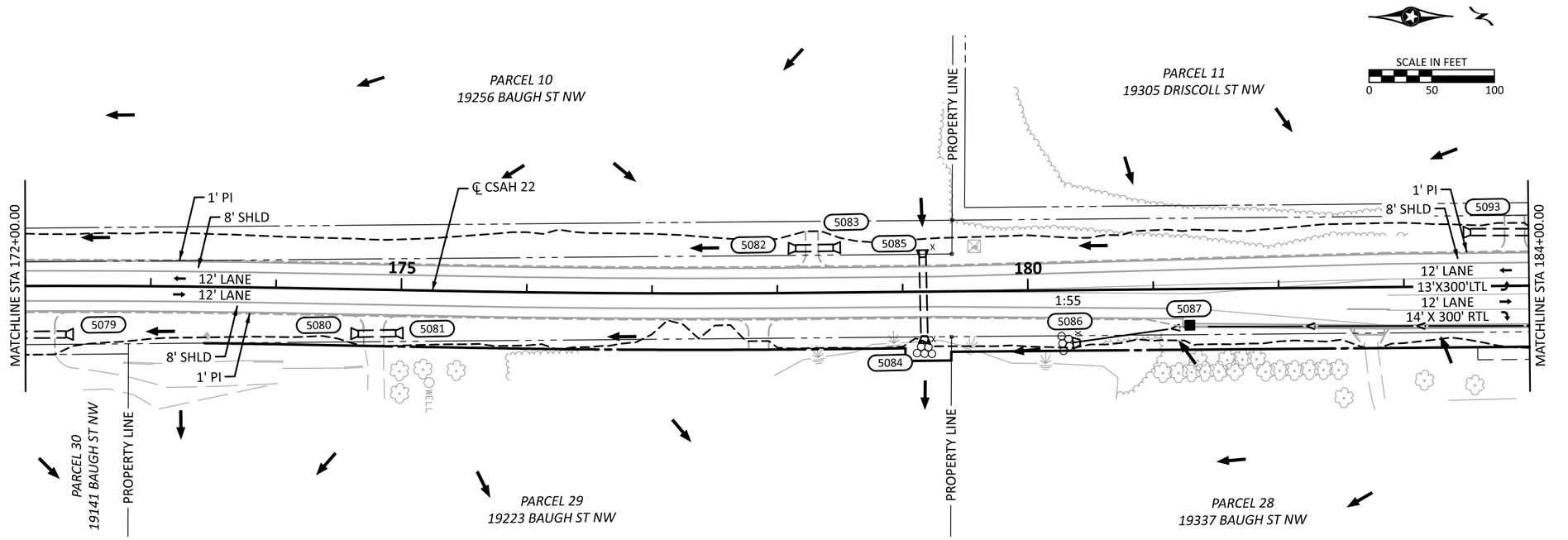
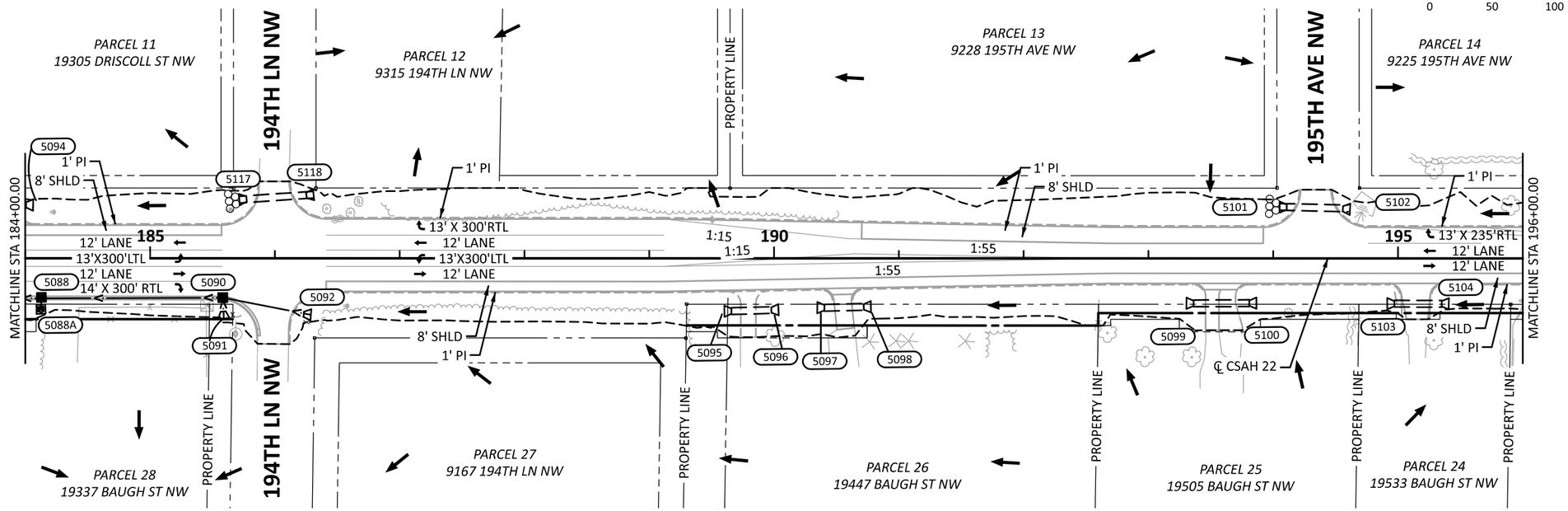


CSAH 22 (Baugh Street NW)



LEGEND

- GUIDE POST TYPE B
- CATCH BASIN
- APRON
- STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
- CULVERT PIPE
- INPLACE CULVERT
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
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GENERAL NOTES

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DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

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SIGNATURE:
PRINTED NAME: BARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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ANOKA COUNTY

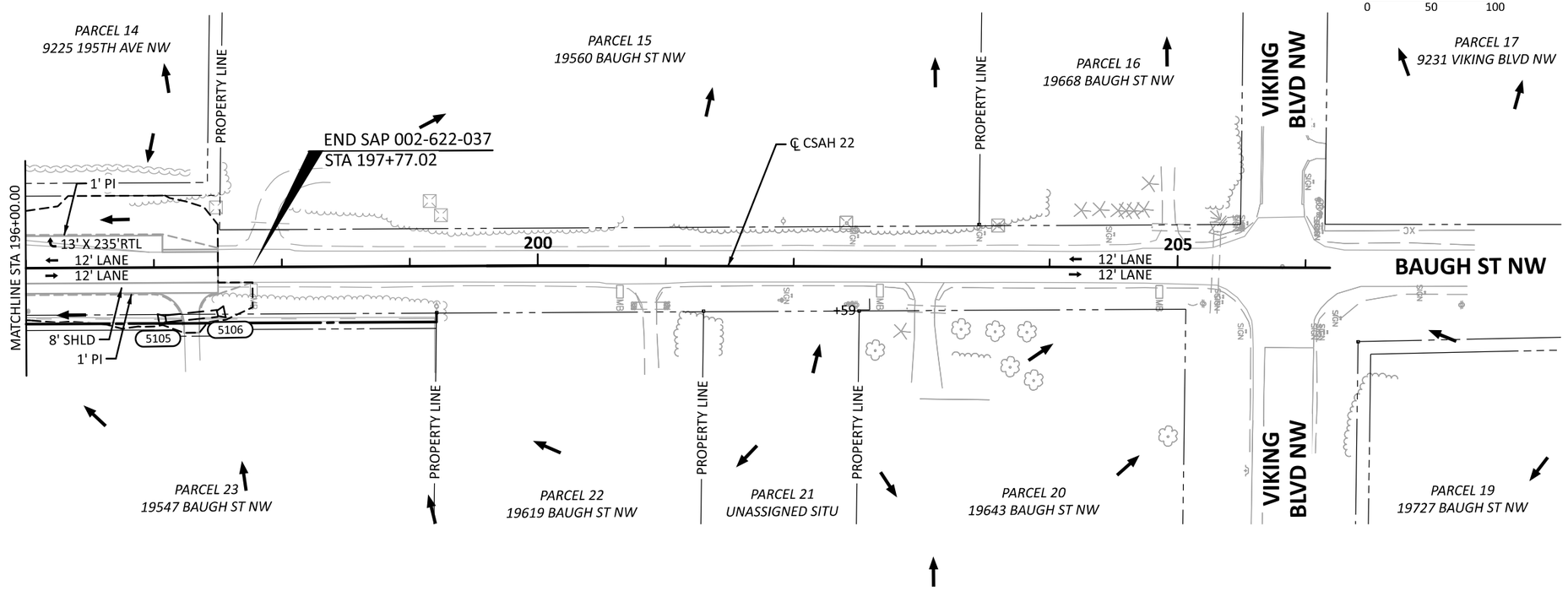
CSAH 22 (Baugh Street NW) Reconstruction

STA 172+00 TO STA 196+00
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 98 of 138 Sheets

CSAH 22 (Baugh Street NW)



LEGEND

- GUIDE POST TYPE B
- CATCH BASIN
- APRON
- STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
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2. SEE SHEETS 100 TO 105 FOR DRAINAGE PROFILES AND TABULATIONS.
3. SEE SHEETS 107 TO 109 FOR POND GRADING.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-301drp-001
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DESIGNED BY: ZHH
CHECKED BY: EAE

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SIGNATURE:
PRINTED NAME: GARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 196+00 TO STA 197+77.02
DRAINAGE PLAN

SAP 002-622-037

PLOTTED/REVISED: 11/4/2025 12:56:46 PM

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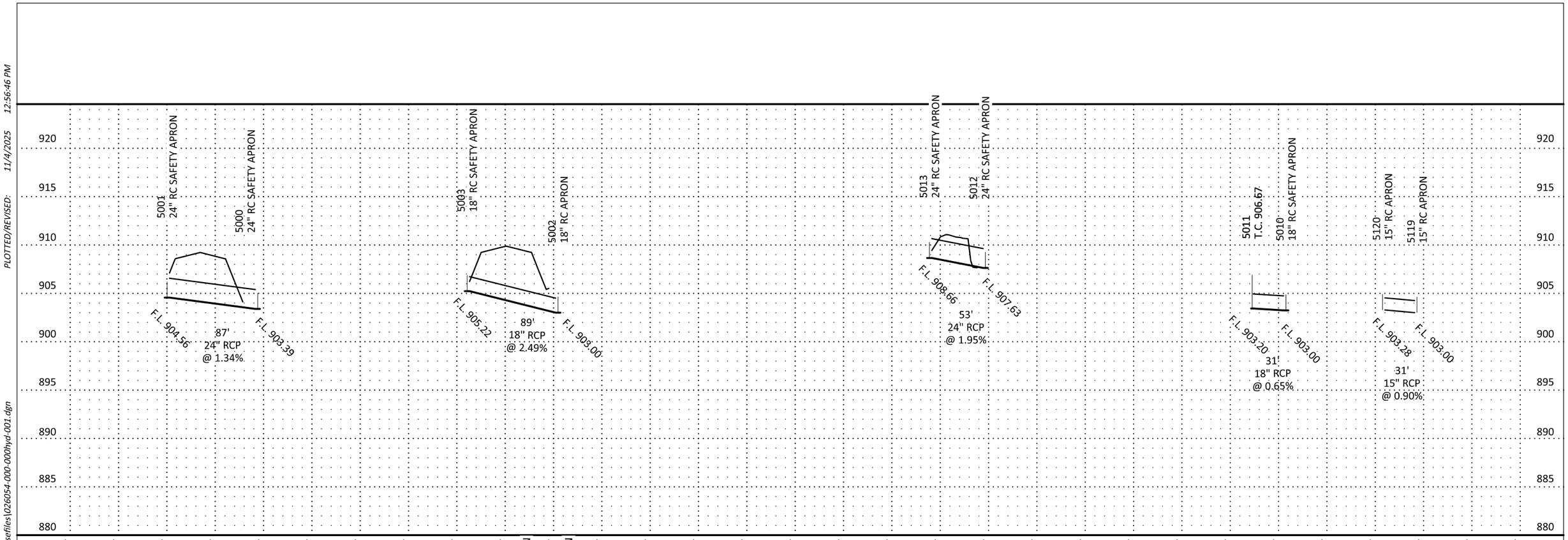

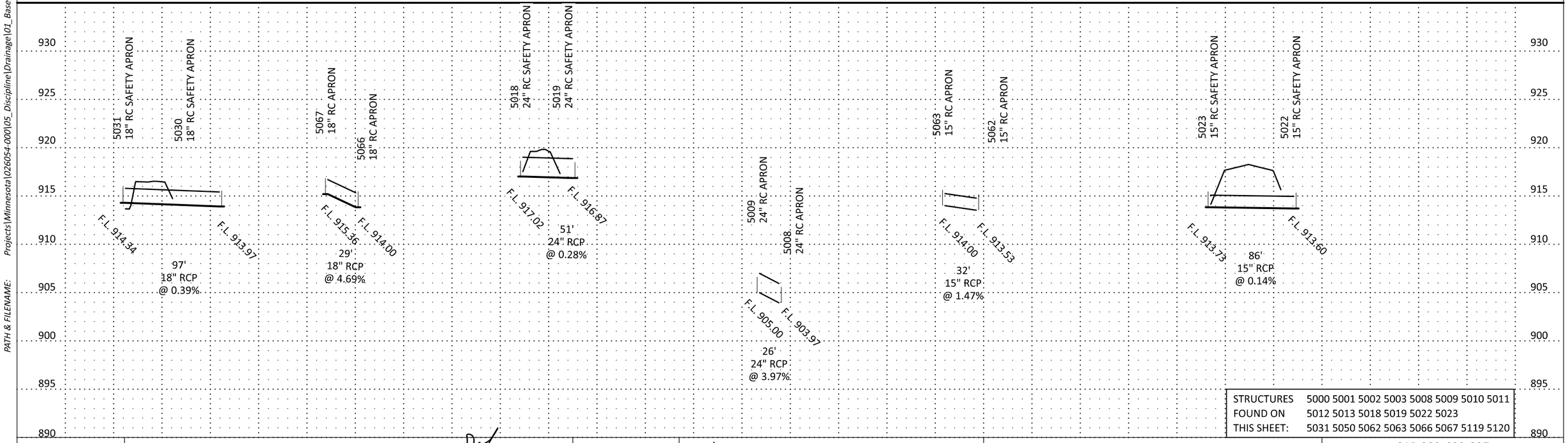

STRUCTURES	5000 5001 5002 5003 5008 5009 5010 5011
FOUND ON	5012 5013 5018 5019 5022 5023
THIS SHEET:	5031 5050 5062 5063 5066 5067 5119 5120

DRAWN BY:	KML
DESIGNED BY:	LGR
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: EARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

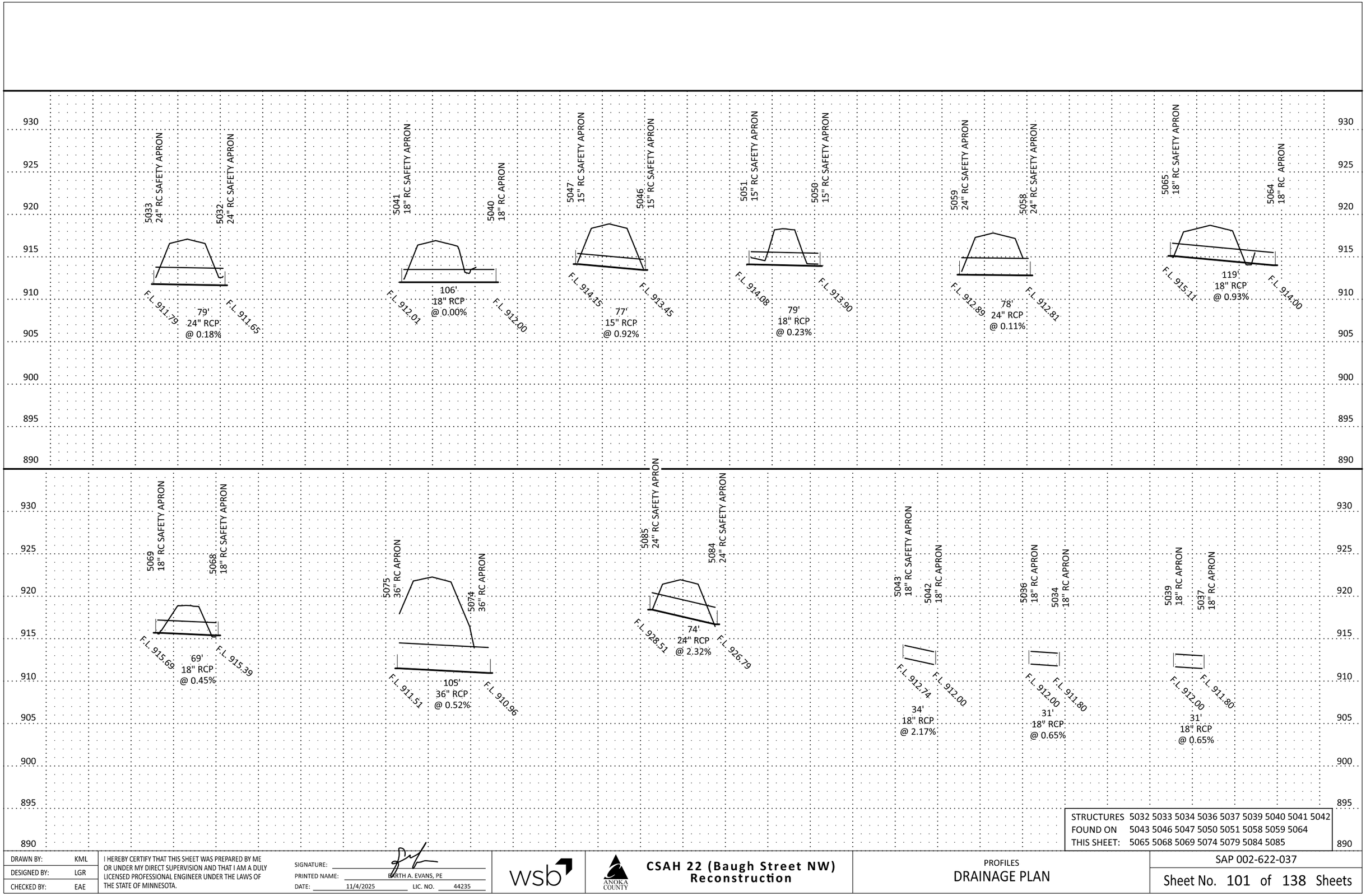
PROFILES
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 100 of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:56:47 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\01_Baseflies\026054-000-000hyd-001.dgn



STRUCTURES	5032 5033 5034 5036 5037 5039 5040 5041 5042
FOUND ON	5043 5046 5047 5050 5051 5058 5059 5064
THIS SHEET:	5065 5068 5069 5074 5079 5084 5085

DRAWN BY:	KML
DESIGNED BY:	LGR
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: BARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

PROFILES
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 101 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\01_Baseflies\026054-000-000hyd-001.dgn
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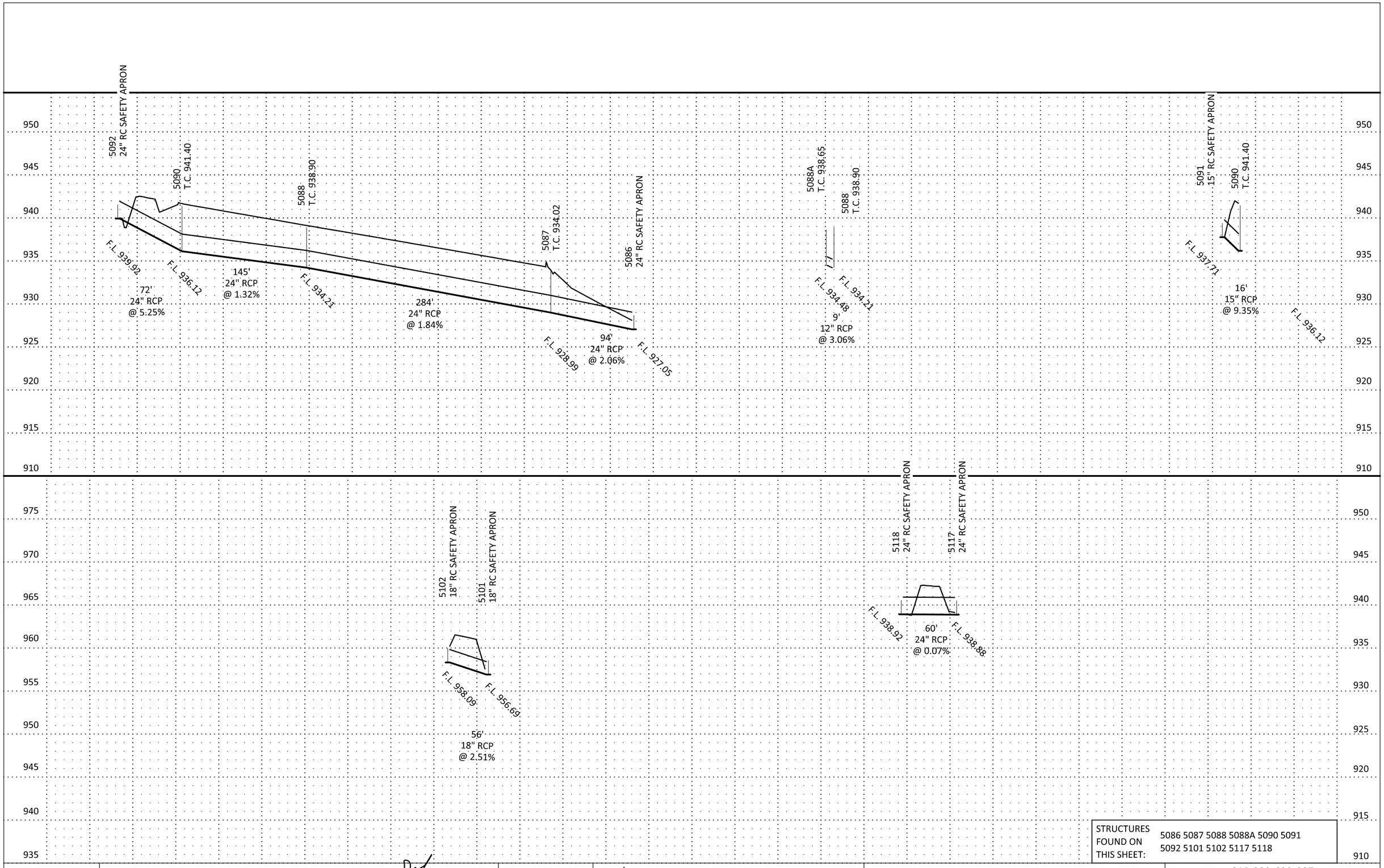

STRUCTURES FOUND ON THIS SHEET:	5086 5087 5088 5088A 5090 5091 5092 5101 5102 5117 5118

DRAWN BY:	KML
DESIGNED BY:	LGR
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: EARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

PROFILES
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 102 of 138 Sheets

CULVERT TABULATION

I

STRUCTURE NUMBER		STRUCTURE LOCATION			DRAINAGE STRUCTURES	FLOWS FROM PIPE OUTLET ELEV	FLOWS TO PIPE INLET ELEV	PIPE SLOPE	15" RC PIPE CULVERT DES 3006 CL V	15" CP PIPE CULVERT	18" RC PIPE CULVERT DES 3006 CL V	24" RC PIPE CULVERT DES 3006	24" RC PIPE CULVERT DES 3006 CL V	36" RC PIPE CULVERT DES 3006	APRON	APRON TYPE	FINE AGGREGATE BEDDING (CV)	GEOTEXTILE FILTER TYPE IV	RIPRAP CLASS III	GUIDE POSTS TYPE B	REMARKS
FLOWS FROM	FLOWS TO	ALIGN.	STATION	OFFSET	TYPE				LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH		CU YD	SQ YD	CU YD	EACH	
5001	5000	CSAH-22	104+36.1	39.8L	APRON	904.56	903.39	1.34%				87			1	24" RC SAFETY APRON	64			1	
5000		CSAH-22	104+31.6	44.4R	APRON	903.39									1	24" RC SAFETY APRON		33.4	9.2	1	
5003	5002	CSAH-22	105+42.7	38.0L	APRON	905.22	903.00	2.49%			89				1	18" RC SAFETY APRON	57			1	
5002		CSAH-22	105+41.9	48.4R	APRON	903.00									1	18" RC PIPE APRON		25.6	6.4	1	
5009	5008	CSAH-22	105+08.4	126.4R	APRON	905.00	903.97	3.97%				26			1	24" RC PIPE APRON	20			1	
5008		CSAH-22	104+90.5	139.5R	APRON	903.97									1	24" RC PIPE APRON		33.4	9.2	1	
5013	5012	CSAH-22	107+34.9	41.0R	APRON	908.66	907.63	1.95%					53		1	24" RC SAFETY APRON	41			1	
5012		CSAH-22	106+86.4	41.1R	APRON	907.63									1	24" RC SAFETY APRON		33.4	9.2	1	
5015	5014	CSAH-22	112+17.7	35.9R	APRON	913.09	912.70	1.01%		38					1	15" GS SAFETY APRON					
5014		CSAH-22	111+79.3	35.6R	APRON	912.70									1	15" GS SAFETY APRON					
5017	5016	CSAH-22	112+20.9	36.3L	APRON	913.12	912.73	1.00%		39					1	15" GS SAFETY APRON					
5016		CSAH-22	111+81.7	36.3L	APRON	912.73									1	15" GS SAFETY APRON					
5019		CSAH-22	120+23.8	41.2R	APRON	916.87									1	24" RC SAFETY APRON		33.4	9.2	1	
5018	5019	CSAH-22	119+76.9	41.2R	APRON	917.02	916.87	0.28%				51			1	24" RC SAFETY APRON	40			1	
5021	5020	CSAH-22	126+49.2	38.8L	APRON	915.14	914.19	1.93%		49					1	15" GS SAFETY APRON					
5020		CSAH-22	126+77.3	47.8L	APRON	914.19									1	15" GS SAFETY APRON					
5023	5022	CSAH-22	127+00.1	40.5R	APRON	913.73	913.60	0.14%	86						1	15" RC SAFETY APRON	50			1	
5022		CSAH-22	126+96.2	41.0L	APRON	913.60									1	15" RC SAFETY APRON		20.8	4.8	1	
5025	5024	CSAH-22	128+09.5	40.9R	APRON	914.63	914.55	0.28%		28					1	15" GS SAFETY APRON					
5024		CSAH-22	128+37.7	40.7R	APRON	914.55									1	15" GS SAFETY APRON					
5027	5026	CSAH-22	129+19.7	40.0R	APRON	914.32	914.13	0.49%		39					1	15" GS SAFETY APRON					
5026		CSAH-22	129+58.6	39.5R	APRON	914.13									1	15" GS SAFETY APRON					
5029	5028	CSAH-22	129+20.6	40.6L	APRON	914.81	914.71	0.29%		36					1	15" GS SAFETY APRON					
5028		CSAH-22	129+56.5	40.7L	APRON	914.71									1	15" GS SAFETY APRON					
5031	5030	CSAH-22	130+78.4	40.6L	APRON	914.34	913.97	0.39%			97				1	18" RC SAFETY APRON	63			1	
5030		CSAH-22	131+69.7	45.5L	APRON	913.97									1	15" RC SAFETY APRON		25.6	6.4	1	
5033	5032	CSAH-22	136+02.5	34.9R	APRON	911.79	911.65	0.18%				79			1	24" RC SAFETY APRON	61			1	
5032		CSAH-22	136+00.3	39.6L	APRON	911.65									1	24" RC SAFETY APRON		33.4	9.2	1	
5036	5034	CSAH-22	135+64.6	188.1L	APRON	912.00	911.80	0.65%			31				1	18" RC PIPE APRON	25				
5034		CSAH-22	135+87.0	203.2L	APRON	911.80									1	18" RC PIPE APRON		25.6	6.4		
5039	5037	CSAH-22	135+60.2	195.5L	APRON	912.00	911.80	0.65%			31				1	18" RC PIPE APRON	25			1	
5037		CSAH-22	135+82.2	211.7L	APRON	911.80									1	18" RC PIPE APRON		25.6	6.4	1	
5041	5040	CSAH-22	135+15.1	34.0R	APRON	912.01	912.00	0.01%			106				1	18" RC SAFETY APRON	72			1	
5040		CSAH-22	135+15.2	66.7L	APRON	912.00									1	18" RC PIPE APRON		25.6	6.4	1	
5043	5042	CSAH-22	134+87.5	47.1L	APRON	912.74	912.00	2.17%			34				1	18" RC SAFETY APRON	20			1	
5042		CSAH-22	135+03.6	70.9L	APRON	912.00									1	18" RC PIPE APRON		25.6	6.4	1	
5045	5044	CSAH-22	138+89.3	40.1L	APRON	912.62	912.47	0.50%		30					1	15" GS SAFETY APRON					
5044		CSAH-22	138+59.2	39.2L	APRON	912.47									1	15" GS SAFETY APRON					
5047	5046	CSAH-22	142+31.6	34.7L	APRON	914.15	913.45	0.92%	77						1	15" RC SAFETY APRON	45			1	
5046		CSAH-22	142+38.5	37.7R	APRON	913.45									1	15" RC SAFETY APRON		20.8	4.8	1	
5049		CSAH-22	143+89.9	33.8R	APRON	915.41									1	15" GS SAFETY APRON					
5048	5049	CSAH-22	143+62.7	33.9R	APRON	915.76	915.41	1.28%		27					1	15" GS SAFETY APRON					
5051	5050	CSAH-22	144+10.2	44.6L	APRON	914.08	913.90	0.23%			79				1	15" RC SAFETY APRON	51			1	
5050		CSAH-22	144+84.2	45.0L	APRON	913.90									1	15" RC SAFETY APRON		20.8	4.8	1	
5053	5052	CSAH-22	146+90.0	45.2L	APRON	913.21	913.13	0.34%		23					1	15" GS SAFETY APRON					
5052		CSAH-22	147+13.3	45.1L	APRON	913.13									1	15" GS SAFETY APRON					
5055	5054	CSAH-22	146+98.0	32.9R	APRON	914.83	914.72	0.33%		31					1	15" GS SAFETY APRON					
5054		CSAH-22	147+28.6	33.0R	APRON	914.72									1	15" GS SAFETY APRON					
5057	5056	CSAH-22	148+52.1	40.0R	APRON	913.14	913.14	0.00%		58					1	15" GS SAFETY APRON				1	
5056		CSAH-22	149+09.7	40.4R	APRON	913.14									1	15" GS SAFETY APRON		20.8	4.8	1	
5059	5058	CSAH-22	149+29.6	34.8R	APRON	912.89	912.81	0.11%				78			1	24" RC SAFETY APRON	61			1	
5058		CSAH-22	149+29.7	39.1L	APRON	912.81									1	24" RC SAFETY APRON		33.4	9.2	1	
5061		CSAH-22	151+04.5	40.2L	APRON	914.11									1	15" GS SAFETY APRON					
5060	5061	CSAH-22	151+32.9	40.1L	APRON	914.14	914.11	0.12%		28					1	15" GS SAFETY APRON					
5063	5062	CSAH-22	154+18.5	76.9L	APRON	914.00	913.53	1.47%	32						1	15" RC PIPE APRON	30			1	
5062		CSAH-22	154+00	55.5L	APRON	913.53									1	15" RC PIPE APRON		20.8	4.8	1	

CONTINUED ON NEXT SHEET

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-302drt-001 PLOTTED/REVISED: 11/4/2025 12:42:42 PM

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: GARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
DRAINAGE PLAN

SAP 002-622-037

CULVERT TABULATION

STRUCTURE NUMBER		STRUCTURE LOCATION			DRAINAGE STRUCTURES	FLOWS FROM PIPE OUTLET ELEV	FLOWS TO PIPE INLET ELEV	PIPE SLOPE	15" RC PIPE CULVERT DES 3006 CL V	15" CP PIPE CULVERT	18" RC PIPE CULVERT DES 3006 CL V	24" RC PIPE CULVERT DES 3006	24" RC PIPE CULVERT DES 3006 CL V	36" RC PIPE CULVERT DES 3006	APRON	APRON TYPE	FINE AGGREGATE BEDDING (CV)	GEOTEXTILE FILTER TYPE IV	RIPRAP CLASS III	GUIDE POSTS TYPE B	REMARKS
FLOWS FROM	FLOWS TO	ALIGN.	STATION	OFFSET	TYPE				LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH		CU YD	SQ YD	CU YD	EACH	
5065	5064	CSAH-22	155+78.0	41.7R	APRON	915.11	914.00	0.93%			119				1	18" RC SAFETY APRON	81			1	
5064		CSAH-22	155+77.7	71.6L	APRON	914.00									1	18" RC PIPE APRON		25.6	6.4	1	
5067	5066	CSAH-22	156+09.5	50.9L	APRON	915.36	914.00	4.69%			29				1	18" RC PIPE APRON	25			1	
5066		CSAH-22	155+98.6	72.2L	APRON	914.00									1	18" RC PIPE APRON		25.6	6.4	1	
5069	5068	CSAH-22	157+12.5	47.5R	APRON	915.69	915.39	0.45%			69				1	18" RC SAFETY APRON	45			1	
5068		CSAH-22	156+49.2	47.2R	APRON	915.39									1	18" RC SAFETY APRON		25.6	6.4	1	
5071	5070	CSAH-22	158+26.5	42.7L	APRON	916.31	916.20	0.44%		25					1	15" GS SAFETY APRON					
5070		CSAH-22	158+01.9	42.5L	APRON	916.20									1	15" GS SAFETY APRON					
5073	5072	CSAH-22	159+76.5	42.4L	APRON	916.98	916.87	0.45%		25					1	15" GS SAFETY APRON					
5072		CSAH-22	159+51.0	42.5L	APRON	916.87									1	15" GS SAFETY APRON					
5075	5074	CSAH-22	165+29.1	48.5R	APRON	911.51	910.96	0.52%						105	1	36" RC PIPE APRON	113			1	
5074		CSAH-22	164+98.9	45.3L	APRON	910.96									1	36" RC PIPE APRON		50.5	15.8	1	
5077	5076	CSAH-22	168+67.4	40.6R	APRON	921.92	921.59	1.23%		27					1	15" GS SAFETY APRON					
5076		CSAH-22	168+40.5	40.4R	APRON	921.59									1	15" GS SAFETY APRON					
5079	5078	CSAH-22	172+32.3	38.7R	APRON	926.66	926.50	0.39%		43					1	15" GS SAFETY APRON					
5078		CSAH-22	171+88.8	39.0R	APRON	926.50									1	15" GS SAFETY APRON					
5081	5080	CSAH-22	174+96.0	34.4R	APRON	927.14	927.09	0.18%		30					1	15" GS SAFETY APRON					
5080		CSAH-22	174+66.2	35.4R	APRON	927.09									1	15" GS SAFETY APRON					
5083	5082	CSAH-22	178+45.0	35.7L	APRON	927.97	927.81	0.54%		30					1	15" GS SAFETY APRON					
5082		CSAH-22	178+15.0	35.7L	APRON	927.81									1	15" GS SAFETY APRON					
5085	5084	CSAH-22	179+16.2	31.0L	APRON	928.51	926.79	2.32%				74			1	24" RC SAFETY APRON	58			1	
5084		CSAH-22	179+16.9	38.7R	APRON	926.79									1	24" RC SAFETY APRON		33.4	9.2	1	
5094	5093	CSAH-22	184+00.6	42.8L	APRON	936.04	935.22	1.74%		47					1	15" GS SAFETY APRON					
5093		CSAH-22	183+53.7	43.2L	APRON	935.22									1	15" GS SAFETY APRON					
5096	5095	CSAH-22	189+97.8	41.5R	APRON	947.86	947.14	2.25%		32					1	15" GS SAFETY APRON					
5095		CSAH-22	189+65.8	42.3R	APRON	947.14									1	15" GS SAFETY APRON					
5098	5097	CSAH-22	190+71.9	38.9R	APRON	949.53	948.82	2.23%		32					1	15" GS SAFETY APRON					
5097		CSAH-22	190+40.3	39.5R	APRON	948.82									1	15" GS SAFETY APRON					
5100	5099	CSAH-22	193+80.8	35.9R	APRON	956.45	955.46	2.19%		45					1	15" GS SAFETY APRON					
5099		CSAH-22	193+36.1	35.9R	APRON	955.46									1	15" GS SAFETY APRON					
5102	5101	CSAH-22	194+58.8	39.2L	APRON	958.09	956.69	2.51%			56				1	18" RC SAFETY APRON	36			1	
5101		CSAH-22	194+07.8	41.2L	APRON	956.69									1	18" RC SAFETY APRON		25.6	6.4	1	
5104	5103	CSAH-22	195+34.9	36.2R	APRON	959.85	957.85	5.28%		38					1	15" GS SAFETY APRON					
5103		CSAH-22	194+97.1	36.2R	APRON	957.85									1	15" GS SAFETY APRON					
5106	5105	CSAH-22	197+49.4	36.1R	APRON	961.97	960.80	2.85%		41					1	15" GS SAFETY APRON					
5105		CSAH-22	197+09.0	40.0R	APRON	960.80									1	15" GS SAFETY APRON					
5118	5117	CSAH-22	186+28.8	50.8L	APRON	938.92	938.88	0.07%				60			1	24" RC SAFETY APRON	47			1	
5117		CSAH-22	185+73.8	46.8L	APRON	938.88									1	24" RC SAFETY APRON		33.4	9.2		
5120	5119	CSAH-22	104+74.6	51.5R	APRON	903.28	903.00	0.90%	31						1	15" RC PIPE APRON	18				
5119		CSAH-22	105+05.3	53.6R	APRON	903.00									1	15" RC PIPE APRON		20.8	4.8	1	
					PROJECT TOTAL				226	841	740	455	53	105	96		1148	698.5	182.2	46	

GENERAL NOTES:
- STATIONS, OFFSETS, AND ELEVATIONS ARE GIVEN TO:
  - -END OF APRON FOR ALL CONCRETE APRONS.
  - -END OF PIPE BARREL FOR ALL METAL APRONS.
  - -CENTER OF CASTING FOR ALL STORM STRUCTURES.
- PIPE LENGTH INCLUDES APRON LENGTH FOR RCP CULVERTS. APRON LENGTH IS EXCLUDED FROM METAL CULVERTS.

GENERAL NOTES (CONTINUED):
- ALL RC PIPE IS CL II UNLESS OTHERWISE NOTED.
- TIE PIPE JOINTS FOR CULVERTS AND SEWER PIPE FROM APRONS TO FIRST STRUCTURE (INCIDENTAL).
- FLOWLINE (F.L.) ELEVATIONS ON PROFILES ARE AT CENTER OF STRUCTURE. PIPE INLET AND OUTLET ELEVATIONS ON TABULATIONS ARE CENTER OF STRUCTURE.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-302drt-001
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DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: GARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
DRAINAGE PLAN

SAP 002-622-037

DRAINAGE TABULATION — J

STRUCTURE NUMBER		STRUCTURE LOCATION			DRAINAGE STRUCTURES				TOP OF CASTING ELEV	FLOWS FROM PIPE OUTLET ELEV	FLOWS TO PIPE INLET ELEV	12" RC PIPE SEWER DES 3006 CL	15" RC PIPE SEWER DES 3006 CL V	18" RC PIPE SEWER DES 3006 CL	24" RC PIPE SEWER DES 3006	APRON	APRON TYPE	GEOTEXTILE FILTER TYPE 4	RIPRAP CLASS III	GUIDE POSTS TYPE B	REMARKS
FLOWS FROM	FLOWS TO	ALIGN.	STATION	OFFSET	TYPE	PAY HEIGHT 48-4020	PAY HEIGHT H	CASTING ASSEMBLY TYPE	STEPS REQ'D												
						LIN FT	LIN FT						LIN FT	LIN FT	LIN FT	LIN FT	EACH		SQ YD	CU YD	EACH	
5092	5090	CSAH-22	186+26.6	45.3R	APRON						939.92	936.23				72	1	24" RC SAFETY APRON			1	
5091	5090	CSAH-22	185+59.0	46.0R	APRON						937.71	936.32		17			1	15" RC SAFETY APRON			1	
5090	5088	CSAH-22	185+57.8	32.2R	CB	5.2		TYPE - C	YES	941.40	936.12	934.24				145						
5088A	5088	CSAH-22	184+12.6	40.9R	CB		4.1	B - 9		938.65	934.48	934.21	9								1	
5088	5087	CSAH-22	184+12.8	31.9R	CB	4.6		TYPE - C	YES	938.90	934.21	929.03				284						
5087	5086	CSAH-22	181+28.9	29.4R	CB	5.0		TYPE - C	YES	934.02	928.99	927.05				94						
5086		CSAH-22	180+37.8	42.0R	APRON						927.05						1	24" RC SAFETY APRON	33.4	9.2	1	
5011	5010	23EB	105+81.0	48.0R	CB		4.1	M - 11		906.67	903.20	903.00			31							
5010		CSAH-22	105+53.7	57.4R	APRON						903.00						1	18" RC SAFETY APRON	25.6	6.4		
TOTALS						**14.8**	**8.2**						**9**	**17**	**31**	**595**	**4**		**59.0**	**15.6**	**4**	

GENERAL NOTES:
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  - -END OF APRON FOR ALL CONCRETE APRONS.
  - -END OF PIPE BARREL FOR ALL METAL APRONS.
  - -CENTER OF CASTING FOR ALL STORM STRUCTURES.
- PIPE LENGTH INCLUDES APRON LENGTH FOR RCP CULVERTS. APRON LENGTH IS EXCLUDED FROM METAL CULVERTS.

GENERAL NOTES (CONTINUED):
- ALL RC PIPE IS CL II UNLESS OTHERWISE NOTED.
- TIE PIPE JOINTS FOR CULVERTS AND SEWER PIPE FROM APRONS TO FIRST STRUCTURE (INCIDENTAL).
- FLOWLINE (F.L.) ELEVATIONS ON PROFILES ARE AT CENTER OF STRUCTURE. PIPE INLET AND OUTLET ELEVATIONS ON TABULATIONS ARE CENTER OF STRUCTURE.

DRAINAGE SUMMARY — K

ITEM	UNIT	ANOKA COUNTY SAP 002-622-037		STORM SEWER 56% SAP 002-622-037 44% NOWTHEN	PROJECT TOTAL
		APPEARS ON SHEET NO.			
		103 - 104	107R - 109	105R1	
15" RC PIPE CULVERT DES 3006 CL V	LIN FT	226			**226**
18" RC PIPE CULVERT DES 3006 CL V	LIN FT	740			**740**
24" RC PIPE CULVERT DES 3006 CL V	LIN FT	53			**53**
24" RC PIPE CULVERT DES 3006	LIN FT	455			**455**
36" RC PIPE CULVERT DES 3006	LIN FT	105			**105**
15" CP PIPE CULVERT	LIN FT	841			**841**
12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT			9	**9**
15" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT			17	**17**
18" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT			31	**31**
24" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT			595	**595**
15" RC PIPE APRON	EACH	4			**4**
18" RC PIPE APRON	EACH	10			**10**
1 24" RC PIPE APRON	EACH	2			**2**
36" RC PIPE APRON	EACH	2			**2**
15" RC SAFETY APRON	EACH	7		1	**8**
18" RC SAFETY APRON	EACH	9		1	**10**
24" RC SAFETY APRON	EACH	14		2	**16**
15" GS SAFETY APRON	EACH	48			**48**
RANDOM RIPRAP CLASS III	CU YD	182	71	16	**269**
GEOTEXTILE FILTER TYPE 4	SQ YD	699		59	**758**
GUIDE POST TYPE B	EACH	46		4	**50**
FINE AGGREGATE BEDDING (CV)	CU YD	1148			**1148**
CONSTRUCT DRAINAGE STRUCTURE DESIGN H	LIN FT			8.2	**8.2**
CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LIN FT			14.8	**14.8**
CASTING ASSEMBLY	EACH			5	**5**
COMPOST GRADE 2	CU YD		54		**54**
2 INFILTRATION TESTING	LS		1		**1**

CASTING ASSEMBLY SUMMARY — L

ASSEMBLY	RING OR FRAME	COVER OR GRATE	CURB BOX	STANDARD PLATE NUMBER	USE	TOTALS
TYPE C	805 MODIFIED	816		SEE DETAIL 4154	CATCH BASIN	**3**
M-11	ROUND CONC	731		4143 4143	DROP INLET	**2**
					TOTAL	**5**

NO	DATE	DWN	CKD	REVISIONS
1	12/10/2025	ZHH	AJF	24" RC PIPE APRONS ADDED
2	12/17/2025	ZHH	EAE	INFILTRATION TESTING ADDED

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: GARTH A. EVANS, PE
DATE: 12/18/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 105R1 of 138 Sheets

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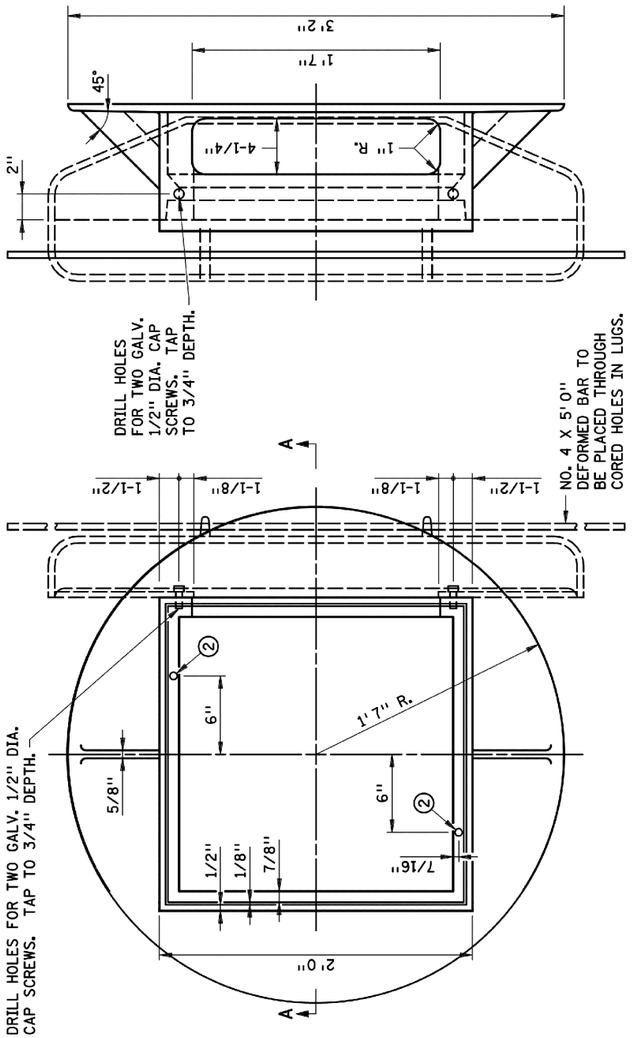
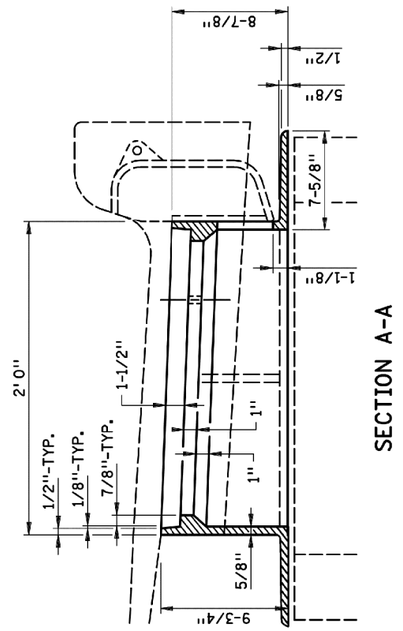
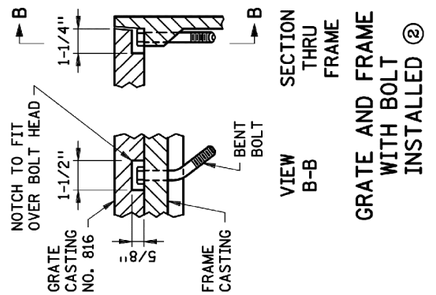


TOP VIEW



SECTION A-A

END VIEW



SECTION THRU FRAME

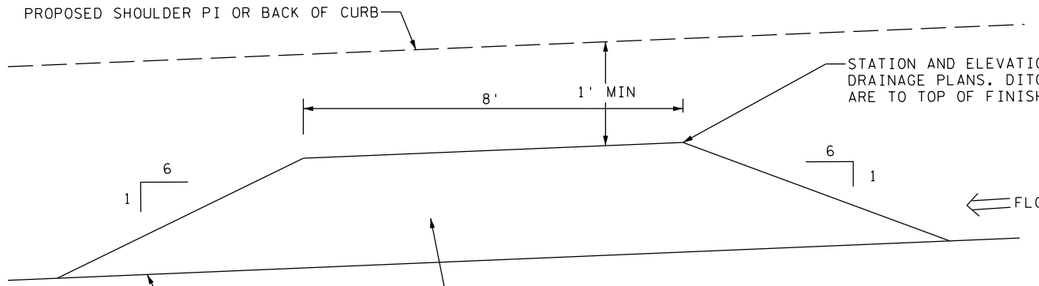
VIEW B-B

GRATE AND FRAME WITH BOLT INSTALLED ②

CASTINGS USED FOR ASSEMBLY	
GRATE	NO. 816 (MNDOT STD PLATE 4154B)
CURB BOX ①	NO. 823A (MNDOT STD PLATE 4160) OR

NOTES:

USE 1/4" FILLETS IN ALL CORNERS.
SEE MNDOT STANDARD PLATE INSTALLATION REQUIREMENTS.
① APPLIES TO DESIGN B OR V CURB AND CURB AND GUTTER.
② AT LOCATIONS INDICATED IN TOP VIEW, PROVIDE 9/16" DIA. HOLES WHEN GRATE NO 816 (MNDOT STD PLATE 4154) IS USED WITH THIS FRAME. FIELD PLACE 1/2" DIA X 4" LONG GALV BOLT IN UP STREAM SIDE AND BENT UNDERSIDE TO PREVENT REMOVAL. THIS WILL PREVENT GRATE NO. 816 (MNDOT STD PLATE 4154) FROM BEING PLACED IN WRONG AND NOT BEING BICYCLE SAFE



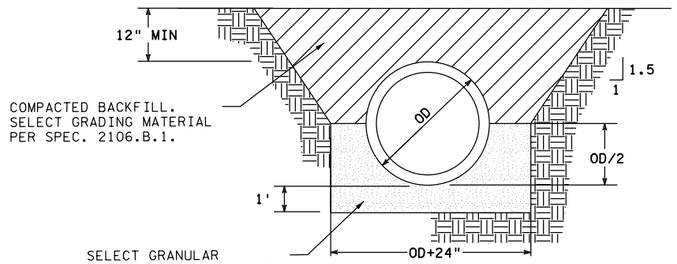
DITCH BLOCK DETAIL
NO SCALE

NOTES:

DITCH BLOCK SLOPES 1V:6H)
DITCH BLOCK : 1:6

PAID FOR UNDER COMMON EMBANKMENT (CV); INCLUDES TOPSOIL AND SUITABLE GRADING MATERAL TO CONSTRUCT DITCH BLOCK.

STABILIZE SIDE SLOPES PRIOR TO PLACING TOPSOIL IN THE BOTTOM OF THE DITCH BLOCK AREA.



LEGEND
OD = OUTSIDE DIAMETER

NOTES:
- GRANULAR FOUNDATION DETAIL FOR USE FOR ENTRANCE CULVERTS.
- GRANULAR FOUNDATION, EXCAVATION, AND BACKFILL IS INCLUSIVE TO APPLICABLE PIPE CULVERT PAY ITEMS.

ENTRANCE CULVERT TRENCH GRANULAR FOUNDATION
NO SCALE

GRATE FRAME CASTING TYPE C & D

NOT TO SCALE

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: GARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

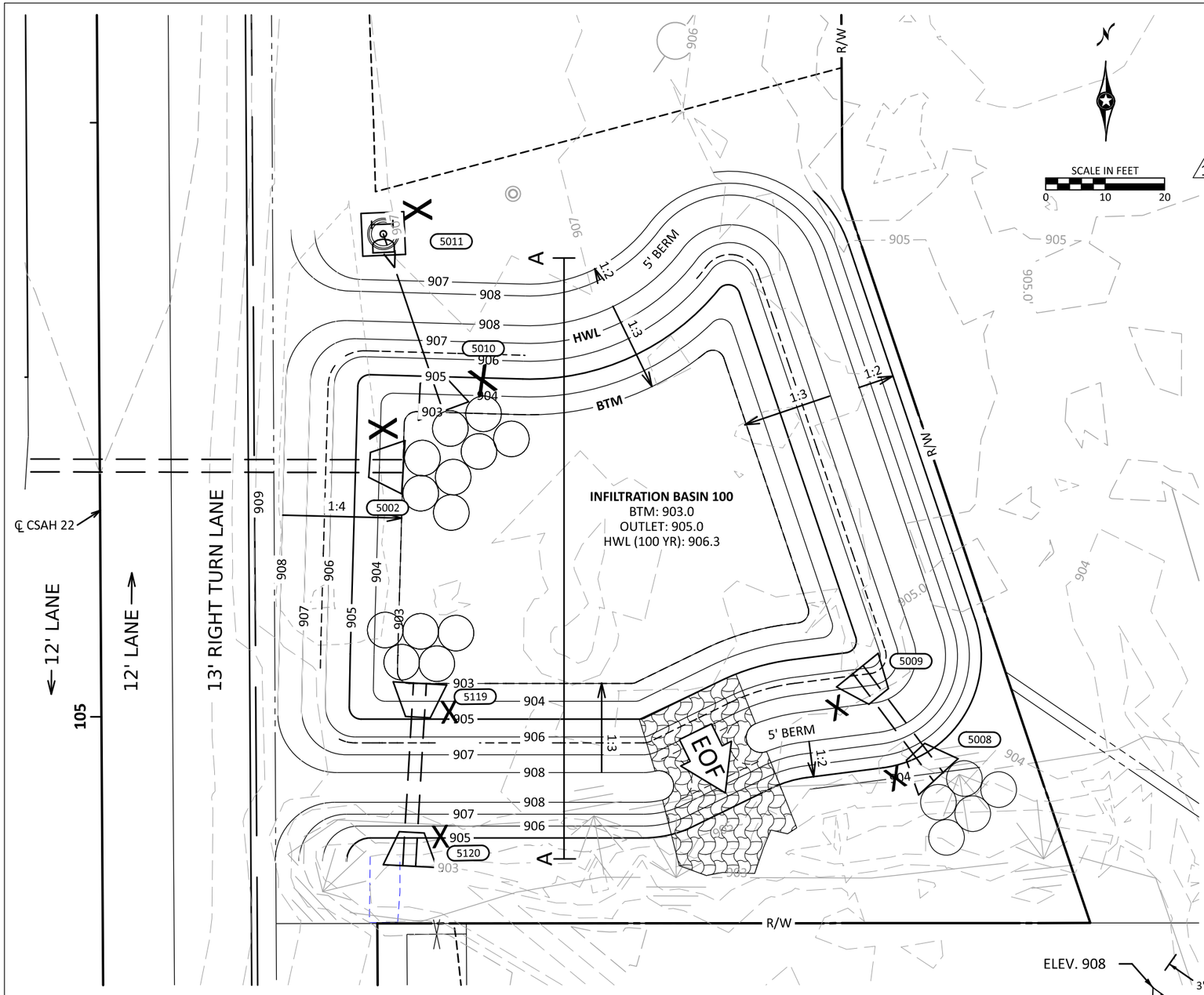
CSAH 22 (Baugh Street NW) Reconstruction

DETAILS
DRAINAGE PLAN

SAP 002-622-037

Sheet No. 106 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-230con-001
PLOTTED/REVISED: 12/18/2025 9:38:28 AM



GENERAL NOTES:

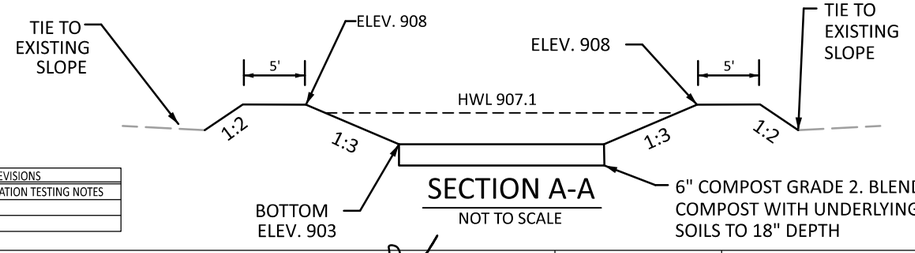
1. CONTOURS ARE TO FINISHED GRADE (TOP OF TOPSOIL).
2. EXISTING GROUND AND PROPOSED GROUND CONTOURS ARE APPROXIMATE. EXACT CONTOURS SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
3. FINISHED SLOPE GRADES ARE LISTED AS VERTICAL TO HORIZONTAL (V:H).
4. EXCAVATION OF THE INFILTRATION SUBCUT REQUIRES TOOTHED BUCKET TO AVOID COMPACTING OR SMEARING SOILS.
5. PLACE ALL UTILITIES PRIOR TO SETTING FINAL GRADE OF BMP.
6. ENSURE ALL DRAINAGE STRUCTURES, BOTTOM, AND OUTLET ELEVATIONS ARE CORRECT PRIOR TO TOPSOIL PLACEMENT. A 6-INCH LAYER OF TOPSOIL SHALL BE PLACED ON THE EXPOSED POND SLOPES TO SUPPORT VEGETATION.
7. A MINIMUM OF TWO INFILTRATION TESTS MUST BE PERFORMED DURING CONSTRUCTION WITH AN ENGINEER PRESENT.
8. A MINIMUM OF TWO INFILTRATION TESTS MUST BE PERFORMED POST-CONSTRUCTION WITH AN ENGINEER PRESENT.

CONSTRUCTION SEQUENCING:

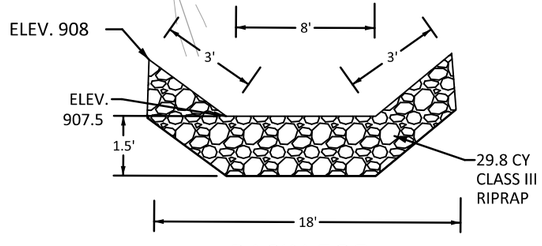
1. INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.
2. PLACE SILT FENCE ALONG THE PERIMETER OF THE SITE TO PREVENT SEDIMENT FROM LEAVING THE SITE DURING THE CONSTRUCTION PROCESS. ALL DOWNGRADIENT PERIMETER SEDIMENT-CONTROL BMPS MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND-DISTURBING ACTIVITY BEGINS.
3. PLACE STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
4. VEGETATION AND OTHER MATERIALS SHALL BE CLEARED FROM POND AREA. REMOVE TOPSOIL FROM THE SITE AND PLACE IN TEMPORARY STOCKPILE LOCATION. TEMPORARY SEED THE STOCKPILE.
5. EXCAVATE THE INFILTRATION BASIN TO THE SPECIFIED DEPTH (ELEVATION).
6. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE BASIN PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE BASIN DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
7. SEEDING AND INSTALLATION OF EROSION CONTROL BLANKET SHALL BE COMPLETED WITHIN 48 HOURS OF FINAL GRADING.
8. REMOVE THE SILT FENCE AFTER THE SITE AND UPSTREAM DRAINAGE AREA IS STABILIZED
7. NATIVE SOILS IN INFILTRATION AREAS SHALL BE DECOMPACTED TO A MINIMUM DEPTH OF 18 INCHES BELOW THE SUBGRADE.
8. CONTRACTOR SHALL NOT COMPACT THE SUBGRADE BENEATH THE INFILTRATION SYSTEM.
9. SURFACE INFILTRATION SYSTEMS SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED.

LEGEND

- X — GUIDE POST TYPE B
- DROP INLET
- APRON
- XXXX — STRUCTURE NUMBER
- RANDOM RIPRAP
- STORM SEWER PIPE
- CULVERT PIPE
- INPLACE CULVERT
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY



SECTION A-A
NOT TO SCALE



BASIN EOF
NOT TO SCALE

NO	DATE	DWN	CKD	REVISIONS
1	12/17/2025	ZH	EAE	ADDED INFILTRATION TESTING NOTES

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: BARTH A. EVANS, PE
DATE: 12/18/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

INFILTRATION BASIN 100
GRADING PLAN

SAP 002-622-037

Sheet No. 107R of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:42:57 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-230con-001

SCALE IN FEET
0 15 30

POND 200
BTM: 908.0
OUTLET: 912.0
HWL (100 YR): 914.0

PROPERTY LINE

13' RIGHT TURN LANE

℄ CSAH 22

12' LANE

12' LANE

135

CONSTRUCT DITCH BLOCK SEE DRAINAGE DETAILS

GENERAL NOTES:
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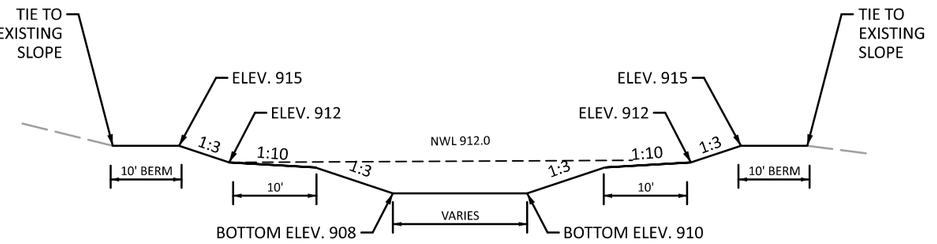
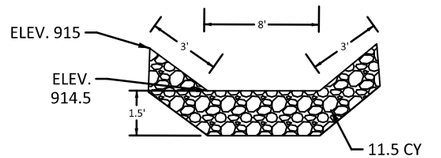


SECTION A-A (TYP)
NOT TO SCALE



BASIN EOF
NOT TO SCALE

LEGEND

- X — GUIDE POST TYPE B
- APRON
- XXXX — STRUCTURE NUMBER
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
- CULVERT PIPE
- INPLACE CULVERT
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: BARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

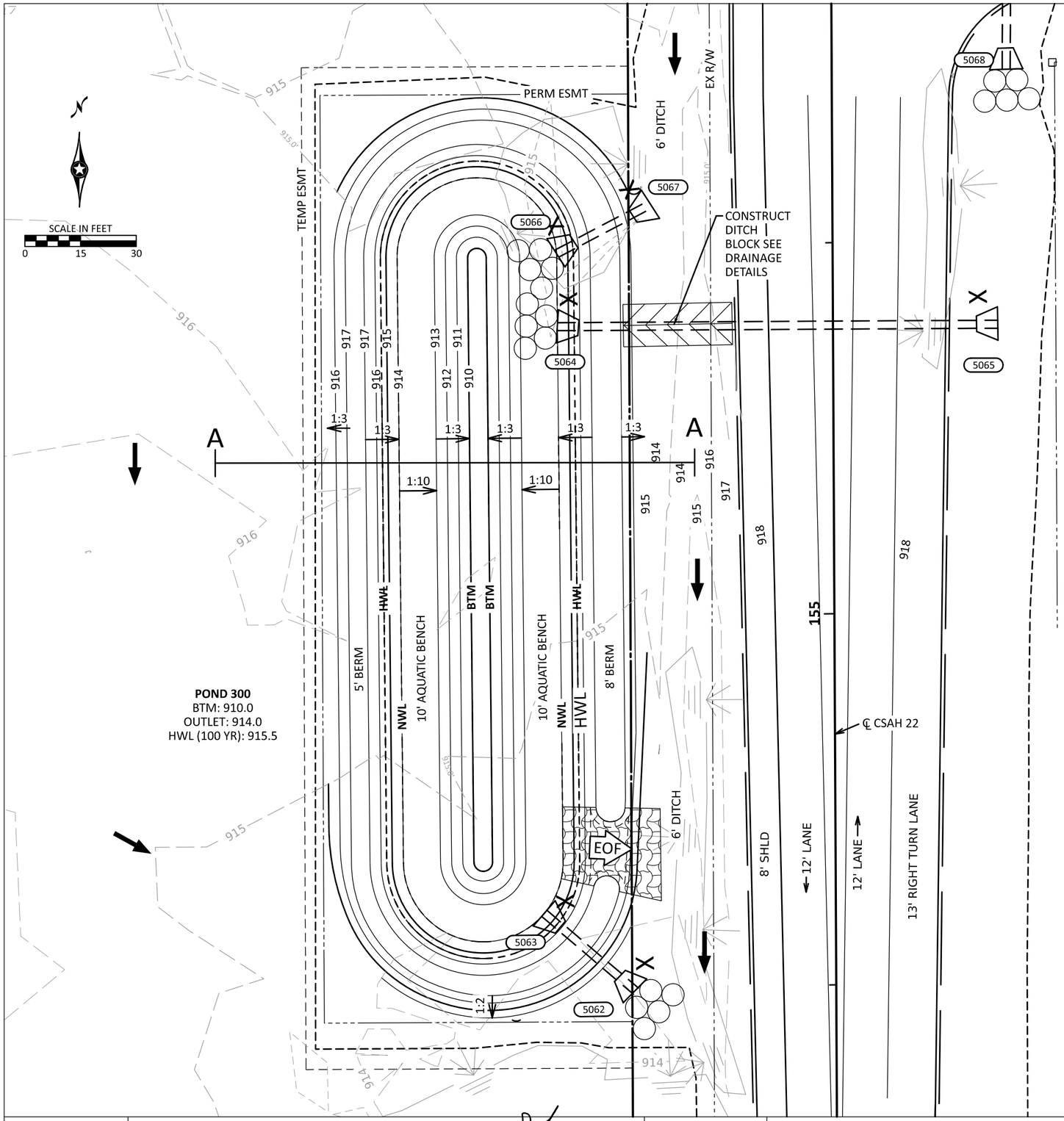
POND 200
GRADING PLAN

SAP 002-622-037

Sheet No. 108 of 138 Sheets

PLOTTED/REVISED: 11/4/2025 12:42:59 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Drainage\03_Sheets\026054-000-230con-001



POND 300
BTM: 910.0
OUTLET: 914.0
HWL (100 YR): 915.5

GENERAL NOTES:

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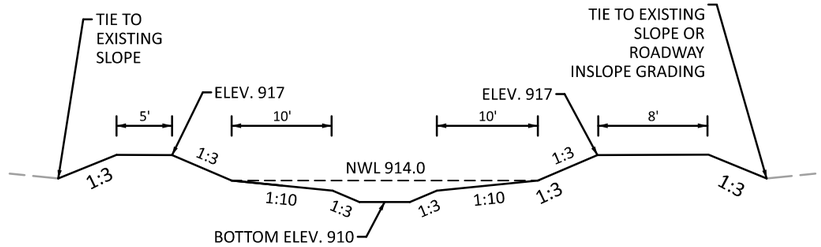
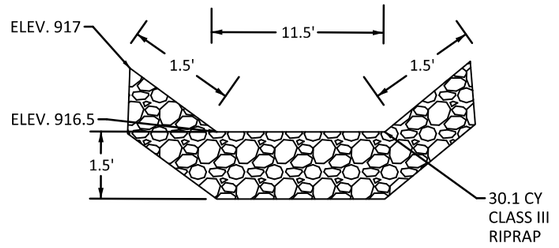


SECTION A-A
NOT TO SCALE



BASIN EOF
NOT TO SCALE

LEGEND

- GUIDE POST TYPE B
- APRON
- STRUCTURE NUMBER (XXXX)
- SURFACE FLOW DIRECTION
- DITCH BLOCK
- RANDOM RIPRAP
- STORM SEWER PIPE
- CULVERT PIPE
- INPLACE CULVERT
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- PROPOSED RIGHT-OF-WAY

DRAWN BY:	ZHH
DESIGNED BY:	ZHH
CHECKED BY:	EAE

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE:
PRINTED NAME: EARTH A. EVANS, PE
DATE: 11/4/2025 LIC. NO. 44235

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

POND 300
GRADING PLAN

SAP 002-622-037

SIGN AND DELINEATOR / MARKER

SIGN NUMBER	PANEL				SUPPORT		REMOVE SIGN	SIGN	SALVAGE SIGN	INSTALL SIGN	REMOVE DELINEATOR /MARKER	M DELINEATOR /MARKER PANEL
	PANEL CODE	LEGEND	SIZE (W x H)	MOUNTING HEIGHT	TYPE	NUMBER OF POSTS						
			INCHES	FEET			EACH	SQ FT	EACH	EACH	EACH	EACH
S-1	M1-6M	ANOKA COUNTY 64	24 x 24	7	U-SOIL	1	1	4.00				
	M6-1L	ARROW LEFT (BLUE)	21 x 15					2.19				
S-2	M1-6M	ANOKA COUNTY 83	24 x 24	7	U-SOIL	1	1	4.00				
	M6-3	ARROW UP (BLUE)	21 x 15					2.19				
S-3	M1-6M	ANOKA COUNTY 22	24 x 24	7	U-SOIL	1	1	4.00				
	M6-1R	ARROW RIGHT (BLUE)	21 x 15					2.19				
S-4	R1-1	STOP	x				1					
	R1-3P	ALL WAY PLAQUE	x									
	X4-1	GUIDE DELINEATOR(WHITE)	x									
S-5	R1-1	STOP	48 x 48	7	U-SOIL	2		16.00				
	R1-3P	ALL WAY PLAQUE	18 x 6					0.75				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-6	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-7		RIGHT TURN LANE	x				1					
S-8	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-9	M2-1	JCT(BLUE)	21 x 15	7	U-SOIL	1	1	2.19				
	M1-6M	ANOKA COUNTY 64	24 x 24					4.00				
S-10	M2-1	JCT(BLUE)	21 x 15	7	U-SOIL	1	1	2.19				
	M1-6M	ANOKA COUNTY 83	24 x 24					4.00				
S-11	W1-7	DOUBLE ARROW	48 x 24	7	U-SOIL	2	1	8.00				
	OM1-2	TYPE 1 OBJECT MARKER	18 x 18									1
	OM1-2	TYPE 1 OBJECT MARKER	18 x 18									1
S-12	M1-6M	ANOKA COUNTY 163	24 x 24	7	U-SOIL	1	1	4.00				
	M6-1L	ARROW LEFT (BLUE)	21 x 15					2.19				
S-13	W3-1	STOP AHEAD	48 x 48	7	U-SOIL	2	1	16.00				
S-14	M2-1	JCT(BLUE)	21 x 15	7	U-SOIL	1	1	2.19				
	M1-6M	ANOKA COUNTY 163	24 x 24					4.00				
S-15	W3-1	STOP AHEAD	36 x 36	7	U-SOIL	2	1	9.00				
S-16	R2-1	SPEED LIMIT 55	24 x 30	7	U-SOIL	1	1	5.00				
S-17	M1-6M	ANOKA COUNTY 22	24 x 24	7	U-SOIL	1	1	4.00				
	M6-4	DOUBLE ARROW(BLUE)	21 x 15					2.19				
S-18	M4-6	END(BLUE)	24 x 12	7	U-SOIL	1	1	2.00				
	M1-6M	ANOKA COUNTY 163	24 x 24					4.00				
S-19	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR(WHITE)	x									
S-20	R1-1	STOP	48 x 48	7	U-SOIL	2		16.00				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-21	M1-6M	ANOKA COUNTY 163	24 x 24	7	U-SOIL	1	1	4.00				
	M6-1R	ARROW RIGHT (BLUE)	21 x 15					2.19				
S-22	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-23	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-24	M2-1	JCT(BLUE)	21 x 15	7	U-SOIL	1	1	2.19				
	M1-6M	ANOKA COUNTY 163	24 x 24					4.00				
S-25	DESIGN	NOWTHEN POPULATION	x	7					1	1		
	DESIGN	FIRE	x									
S-26	R1-1	STOP	36 x 36	7	U-SOIL	2	1	9.00				
	R1-3P	ALL WAY PLAQUE	18 x 6					0.75				
S-27	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2		9.89				
S-28	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR(WHITE)	x									
S-29	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-30	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-31	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2	1	9.89				
S-32	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR(WHITE)	x									

SIGN AND DELINEATOR / MARKER

SIGN NUMBER	PANEL				SUPPORT		REMOVE SIGN	SIGN	SALVAGE SIGN	INSTALL SIGN	REMOVE DELINEATOR /MARKER	M DELINEATOR /MARKER PANEL
	PANEL CODE	LEGEND	SIZE (W x H)	MOUNTING HEIGHT	TYPE	NUMBER OF POSTS						
			INCHES	FEET			EACH	SQ FT	EACH	EACH	EACH	EACH
S-33	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-34	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-35		RIGHT TURN LANE	x				1					
S-36	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-37	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-38	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-39	R3-8AC	L-T	36 x 30	7	U-SOIL	2		7.50				
S-40	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-41	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-42	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR (WHITE)	x									
S-43	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-44	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-45	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2		9.89				
S-46	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-47	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-48	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2		9.89				
S-49	R3-8AC	L-T	36 x 30	7	U-SOIL	2		7.50				
S-50	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-51	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR (WHITE)	x									
S-52	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-53	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2		9.89				
S-54	W14-3	NO PASSING ZONE	64x64x48	7	U-SOIL	2		9.89				
S-55	R3-8ACA	L-T-R	54 x 30	7	U-SOIL	2		11.25				
S-56	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
S-57	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-58	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR (WHITE)	x									
S-59	R3-8ACA	L-T-R	54 x 30	7	U-SOIL	2		11.25				
S-60	W14-3	NO PASSING ZONE	x				1					
S-61	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-62	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR (WHITE)	x									
S-63	W3-1	STOP AHEAD	48 x 48	7	U-SOIL	2	1	16.00				
S-64	R1-1	STOP	30 x 30	7	U-SOIL	1		6.25				
	X4-3	CYLINDER STYLE DELINEATOR (WHITE)	6 x 9									1
S-65	R1-1	STOP	x				1					
	X4-1	GUIDE DELINEATOR (WHITE)	x									
S-66	R3-7R	RIGHT LANE MUST TURN RIGHT	30 x 30	7	U-SOIL	1		6.25				
S-67	OM2-2V	TYPE 2 OBJECT MARKER	x								1	
	OM2-2V	TYPE 2 OBJECT MARKER	x									
			TOTAL				30	349	1	1	11	11

DRAWN BY:	BC
DESIGNED BY:	MF
CHECKED BY:	MF

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Mallori Fitzpatrick
PRINTED NAME: MALLORI FITZPATRICK, PE
DATE: 11/18/2025 LIC. NO. 58640

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
SIGNING PLAN

SAP 002-622-037

SIGN SPECIAL

N

SIGN NUMBER	PANEL			SUPPORT		SALVAGE SIGN SPECIAL	INSTALL SIGN SPECIAL
	LEGEND	SIZE (W x H)	MOUNTING HEIGHT	TYPE	NUMBER OF POSTS		
		INCH	FEET			EACH	EACH
S-501	BAUGH ST NW	x	7	ROUND-SOIL	1	1	1
	BURNS PKWY	x					
S-502	184TH AVE NW	x	7	ROUND-SOIL	1	1	1
	BAUGH ST. N.W.	x					
S-503	BAUGH ST NW	x	7	ROUND-SOIL	1	1	1
	187TH AVE NW	x					
S-504	188TH AVE NW	x	7	ROUND-SOIL	1	1	1
	BAUGH ST NW	x					
S-505	190TH AVE NW	x	7	ROUND-SOIL	1	1	1
	BAUGH ST NW	x					
S-506	195TH LN NW	x	7	ROUND-SOIL	1	1	1
	BAUGH ST NW	x					
S-507	194TH AVE NW	x	7	ROUND-SOIL	1	1	1
	BAUGH ST	x					
					TOTAL	7	7

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn

PLOTTED/REVISED: 11/18/2025 7:57:49 AM

DRAWN BY:	BC
DESIGNED BY:	MF
CHECKED BY:	MF

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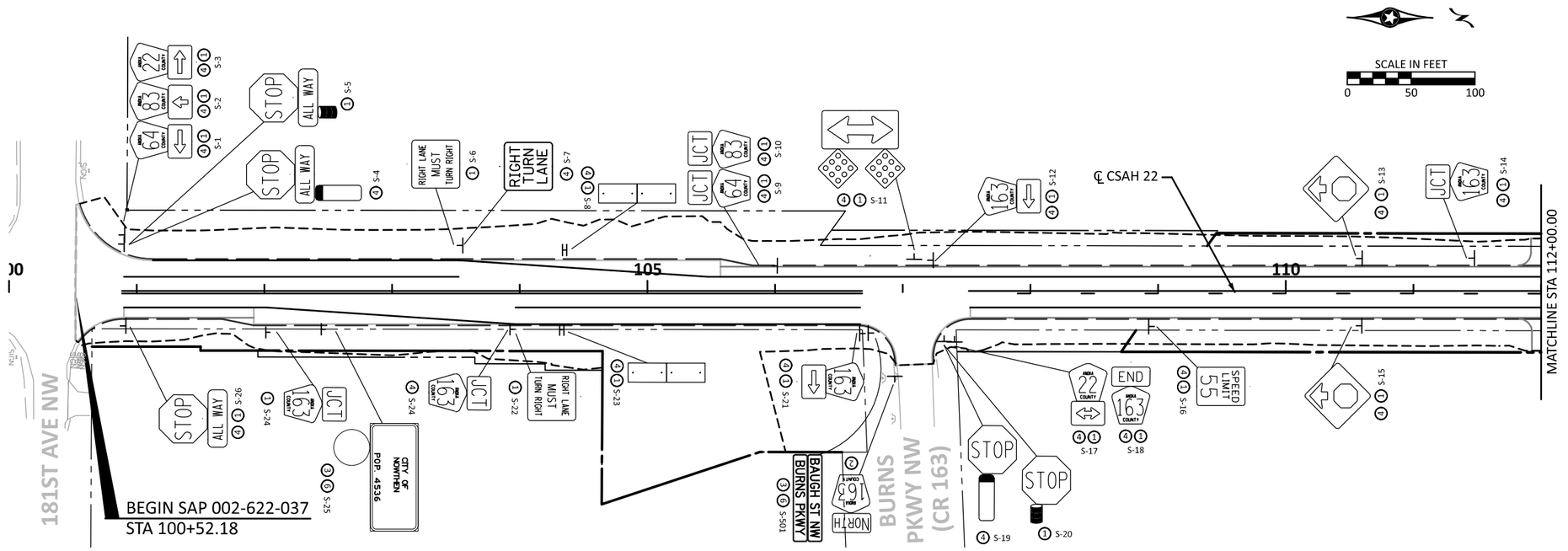
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
SIGNING PLAN

SAP 002-622-037

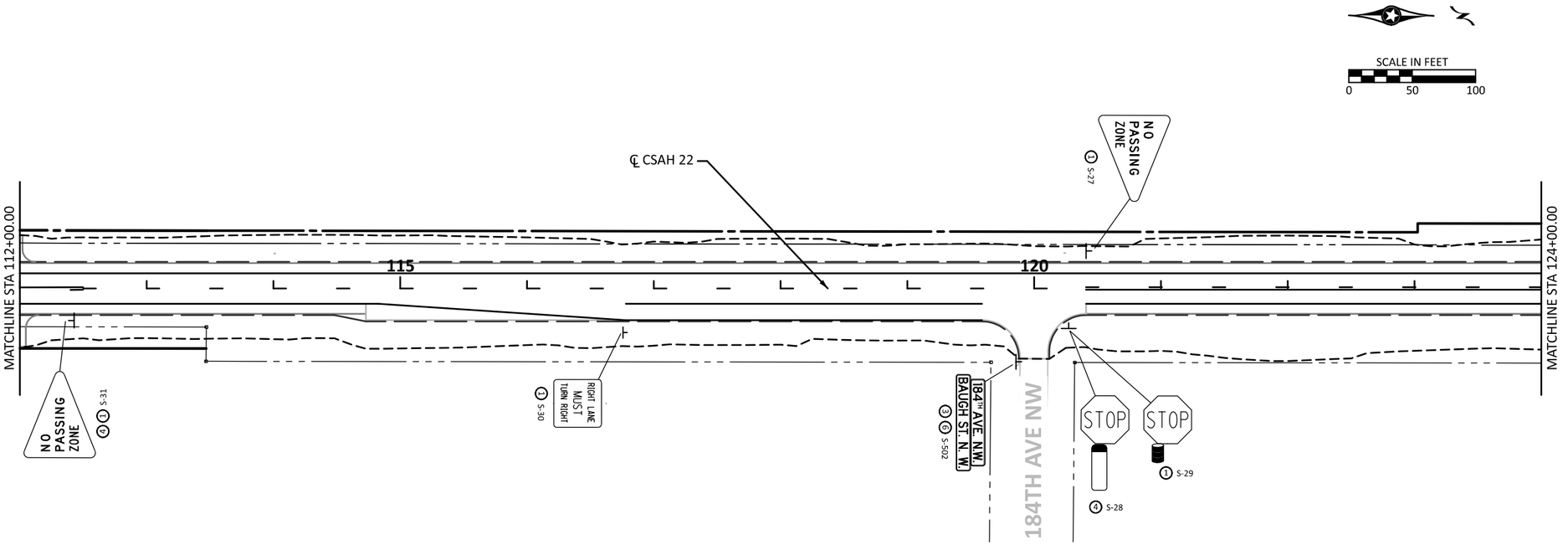
CSAH 22 (Baugh Street NW)



LEGEND

1. FURNISH & INSTALL
2. INPLACE
3. SALVAGE
4. REMOVE
6. INSTALL

CSAH 22 (Baugh Street NW)



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ANOKA COUNTY

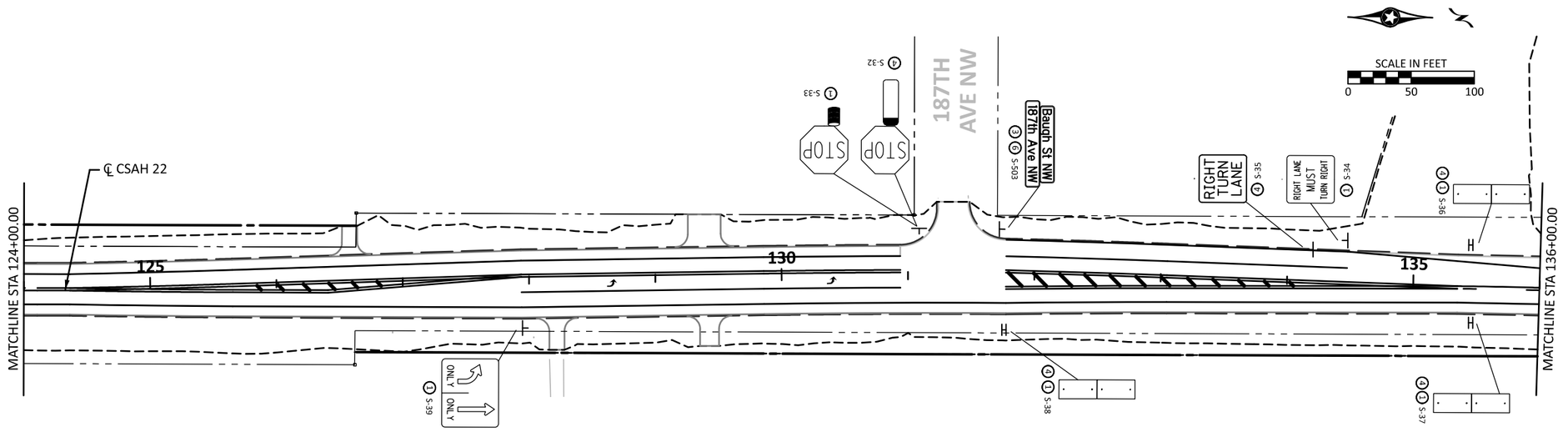
CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 124+00
SIGNING PLAN

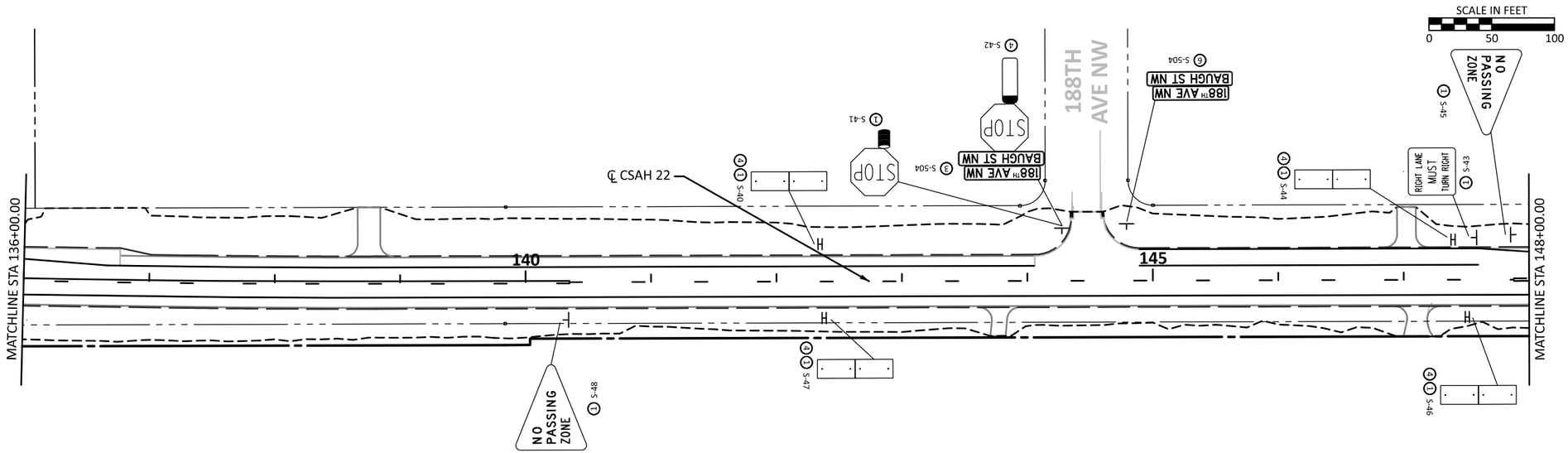
SAP 002-622-037

Sheet No. 112 of 138 Sheets

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

1. FURNISH & INSTALL
2. INPLACE
3. SALVAGE
4. REMOVE
6. INSTALL

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn
PLOTTED/REVISED: 11/18/2025 7:57:55 AM

DRAWN BY:	BC
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CHECKED BY:	MF

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PRINTED NAME: MALLORI FITZPATRICK, PE
DATE: 11/18/2025 LIC. NO. 58640

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

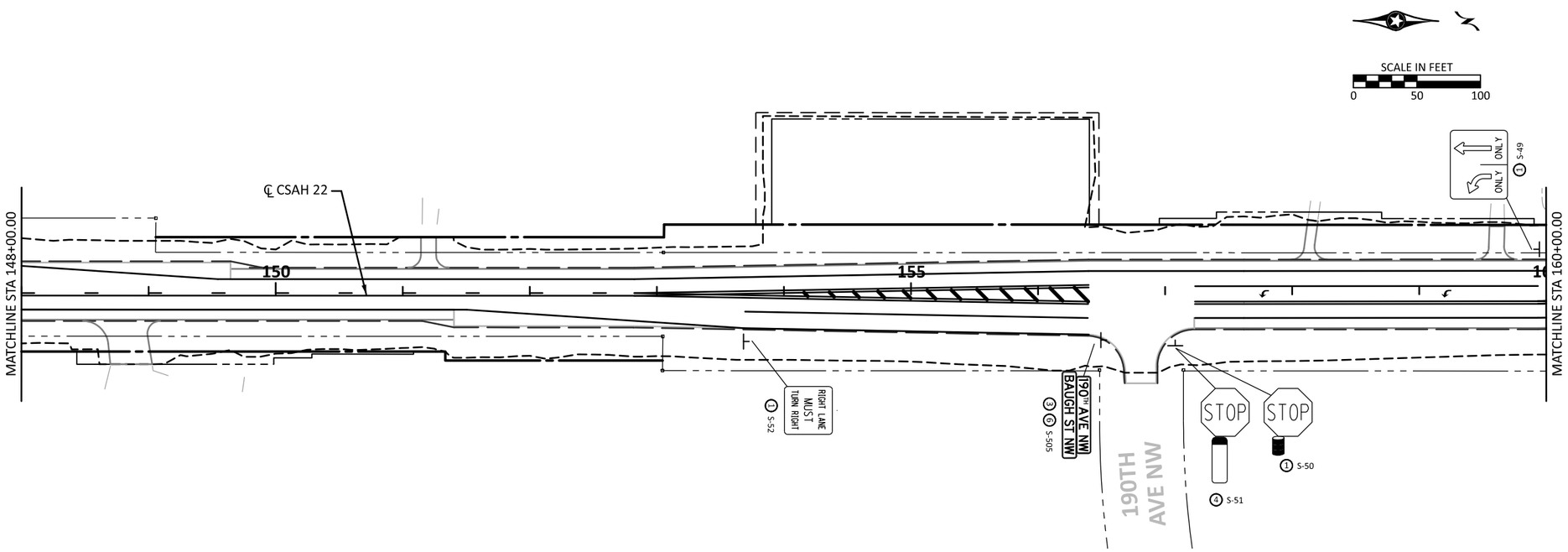
STA 124+00 TO STA 148+00
SIGNING PLAN

SAP 002-622-037

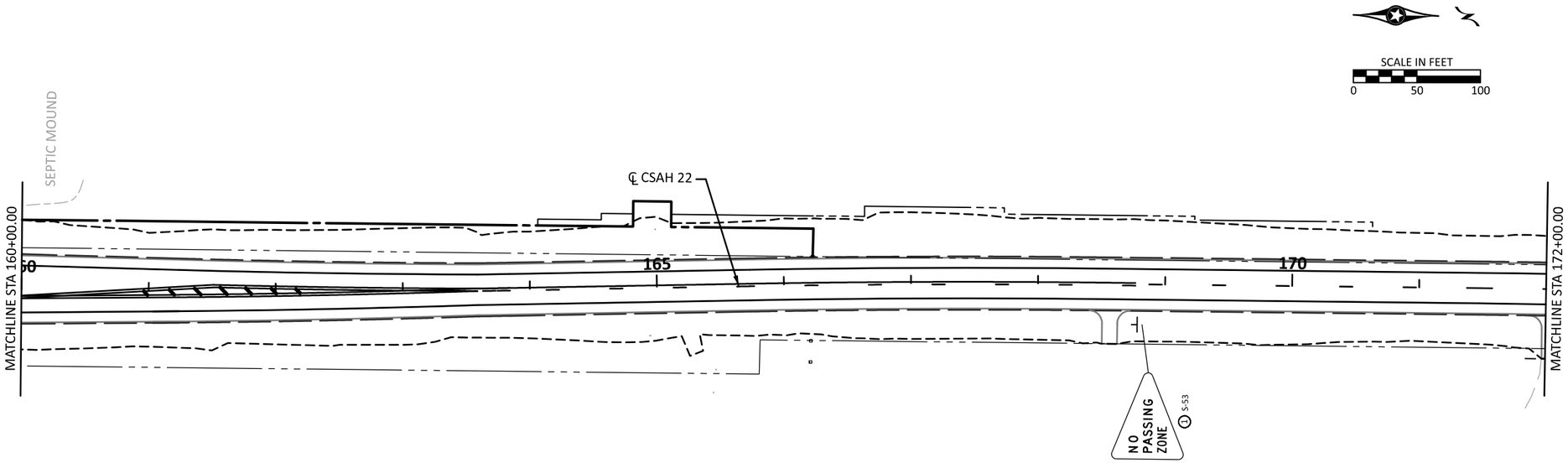
Sheet No. 113 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\4400sgn-001.dgn
. PLOTTED/REVISED: 11/18/2025 7:57:56 AM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



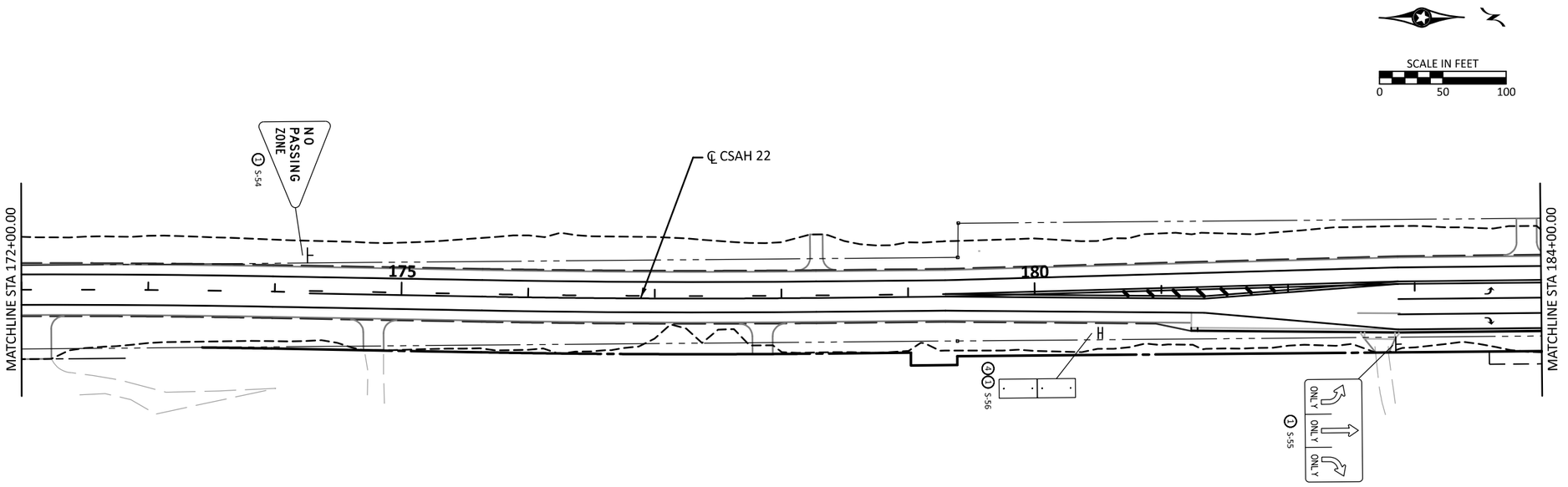
LEGEND

1. FURNISH & INSTALL
2. INPLACE
3. SALVAGE
4. REMOVE
6. INSTALL

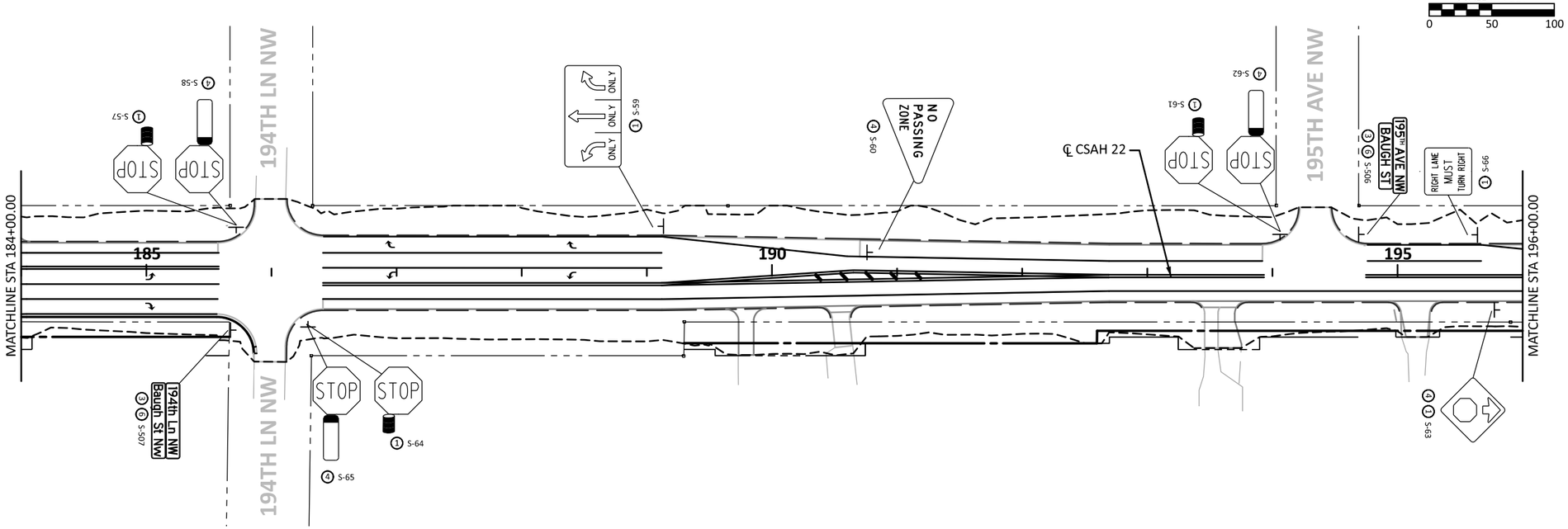
DRAWN BY:	BC	I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Mallori Fitzpatrick	wsb	**CSAH 22 (Baugh Street NW) Reconstruction**
DESIGNED BY:	MF		PRINTED NAME: MALLORI FITZPATRICK, PE		STA 148+00 TO STA 172+00 SIGNING PLAN
CHECKED BY:	MF		DATE: 11/18/2025 LIC. NO. 58640	ANOKA COUNTY	SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn
PLOTTED/REVISED: 11/18/2025 7:57:56 AM

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

1. FURNISH & INSTALL
2. INPLACE
3. SALVAGE
4. REMOVE
6. INSTALL

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wsb

ANOKA COUNTY

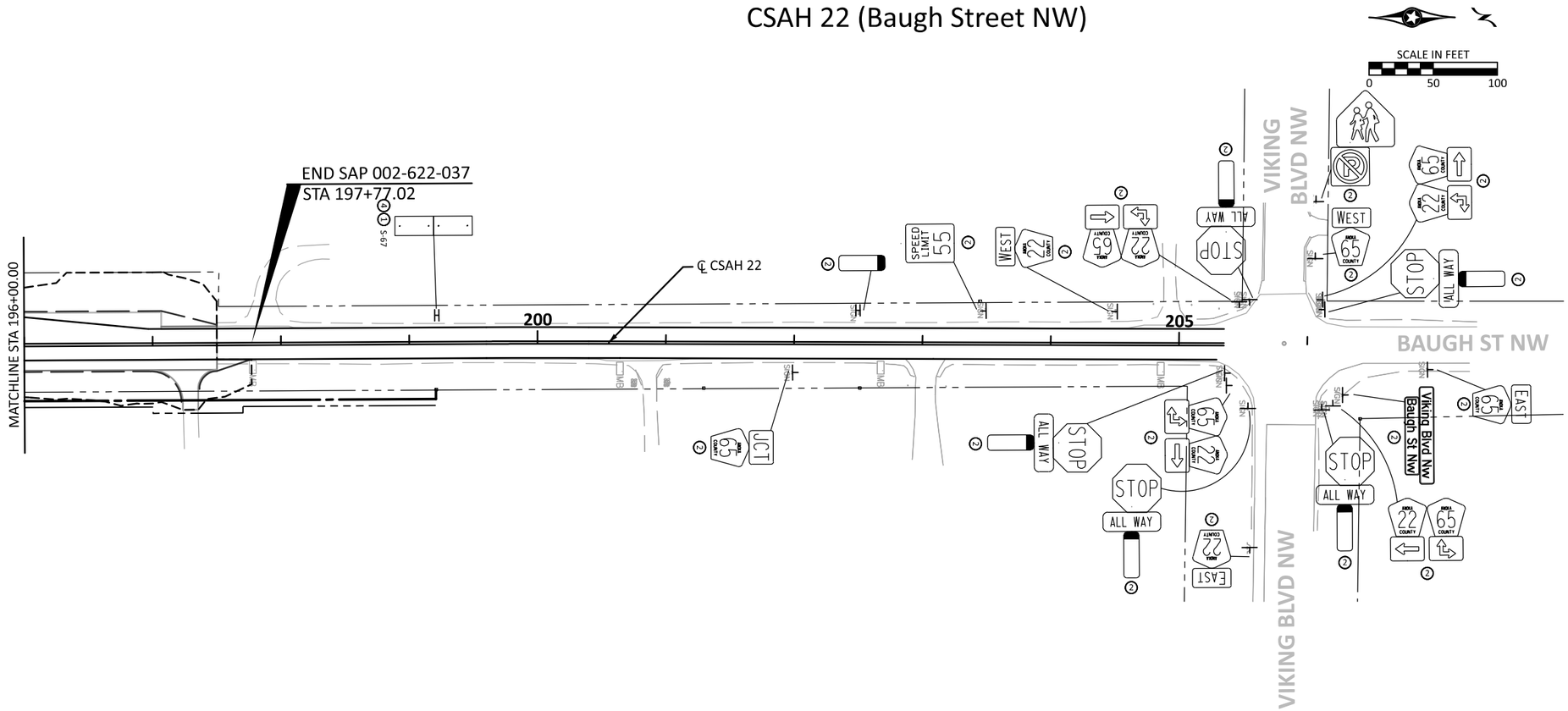
CSAH 22 (Baugh Street NW) Reconstruction

STA 172+00 TO STA 196+00
SIGNING PLAN

SAP 002-622-037

Sheet No. 115 of 138 Sheets

CSAH 22 (Baugh Street NW)



LEGEND

1. FURNISH & INSTALL
2. INPLACE
3. SALVAGE
4. REMOVE
6. INSTALL

PATH & FILENAME: Projects\Minnesota\026054-000-4400sgn-001.dgn
. PLOTTED/REVISED: 11/18/2025 7:57:57 AM

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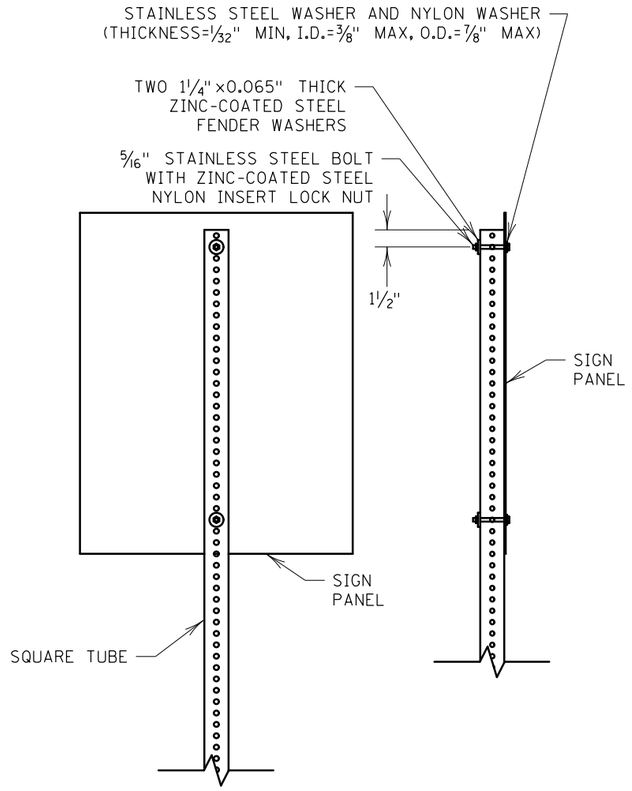
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

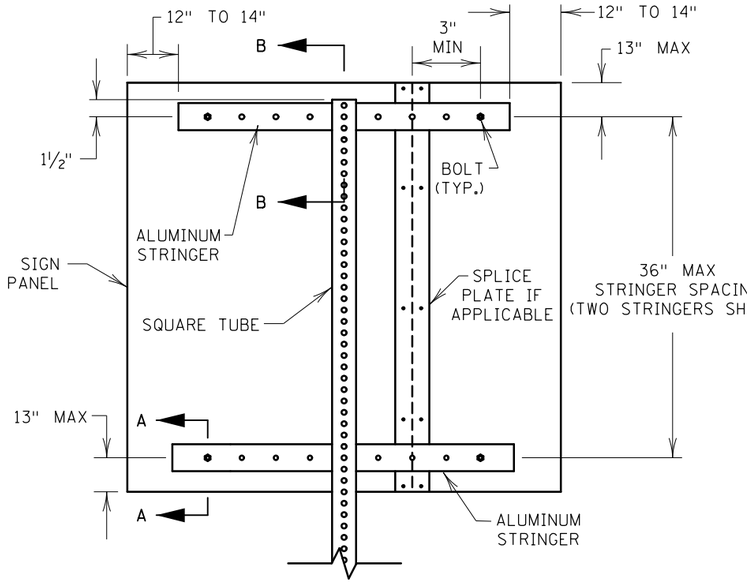
STA 196+00 TO STA 197+77.02
SIGNING PLAN

SAP 002-622-037

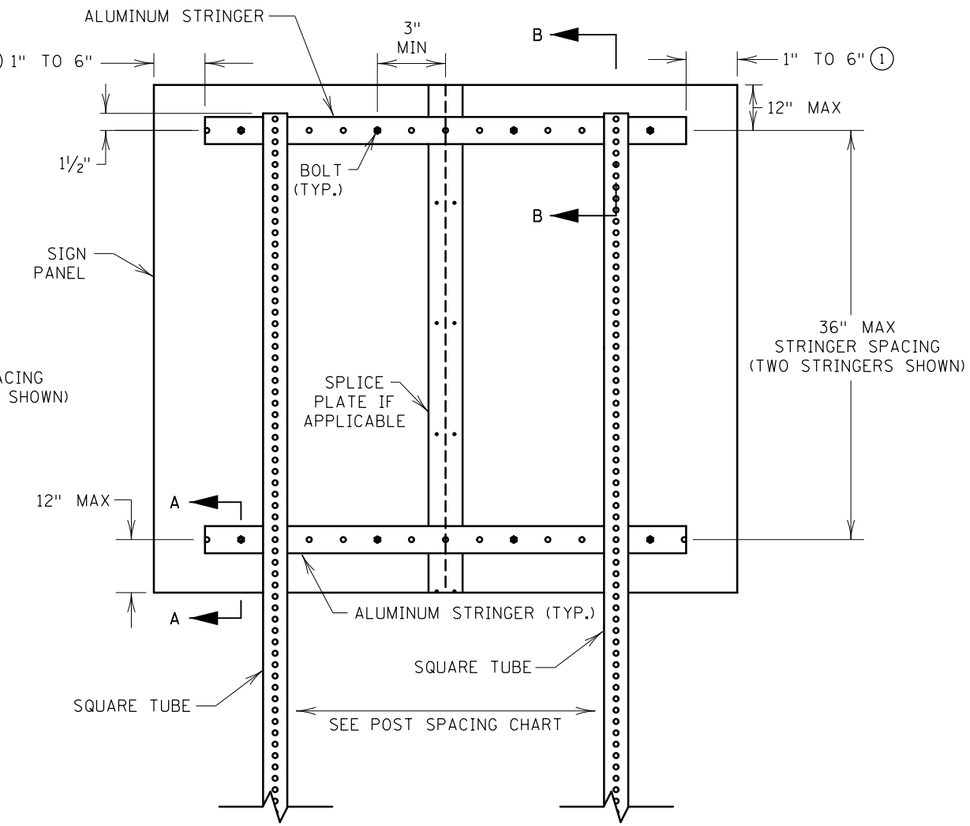
Sheet No. 116 of 138 Sheets



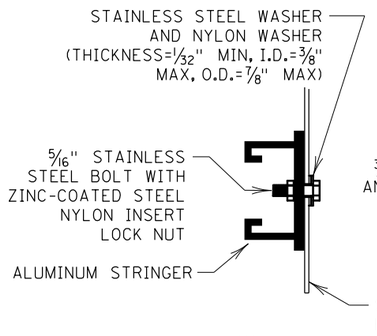
FOR SIGN PANELS UP TO 30" WIDE



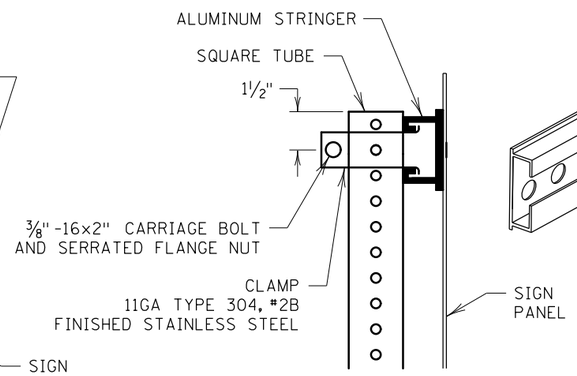
FOR SIGN PANELS 36" WIDE OR GREATER ON ONE POST



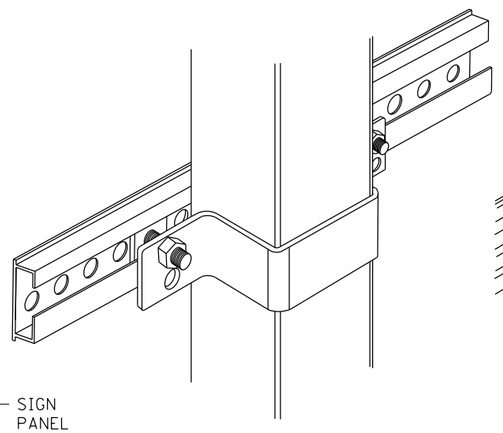
FOR SIGN PANELS ON TWO OR MORE POSTS



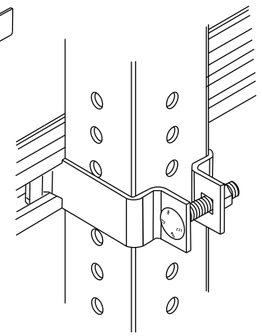
VIEW A-A



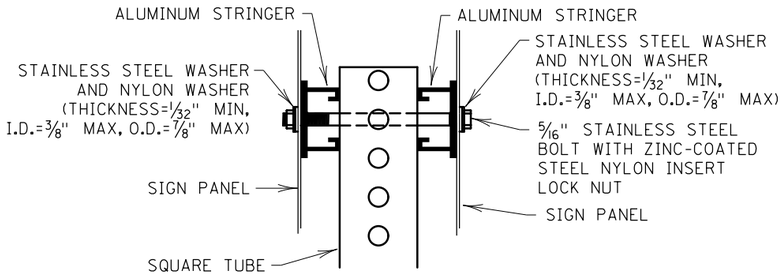
VIEW B-B



CLAMP DETAIL
4" SQUARE TUBE



CLAMP DETAIL
2" AND 2 1/2" SQUARE TUBE



BACK-TO-BACK SIGN MOUNTING WITH STRINGERS

NOTES:

BOLT SIGN PANELS TO STRINGERS OR RISER POSTS AT NO GREATER THAN 24" SPACING OR ACCORDING TO THE MNDOT STANDARD SIGNS AND MARKINGS MANUAL FOR MOUNTING HOLES (PUNCH CODES) INFORMATION.

CENTER STRINGERS ON SIGN PANEL.

(1) IF POST SPACING REQUIRES PLACEMENT OF A POST WITHIN THIS AREA, EXTEND STRINGERS AS NEEDED TO ACCOMMODATE THE STRINGER TO POST CLAMP.

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn . PLOTTED/REVISED: 11/18/2025 7:57:58 AM

DRAWN BY:	BC
DESIGNED BY:	MF
CHECKED BY:	MF

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DATE: 11/18/2025 LIC. NO. 58640

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

SQUARE-TUBE SIGN MOUNTING DETAILS
SIGNING PLAN

SAP 002-622-037

Sheet No. 117 of 138 Sheets

PANEL WIDTH	SQUARE TUBE POST SPACING						
	2 POSTS	3 POSTS	4 POSTS	5 POSTS	6 POSTS	7 POSTS	8 POSTS
(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)
42	15						
48	21						
54	30						
60	36						
66	36						
72	42						
78	42						
84	48						
90	48	42					
96	48	42					
102	54	42					
108	54	42					
114	60	42					
120	60	48					
126	66	48					
132	66	48	42				
138	72	48	42				
144	72	48	42				
150	78	54	42				
156	78	54	42				
162	84	54	42				
168	84	60	48				
174	90	60	48	42			
180	90	60	48	42			
186	96	66	48	42			
192	96	66	48	42			
198	102	66	54	42			
204	102	72	54	42			
210	108	72	54	42			
216	108	72	54	48	42		
222	114	78	60	48	42		
228	114	78	60	48	42		
234	120	78	60	48	42		
240	120	84	60	48	42		
246		84	66	54	42		
252		84	66	54	42		
258		90	66	54	42	42	
264		90	66	54	48	42	
270		90	72	54	48	42	
276		96	72	60	48	42	
282		96	72	60	48	42	
288		96	72	60	48	42	
294		102	78	60	54	42	
300		102	78	60	54	42	42
306		102	78	66	54	42	42
312		108	78	66	54	48	42
318		108	84	66	54	48	42
324		108	84	66	54	48	42
330		114	84	66	60	48	42
336		114	84	72	60	48	42

DISTANCES ARE CENTER-TO-CENTER OF POSTS

NUMBER OF ALUMINUM STRINGERS FOR 2½" OR SMALLER POSTS

PANEL HEIGHT (INCHES)	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324	330	336
120	0	0	0	0	4	4	4	4	4					4																																														
114	0	0	0	0	4	4	4	4	4	4				4	4																																													
108	0	0	0	0	4	4	4	4	4	4	4			4	4	4					4	4																																							
102	0	0	0	0	4	4	4	4	4	4	4			4	4	4	4	4	4			4	4	4	4				4	4	4					4	4																						
96	0	0	0	0	3	3	3	3	3	3	3	3		3	3	3	3	3	3		3	3	3	3	3	3		3	3	3	3	3	3		3	3	3	3	3																			
90	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3							
84	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
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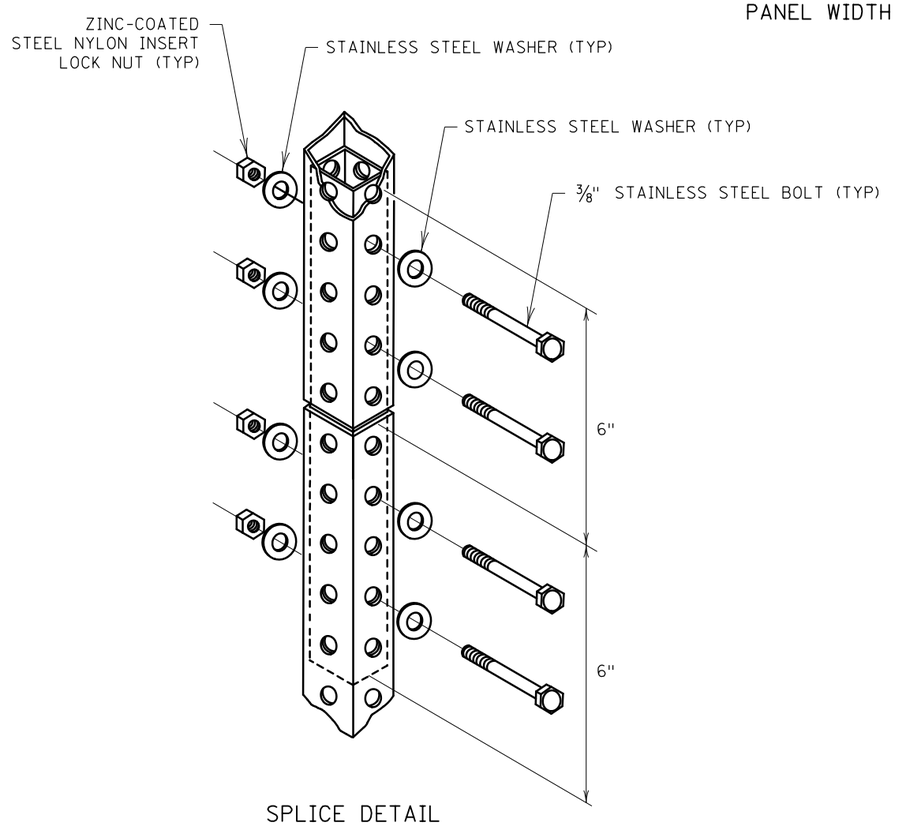
PANEL WIDTH (INCHES)

1 POST | 2 POST | 3 POST | 4 POST | 5 POST | 6 POST



SPLICE DETAIL

NOTES:

NO MORE THAN ONE SPLICE PER POST.

WHEN USED, THE SPLICE MUST BE PLACED AT LEAST 8' ABOVE GROUND. THE PREFERRED PLACEMENT LOCATION IS BEHIND THE SIGN PANEL.

INTERIOR POST STUD SHALL BE ONE SIZE SMALLER FOR TIGHT FIT. IF RISER POST IS 2½", INTERIOR POST IS 2³⁄₁₆". IF RISER POST IS 2", INTERIOR POST IS 1¾".

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn
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DATE: 11/18/2025 LIC. NO. 58640

wsb

ANOKA COUNTY

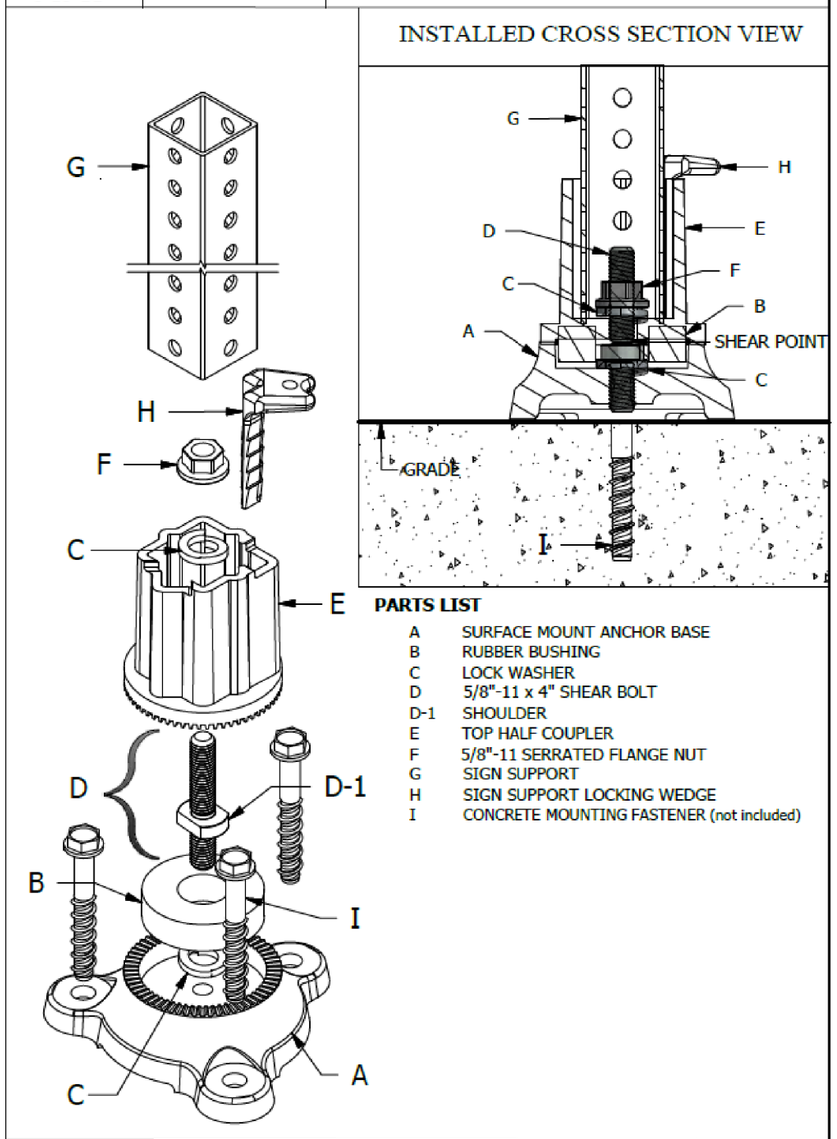
CSAH 22 (Baugh Street NW) Reconstruction

SQUARE-TUBE SIGN MOUNTING DETAILS
SIGNING PLAN

SAP 002-622-037

CONCRETE SURFACE SIGN INSTALLATION
SHIM WASHERS LESS THAN 1/2"

DATE:	
8-13-21	



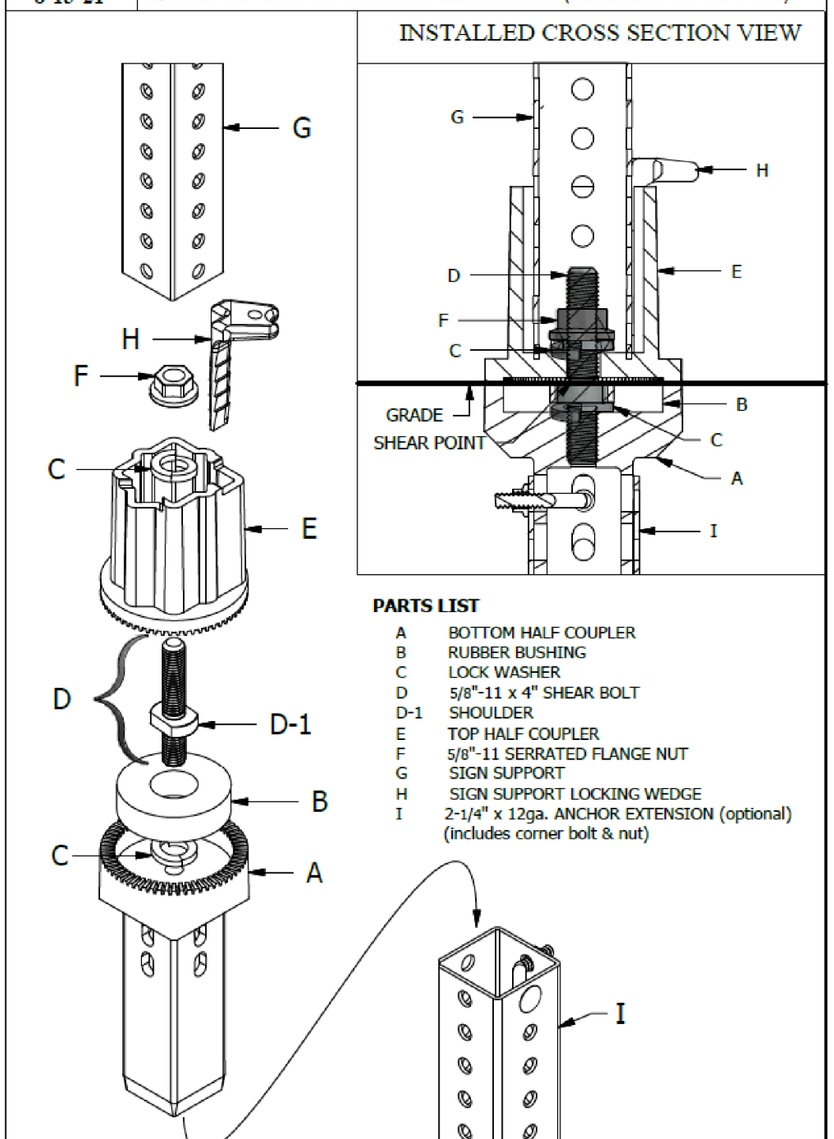
PARTS LIST

A	SURFACE MOUNT ANCHOR BASE
B	RUBBER BUSHING
C	LOCK WASHER
D	5/8"-11 x 4" SHEAR BOLT
D-1	SHOULDER
E	TOP HALF COUPLER
F	5/8"-11 SERRATED FLANGE NUT
G	SIGN SUPPORT
H	SIGN SUPPORT LOCKING WEDGE
I	CONCRETE MOUNTING FASTENER (not included)

KLEEN BREAK MODEL 425 FOR **SURFACE MOUNT CONCRETE INSTALLATIONS**
SQUARE POST SIGN SUPPORT INSTALLATION INSTRUCTIONS (RECEIVES 1- 3/4"& 2" SQUARE POST)

CONCRETE SURFACE SIGN INSTALLATION
SHIM WASHERS 1/2" OR MORE

DATE:	**KLEEN BREAK MODEL 425** FOR **CONCRETE INSTALLATIONS**
8-13-21	SQUARE POST SIGN SUPPORT INSTALLATION INST. (RECEIVES 1- 3/4"& 2" POST)



PARTS LIST

A	BOTTOM HALF COUPLER
B	RUBBER BUSHING
C	LOCK WASHER
D	5/8"-11 x 4" SHEAR BOLT
D-1	SHOULDER
E	TOP HALF COUPLER
F	5/8"-11 SERRATED FLANGE NUT
G	SIGN SUPPORT
H	SIGN SUPPORT LOCKING WEDGE
I	2-1/4" x 12ga. ANCHOR EXTENSION (optional) (includes corner bolt & nut)

TO BE USED WHEN SHIMS WASHERS ARE MORE THAN 1/2"

DRAWN BY:	BC
DESIGNED BY:	MF
CHECKED BY:	MF

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Mallori Fitzpatrick
PRINTED NAME: MALLORI FITZPATRICK, PE
DATE: 11/18/2025 LIC. NO. 58640

wsb

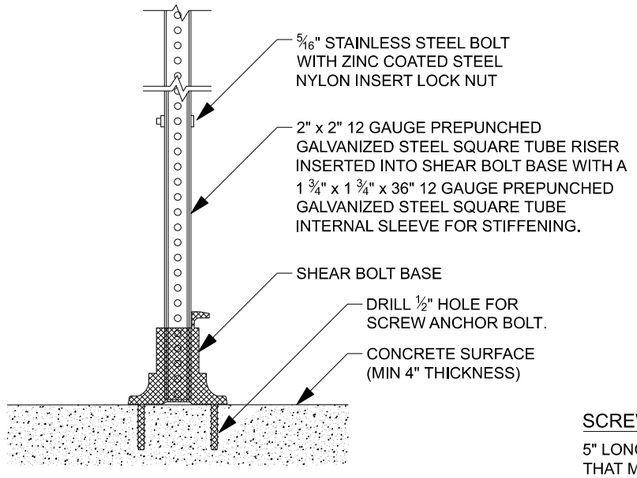
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

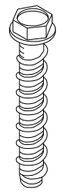
SHEAR BOLT BASE DETAIL
SIGNING PLAN

SAP 002-622-037

PLOTTED/REVISED: 11/18/2025 7:58:02 AM
PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-4400sgn-001.dgn

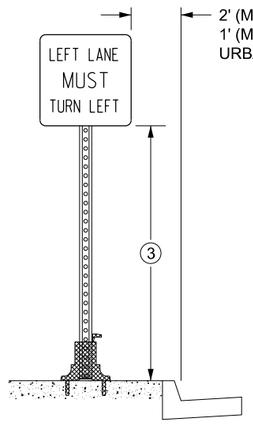


SHEAR BOLT BASE MOUNTED
CONCRETE SURFACE

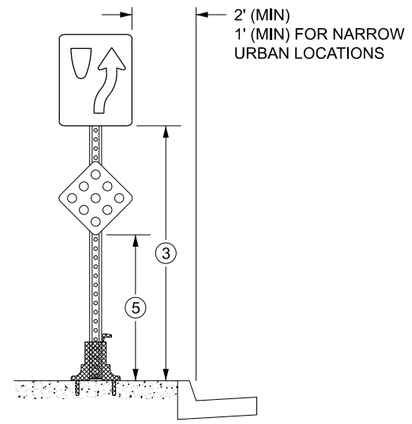


SCREW ANCHOR BOLT

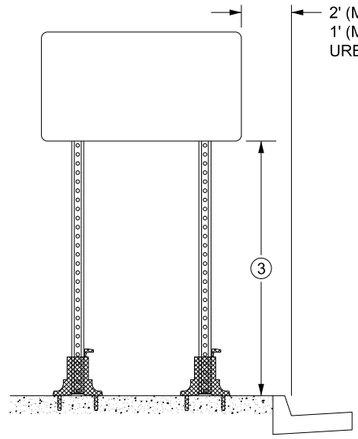
5" LONG CARBON STEEL
THAT MUST MEET A MINIMUM
ALLOWABLE TENSION LOAD
OF 2270 PSI.



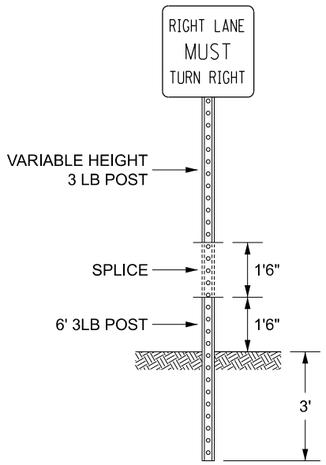
SHEAR BOLT BASE
CONCRETE SURFACE



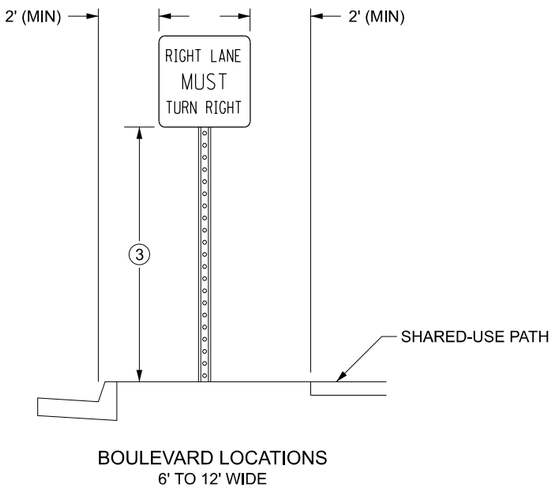
KEEP RIGHT & TYPE ONE OBJECT MARKER
SHEAR BOLT BASE
CONCRETE SURFACE



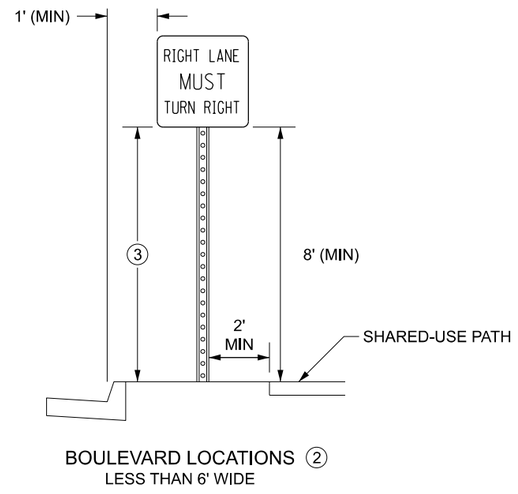
2-POST FOR SIGNS 66"-126" WIDE
SHEAR BOLT BASE
CONCRETE SURFACE



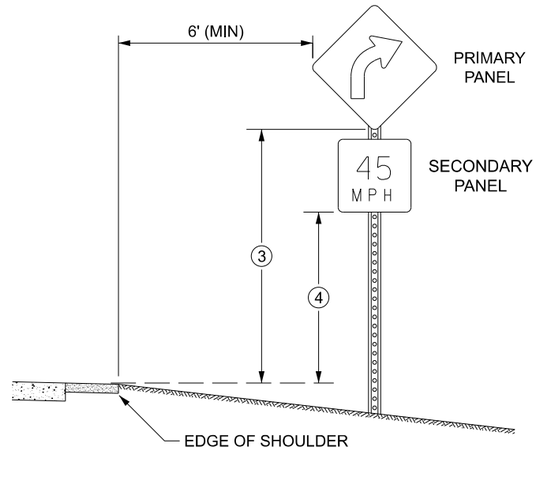
U-CHANNEL POST
SOIL SURFACE



BOULEVARD LOCATIONS
6' TO 12' WIDE



BOULEVARD LOCATIONS ②
LESS THAN 6' WIDE



SHEAR BOLT BASE NOTES:

1. INSTALLATION OF SHEAR BOLT BASE MUST NOT BE EARLIER THAN 3 DAYS AFTER CONCRETE IS PLACED.
2. FOR SHEAR BOLT BASE USE APPROVED PRODUCT FROM MnDOT APPROVED PRODUCTS LIST.
3. USE ANTI-SEIZE ON THE SHEAR BOLT CONNECTIONS.
4. FOR SIGN MOUNTING DETAILS SEE SQUARE TUBE SIGN MOUNTING DETAILS.
5. SQUARE TUBE SIGN POSTS PER MnDOT SPEC. 3402.

NOTES:

1. ALL DIMENSIONS ARE MINIMUMS.

② USE ONLY WHEN BOULEVARD IS TOO NARROW TO OBTAIN ADEQUATE SIGN OFFSETS.

③ MOUNTING HEIGHT (PRIMARY PANEL):
- 5 FEET IN RURAL AREAS.
- 7 FEET IN BUSINESS, COMMERCIAL OR RESIDENTIAL AREAS WITH PARKING OR PEDESTRIANS AND IN SIDEWALK AREAS.
- 8 FEET WHEN SIGN IS MOUNTED ABOVE OR WITHIN 2 FEET OF A SHARED-USE PATH.

④ SECONDARY PANEL MOUNTING HEIGHT MAY BE ONE FOOT LESS THAN THAT SHOWN IN NOTE 3.

⑤ OBJECT MARKER MAY BE INSTALLED AT A MININUM 4 FEET.

DRAWN BY:	BC
DESIGNED BY:	MF
CHECKED BY:	MF

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SIGNATURE: Mallori Fitzpatrick
PRINTED NAME: MALLORI FITZPATRICK, PE
DATE: 11/18/2025 LIC. NO. 58640

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

SIGN INSTALLATION AND PLACEMENT DETAIL
SIGNING PLAN

SAP 002-622-037

Sheet No. 120 of 138 Sheets

PAVEMENT MARKING TABULATION

O

LOCATION	4" DOUBLE SOLID YELLOW LINE PAINT (2)	PAVEMENT MARKING - LATE SEASON	MULTI-COMPONENT (1)				PREFORM THERMOPLASTIC		
			4" SOLID LINE		4" BROKEN LINE	4" DOUBLE SOLID LINE	PAVEMENT MESSAGE		24" SOLID LINE GROUND IN
			WHITE	YELLOW	YELLOW	YELLOW	LEFT ARROW	RIGHT ARROW	YELLOW
	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	SQ FT	SQ FT	LIN FT
CSAH 22 (BAUGH STREET NW)									
STA 100+52.18 TO STA 112+00	580	4344	2645	449	90	580			
STA 112+00 TO STA 124+00		3260	2610	410	240				
STA 124+00 TO STA 136+00	1757	6492	2888	75	15	1757	31		145
STA 136+00 TO STA 148+00		3275	2587	448	240				
STA 148+00 TO STA 160+00	985	5390	2841	482	97	985	31		116
STA 160+00 TO STA 172+00	732	4560	2427	500	169	732			40
STA 172+00 TO STA 184+00	829	4936	2631	500	147	829	16	16	40
STA 184+00 TO STA 196+00	1390	5875	3095			1390	47	47	31
STA 196+00 TO STA 197+77.02	935	3711	1841			935			
SAP 002-622-037 SUBTOTAL	**7208**	**41843**	**23565**	**2864**	**998**	**7208**	**125**	**63**	**372**
PROJECT TOTAL	**7208**	**41843**	**26429**		**998**	**7208**	**188**		**372**

NOTES:
(1) PAID AS PAVEMENT MARKING - LATE SEASON BY THE LIN FT
(2) PAID AS INTERIM PAVEMENT MARKING

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-430pmp-001.dgn . PLOTTED/REVISED: 11/19/2025 10:45:01 AM

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CHECKED BY:	MF

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DATE: 11/19/2025 LIC. NO. 58640

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ANOKA COUNTY

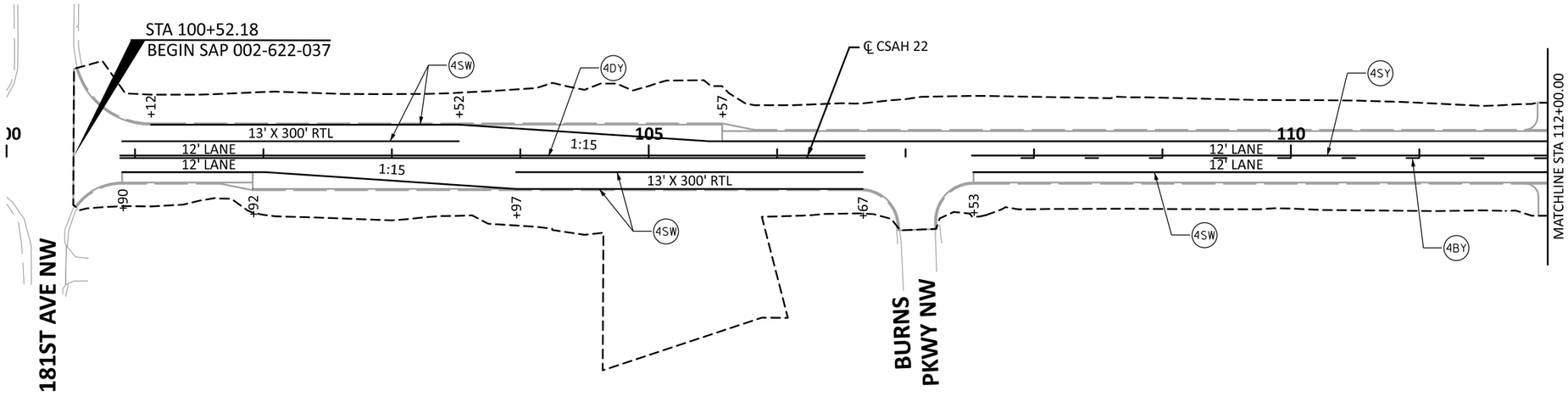
CSAH 22 (Baugh Street NW) Reconstruction

TABULATION
PAVEMENT MARKING PLAN

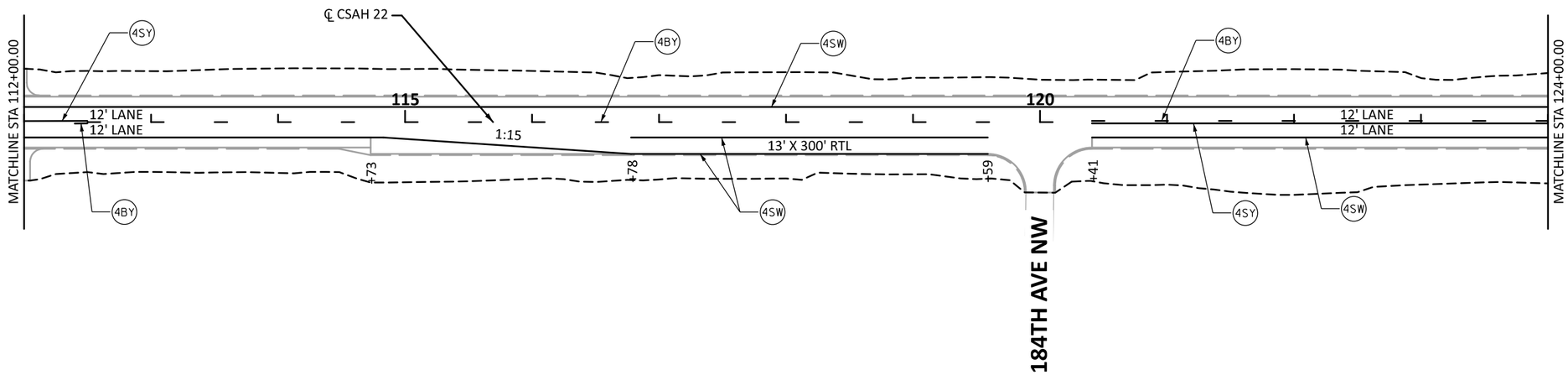
SAP 002-622-037

PATH & FILENAME: Projects\Minnesota\026054-000\430pmp-001.dgn
PLOTTED/REVISED: 11/18/2025 7:58:46 AM

CSAH 22 (Baugh Street NW)

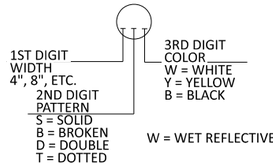


CSAH 22 (Baugh Street NW)



LEGEND

- CIRCLE - MULTI COMP
- SQUARE - PREF THERMO
- ARROWS - PREF THERMO
- G GROUND IN



EXAMPLE: 4SW / G = 4" SOLID LINE WHITE - MULTI-COMP GROUND IN

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DESIGNED BY:	MF
CHECKED BY:	MF

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DATE: 11/18/2025 LIC. NO. 58640

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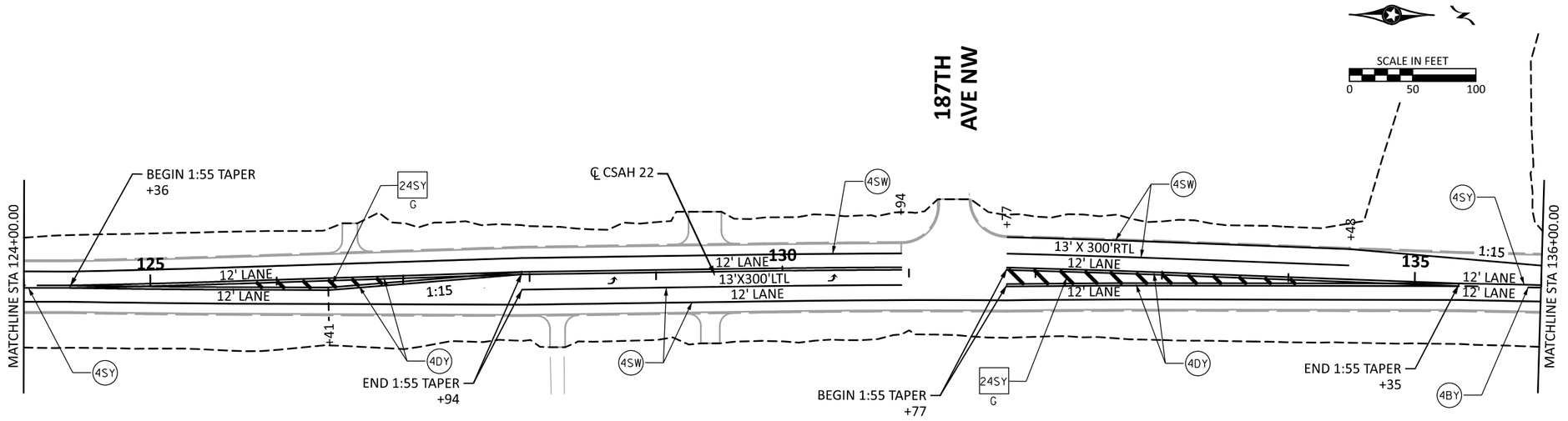
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

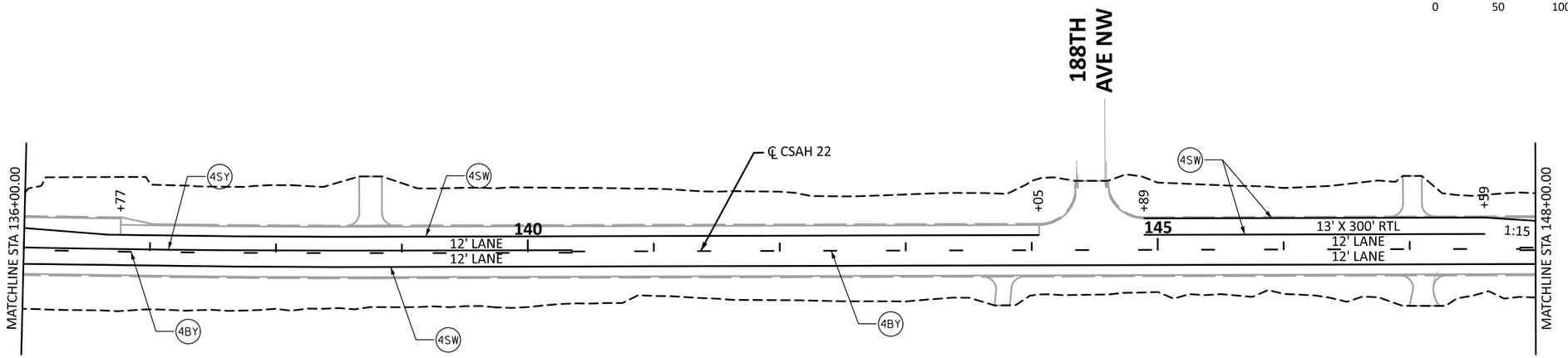
STA 100+52.18 TO STA 124+00
PAVEMENT MARKING PLAN

SAP 002-622-037

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- CIRCLE - MULTI COMP
- SQUARE - PREF THERMO
- ARROWS - PREF THERMO
- G GROUND IN

1ST DIGIT WIDTH 4", 8", ETC.
2ND DIGIT PATTERN
S = SOLID
B = BROKEN
D = DOUBLE
T = DOTTED
3RD DIGIT COLOR
W = WHITE
Y = YELLOW
B = BLACK
W = WET REFLECTIVE

EXAMPLE: 4SW G = 4" SOLID LINE WHITE - MULTI-COMP GROUND IN

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-430pmp-001.dgn
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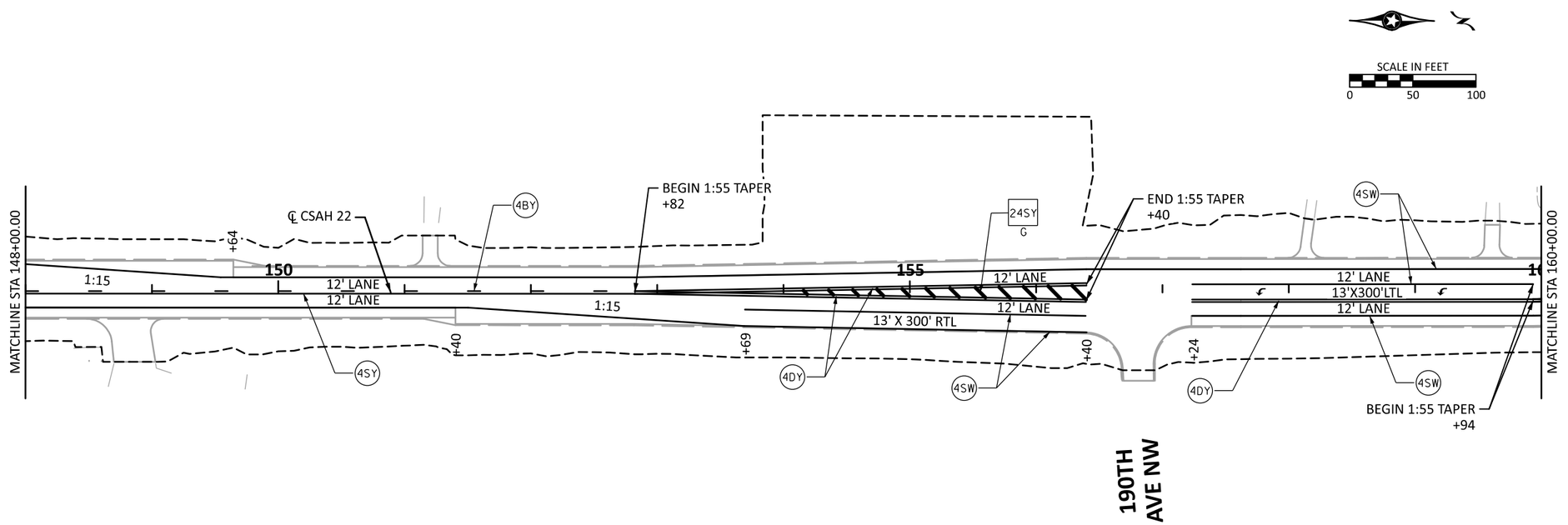
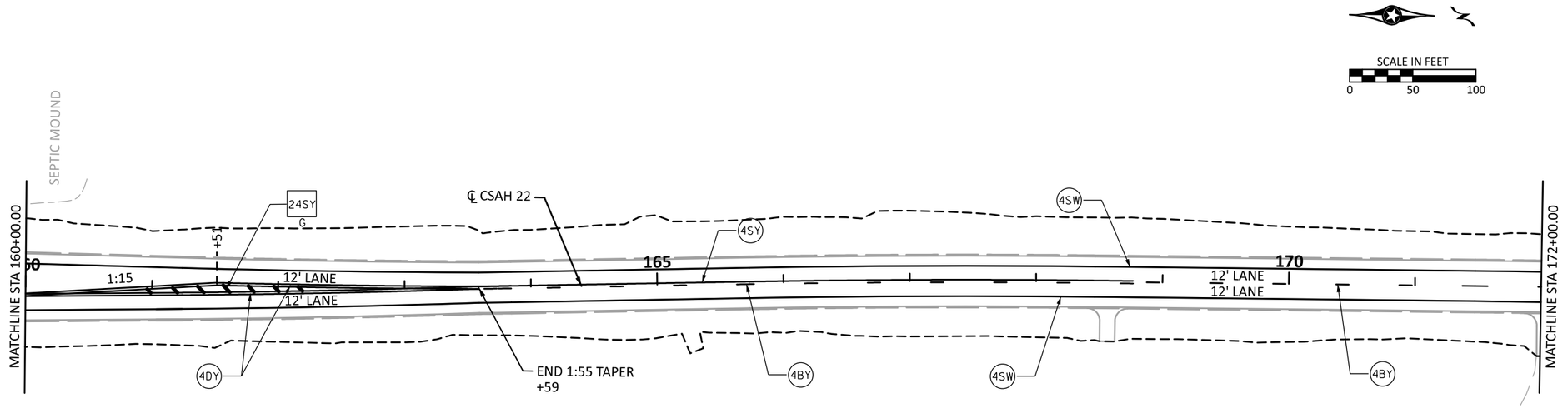
CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- CIRCLE - MULTI COMP
- SQUARE - PREF THERMO
- ARROWS - PREF THERMO
- G GROUND IN

1ST DIGIT WIDTH 4", 8", ETC.
2ND DIGIT PATTERN
S = SOLID
B = BROKEN
D = DOUBLE
T = DOTTED
3RD DIGIT COLOR
W = WHITE
Y = YELLOW
B = BLACK
W = WET REFLECTIVE

EXAMPLE: 4SW / G = 4" SOLID LINE WHITE - MULTI-COMP GROUND IN

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SIGNATURE: Mallori Fitzpatrick
PRINTED NAME: MALLORI FITZPATRICK, PE
DATE: 11/18/2025 LIC. NO. 58640

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 172+00
PAVEMENT MARKING PLAN

SAP 002-622-037

Sheet No. 124 of 138 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-430pmp-001.dgn
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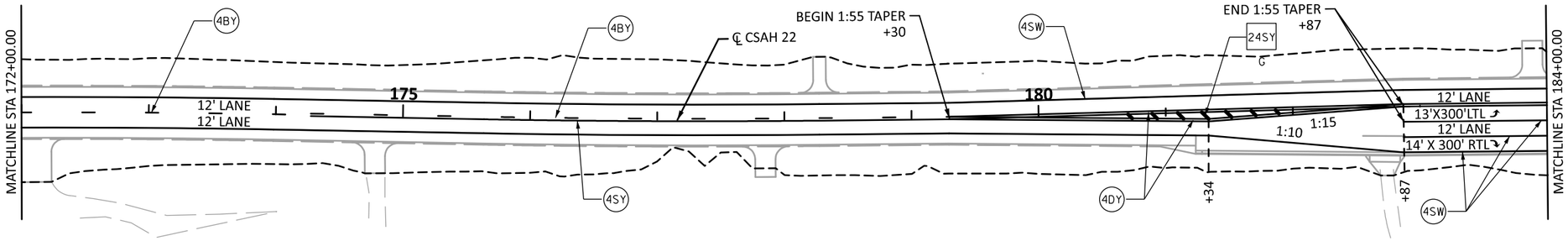
CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

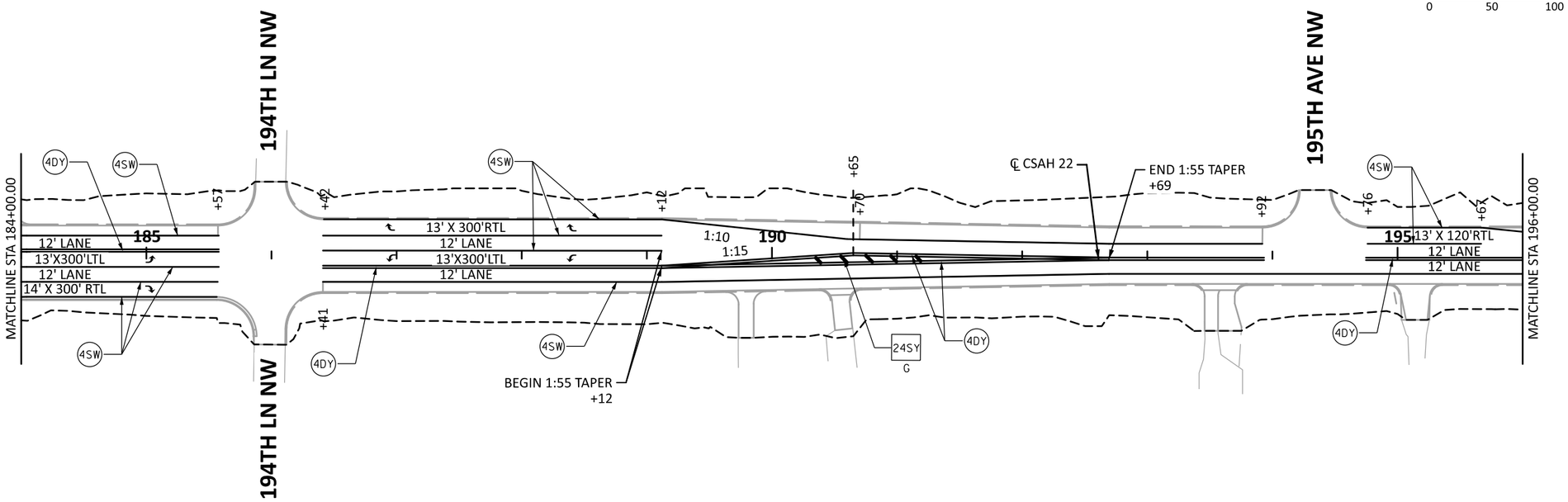
LEGEND

- CIRCLE - MULTI COMP
- SQUARE - PREF THERMO
- ARROWS - PREF THERMO
- G GROUND IN

1ST DIGIT WIDTH 4", 8", ETC.
2ND DIGIT PATTERN
S = SOLID
B = BROKEN
D = DOUBLE
T = DOTTED
3RD DIGIT COLOR
W = WHITE
Y = YELLOW
B = BLACK
W = WET REFLECTIVE

EXAMPLE: 4SW / G = 4" SOLID LINE WHITE - MULTI-COMP GROUND IN

CSAH 22 (Baugh Street NW)



SCALE IN FEET
0 50 100

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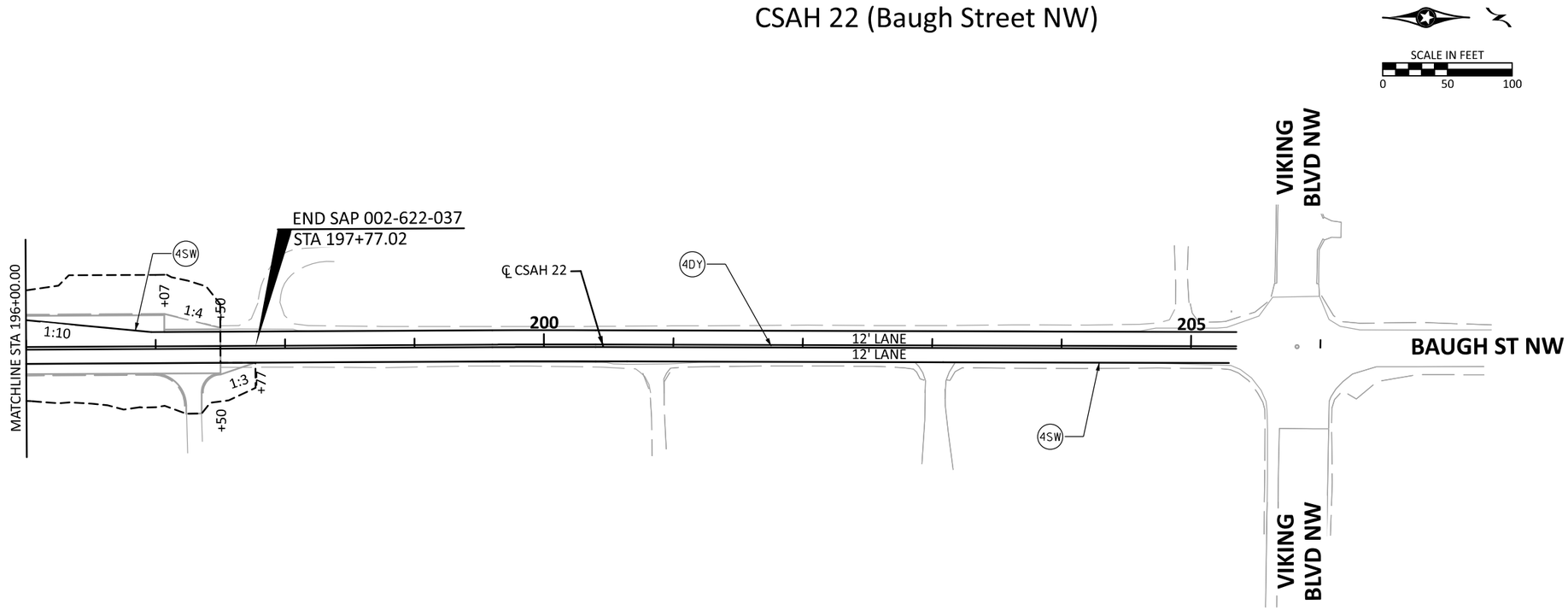
CSAH 22 (Baugh Street NW)



LEGEND

- CIRCLE - MULTI COMP
- SQUARE - PREF THERMO
- ARROWS - PREF THERMO
- G GROUND IN

1ST DIGIT WIDTH 4", 8", ETC.
2ND DIGIT PATTERN
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3RD DIGIT COLOR
W = WHITE
Y = YELLOW
B = BLACK
W = WET REFLECTIVE

EXAMPLE: 4SW / G = 4" SOLID LINE WHITE - MULTI-COMP GROUND IN

PATH & FILENAME: Projects\Minnesota\026054-000\430pmp-001.dgn
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DATE: 11/18/2025 LIC. NO. 58640

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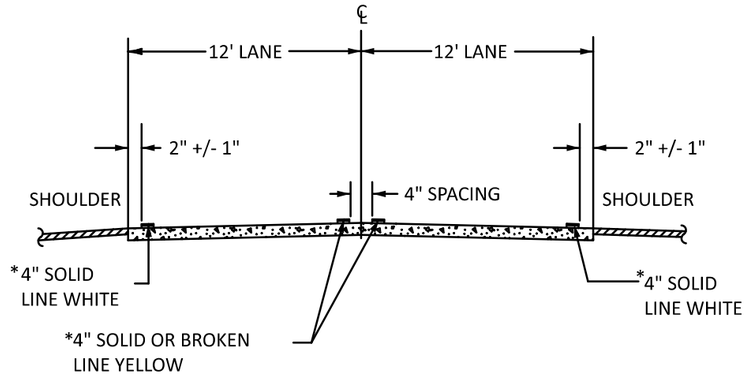
ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

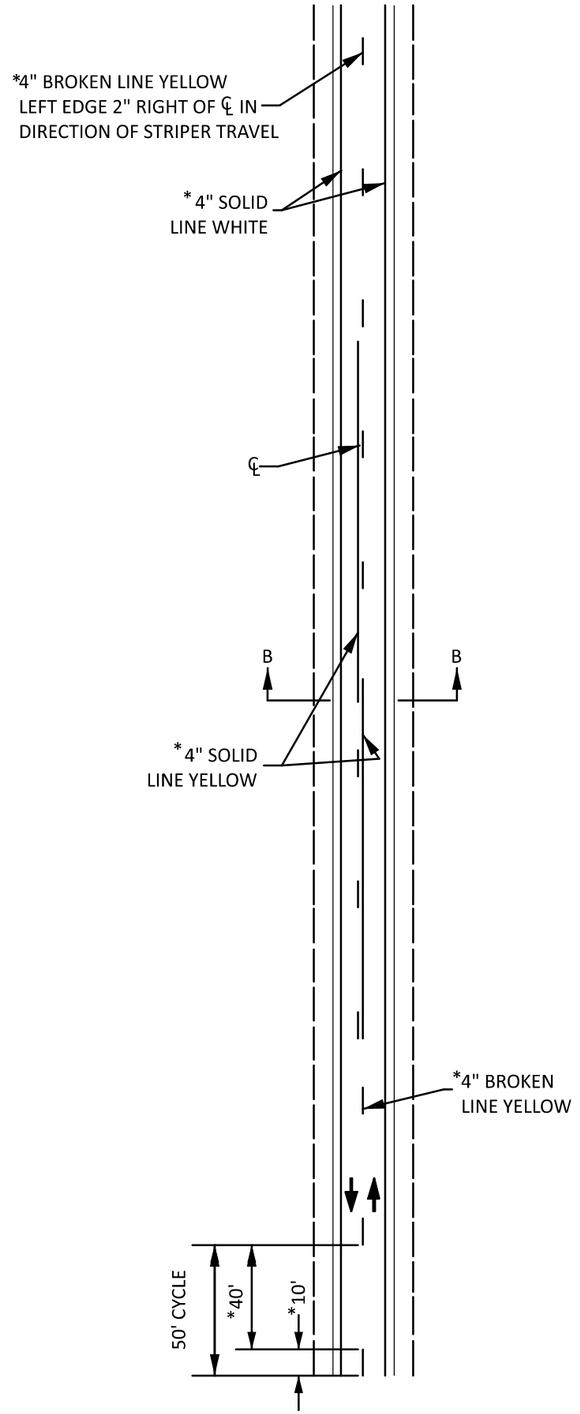
STA 196+00 TO STA 197+77.02
PAVEMENT MARKING PLAN

SAP 002-622-037

TWO-LANE, TWO-WAY



SECTION B-B



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PLOTTED/REVISED: 11/18/2025 7:58:51 AM

PUBLISHED BY OTE: 26 SEPT 2024	MODIFIED: 16 JAN 2025				
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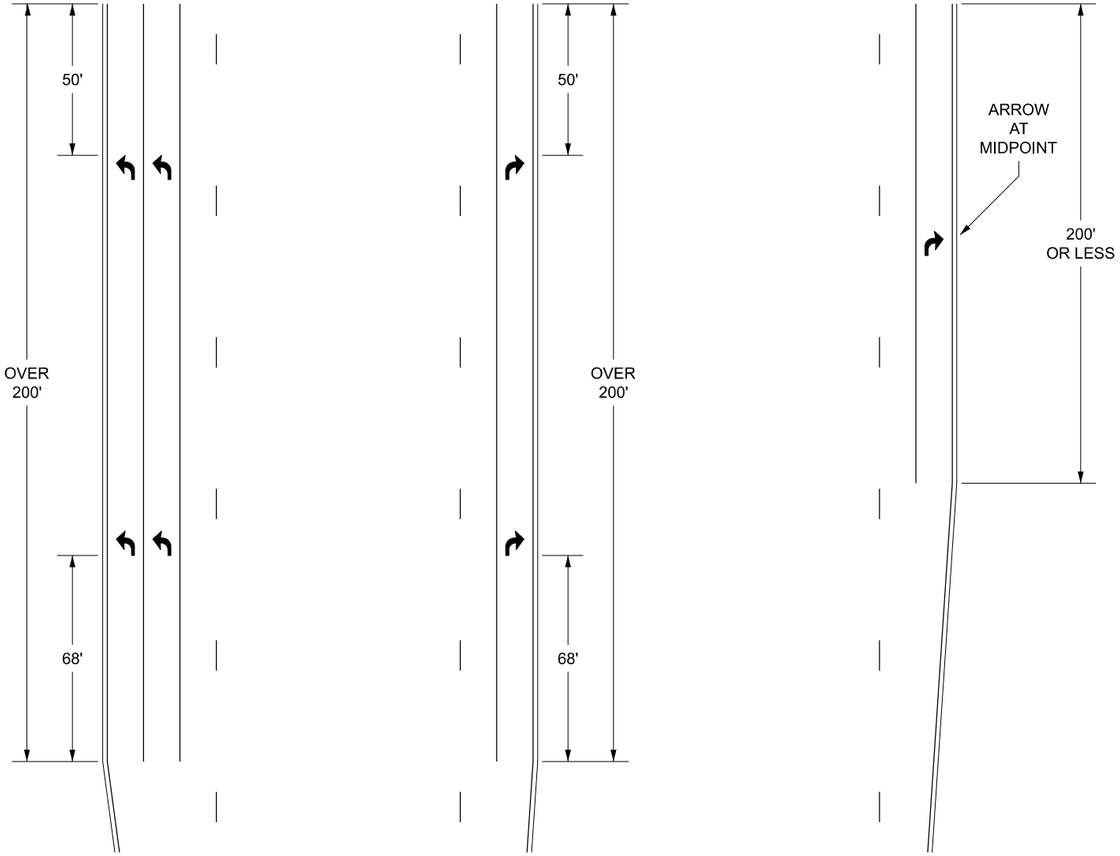
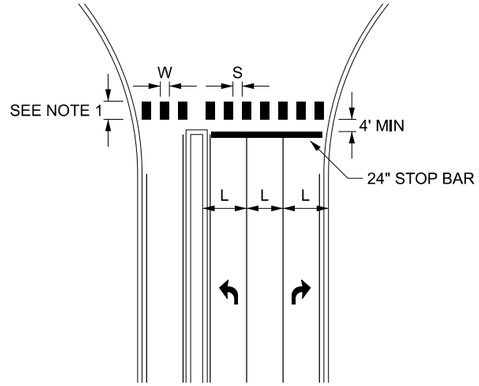
PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-430pmp-001.dgn
PLOTTED/REVISED: 11/18/2025 7:58:52 AM

TURN LANE ARROW PLACEMENT

ONLY AT SIGNALS OR LOCATIONS WITH LANE DESIGNATION SIGNS

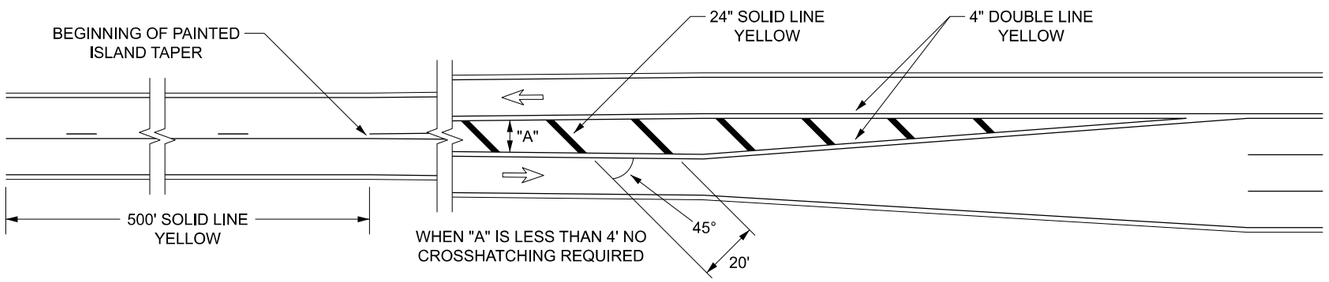


PEDESTRIAN CROSSWALK



(L) WIDTH OF INSIDE LANE	(W) WIDTH OF PAINTED AREAS	(S) WIDTH OF SPACE
9'	2.0'	2.5'
10'	2.5'	2.5'
11'	2.5'	3.0'
12'	3.0'	3.0'
13'	3.0'	3.5'

LEFT TURN ISLAND MARKINGS



CROSSWALK NOTES:

1. THE BLOCKS SHALL BE A MINIMUM OF 6' AND AT LEAST AS LONG AS THE TRUNCATED DOMES. FOR FANNED TRUNCATED DOMES THE BLOCKS SHALL BE AT LEAST AS LONG AS THE APPROACHING SIDEWALK OR SHARED-USE PATH.
2. BLOCKS TO BE CENTERED ON CENTERLINE AND LANE LINES.
3. A MINIMUM OF 1.5' CLEAR DISTANCE SHALL BE LEFT ADJACENT TO THE CURB FACE. IF BLOCK FALLS INTO THIS DISTANCE IT MUST BE OMITTED.
4. ON TWO LANE TWO WAY STREETS, USE SPACING SHOWN FOR AN 11' INSIDE LANE.
5. FOR DIVIDED ROADWAYS, ADJUSTMENTS IN SPACING OF THE BLOCKS SHOULD BE MADE IN THE MEDIAN SO THAT THE BLOCKS ARE MAINTAINED IN THEIR PROPER LOCATION ACROSS THE TRAVELED PORTION OF THE ROADWAY.
6. AT SKEWED CROSSWALKS, THE BLOCKS ARE TO REMAIN PARALLEL TO THE LANE LINES.
7. THE BLOCKS SHALL BE PLACED SO THAT THEY ARE NOT LOCATED IN THE WHEEL PATH OF THE VEHICLES.
8. LOCATION OF CROSSWALK BLOCKS, STOP BARS, SIGNAL LOOPS AND PEDESTRIAN RAMPS ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED AND FIELD VERIFIED DURING CONSTRUCTION BY THE FIELD ENGINEER.

DRAWN BY: BC DESIGNED BY: MF CHECKED BY: MF	I HEREBY CERTIFY THAT THIS SHEET 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.	SIGNATURE: Mallori Fitzpatrick PRINTED NAME: MALLORI FITZPATRICK, PE DATE: 11/18/2025 LIC. NO. 58640	wsb	ANOKA COUNTY **CSAH 22 (Baugh Street NW) Reconstruction**	DETAILS PAVEMENT MARKING PLAN	SAP 002-622-037 Sheet No. 128 of 138 Sheets

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

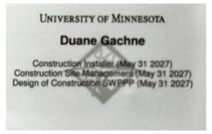
PROJECT NAME: CSAH 22 (BAUGH STREET NW) RECONSTRUCTION **PROJECT NUMBER**: SAP 002-622-037; WSB 026054-000
PROJECT LOCATION: STREET: BAUGH STREET NW CITY: NOWTHEN COUNTY: ANOKA
STATE: MINNESOTA ZIP: 55303 LATITUDE/LONGITUDE: 45.3163, -93.5005

THE PLANNED SCOPE OF THE PROJECT INCLUDES:
ANOKA COUNTY IS PROPOSING TO RECONSTRUCT CSAH 22 AN EXISTING RURAL 2 LANE ROADWAY WITHOUT SHOULDERS. THE ROADWAY WILL BE RECONSTRUCTED BY ADDING 8' PAVED SHOULDERS; RIGHT TURN LANES AT ALL SIDE STREETS; LEFT TURN LANES AT 187TH AVE NW, 190TH AVE NW, AND 194TH LN NW; GRADE DITCHES AND REPLACE ALL CULVERTS; AND CONSTRUCT THREE STORMWATER BASINS.

TENTATIVE CONSTRUCTION SCHEDULE (OPERATOR SHOULD PROVIDE ESTIMATED CONSTRUCTION SCHEDULE TO THE ENGINEER)	
CONSTRUCTION ACTIVITIES:	ESTIMATED DATES OF SOIL DISTURBANCE ACTIVITIES:
TEMPORARY SEDIMENT CONTROL BMPS & REMOVALS	MAY 2026
GRADING & UTILITY WORK	JUNE - JULY 2026
CURB & PAVEMENT	AUG - SEPT 2026
FINAL STABILIZATION	NOV 2026

PROJECT PERSONNEL AND TRAINING

SWPPP DEVELOPER:
WSB (DUANE GACHNE)
3701 40TH AVE NW SUITE 100
ROCHESTER, MN, 55901
507-910-2983/DGACHNE@WSBENG.COM



CONTRACTOR TO PROVIDE CERTIFICATION OF EROSION CONTROL OFFICER AND ANY OTHER CREW MEMBERS WHO WILL WORK ON THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING, AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

CHAIN OF RESPONSIBILITY

ANOKA COUNTY AND THE CONTRACTOR ARE CO-PERMITTEES FOR THE NPDES CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION PERMIT AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA.

NAME	COMPANY	TITLE	PHONE
CHRIS OSTERHUS	ANOKA COUNTY	OWNER CONTACT	763-324-3189 CHRIS.OSTERHUS@ANOKACOUNTYMN.GOV
		CONTRACTOR CONTACT	
		ON SITE ESC INSPECTOR	

AGENCY CONTACTS

ORGANIZATION	CONTACT NAME	PHONE
MPCA (EMERGENCY) 24 HOUR	STATE DUTY OFFICER	1-800-422-0798
MPCA	MATT HOSKINS	651-757-2864
UPPER RUM RIVER WMO	JOHN WEST	612-414-3513
CITY OF NOWTHEN LGU	NIKKI MCDERMOND-SPIES (HAA)	763-852-0496
MNDNR ECO/WATERS	RYAN TOOT	651-259-5822

LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN SET AS WELL AS IN THE SPECIAL PROVISIONS, PROJECT MANUAL, MNDOT SPEC BOOK, OR ON FILE WITH THE PROJECT OWNER.

DESCRIPTION	LOCATION
TEMPORARY/PERMANENT EROSION CONTROL MEASURES	SHEET NO. 133 - 138
DIRECTION OF FLOW	SHEET NO. 133 - 138
CONSTRUCTION NOTES & STANDARD PLATES	SHEET NO. 11
DRAINAGE PLAN & CONSTRUCTION PLAN	SHEET NO. 54 - 62 ; 95 - 99
BMP TABULATION	SHEET NO. 8
STORMWATER CALCULATIONS	DRAINAGE REPORT & HYDRAULIC REPORT. AVAILABLE UPON REQUEST

RECEIVING WATERS

A SPECIAL AND IMPAIRED WATERS SEARCH WAS COMPLETED USING THE MPCA SEARCH ENGINE ON 07/29/2025. BASED ON THIS REVIEW, THERE ARE NO SPECIAL IMPAIRED WATERS (WITH CONSTRUCTION RELATED IMPAIRMENTS) LOCATED WITHIN ONE MILE OF, AND DOWNSTREAM OF, PROJECT DISCHARGE POINTS. THE FOLLOWING IS A LIST OF RECEIVING WATERS WITHIN ONE MILE OF THE PROJECT:

WATERBODY	IMPAIRMENT(S)
TROTT BROOK	N/A
ONSITE WETLANDS	N/A
ONSITE PONDS	N/A

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS, THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS AND EXISTING STORMWATER FACILITIES WITHIN AND NEAR THE PROJECT BOUNDARY. THERE IS A MAP OF KNOWN NATURAL RESOURCES ON THE LAST PAGE OF THE SWPPP NARRATIVE. AREAS OF ENVIRONMENTAL SENSITIVITY ARE ALSO CALLED OUT ON THE PLAN SHEETS.

SOIL TYPES

A PROJECT WIDE GEOTECHNICAL REPORT WAS COMPLETED DURING THE DESIGN PHASE. THE ANOKA COUNTY GEOLOGIC ATLAS INDICATES THE SURFICIAL GEOLOGY OF THE AREA IS A MIXTURE OF GLACIAL, LACUSTRINE, AND SWAMP DEPOSITS. THE GLACIAL DEPOSITS CONSIST OF UNSORTED MIXTURE OF SANDS, SILTS, AND CLAYSWITH SCATTERED COBBLES AND BOULDERS. THE LACUSTRINE DEPOSITS ARE CHIEFLY SILTS AND CLAYS, WITH INTERMIXED SAND IN SOME PLACES. THE SWAMP DEPOSITS CONSIST OF PARTIALLY DECOMPOSED PLANT MATTER MIXED WITH THE SOIL. SOIL CLASSIFICATIONS FOR HIGHLY ERODIBLE LAND (HEL), POTENTIALLY HIGHLY ERODIBLE LAND (PHEL), AND NOT HIGHLY ERODIBLE LAND (NHEL) SOILS CAN BE FOUND ON *FIGURE 1. SWPPP RESOURCE MAP*.
NATIVE TOPSOIL WILL BE STRIPPED; IF MATERIAL NEEDS TO BE STOCKPILED, APPROPRIATE ACTION WILL TAKE PLACE TO ENSURE THE STOCKPILES HAVE ALL PROPER BMPS IN PLACE ACCORDING TO THIS SWPPP AND THE NPDES PERMIT.

ENVIRONMENTAL REVIEW

NO FORMAL ENVIRONMENTAL REVIEW WAS REQUIRED FOR THIS PROJECT.

WETLANDS: MITIGATION MEASURES ARE REQUIRED AS A RESULT OF WETLAND IMPACTS FROM THE PROJECT. A PROJECT WIDE WETLAND DELINEATION REPORT SHOWS SEVEN WETLANDS, AND TWENTY-ONE OTHER AQUATIC RESOURCES WERE DELINEATED WITHIN THE PROJECT AREA USING THE LEVEL 2 METHOD. MITIGATION MEASURES HAVE BEEN ADDRESSED VIA WETLAND BANKING. ALL WETLAND AREAS WILL BE PROTECTED WITH PERIMETER CONTROL AND A 50' NATURAL BUFFER (IF INFEASIBLE, REDUNDANT PERIMETER CONTROL MEASURES), INCLUDED AREAS THAT ARE PERMITTED TO BE FILLED AND/OR EXCAVATED UNTIL WORK IN THE PERMITTED AREAS ARE NECESSARY. REDUNDANT BMP MEASURES MUST BE PLACED 5' FROM THE INITIAL PERIMETER CONTROL MEASURE WITH A STABILIZED BUFFER STRIP BETWEEN THE BMPS.

THREATENED/ENDANGERED SPECIES: ANOKA COUNTY LISTS THE WHOOPING CRANE AS EXPERIMENTAL POPULATION NON-ESSENTIAL, THE MONARCH BUTTERFLY AND THE WESTERN REGAL FRITILLARY AS PROPOSED THREATENED SPECIES WITHIN THE COUNTY. BASED ON THE CONSTRUCTION ACTIVITIES, IT IS DETERMINED THAT THE PROJECT WILL HAVE NO EFFECT ON THESE SPECIES OR THEIR HABITATS. HOWEVER, IF THESE SPECIES ARE FOUND, CONTRACTOR TO STOP WORK IMMEDIATELY FOR FURTHER INVESTIGATION.

DRINKING WATER/WELLS: ACCORDING TO THE MDH, THE PROJECT IS NOT LOCATED WITHIN ANY DRINKING WATER SUPPLY MANAGEMENT AREA (DWSMA) OR NEAR ANY WELLHEAD PROTECTION AREAS.

CONTAMINATED PROPERTIES: THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DATABASE WAS REVIEWED ON 07/29/2025. THE RESULTS OF THIS REVIEW SHOW NO KNOWN CONTAMINATED PROPERTIES LOCATED ADJACENT TO THE PROJECT ALIGNMENT. THE DEPTH OF THE FULL RECLAMATION IS NOT PROPOSED TO UNEARTH ANY CONTAMINATED SOIL, CONTAMINATED WATER, AND/OR REGULATED WASTE. REFER TO MNDOT SPEC 1717.1.A. FOR POTENTIAL INDICATORS OF CONTAMINATED MATERIALS AND REGULATED WASTE. IF CONTAMINATED MATERIAL, CONTAMINATED WATER, AND/OR REGULATED MATERIALS ARE FOUND, CREWS ARE TO STOP WORK IMMEDIATELY FOR FURTHER INVESTIGATION/TESTING.

FLOOD CONTINGENCY PLAN: PROJECT ACTIVITIES ARE NOT LOCATED WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY; HOWEVER, THE PROJECT ENGINEER (AT THEIR DISCRETION) MAY REQUIRE A PREVENTATIVE FLOOD CONTINGENCY PLAN FOR SPECIFIC PROJECT ACTIVITIES AND AREAS IF SEASONAL PRECIPITATION POSSESS A POTENTIAL RISK OF FLOODING WORK AREAS WITHIN THE PROJECT LIMITS. THIS PLAN SHALL BE SUBMITTED BY THE OPERATOR TO THE PROJECT ENGINEER FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK AND/OR DURING ACTIVE WORK WITHIN THE AREA OF POTENTIAL RISK OF FLOODING. NO WORK CAN COMMENCE IN THE AREA UNTIL WRITTEN APPROVAL HAS BEEN GRANTED BY THE PROJECT ENGINEER.

FISH EXCLUSION DATES: OPERATOR IS PROHIBITED FROM CONDUCTING IN-WATER WORK DURING THE FISH SPAWNING AND MIGRATION DATES OF MARCH 15 TO JUNE 15 FOR NON-TROUT WATERS. IF WORK MUST BE CONDUCTING DURING THIS TIMEFRAME, CONTRACTOR SHALL CONTACT THE LOCAL DNR FISHERIES MANAGER FOR WRITTEN APPROVAL PRIOR TO CONDUCTING THE IN-STREAM WORK. EXPOSED SOILS WITHIN 200' OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, MUST RECEIVE STABILIZATION MEASURES IMMEDIATELY AND WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.

AQUATIC INVASIVE SPECIES: ALL IN-WATER, AND DEWATERING EQUIPMENT SHALL BE DECONTAMINATED OF ALL AQUATIC PLANTS AND PROHIBITED INVASIVE SPECIES PRIOR TO USING WITHIN SURFACE WATERS ON-SITE AND TRANSPORTING OFF-SITE. ALL DECONTAMINATION ACTIVITIES SHALL MEET THE CHAPTER 1 STANDARDS OF THE MINNESOTA DNR'S BEST PRACTICES MANUAL FOR MEETING DNR GENERAL PUBLIC WATERS WORK PERMIT GP 2004-0001.

LAND FEATURE CHANGES

TOTAL AREA TO BE DISTURBED = 21.826 ACRES
IMPERVIOUS AREA: PRE-CONSTRUCTION = 8.009 ACRES/POST-CONSTRUCTION = 11.196 ACRES
NET INCREASE OF IMPERVIOUS AREA = 3.187 ACRES

LONG TERM MAINTENANCE AND OPERATION:
THE NPDES PERMANENT STORMWATER TREATMENT SYSTEM (PART 15.1) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED IN THE THREE CONSTRUCTED STORMWATER RETENTION BASINS. ANOKA COUNTY STAFF IS RESPONSIBLE FOR THE LONG-TERM MAINTENANCE AND OPERATION OF THE PERMANENT STORMWATER SYSTEM.
IF A FULL VOLUME REDUCTION IS INFEASIBLE WITHIN THE PROJECT LIMITS, PERMITTEE MUST DOCUMENT REASONS WITHIN THE SWPPP.

STABILIZATION TIME FRAMES

AREA	TIME FRAME	NOTES
EXPOSED AREAS	IMMEDIATELY AND NO LATER THAN 14 DAYS OF BEING UNWORKED	1, 4, 5
LAST 200 LINEAL FEET OF DRAINAGE DITCH/SWALE	WITHIN 24 HOURS OF CONNECTION TO SURFACE WATER/PROPERTY EDGE	1, 2, 3
REMAINING PORTIONS OF DRAINAGE DITCH OR SWALE	14 DAYS	1, 3
PIPE AND CULVERT OUTLETS	24 HOURS	
STOCKPILES	14 DAYS	1

1. INITIATE STABILIZATION IMMEDIATELY WHEN CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE. COMPLETE STABILIZATION WITHIN THE TIME FRAME LISTED. IN MANY INSTANCES THIS WILL REQUIRE STABILIZATION TO

OCCUR MORE THAN ONCE DURING THE COURSE OF THE PROJECT. TEMPORARY SOIL STOCKPILES WITHOUT SIGNIFICANT CLAY OR SILT AND STOCKPILED AND CONSTRUCTED ROAD BASE ARE EXEMPT FROM THE STABILIZATION REQUIREMENT.

2. STABILIZE WETTED PERIMETER OF DITCH (I.E. WHERE THE DITCH GETS WET).
3. APPLICATION OF MULCH, HYDROMULCH, TACKIFIER AND POLYACRYLAMIDE ARE NOT ACCEPTABLE STABILIZATION METHODS IN THESE AREAS.
4. STABILIZE ALL AREAS OF THE SITE PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED WILL BE MULCHED OR BLANKETED WITHIN THE TIME FRAMES IN THE NPDES PERMIT.
5. TOPSOIL BERMS MUST BE STABILIZED TO BE CONSIDERED PERIMETER CONTROL BMPS. USE RAPID STABILIZATION METHOD 3. THE SEED MIX USED IN THE RAPID STABILIZATION MAY BE SUBSTITUTED AS FOLLOWS:
   A. SINGLE YEAR CONSTRUCTION BETWEEN MAY 1 - AUGUST 1, SEED WITH SEED MIX OATS (O)
   B. SINGLE YEAR CONSTRUCTION BETWEEN AUGUST 1 - OCTOBER 31, SEED WITH SEED MIX WINTER WHEAT (WW)
   C. MULTI YEAR TEMPORARY STABILIZATION TWO-YEAR COVER CROP (TCC)
6. KEEP DITCHES AND EXPOSED SOILS IN AN EVEN ROUGH GRADED CONDITION IN ORDER TO BE ABLE TO APPLY EROSION CONTROL MULCHES, HYDROMULCHES, AND BLANKETS.

SITE INSPECTION AND MAINTENANCE

THE EROSION CONTROL OFFICER IS TO INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE OPERATOR SHALL PROVIDE A RAINFALL GAUGE ON-SITE AT VARIOUS MILE INTERVALS ALONG THE ALIGNMENT. INSPECT ALL TEMPORARY AND PERMANENT PROJECT BMPS UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND THE NOT HAS BEEN SUBMITTED. INSPECT SURFACE WATER INCLUDING DRAINAGE DITCHES FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION. INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES. INSPECT SURROUNDING PROPERTIES FOR EVIDENCE OF OFF-SITE SEDIMENT ACCUMULATION. INSPECT INFILTRATION AREAS FOR SIGN OF SEDIMENT DEPOSITION AND COMPACTIONS (TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE AREA). ALL INSPECTIONS AND MAINTENANCE CONDUCTED MUST BE RECORDED IN WRITING BY THE OPERATOR AND RETAINED WITH THE SWPPP. SUBMIT INSPECTION REPORTS IN A FORMAT THAT IS ACCEPTABLE TO THE PROJECT ENGINEER. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:

A. DATE, TIME, AND NAME OF PERSON(S) CONDUCTING INSPECTIONS;
B. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
C. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); INCLUDING DOCUMENTATION/PHOTOS OF IMPLEMENTED BMPS INTENDED TO CORRECT A PROBLEM BUT FAILED.
D. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS;
E. DOCUMENTATION OF CHANGES MADE TO THE SWPPP.

REPLACE, REPAIR OR SUPPLEMENT ALL NONFUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY UNLESS LISTED DIFFERENTLY BELOW:

A. REPAIR, REPLACE, OR SUPPLEMENT PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE. COMPLETE REPAIRS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
B. REPAIR OR REPLACE INLET PROTECTION DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
C. DRAIN AND REMOVE SEDIMENT FROM TEMPORARY AND PERMANENT SEDIMENT BASINS ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME. COMPLETE WORK WITHIN 72 HOURS OF DISCOVERY.
D. REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS. STABILIZE ANY AREAS THAT ARE DISTURBED BY SEDIMENT REMOVAL OPERATIONS. SEDIMENT REMOVAL AND STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS OF DISCOVERY.
E. REMOVE TRACKED SEDIMENT FROM PAVED SURFACES BOTH ON AND OFF SITE WITHIN ONE (1) CALENDAR DAY OF DISCOVERY. STREET SWEEPING MAY HAVE TO OCCUR MORE OFTEN TO MINIMIZE OFF SITE IMPACTS. LIGHTLY WET THE PAVEMENT PRIOR TO SWEEPING.
F. MAINTAIN ALL BMPS UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOT HAS BEEN SUBMITTED TO THE MPCA.

CONSTRUCTION ACTIVITY REQUIREMENTS: EROSION/SEDIMENT CONTROL, PROCEDURES, & MAINTENANCE STANDARDS

1. AMEND THE SWPPP AND DOCUMENT ALL CHANGES TO THE SWPPP AND ASSOCIATED PLAN SHEETS WITHIN 7 DAYS. SWPPP AMENDMENTS AND SITE PLANS WILL BE PREPARED BY THE OPERATOR AND SUBMITTED TO THE OWNER FOR REVIEW AND WRITTEN APPROVAL BY THE PROJECT OWNER (OR DESIGNATED REPRESENTATIVE). STORE THE SWPPP AND ALL AMENDMENTS ON SITE AT ALL TIMES.
2. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR THE ENGINEER'S ACCEPTANCE FOR STAGING/STOCKPILE MANAGEMENT AREAS, CONCRETE MANAGEMENT, CONCRETE SLURRY APPLICATION AREAS, FUGITIVE DUST CONTROL PLAN, SPILL CONTAINMENT PLAN, HAZARDOUS MATERIAL MANIFEST & MANAGEMENT PLAN, WETLAND MANAGEMENT PLAN, VEGETATION PRESERVATION & MAINTENANCE PLAN, WORK IN AND NEAR AREAS OF ENVIRONMENTAL SENSITIVITY, AREAS IDENTIFIED IN THE PLANS AS "SITE MANAGEMENT PLAN AREA", ANY WORK THAT WILL REQUIRE DEWATERING, ANY ADDITIONAL PLANS LISTED IN THE PROJECT SPECIFICATIONS, AND AS REQUIRED BY THE ENGINEER. SUBMIT ALL SITE MANAGEMENT PLANS TO THE ENGINEER IN WRITING. ALLOW A MINIMUM OF 7 DAYS FOR PROJECT ENGINEER TO REVIEW AND ACCEPT SITE MANAGEMENT PLAN SUBMITTALS. WORK WILL NOT BE ALLOWED TO COMMENCE IF A SITE MANAGEMENT PLAN IS REQUIRED UNTIL ACCEPTANCE HAS BEEN GRANTED BY THE ENGINEER. THERE WILL BE NO EXTRA TIME ADDED TO THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL.
3. THE PROJECT'S CONSTRUCTION PHASING AND STAGING IS DEFINED BY THE "CONSTRUCTION STAGING & TRAFFIC CONTROL PLAN" AND PROJECT SPECIFICATIONS.
4. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.
5. DO NOT DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. DELINEATE AREAS NOT TO BE DISTURBED AND WETLANDS (EVEN AREAS THAT ARE PERMITTED FOR CONSTRUCTION) PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. IF IT BECOMES NECESSARY TO DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS, OBTAIN WRITTEN PERMISSION FROM THE PROJECT ENGINEER PRIOR TO PROCEEDING. PRESERVE ALL NATURAL BUFFERS SHOWN ON THE PLANS.
6. ROUTE STORMWATER AROUND UNSTABILIZED AREAS OF THE SITE WHENEVER FEASIBLE. PROVIDE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES AS NEEDED TO KEEP CHANNELS FROM ERODING AND TO PREVENT NUISANCE CONDITIONS AT THE OUTLET.
7. DIRECT DISCHARGE FROM BMPS TO VEGETATED AREAS WHENEVER FEASIBLE. PROVIDE VELOCITY DISSIPATION DEVICES AS NEEDED TO PREVENT EROSION.
8. LOCATE PERIMETER CONTROL ON THE CONTOUR TO CAPTURE OVERLAND, LOW-VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS. PLACE J-HOOKS AT A MAXIMUM OF 100-FOOT INTERVALS.
9. ALL STOCKPILES MUST HAVE PERIMETER SEDIMENT CONTROLS IMPLEMENTED AND MAINTAINED AT ALL TIMES AND SHOULD BE INSTALLED PRIOR TO INITIATION OF STOCKPILING. PILES CANNOT BE PLACED IN BUFFER AREAS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE TO PREVENT STORMWATER RUN-ON INTO THE STOCKPILE.
10. STEEP SLOPES MAY BE TEMPORARILY CREATED DURING GRADING OPERATIONS. STABILIZATION OF STEEP SLOPES (3:1 OR GREATER) SHALL BE PROPERLY CAT-TRACKED AND STABILIZED PER THE EROSION CONTROL PLAN. LONG SLOPES CAN BE BROKEN UP WITH SEDIMENT CONTROL LOGS IF EROSION IS EVIDENT.
11. DITCH CHECKS WILL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION.
12. ALL STORM DRAIN INLETS, THAT RECEIVE PROJECT STORMWATER, MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED AND THE PERMITTEE(S) HAS RECEIVED WRITTEN CORRESPONDENCE FROM THE JURISDICTIONAL AUTHORITY VERIFYING THE NEED FOR REMOVAL. WRITTEN CORRESPONDENCE MUST BE DOCUMENTED IN THE SWPPP.
13. SILT FENCE IS NOT AN ACCEPTABLE CATCH BASIN INLET PROTECTION BMP. CONTACTOR SHALL CLEAN, REMOVE AND DISPOSE OF SEDIMENT, AND/OR REPLACE STORM DRAIN INLET PROTECTION ON A ROUTINE BASIS TO ENSURE THE DEVICE IS FULLY FUNCTIONAL PRIOR TO THE NEXT FORECASTED PRECIPITATION EVENT (30% OR GREATER).
14. DISCHARGE TURBID OR SEDIMENT LADEN WATER TO TEMPORARY SEDIMENT BASINS WHENEVER FEASIBLE. IN THE EVENT THAT IT IS NOT FEASIBLE TO DISCHARGE THE SEDIMENT LADEN WATER TO A TEMPORARY SEDIMENT BASIN, THE WATER MUST BE TREATED SO THAT IT DOES NOT CAUSE A NUISANCE CONDITION IN THE RECEIVING WATERS OR TO DOWNSTREAM LANDOWNERS. CLEAN OUT ALL PERMANENT STORMWATER BASINS REGARDLESS OF WHETHER USED AS TEMPORARY SEDIMENT BASINS/TRAPS TO THE DESIGN CAPACITY AFTER COMPLETING ALL UP-GRADIENT LAND DISTURBING ACTIVITY. USE A SKIMMER DEVICE FOR BASIN DRAINING.
15. PROVIDE STABILIZATION IN ANY TRENCHES CUT FOR DEWATERING OR SITE DRAINING PURPOSES.
16. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND NARRATIVE TO THE PROJECT ENGINEER FOR APPROVAL 7 DAYS PRIOR TO UNDERTAKING THESE ACTIVITIES. DEWATERING PLAN MUST INCLUDE BMP'S TO PREVENT SEDIMENT TRANSPORT, EROSION, AND ADVERSE IMPACTS TO DOWNSTREAM RECEIVING WATERS. THE DEWATERING PLAN MUST ALSO INCLUDE ANY SPECIFIC CHEMICAL TREATMENTS (FLOC, POLYMERS, ETC.) THAT WILL BE USED. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY PERMIT NECESSARY FOR THESE ACTIVITIES; THE DEWATERING PLAN AND DNR APPROPRIATIONS PERMIT WILL BECOME PART OF THE SWPPP. THE CONTRACTOR SHALL VISUALLY CHECK AND PHOTOGRAPH THE DISCHARGE AT THE BEGINNING AND AT LEAST ONCE EVERY 24 HOURS OF OPERATION TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE.

TEMPORARY & PERMANENT EROSION CONTROL BMPS

SEED MIX: SEED MIX SHALL BE USED IN CONSTRUCTION AND REVEGETATION PROJECTS IN ORDER TO ENHANCE SOIL NUTRIENT AVAILABILITY AND BIOLOGICAL SOIL STRUCTURE, ENCOURAGE NATIVE PLAN SUCCESSION, REDUCE EROSION, AND DISCOURAGE INVASIVE PLANT SPECIES. INOCULATION OF SOILS WITH MYCORRHIZAL FUNGI OR THE PRESENCE OF PRE-EXISTING SOIL MICROBES IS ESSENTIAL FOR THE STABILIZATION OF ADVERSE SOILS, ESTABLISHMENT OF NATIVE GRASSES, AND THE EXCLUSION OF NON-NATIVE "ANNUALS" AND NOXIOUS WEEDS.

EROSION CONTROL BLANKET: EROSION CONTROL BLANKETS (ECBS) ARE A SOIL STABILIZATION (EROSION CONTROL) BMP, INTENDED TO PROTECT DISTURBED SOIL SURFACES FROM RAINDROP IMPACT EROSION. ECBS ARE CARPET-LIKE MATS, INSTALLED OVER AND ANCHORED TO THE PROPERLY PREPARED SOIL SURFACES. PROPERLY SELECTED AND INSTALLED, ECBS CAN MIMIC THE BENEFICIAL EFFECTS OF VEGETATIVE COVER THEREBY REDUCING EROSION RATES BY OVER 90%. ECBS ALSO PROTECT SEEDS AND PROVIDE A BENEFICIAL ENVIRONMENT FOR VEGETATION TO BECOME ESTABLISHED. CONTRACTOR SHALL VERIFY DURING REGULAR INSPECTIONS THAT NO GULLIES, RILLS, OR SCOUR HOLES HAVE FORMED UNDER EROSION CONTROL BLANKETS AND MATS AND CORRECT ALL ERODED AREAS WITHIN 14 DAYS. ALL REPAIRS MUST BE COMPLETED WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

STRAW MULCHING: DISTURBED SOIL AREAS SHALL BE PROTECTED WITH STRAW MULCH. MULCHING IS THE APPLICATION OF A PROTECTIVE LAYER OF STRAW OR OTHER SUITABLE MATERIAL TO THE SOIL SURFACE. STRAW MULCH SHALL BE USED IN CONJUNCTION WITH SEEDING AND HYDRO-SEEDING FOR ESTABLISHMENT OF VEGETATION. STRAW MULCH MUST BE SECURED TO THE GROUND USING DISKING OR AN OVERSPRAY OF AN HECP. MULCHING IS COMMONLY USED AS A TEMPORARY MEASURE TO PROTECT BARE OR DISTURBED SOIL AREAS THAT HAVE NOT BEEN SEEDED, UNTIL NATIVE VEGETATION RE-GROWS. CERTIFIED WEED-FREE MULCH MUST BE USED WHEN USING NATIVE SEED MIXES OR WHEN WORKING NEAR ENVIRONMENTALLY SENSITIVE AREAS.

HYDRAULIC MATRICES: HYDRAULIC MATRICES ARE EROSION CONTROL PRODUCTS THAT ARE USED TO STABILIZE EXPOSED SOILS. THESE MATRICES ARE APPLIED IN A SLURRY, PRODUCED BY MIXING FIBER, WATER AND A BINDING AGENT TOGETHER IN A MECHANICAL HYDRO-SEEDER. WOOD FIBER IS WIDELY USED BUT OTHER FIBERS CAN INCLUDE PAPER, STRAW, COIR, CORN, ETC. THE EFFECTIVENESS OF THESE HYDRAULIC MATRICES ARE DEPENDENT ON:

- PROPER SOIL PREPARATION
- APPLICATION RATES (DEPENDENT ON THE MANUFACTURERS RECOMMENDATIONS)
- THE TYPE OF FIBERS USED
- THE TYPE OF BOND AGENT(S) ADDED

THESE HYDRAULIC MATRICES ARE CLASSIFIED IN THE MNDOT SPEC BOOK AND APPROVED PRODUCTS LIST, DEPENDING ON THE PRODUCT CHARACTERISTICS, STRENGTH, AND LONGEVITY. HYDRAULIC MATRICES USED INCLUDE: ORGANIC FIBER MATRIX, HYDRAULIC MULCH MATRIX, STABILIZED FIBER MATRIX, BONDED FIBER MATRIX, AND FIBER REINFORCED MATRIX.

SOD TYPE LAWN: SOD IS A PERMANENT EROSION PREVENTION BMP THAT PROVIDES INSTANTANEOUS SOIL STABILIZATION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF SOD AS OUTLINED IN THE PROJECT SPECIFICATIONS.

ENERGY DISSIPATER: AN ENERGY DISSIPATER IS A STRUCTURE DESIGNED TO CONTROL EROSION AT THE OUTLET OF A CHANNEL OR CONDUIT.

RAPID STABILIZATION METHOD #3: THIS WORK SHALL CONSIST OF OPERATIONS NECESSARY TO RAPIDLY STABILIZE SMALL CRITICAL AREAS WITHIN 200 FEET OF SURFACE WATERS, TO PREVENT OFF SITE SEDIMENTATION AND/OR TO COMPLY WITH PERMIT REQUIREMENTS. THIS FORM OF RAPID STABILIZATION EMPLOYS SFM, SEED MIX OATS, AND FERTILIZER TYPE 3. THIS METHOD SHALL BE USED ON SLOPES LESS THAN 3:1. INSTALL PER MNDOT SPECIFICATION 2575.3.M.1.C.

RAPID STABILIZATION METHOD #4: THIS METHOD SHALL CONSIST OF CATEGORY 20/25 EROSION CONTROL BLANKET (NATURAL NET ONLY) IN COMBINATION WITH MNDOT SEED MIX OATS (2 LBS PER 100 SQ. YD.) AND TYPE 3 SLOW-RELEASE FERTILIZER (8 LBS PER 100 SQ.

YD.). THIS IS AN ACCEPTABLE BMP FOR DISTURBED AREAS ADJACENT TO ENVIRONMENTALLY SENSITIVE AREAS, SURFACE WATERS, AND WITHIN THE LAST 200 FEET OF DITCH BOTTOMS.

TEMPORARY & PERMANENT SEDIMENT CONTROL BMPS

SEDIMENT CONTROL LOGS: SEDIMENT CONTROL LOGS ARE MANUFACTURED FROM STRAW, WOOD EXCELSIOR, COCONUT FIBERS, AND/OR OTHER MATERIALS THAT ARE BOUND WITH POLYPROPYLENE OR BIODEGRADABLE NETTING INTO TIGHT TUBULAR ROLLS. FIBER ROLLS CONTROL THREE TYPES OF EROSIONAL PROCESSES; EROSION CONTROL, RUN OFF CONTROL, AND SEDIMENT CONTROL. SEDIMENT CONTROL LOGS CAN BE USED FOR THE FOLLOWING:

- SLOPE INTERRUPTERS TO REDUCE EROSION ON NEWLY CONSTRUCTED SLOPES
- TEMPORARY DITCH CHECKS TO REDUCE RUNOFF VELOCITIES IN DRAINAGE CHANNELS
- SEDIMENT CONTROL BARRIERS FOR SMALL DISTURBED SOIL AREAS SUCH AS STOCKPILES, DISCRETE SLOPES, OR INDIVIDUAL LOTS

MACHINE SLICED SILT FENCE: A SILT FENCE IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF FILTER FABRIC ENTRENCHED INTO THE SOIL AND ATTACHED TO SUPPORTING POSTS. SILT FENCE IS INTENDED TO BE INSTALLED WHERE SEDIMENT-LADEN WATER CAN POND, THUS ALLOWING THE SEDIMENT TO FALL OUT OF SUSPENSION AND SEPARATE FROM THE RUNOFF. SILT FENCE INSTALLED WITH A TRENCHER OR BY SLICING IS THE MOST EFFECTIVE INSTALLATION METHOD TO ENSURE AGAINST COMMON SILT FENCE FAILURES. THE BMP WILL BE CLEANED OUT OR REPLACED WHEN THE SEDIMENT REACHES 1/2 THE HEIGHT OF THE FENCE.

FLOTATION SILT CURTAIN: FLOTATION SILT CURTAIN WILL BE IN PLACE WHERE PROJECT ACTIVITIES ARE LOCATED WITHIN OR NEAR A SURFACE WATER/WETLAND. THE CURTAIN WILL BE LOCATED AS TIGHT TO THE SHORELINE AS POSSIBLE AND NOT TO EXCEED 1/4 THE STREAM WIDTH. DOWN GRADIENT PERIMETER CONTROL MUST STILL BE INSTALLED AS WELL AS AN ADDITIONAL REDUNDANT BMP WHEN WORK IS WITHIN 50 FEET OF THE SURFACE WATER.

TEMPORARY SEDIMENTATION BASINS: WHERE 10 OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, A TEMPORARY SEDIMENT BASIN MUST BE PROVIDED PRIOR TO RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS. ALL TEMPORARY BASINS SHALL BE CONSTRUCTED AND OPERATIONAL PRIOR TO GRADING 10 OR MORE ACRES. BASINS MUST PROVIDE A LIVE STORAGE VOLUME FROM A 2-YEAR 24-HOUR STORM EVENT FROM EACH ACRE (DISTURBED AND UNDISTURBED) DRAINING TO THE BASIN. AT A MINIMUM, IF CALCULATIONS ARE NOT PERFORMED THE BASIN SHALL PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE FROM EACH ACRE. THE BASIN INTAKE MUST BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE, PREVENT SHORT CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS, INCLUDE AN EMERGENCY OVERFLOW ABOVE THE LIVE STORAGE ELEVATION, AND PROVIDE ENERGY DISSIPATION AT THE BASIN OUTLET. BASINS MUST BE DRAINED AND SEDIMENT REMOVED WHEN THE DEPTH OF COLLECTED SEDIMENT IN THE BASIN REACHES 1/2 THE LIVE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
IF A BASIN IS INFEASIBLE WITHIN THE PROJECT LIMITS, EQUIVALENT SEDIMENT CONTROL BMPS MUST BE IMPLEMENTED AND DOCUMENTED IN THE SWPPP OR SWPPP AMENDMENT.

STABILIZED CONSTRUCTION EXIT: TEMPORARY CONSTRUCTION EXITS ARE CONSTRUCTED AT THE EGRESS POINT FROM THE CONSTRUCTION AREA ONTO A PAVED ROAD. A STABILIZED CONSTRUCTION EXIT IS A TRACKING CONTROL BMP INTENDED TO PREVENT TRACKING OF SOIL FROM THE CONSTRUCTION SITE BY EQUIPMENT AND VEHICLES. THE EXITS ARE CONSTRUCTED OF LARGE ANGULAR ROCK, STEEL RIBS (RUMBLE STRIPS), OR TRACK PADS INTENDED TO KNOCK THE MUD OFF THE TIRES BEFORE TRAVELING ONTO THE ROADWAY.

CHEMICAL TREATMENTS: OPERATOR MUST AMEND THE SWPPP TO INCLUDE THE INTENDED USES AND LOCATIONS OF FLOCCULANTS, POLYMERS, AND OTHER SEDIMENTATION TREATMENT CHEMICALS. CHEMICAL TREATMENTS MUST BE IN COMPLIANCE WITH PART 9.18.

BIORETENTION & BIOSWALES: BIORETENTION BASINS AND BIOSWALES DIRECT SHEET FLOW ACROSS A GRASS BUFFER STRIP TO A PONDING AREA FOR INFILTRATION. THEY UTILIZE SOILS AND BOTH WOODY AND HERBACEOUS PLANTS TO REMOVE POLLUTANTS FROM STORMWATER RUNOFF. THE PONDING AREA GENERALLY CONSISTS OF A SURFACE LAYER CONTAINING ORGANICS SUCH AS MULCH, TREES, NATIVE GRASSES AND SHRUBS, A SUBSURFACE LAYER OF PLANTING SOIL, AND A SAND BED.

DUST CONTROL: OPERATOR WILL COMPLY WITH STATE RULE 7011.0150 ON DUST PREVENTION REQUIREMENTS. DUST FROM THE SITE WILL BE CONTROLLED BY INCREASED STREET SWEEPING AND/OR USING A MOBILE PRESSURE-TYPE DISTRIBUTOR TRUCK TO APPLY POTABLE WATER TO DISTURBED AREAS. THE MOBILE UNIT WILL APPLY WATER AT A RATE NECESSARY TO PREVENT RUNOFF AND PONDING.

POLLUTION PREVENTION MANAGEMENT

POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE, BUT NOT LIMITED TO:

1. SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVALS/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPING STOCKPILING, WET/DRY PAVEMENT CUTTING, STREET CONSTRUCTION.
2. BASIC/ACIDIC PH LEVELS FROM CURB AND GUTTER, MANHOLE STRUCTURES, SIDEWALKS, DRIVEWAY APRONS, FOUNDATIONS, BRIDGE ABUTMENTS, WET/DRY PAVEMENT CUTTING, MASONRY WASHOUT/CLEANOUT.
3. EXCESS NUTRIENTS FROM LANDSCAPING INSTALLATIONS, SOIL ADDITIVES, FERTILIZATION, MULCHING.
4. HYDROCARBONS FROM STREET CONSTRUCTION, DEMOLITION/REMOVALS, WET/DRY PAVEMENT CUTTING.

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE NPDES-CSW PERMIT, PART 12.1. STORAGE AND DISPOSAL OF CONSTRUCTION AND HAZARDOUS WASTES MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

A. POSITION AND STAKE DOWN ALL PORTABLE TOILETS SO THEY CANNOT BE TIPPED OR KNOCKED OVER. SUPPLY ADEQUATE SECONDARY CONTAINMENT.
B. SECONDARY CONTAINMENT IS NEEDED AROUND ALL STATIONARY EQUIPMENT (GENERATORS, PUMPS, LIGHT PLANTS, ETC.) PROVIDE CONTAINMENT FOR ALL HAZARDOUS MATERIALS AND TOXIC WASTE.
C. NO ENGINE DEGREASING IS ALLOWED ON SITE.
D. VEHICLE AND EQUIPMENT WASHING TO OCCUR IN DESIGNATED AREA AS DETERMINED BY THE CONTRACTOR SUBMITTAL OF A MANAGEMENT PLAN FOR THESE ACTIVITIES.
E. PROPERLY CLEAN UP AND REPORT ALL SPILLS AS REQUIRED BY THE MPCA AND MNDOT SPECIFICATIONS.
F. PROVIDE A SPILL KIT AT EACH WORK LOCATION ON THE SITE.
G. PROVIDE A SECURE STORAGE AREA WITH RESTRICTED ACCESS FOR ALL HAZARDOUS MATERIALS AND TOXIC WASTE. RETURN ALL HAZARDOUS MATERIALS AND TOXIC WASTE TO THE DESIGNATED STORAGE AREA AT THE END OF THE BUSINESS DAY UNLESS INFEASIBLE. STORE ALL HAZARDOUS MATERIALS AND TOXIC WASTE (INCLUDING BUT NOT LIMITED TO OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT, PETROLEUM BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS WITH SECONDARY CONTAINMENT. CLEAN UP SPILLS IMMEDIATELY. STORE, COLLECT AND DISPOSE OF ALL SOLID WASTE.
H. SLURRY FROM CONCRETE OPERATIONS MUST BE VACUUMED UP IMMEDIATELY. NO CONCRETE WASHOUT SHALL COME IN CONTACT WITH THE GROUND AND MUST BE PROPERLY DISPOSED OF.
I. A SIGN MUST BE INSTALLED ADJACENT TO EACH CONCRETE WASHOUT FACILITY.
J. CREATE AND FOLLOW A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. INCLUDE IN THE PLAN HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE. SUBMIT PLAN TO THE ENGINEER PRIOR TO CONSTRUCTION.
K. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS AND FROM ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES.

FINAL STABILIZATION

FINAL STABILIZATION IS ACHIEVED WHEN NPDES CGP PARTS 13.1-13.7 (AS APPLICABLE) ARE COMPLETED PRIOR TO SUBMISSION OF THE NOTICE OF TERMINATION (NOT) TO MPCA.

1. ALL AREAS MUST BE STABILIZED WITH A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%.
2. ALL TEMPORARY SEDIMENT CONTROL BMP MEASURES MUST BE REMOVED PRIOR TO SUBMITTING PERMIT NOT.
3. THE NOT SUBMITTAL MUST INCLUDE EITHER GROUND OR AERIAL PHOTOGRAPHS SHOWING THE AFOREMENTIONED REQUIREMENTS OF HAVE BEEN MET.

DRAWN BY: AJF DESIGNED BY: AJF CHECKED BY: NEH	I HEREBY CERTIFY THAT THIS SHEET 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. SIGNATURE: Austin J. Frosig PRINTED NAME: AUSTIN J. FROSIG, PE DATE: 11/4/2025 LIC. NO. 61652	wsb	ANOKA COUNTY	**CSAH 22 (Baugh Street NW) Reconstruction**	STORMWATER POLLUTION PREVENTION PLAN	SAP 002-622-037 Sheet No. 131 of 138 Sheets

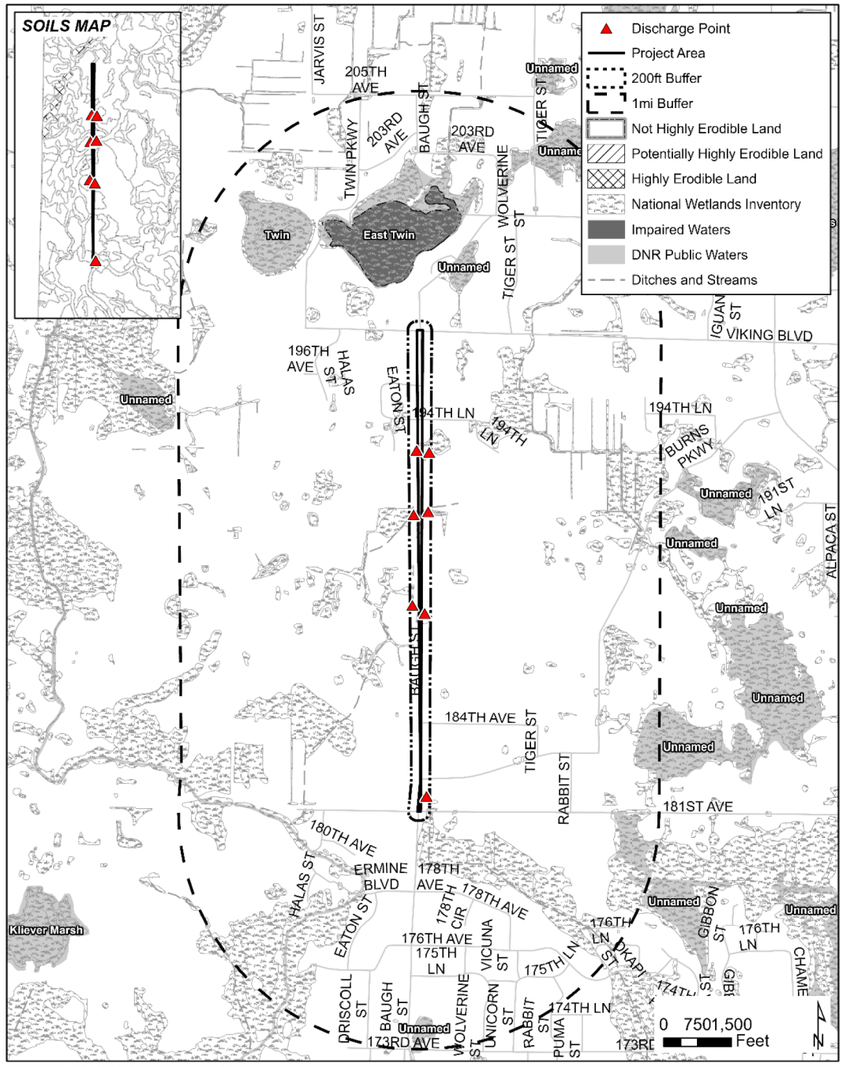


Figure 1. SWPPP Resource Map

DRAWN BY:	AJF	I HEREBY CERTIFY THAT THIS SHEET 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.	SIGNATURE:	wsb	ANOKA COUNTY	**CSAH 22 (Baugh Street NW) Reconstruction**	SAP 002-622-037
DESIGNED BY:	AJF		PRINTED NAME: AUSTIN J. FROSIG, PE			STORMWATER POLLUTION PREVENTION PLAN	Sheet No. 132 of 138 Sheets
CHECKED BY:	NEH		DATE: 11/4/2025 LIC. NO. 61652				

EROSION / SEDIMENT CONTROL NOTES:

SEDIMENT CONTROL PRACTICES:

1. SEDIMENT CONTROL MUST BE IN PLACE AND APPROVED BY THE ENGINEER BEFORE ANY PHASE OF CONSTRUCTION CAN BEGIN.
2. IF A 50' NATURAL BUFFER AROUND A SURFACE WATER IS INFEASIBLE, REDUNDANT PERIMETER CONTROLS MUST BE PROVIDED. REDUNDANT MEASURES TO BE INSTALLED 3'-5' FROM THE PRIMARY MEASURE WITH STABILIZED AREAS BETWEEN THE TWO BMPS.
3. INLET PROTECTION WILL BE INSTALLED AT ALL CATCH INLETS WITHIN THE PROJECT AREA PER STANDARD PLAN.
4. TEMPORARY STABILIZATION MEASURES SHALL BE EMPLOYED WITHIN 200' OF THE NORMAL WETTED PERIMETER OF ALL DISCHARGE POINTS WITHIN 24 HOURS. MULCH IS NOT AN APPROVED MEASURE.
5. IN THE EVENT THAT PERMANENT STABILIZATION MEASURES CANNOT BE IMPLEMENTED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED, TEMPORARY STABILIZATION BMPS MUST BE SCHEDULED TO OCCUR WITHIN THAT 7 DAY TIME FRAME (EXCEPT WHERE CALLED OUT IN THESE NOTES).
6. RAPID STABILIZATION METHOD 4 SHALL BE EMPLOYED WITHIN 200' OF THE NORMAL WETTED PERIMETER OF ALL DISCHARGE POINTS WITHIN 24 HOURS.
7. A SEDIMENT TRAP MUST BE INSTALLED PER THE APPROVED STANDARD DETAILS WITHIN 24 HOURS OF CONNECTING THE UTILITIES.
8. ALL STOCKPILES MUST HAVE DOWN GRADIENT PERIMETER SEDIMENT CONTROL IMPLEMENTED AND MAINTAINED AT ALL TIMES. STOCKPILES TO RECEIVE TEMPORARY STABILIZATION IF UNWORKED FOR 14 DAYS. PERIMETER PROTECTION NEEDED BEFORE STOCKPILE PLACEMENT.
9. STOCKPILES MAY NOT BE PLACED WITHIN ANY DISCHARGE OR CURB LINE UNLESS PROPER BYPASS IS INSTALLED PRIOR TO STOCKPILE PLACEMENT.
10. CONTRACTOR TO INSTALL SEDIMENT CONTROL LOGS AND/OR SILT FENCE DOWN GRADIENT FROM ANY EXPOSED AREA.

EROSION PREVENTION PRACTICES:

1. STABILIZATION OF DISTURBED AREAS SHALL BE DONE BY PERMANENT TURF ESTABLISHMENT WHENEVER POSSIBLE.

POLLUTION PREVENTION MANAGEMENT MEASURES:

1. A ROCK CONSTRUCTION ENTRANCE WILL BE PLACED AT ALL ENTRANCES THAT LEAD TO THE PROJECT SITE IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND THE APPROVED STANDARD DETAILS. ENTRANCE MUST BE A MINIMUM OF 50' LONG PER THE CONSTRUCTION PERMIT REQUIREMENT. THE ENTRANCE(S) SHALL BE REESTABLISHED FOR EACH STAGE OF CONSTRUCTION.
2. ALL STREETS IN AND ADJACENT TO THE PROJECT SHALL REMAIN CLEAN AND PASSABLE AT ALL TIMES. ADJACENT STREET AND CURB LINES TO BE SWEPT FREE OF DEBRIS AT THE END OF EACH WORK DAY, OR AS OFTEN AS NEEDED TO ENSURE PUBLIC SAFETY.
3. SLURRY FROM CONCRETE OPERATIONS MUST BE VACUUMED UP IMMEDIATELY. NO CONCRETE WASHOUT SHALL COME IN CONTACT WITH THE GROUND AND MUST BE PROPERLY DISPOSED OF. ALL HAZARDOUS MATERIALS MUST BE KEPT UNDER COVER AND WITHIN PROPER CONTAINMENT WHEN NOT IN USE.

MISCELLANEOUS:

1. ADDITIONAL EROSION AND SEDIMENT CONTROL MAY BE ADDED DURING ANY PHASE OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
2. IF PROJECT CONSISTS OF MILL & OVERLAY OF SECTIONS, ENSURE MILLINGS ARE NOT A THREAT FROM WASHING OFF THE PROJECT RIGHT OF WAY.
3. CONTRACTOR TO PROTECT ALL WETLAND AREAS WITH PERIMETER CONTROL (AND REDUNDANT MEASURES) UNTIL WORK IN THE PERMITTED AREAS IS NEEDED. REDUNDANT MEASURES MUST BE A MINIMUM 5' APART, WHERE FEASIBLE.
4. THE CONTRACTOR SHALL AMEND THE SWPPP AND THIS PLAN TO SHOW THE LOCATIONS OF STAGING AREAS, STOCKPILE LOCATIONS (AND APPROPRIATE EROSION CONTROL BMPS), DISPOSAL SITES, AND LOCATIONS OF POTENTIAL POLLUTANT GENERATING ACTIVITIES (I.E. DESIGNATED CONCRETE WASHOUT AREAS, FUELING LOCATIONS, ETC.).

EROSION CONTROL & TURF ESTABLISHMENT LEGEND:

PATTERN	USE	PERMANENT	TEMPORARY
	INSLOPES	SEED MESIC INSLOPE @ 65 LBS / ACRE FERTILIZER TYPE 3, 22-5-10 @ 350 LBS / ACRE HYDRAULIC MATRIX TYPE FIBER REINFORCED	RAPID STABILIZATION METHOD 3
	SENSITIVE INSLOPES, INSLOPES 1:3 AND STEEPER, DITCH BOTTOMS, AND BACK SLOPES	SEED SOUTHERN SHORTGRASS @ 26 LBS / ACRE FERTILIZER TYPE 4, 18-1-8 @ 120 LBS / ACRE ROLLED EROSION PREVENTION CATEGORY 20	RAPID STABILIZATION METHOD 4
	RESIDENTIAL PROPERTIES	SEED TURFGRASS @ 200 LBS / ACRE FERTILIZER TYPE 3, 22-5-10 @ 350 LBS /ACRE HYDRAULIC MATRIX TYPE FIBER REINFORCED	RAPID STABILIZATION METHOD 3
	STORMWATER PONDS AND INFILTRATION BASINS	SEED SOUTHERN TALLGRASS @ 26 LBS / ACRE FERTILIZER TYPE 4, 18-1-8 @ 120 LBS / ACRE ROLLED EROSION PREVENTION CATEGORY 25	RAPID STABILIZATION METHOD 4

CP	CULVERT END CONTROLS		CONSTRUCTION LIMITS
	STORM DRAIN INLET PROTECTION		AREA OF ENVIRONMENTAL SENSITIVITY
MS	SILT FENCE, TYPE MS		INPLACE RIGHT-OF-WAY
BR	SEDIMENT CONTROL LOG TYPE COMPOST		INPLACE EASEMENT
	SURFACE FLOW DIRECTION		RIGHT-OF-WAY
	STABILIZED CONSTRUCTION EXIT		TEMPORARY EASEMENT
	RANDOM RIP RAP CLASS III		PERMANENT EASEMENT
	TEMPORARY DITCH CHECK: BIOROLL		

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

NOTES / LEGEND
EROSION CONTROL AND TURF ESTABLISHMENT

SAP 002-622-037

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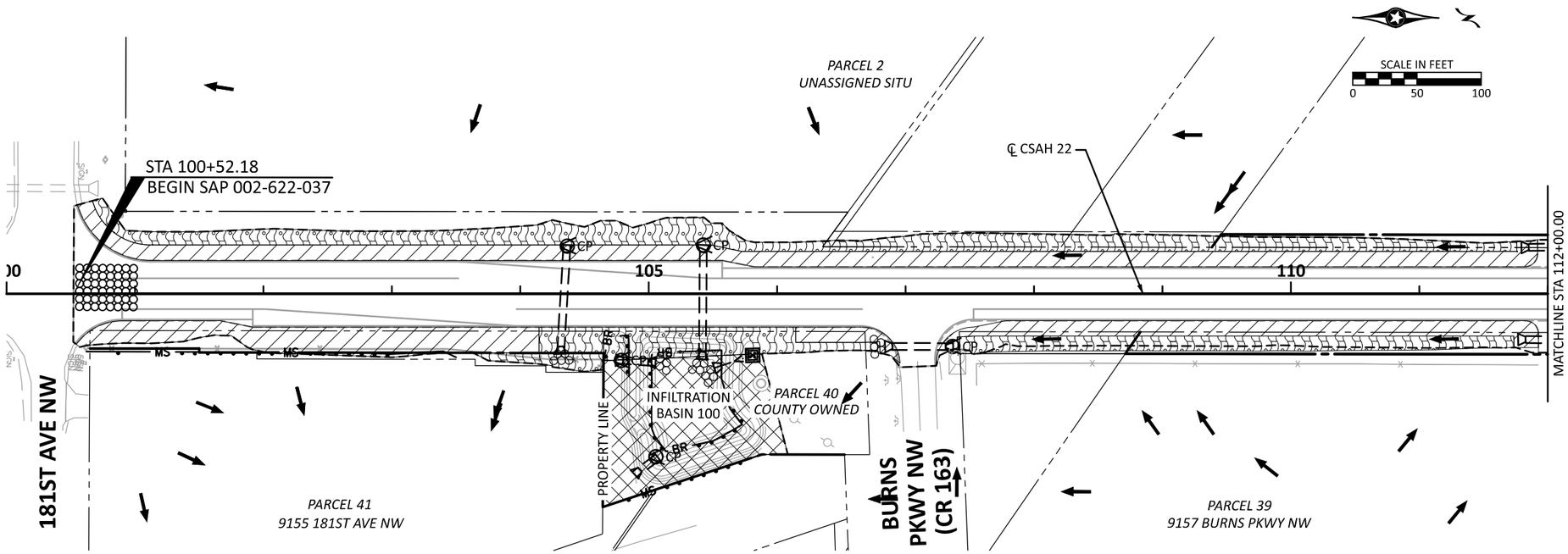

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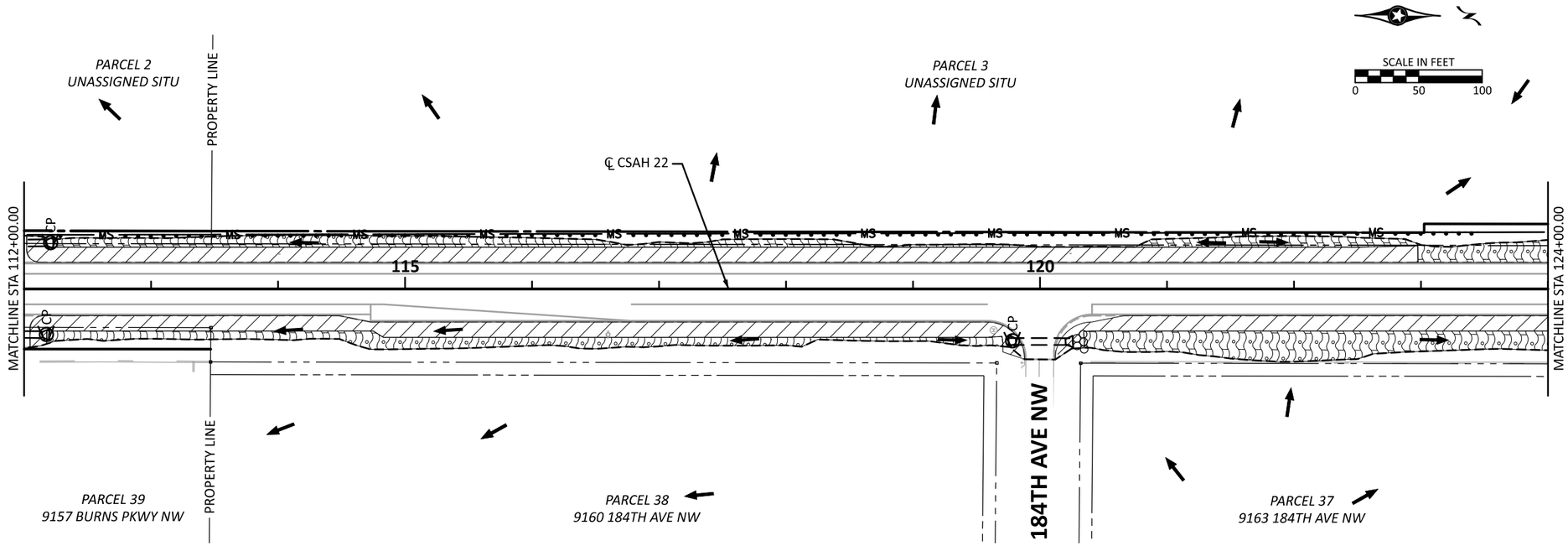

LEGEND

- CP — CULVERT END CONTROLS
- SURFACE FLOW DIRECTION
- STORM DRAIN INLET PROTECTION
- STABILIZED CONSTRUCTION EXIT
- RANDOM RIPRAP
- TEMPORARY DITCH CHECK: BIOROLL
- BR — SEDIMENT CONTROL LOG, TYPE COMPOST
- MS — SILT FENCE, TYPE MS
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- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

PERMANENT:
SEED MESIC INSLOPE
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF.

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN SHORTGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 20

TEMPORARY:
RAPID STABILIZATION METHOD 4

PERMANENT:
SEED TURFGRASS
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF..

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN TALLGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 25

TEMPORARY:
RAPID STABILIZATION METHOD 4

NOTES

SILT FENCE AND SEDIMENT CONTROL LOGS ARE DRAWN SCHEMATICALLY. THE CONTRACTOR SHALL INSTALL PER THE APPROPRIATE DETAILS AND STANDARD PLANS.

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 100+52.18 TO STA 124+00

EROSION CONTROL AND TURF ESTABLISHMENT

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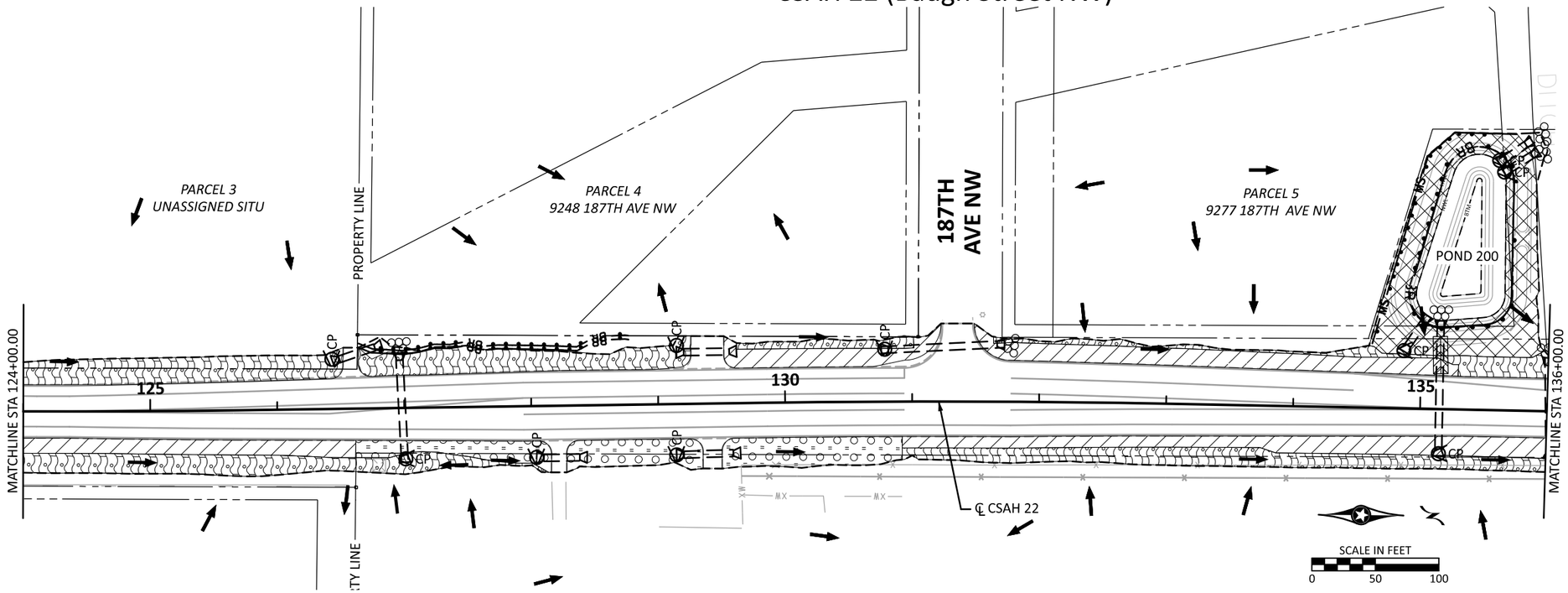

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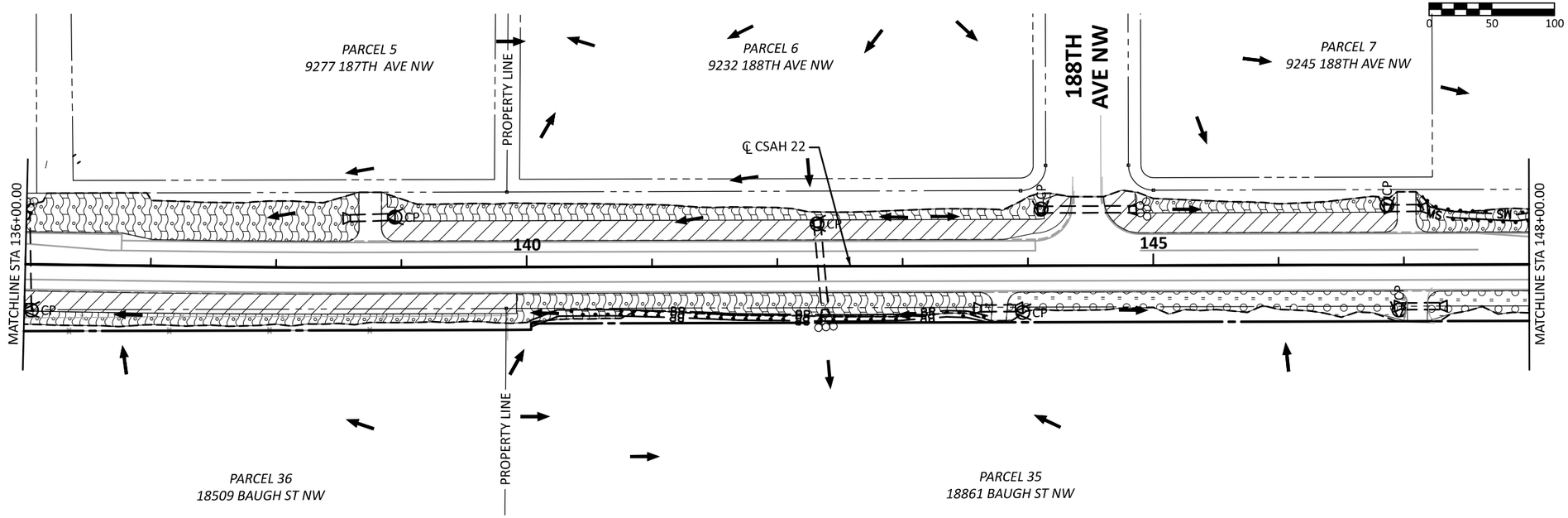

LEGEND

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- PERMANENT EASEMENT
- RIGHT-OF-WAY

PERMANENT:
SEED MESIC INSLOPE
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF.

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN SHORTGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 20

TEMPORARY:
RAPID STABILIZATION METHOD 4

PERMANENT:
SEED TURFGRASS
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF..

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN TALLGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 25

TEMPORARY:
RAPID STABILIZATION METHOD 4

NOTES

SILT FENCE AND SEDIMENT CONTROL LOGS ARE DRAWN SCHEMATICALLY. THE CONTRACTOR SHALL INSTALL PER THE APPROPRIATE DETAILS AND STANDARD PLANS.

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DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Austin J. Frosig
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

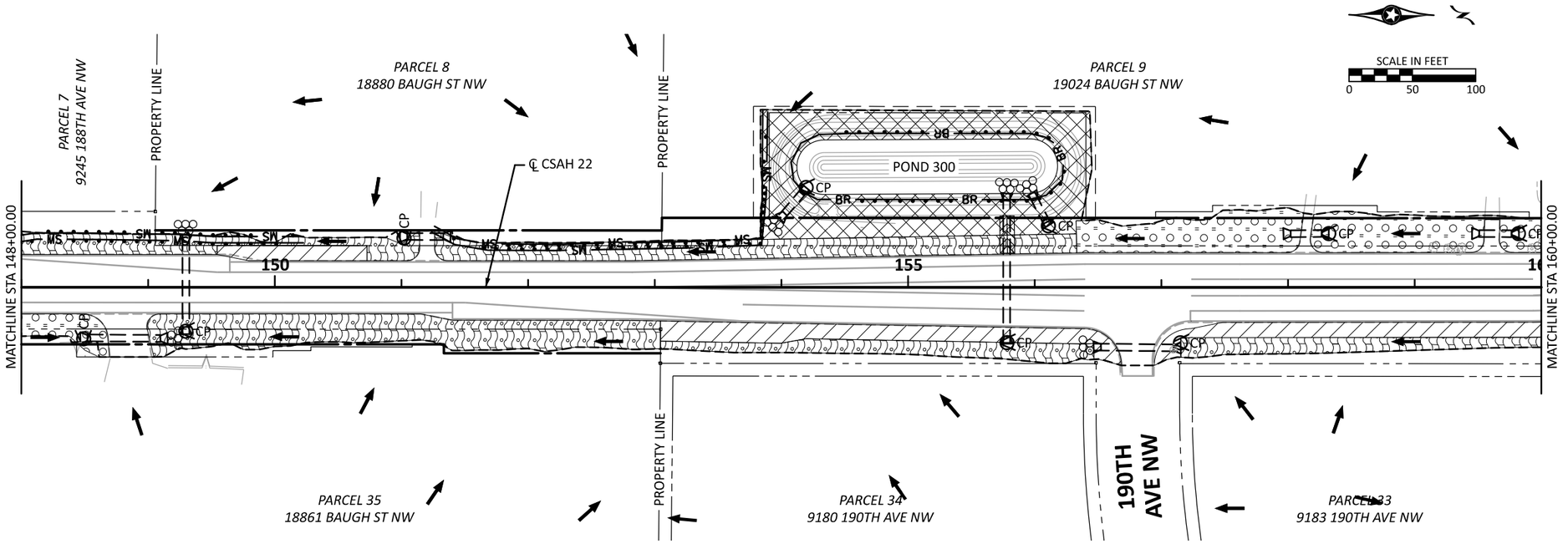
STA 124+00 TO STA 148+00
EROSION CONTROL AND TURF ESTABLISHMENT

SAP 002-622-037

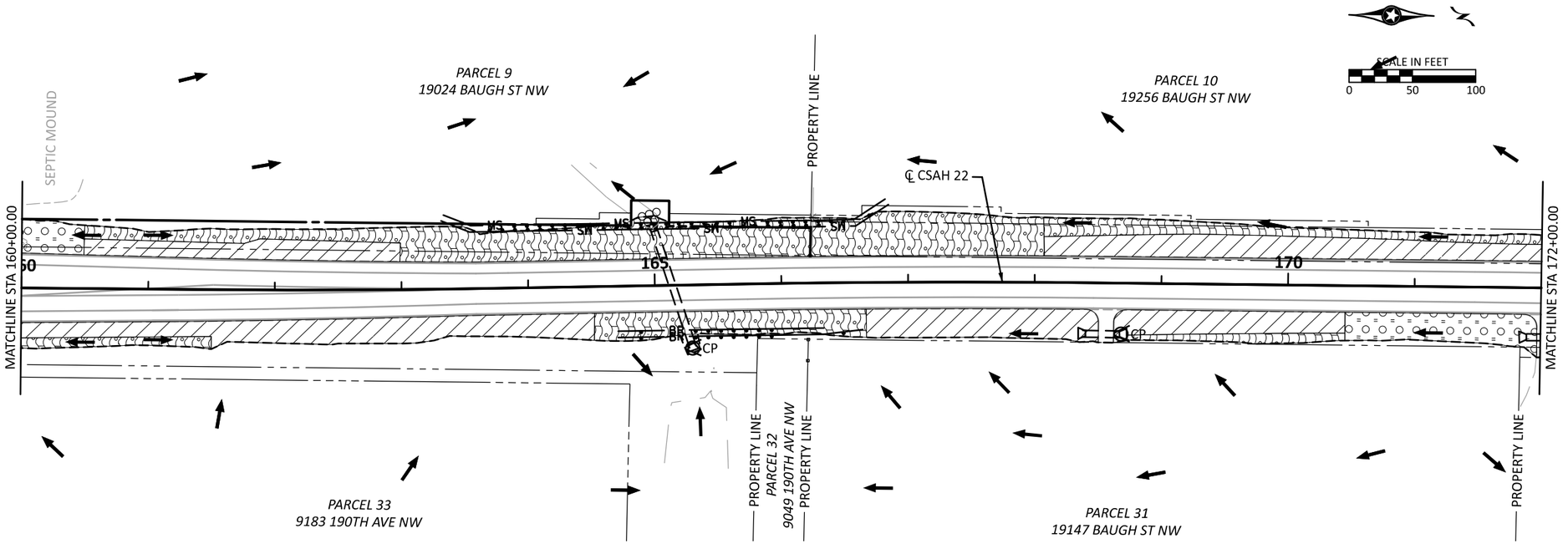
PLOTTED/REVISED: 11/4/2025 12:43:41 PM

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-325erc-001.dgn

CSAH 22 (Baugh Street NW)



CSAH 22 (Baugh Street NW)



LEGEND

- CP — CULVERT END CONTROLS
- SURFACE FLOW DIRECTION
- STORM DRAIN INLET PROTECTION
- STABILIZED CONSTRUCTION EXIT
- RANDOM RIPRAP
- TEMPORARY DITCH CHECK: BIOROLL
- BR — SEDIMENT CONTROL LOG, TYPE COMPOST
- MS — SILT FENCE, TYPE MS
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

PERMANENT:
SEED MESIC INSLOPE
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF.

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN SHORTGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 20

TEMPORARY:
RAPID STABILIZATION METHOD 4

PERMANENT:
SEED TURFGRASS
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF..

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN TALLGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 25

TEMPORARY:
RAPID STABILIZATION METHOD 4

NOTES

SILT FENCE AND SEDIMENT CONTROL LOGS ARE DRAWN SCHEMATICALLY. THE CONTRACTOR SHALL INSTALL PER THE APPROPRIATE DETAILS AND STANDARD PLANS.

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DESIGNED BY:	AJF
CHECKED BY:	NEH

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SIGNATURE: Cut G
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 148+00 TO STA 172+00
EROSION CONTROL AND TURF ESTABLISHMENT

SAP 002-622-037

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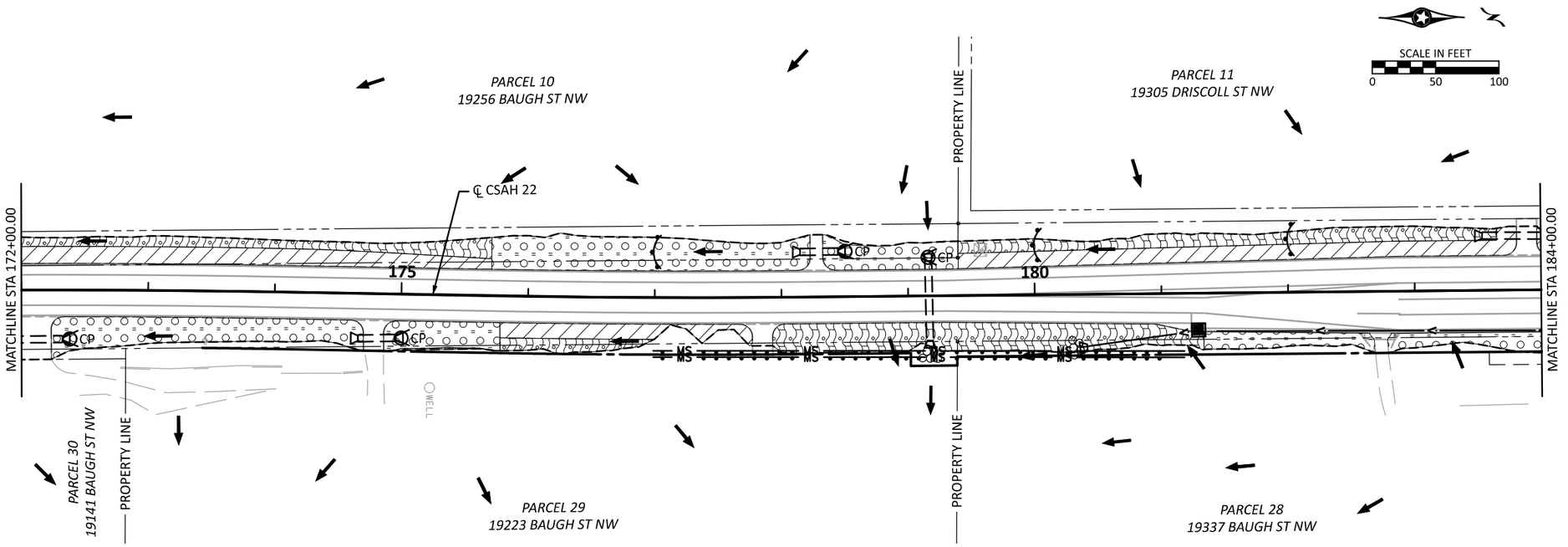
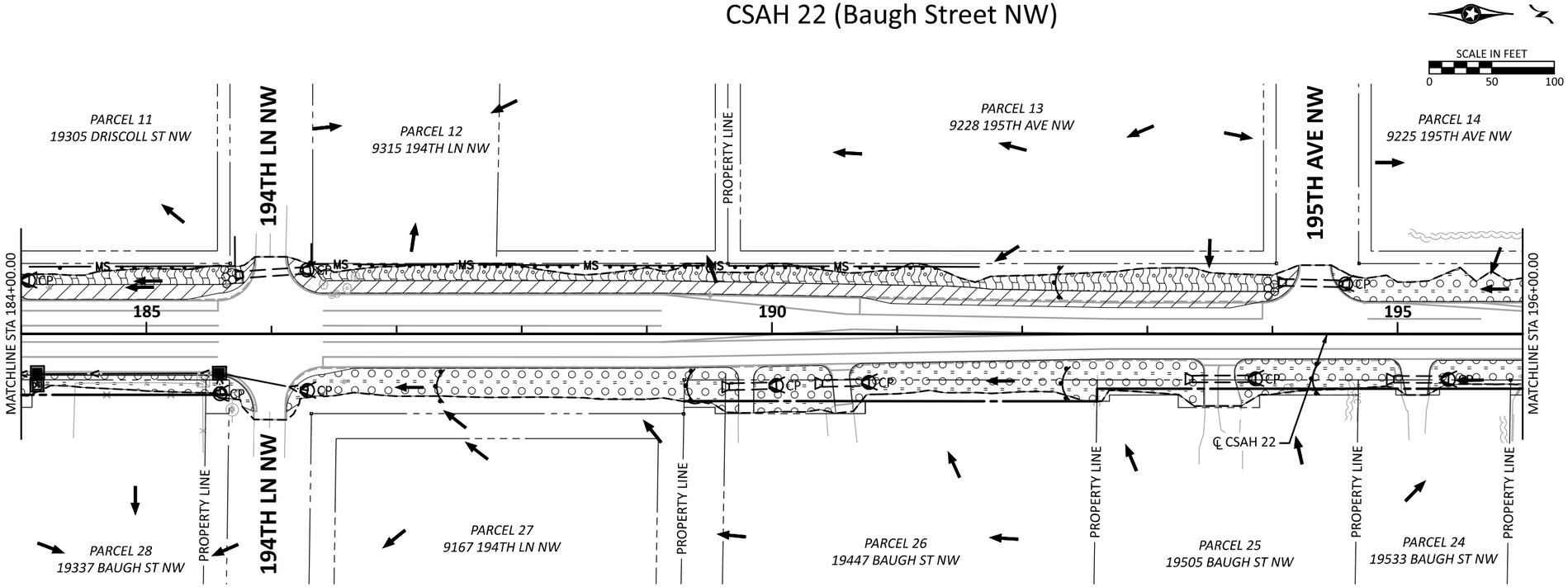


CSAH 22 (Baugh Street NW)



LEGEND

- CP — CULVERT END CONTROLS
- SURFACE FLOW DIRECTION
- STORM DRAIN INLET PROTECTION
- STABILIZED CONSTRUCTION EXIT
- RANDOM RIPRAP
- TEMPORARY DITCH CHECK: BIOROLL
- BR — SEDIMENT CONTROL LOG, TYPE COMPOST
- MS — SILT FENCE, TYPE MS
- CONSTRUCTION LIMITS
- AREA OF ENVIRONMENTAL SENSITIVITY
- INPLACE RIGHT-OF-WAY
- INPLACE EASEMENT
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

PERMANENT:
SEED MESIC INSLOPE
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF.

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN SHORTGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 20

TEMPORARY:
RAPID STABILIZATION METHOD 4

PERMANENT:
SEED TURFGRASS
FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF..

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
SEED SOUTHERN TALLGRASS
FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 25

TEMPORARY:
RAPID STABILIZATION METHOD 4

NOTES

SILT FENCE AND SEDIMENT CONTROL LOGS ARE DRAWN SCHEMATICALLY. THE CONTRACTOR SHALL INSTALL PER THE APPROPRIATE DETAILS AND STANDARD PLANS.

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DESIGNED BY:	AJF
CHECKED BY:	NEH

I HEREBY CERTIFY THAT THIS SHEET 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.

SIGNATURE: Cut G
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

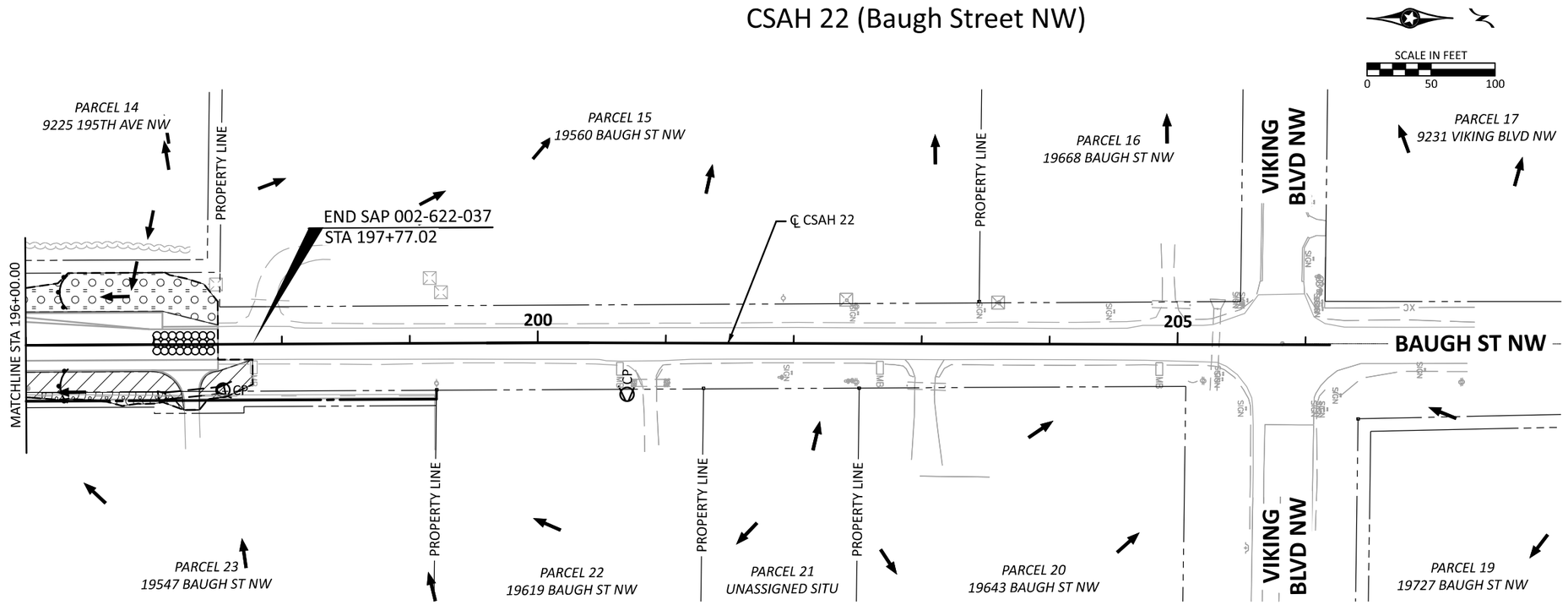
STA 172+00 TO STA 196+00

EROSION CONTROL AND TURF ESTABLISHMENT

SAP 002-622-037

Sheet No. 137 of 138 Sheets

CSAH 22 (Baugh Street NW)



LEGEND

- CP — CULVERT END CONTROLS
- SURFACE FLOW DIRECTION
- STORM DRAIN INLET PROTECTION
- STABILIZED CONSTRUCTION EXIT
- RANDOM RIPRAP
- TEMPORARY DITCH CHECK: BIOROLL
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- INPLACE RIGHT-OF-WAY
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- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- RIGHT-OF-WAY

PERMANENT:
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FERTILIZER TYPE 3
HYDRAULIC MATRIX TYPE FIBER REINF.

TEMPORARY:
RAPID STABILIZATION METHOD 3

PERMANENT:
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FERTILIZER TYPE 4
ROLLED EROSION PREVENTION CAT. 20

TEMPORARY:
RAPID STABILIZATION METHOD 4

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TEMPORARY:
RAPID STABILIZATION METHOD 4

NOTES

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SIGNATURE: _____
PRINTED NAME: AUSTIN J. FROSIG, PE
DATE: 11/4/2025 LIC. NO. 61652

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

STA 196+00 TO STA 197+77.02
EROSION CONTROL AND TURF ESTABLISHMENT

SAP 002-622-037

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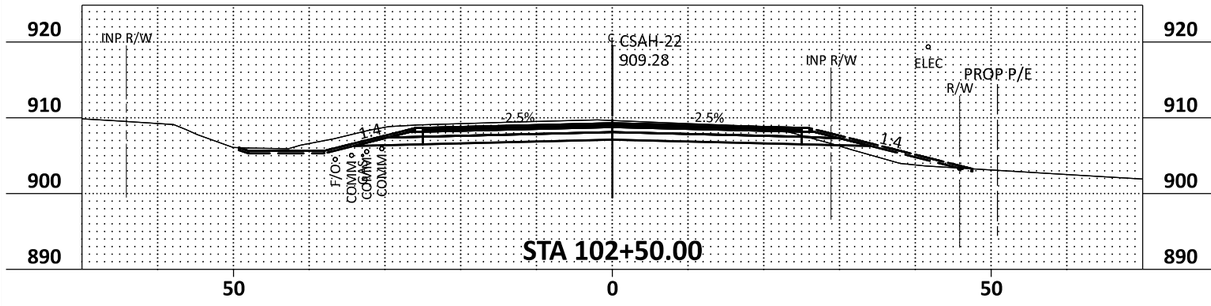

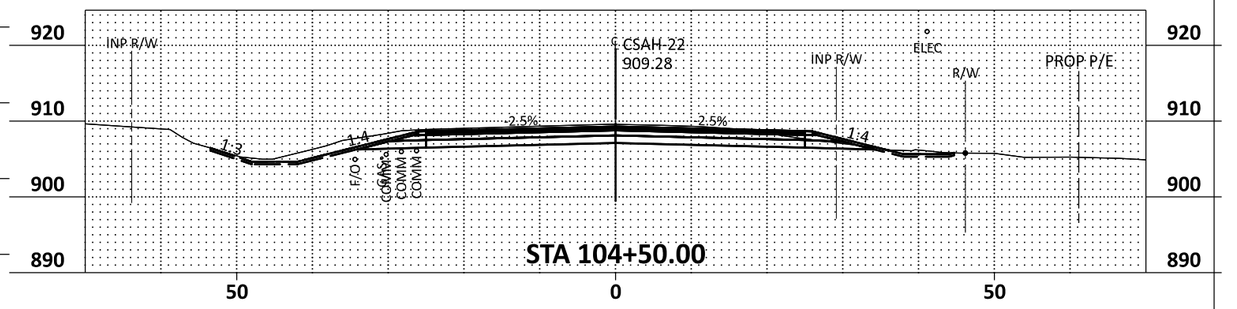

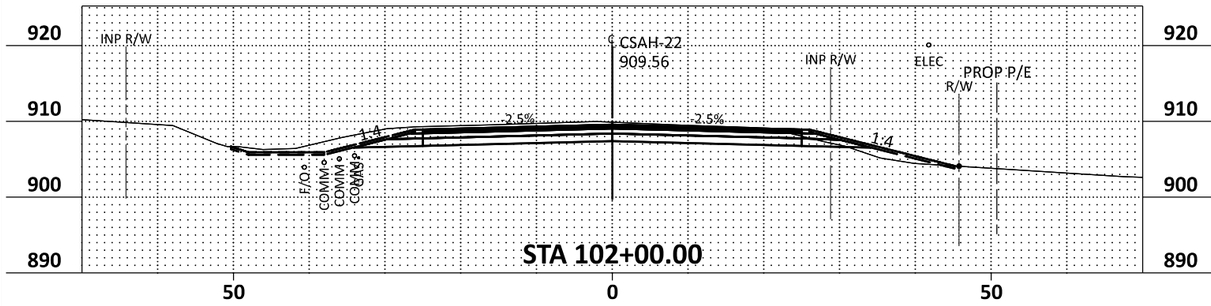

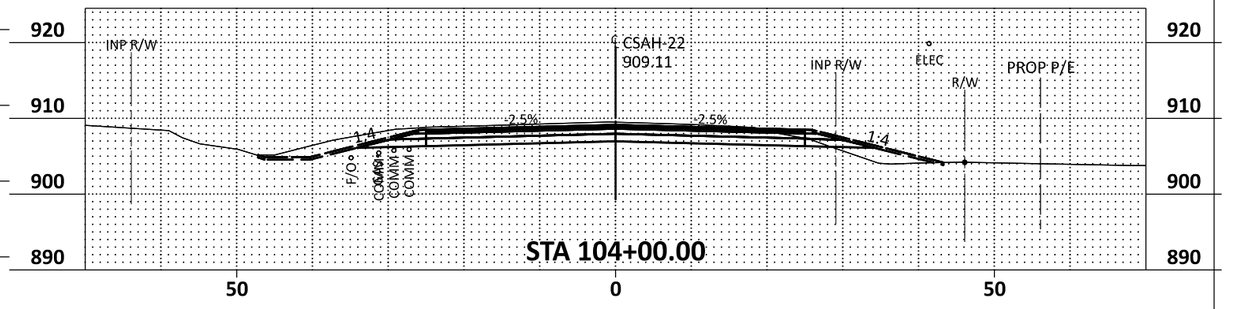

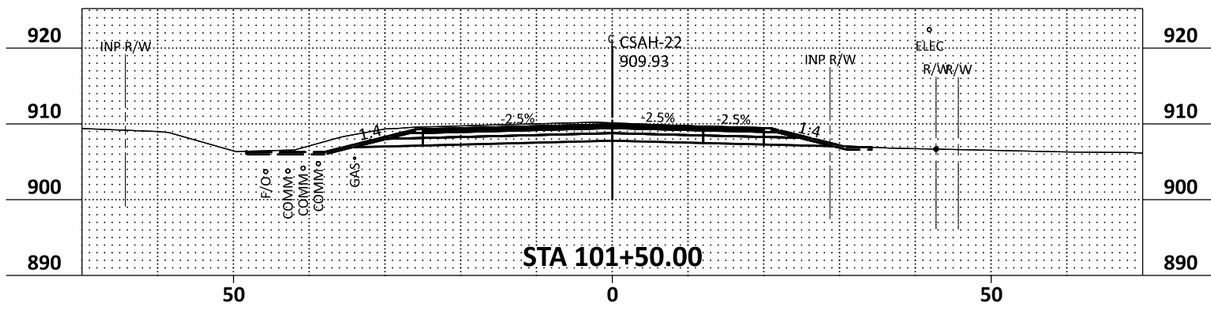

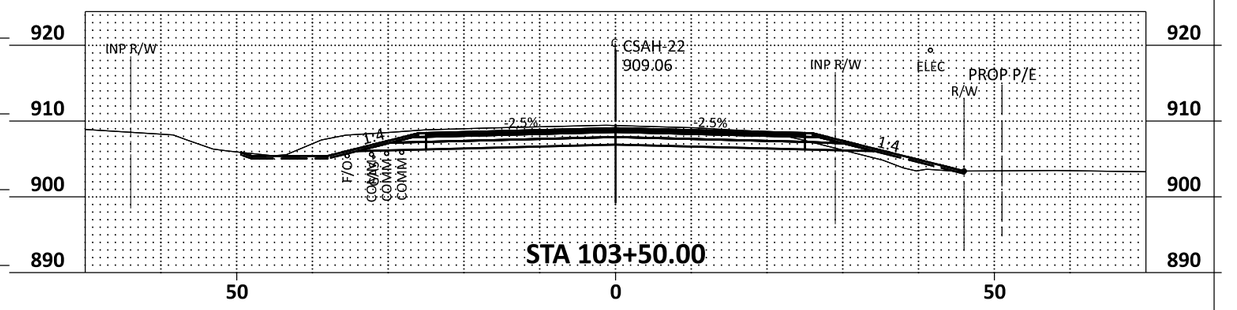

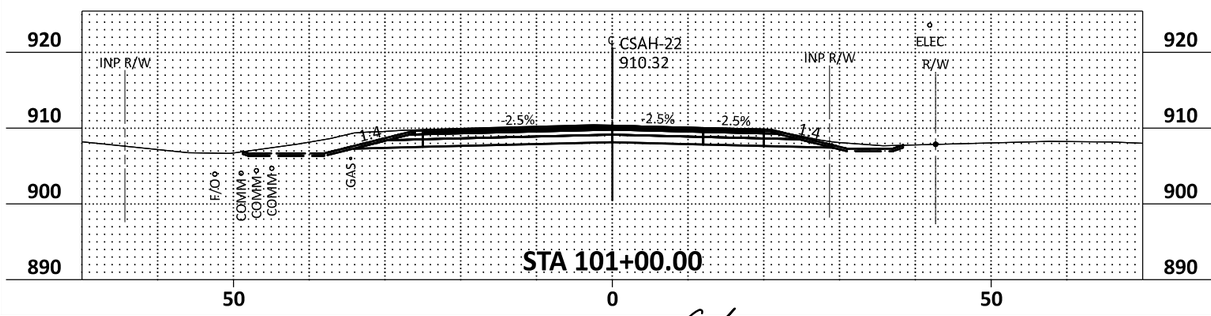

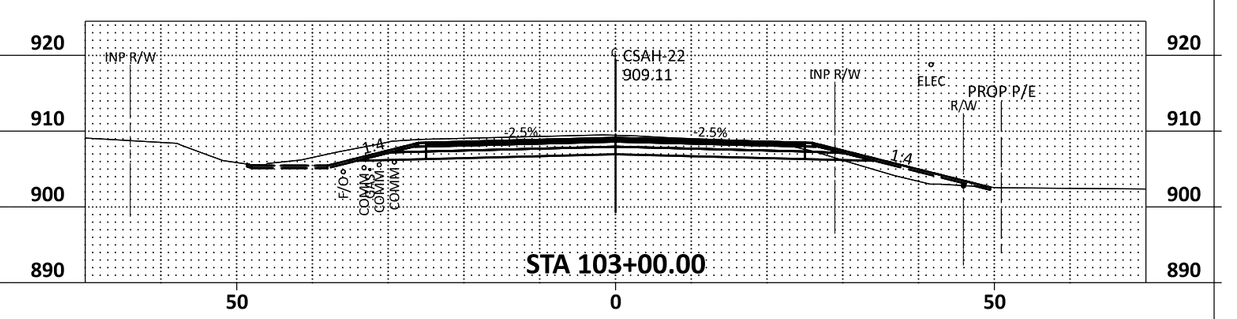

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

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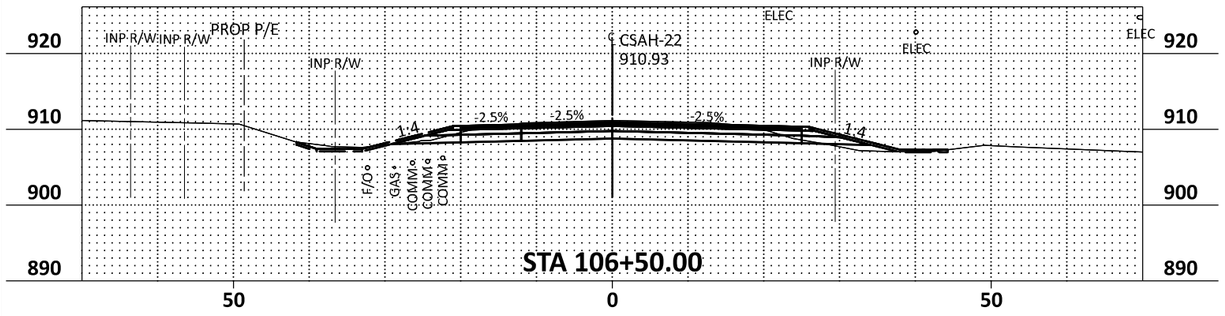
ANOKA COUNTY

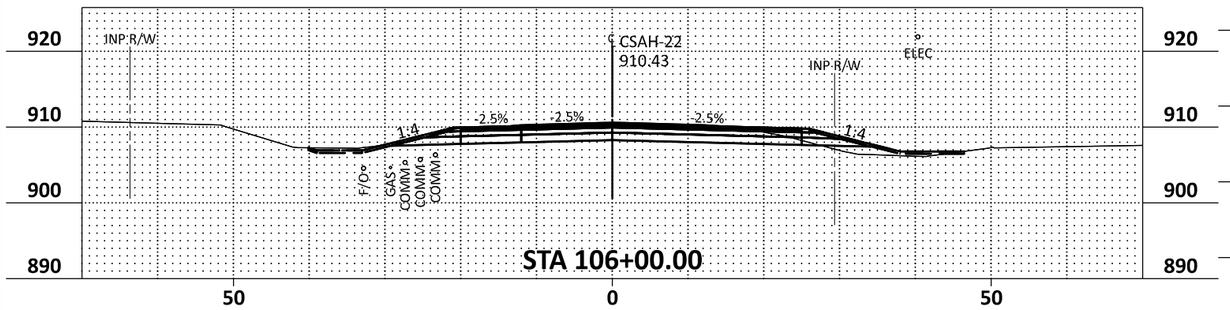
CSAH 22 (Baugh Street NW) Reconstruction

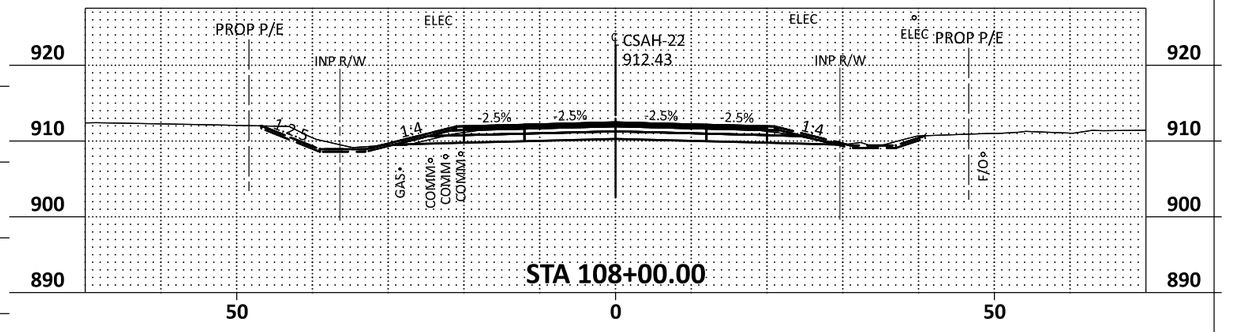
CROSS SECTIONS

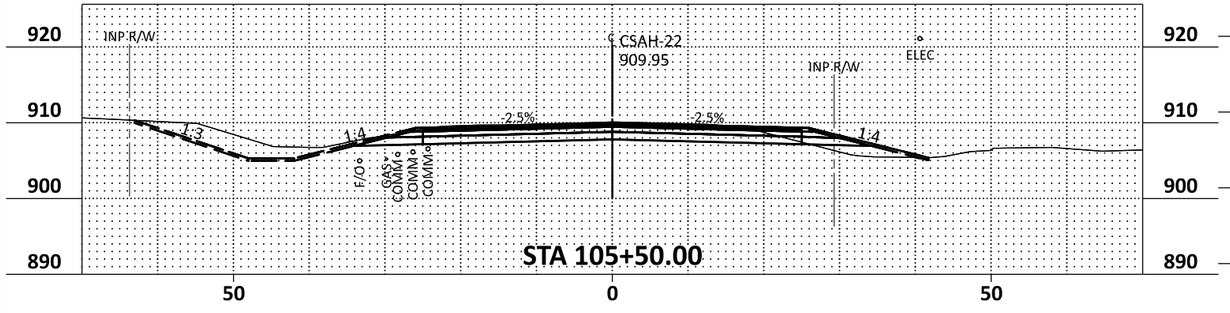
SAP 002-622-037

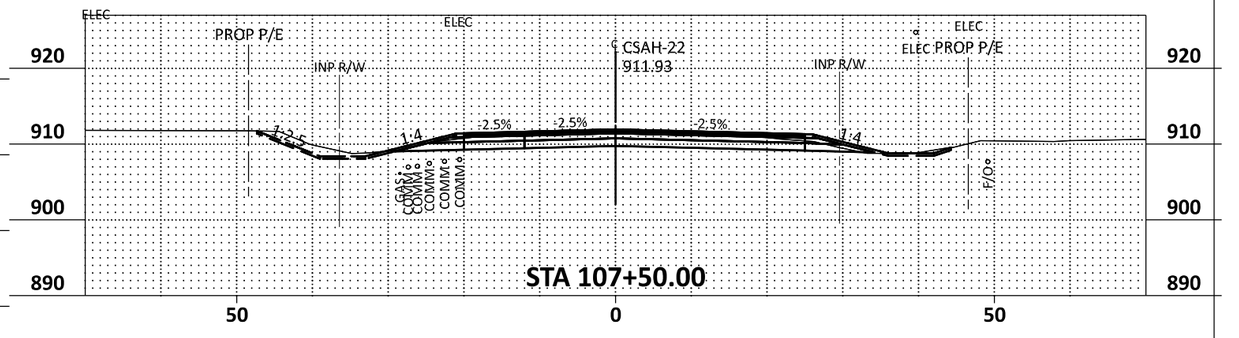
Sheet No. X1 of X31 Sheets

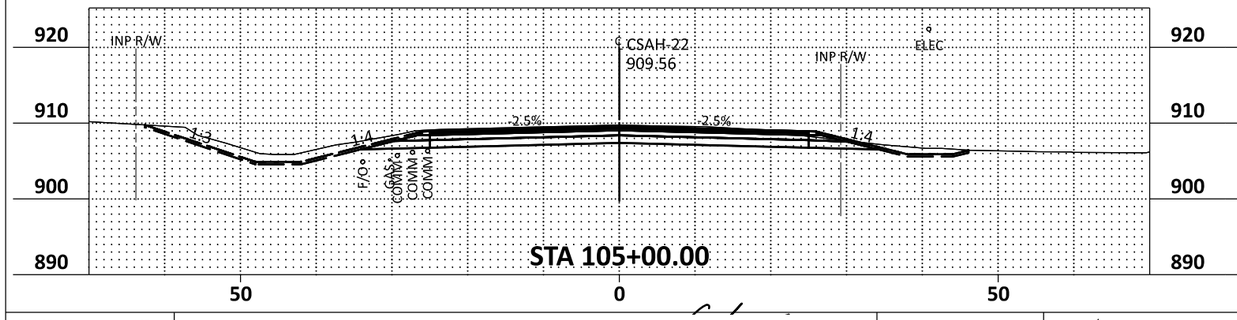


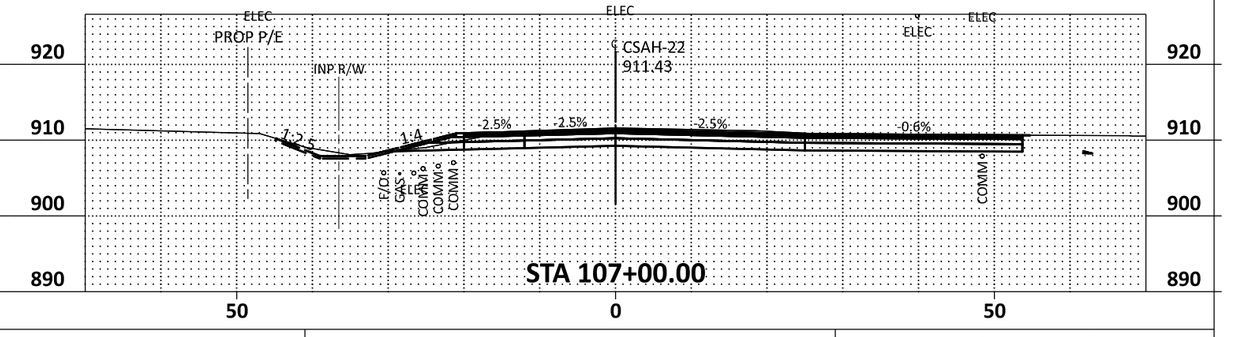












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PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-900xsp-001

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DESIGNED BY:	AJF
CHECKED BY:	NEH

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X2 of X31 Sheets

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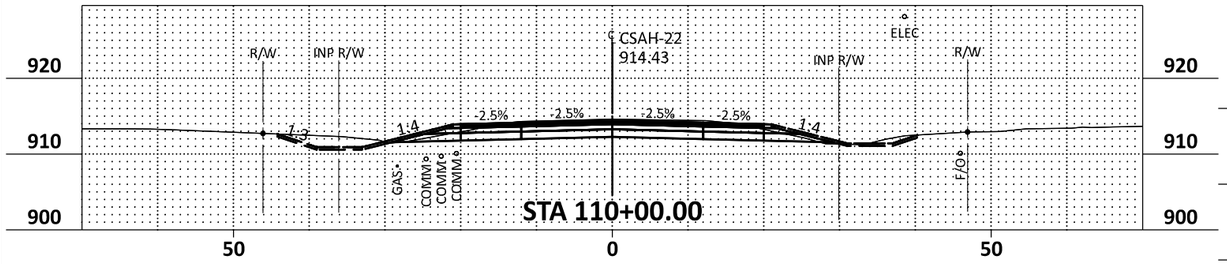

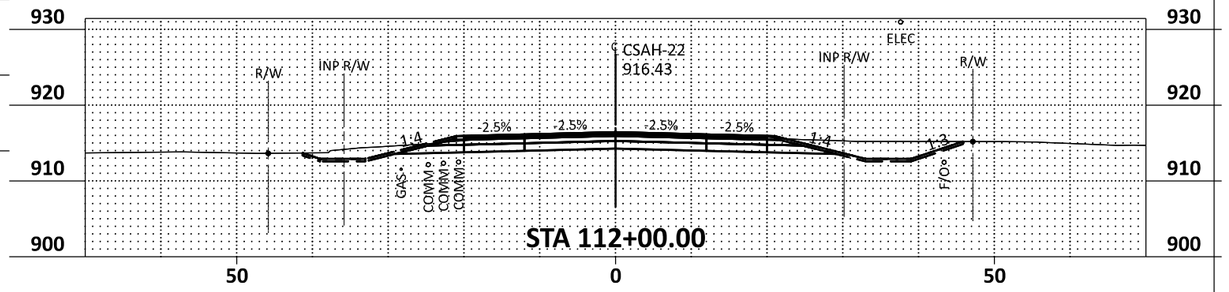

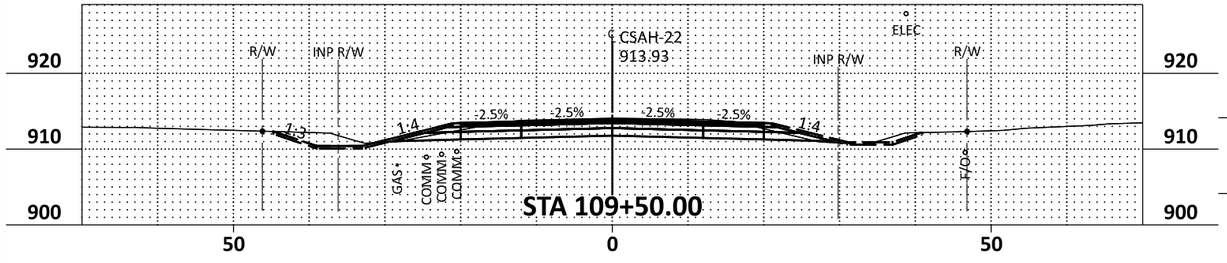

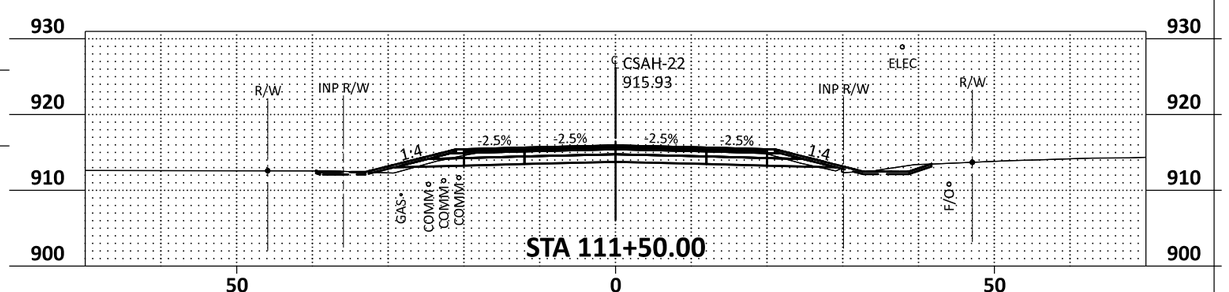

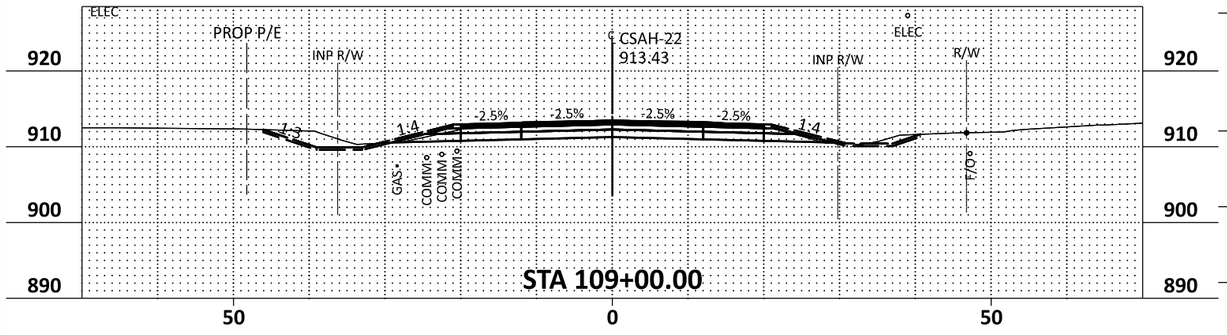

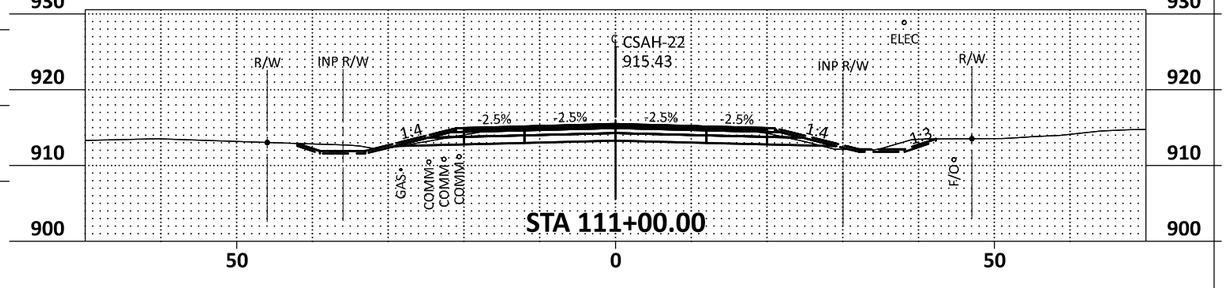

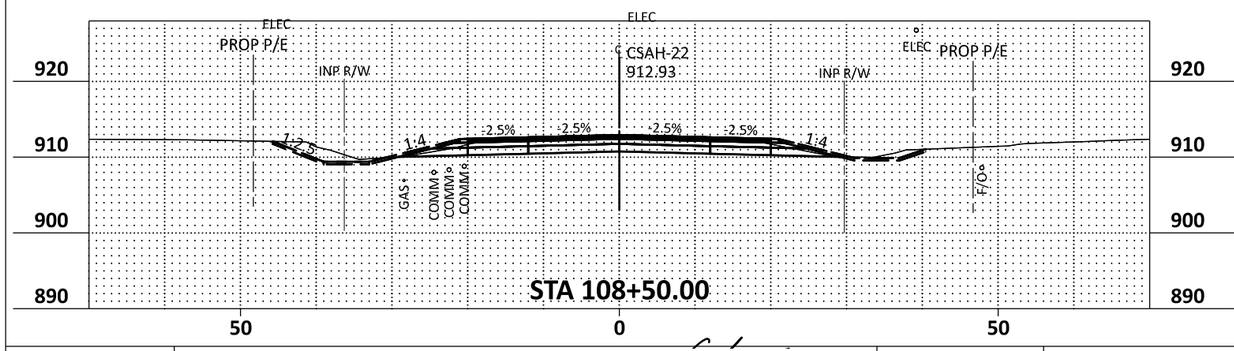

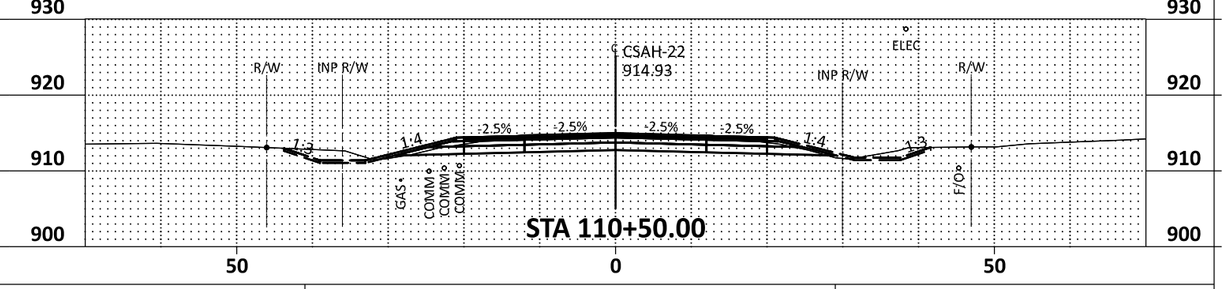

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X3 of X31 Sheets

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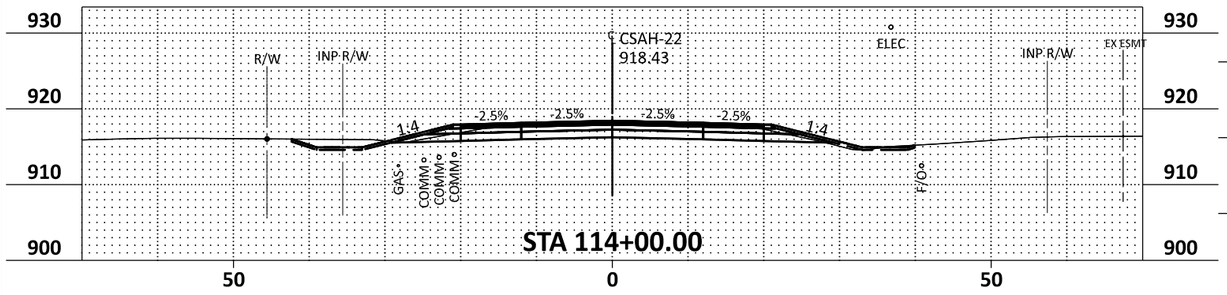

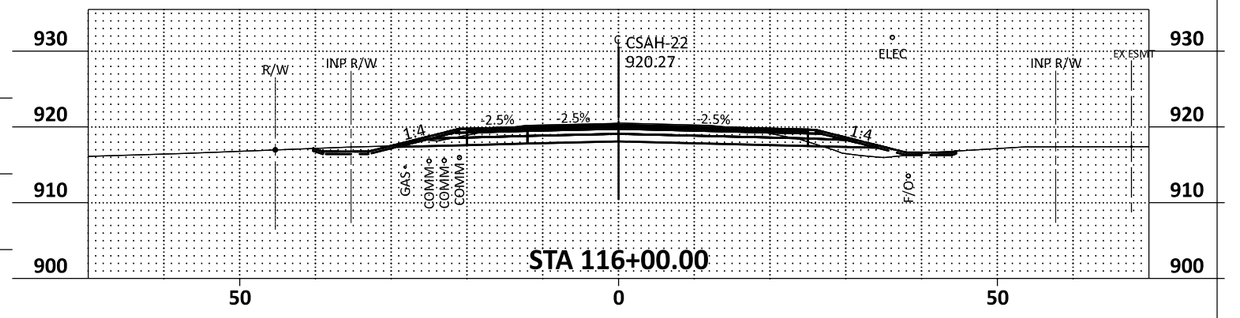

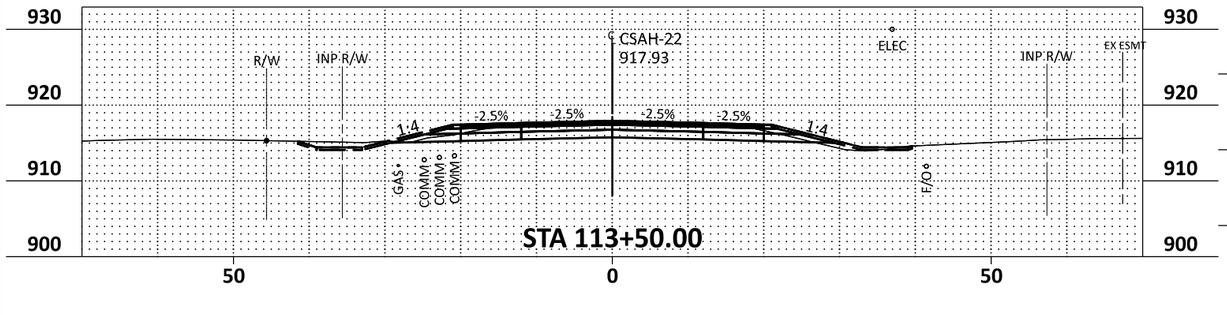

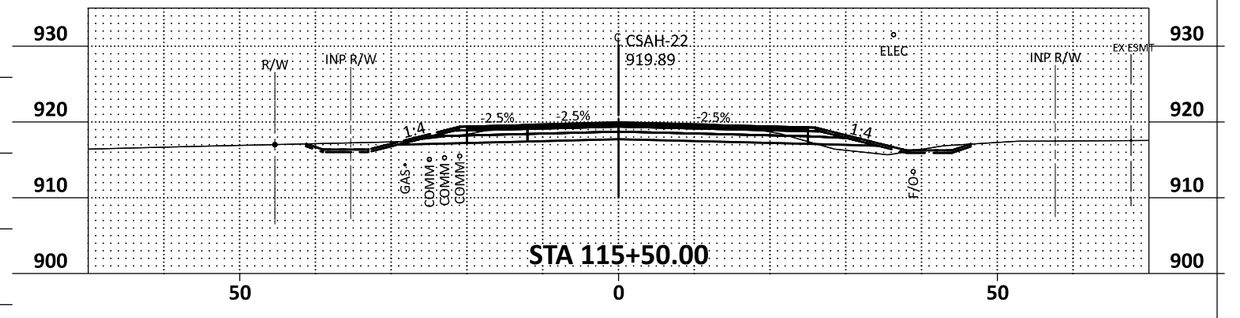

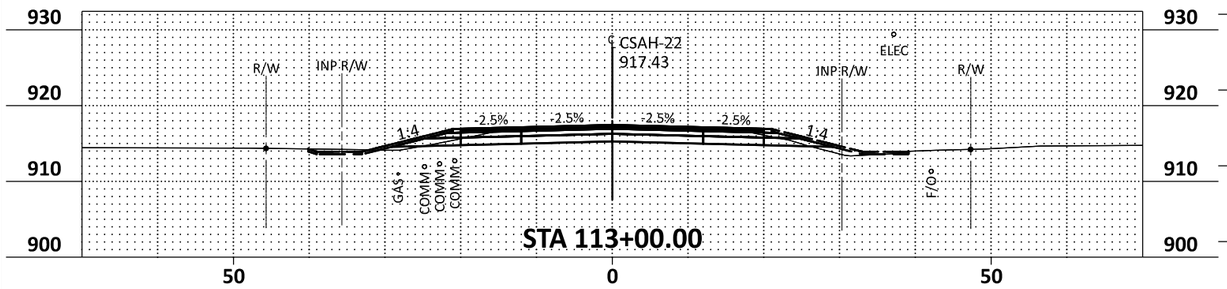

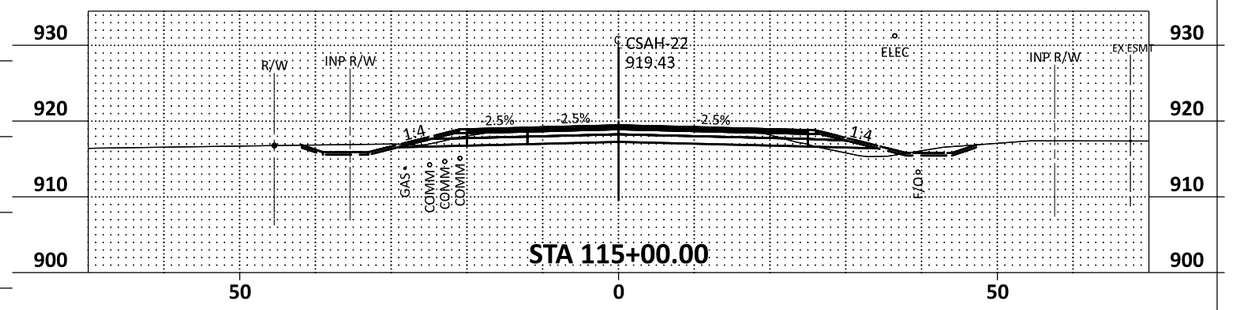

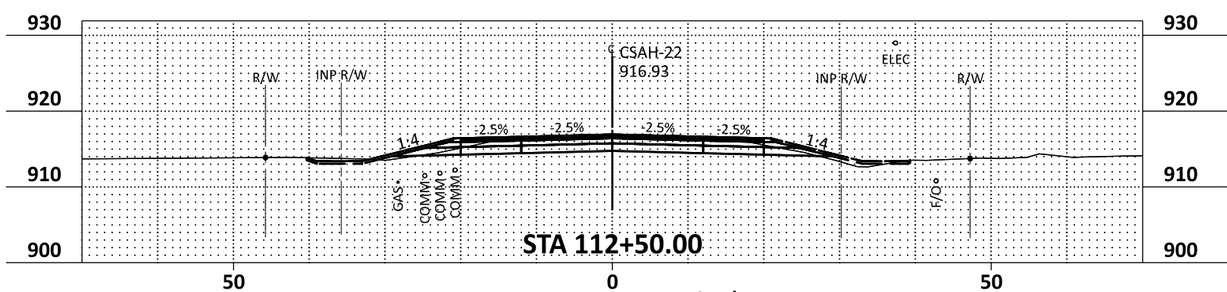

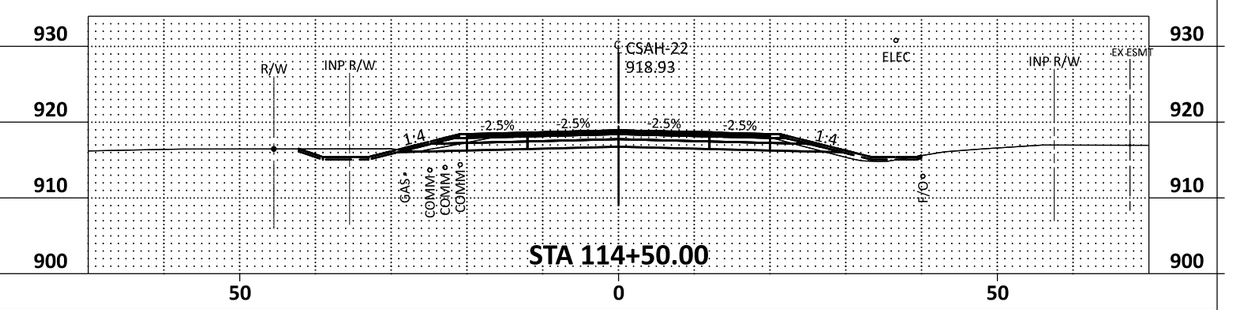

DRAWN BY:	AJF
DESIGNED BY:	AJF
CHECKED BY:	NEH

wsb

ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X4 of X31 Sheets

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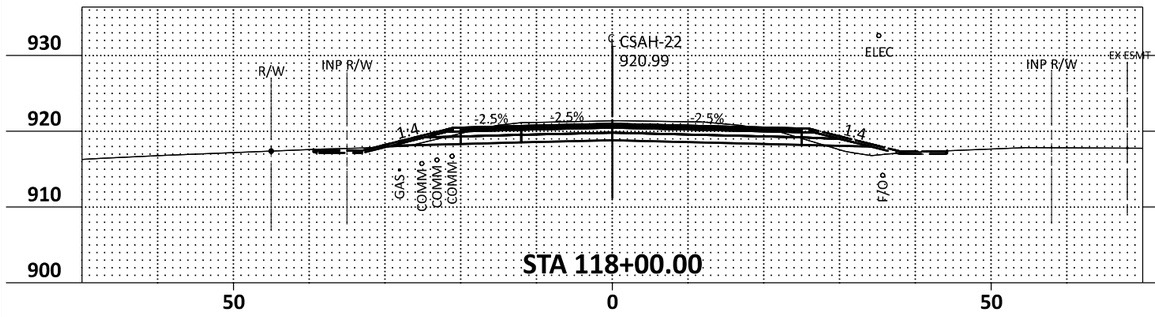

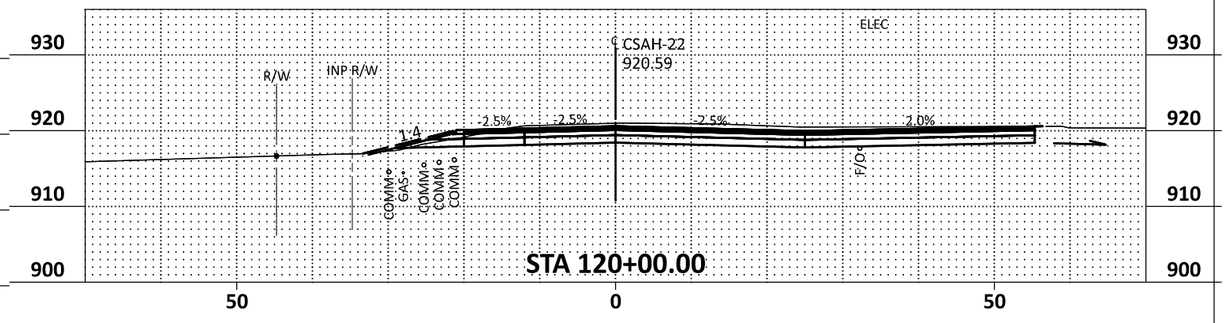

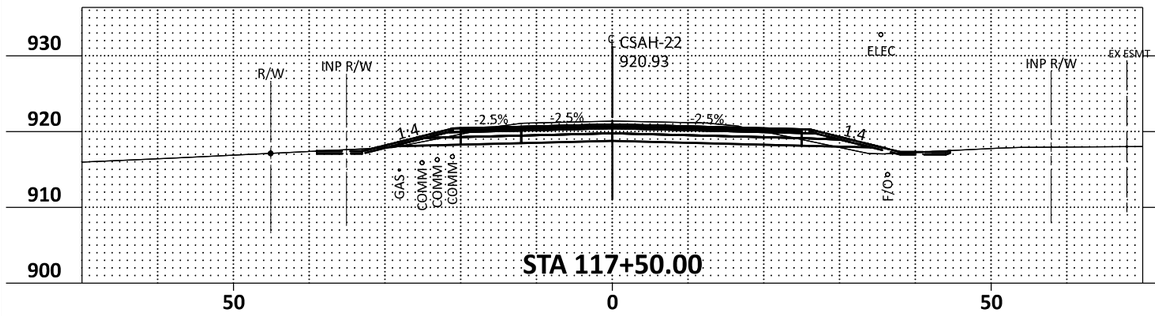

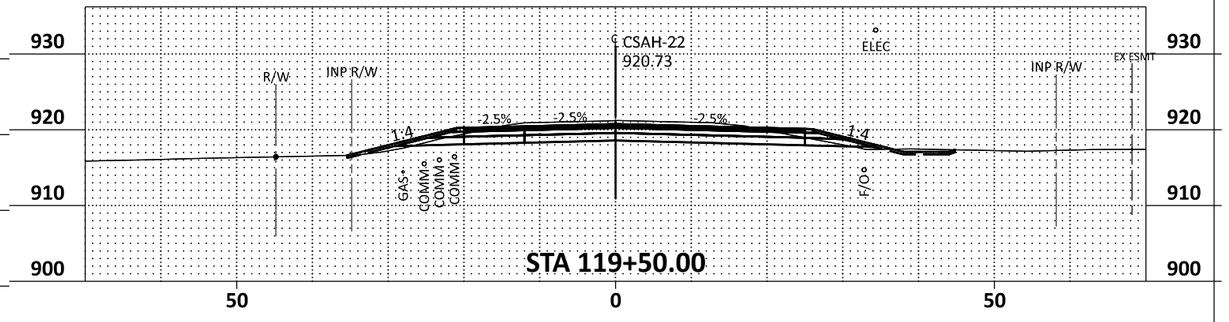

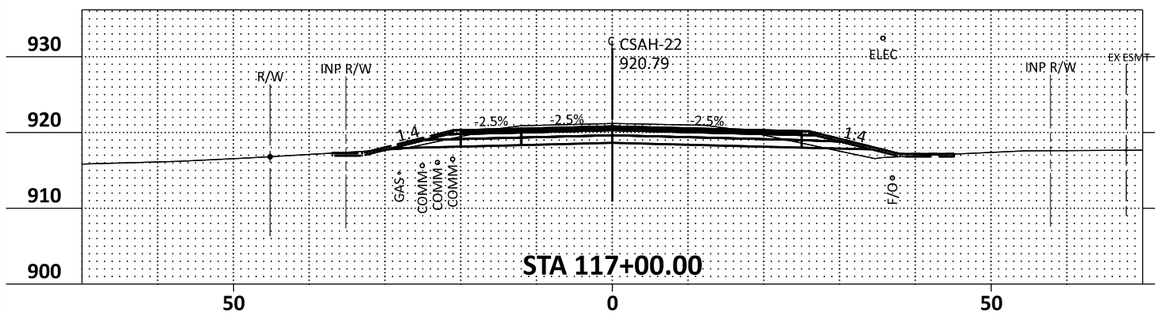

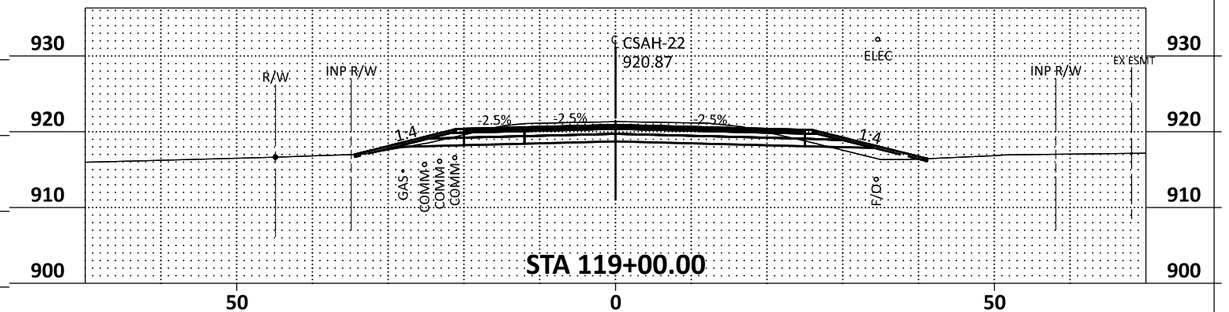

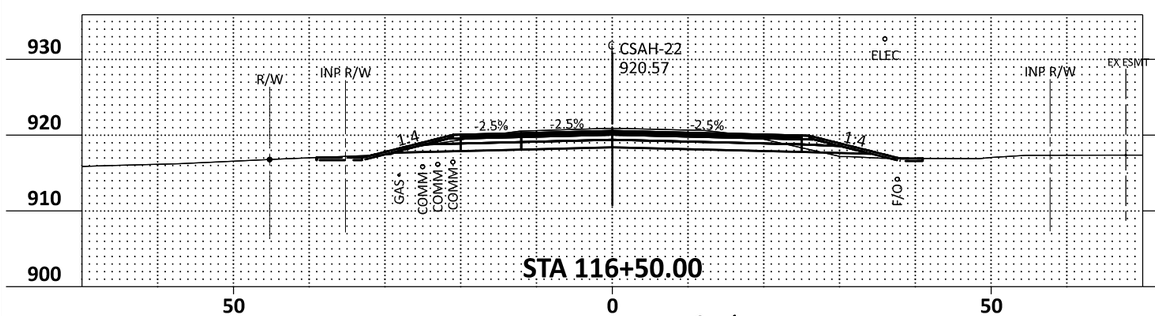

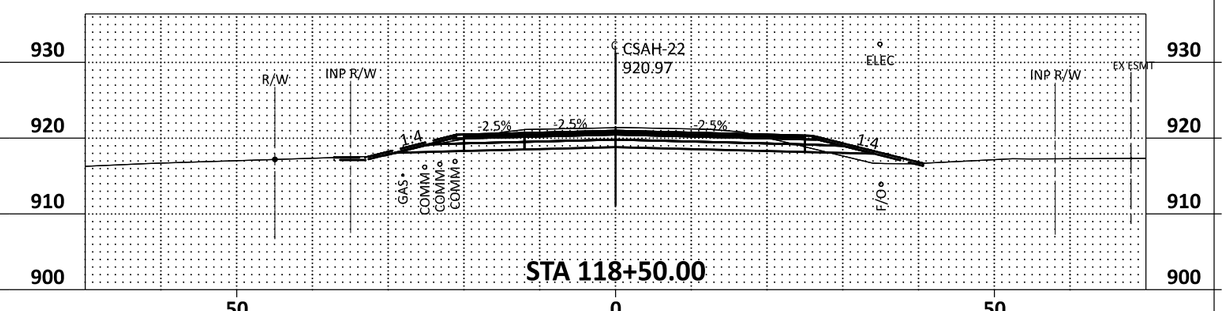

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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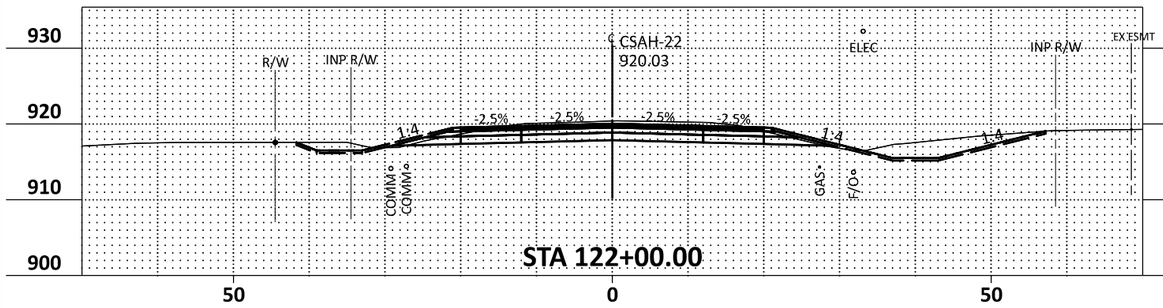

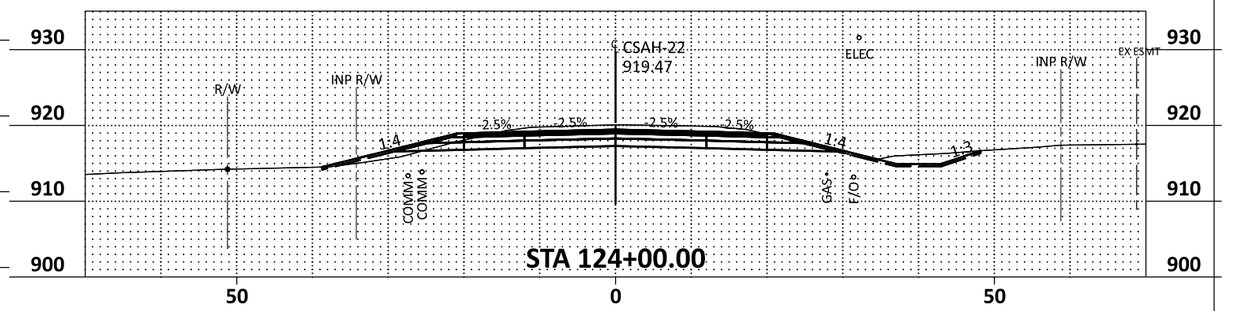

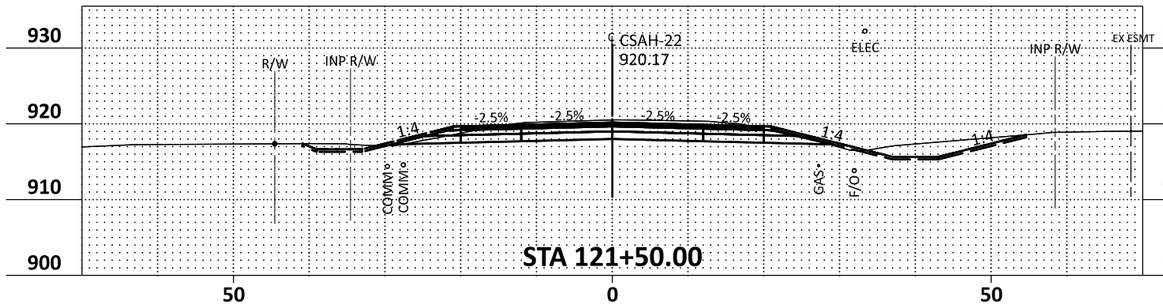

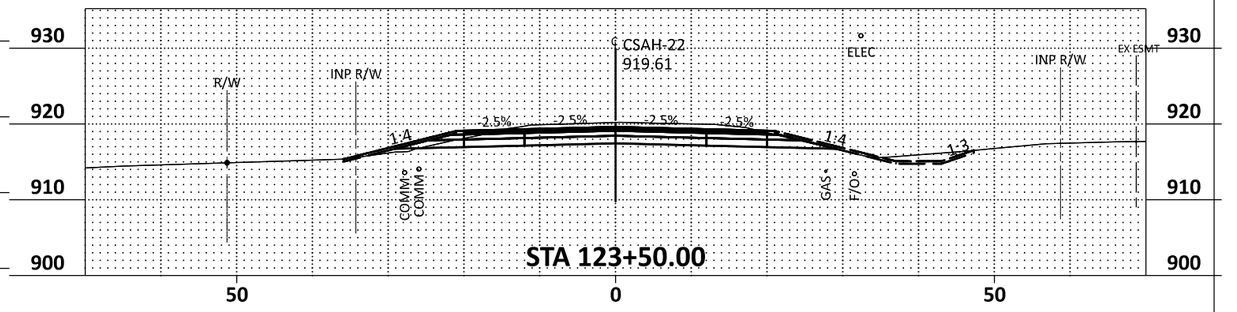

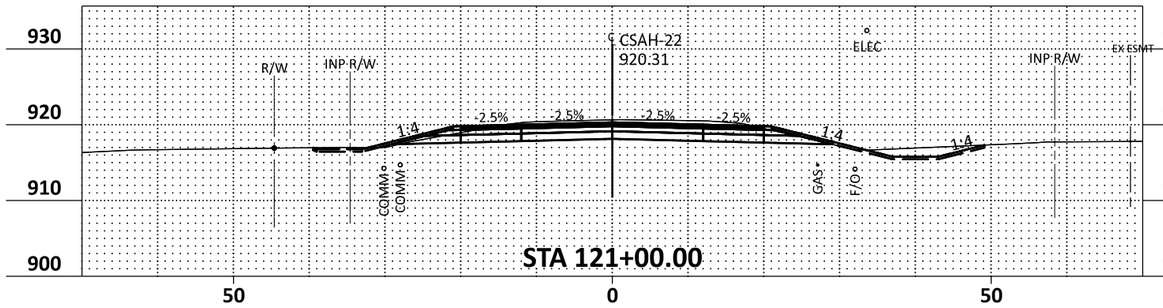

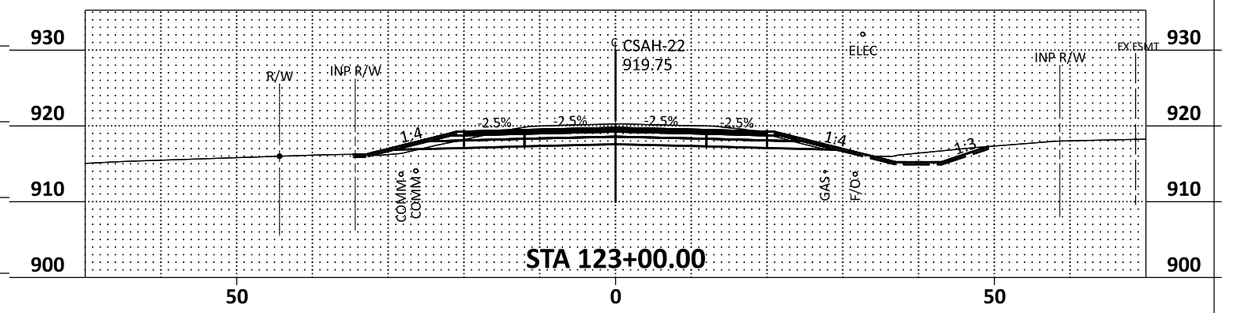

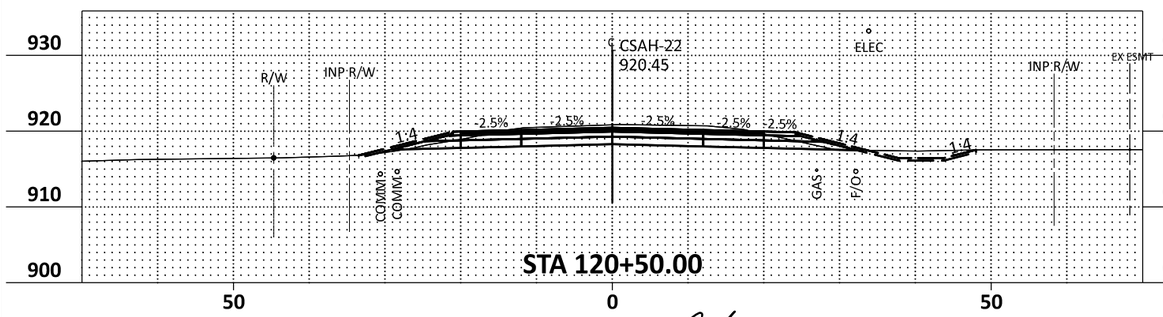

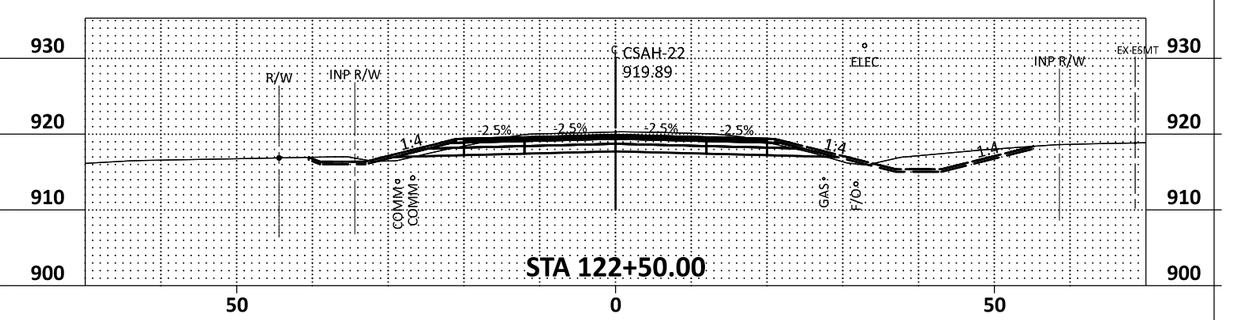

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DESIGNED BY:	AJF
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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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Sheet No. X6 of X31 Sheets

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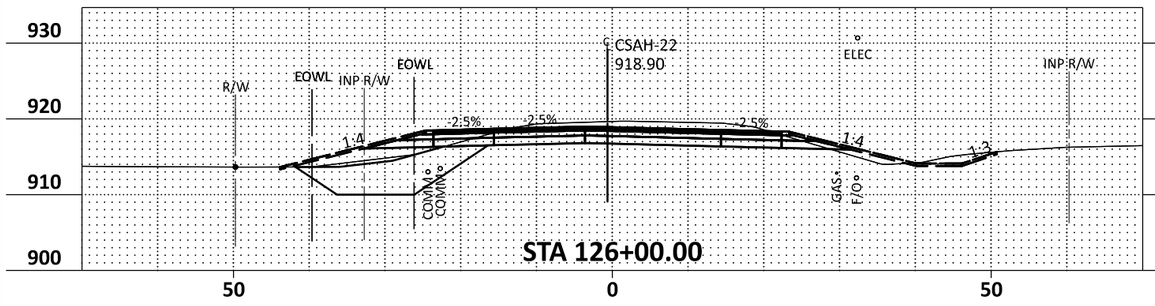

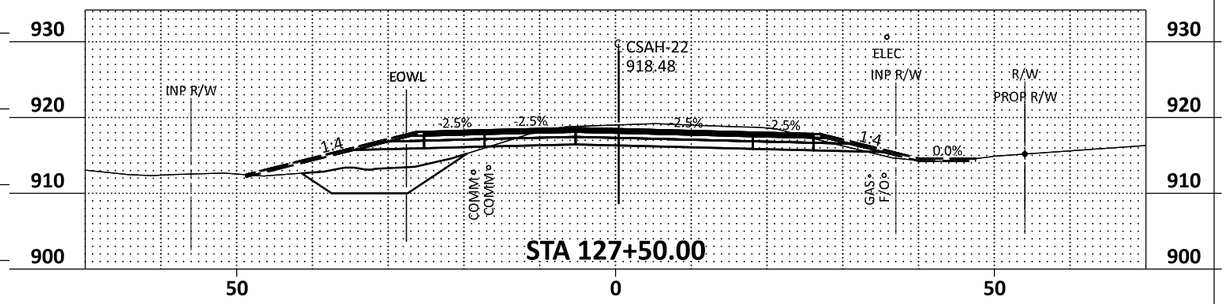

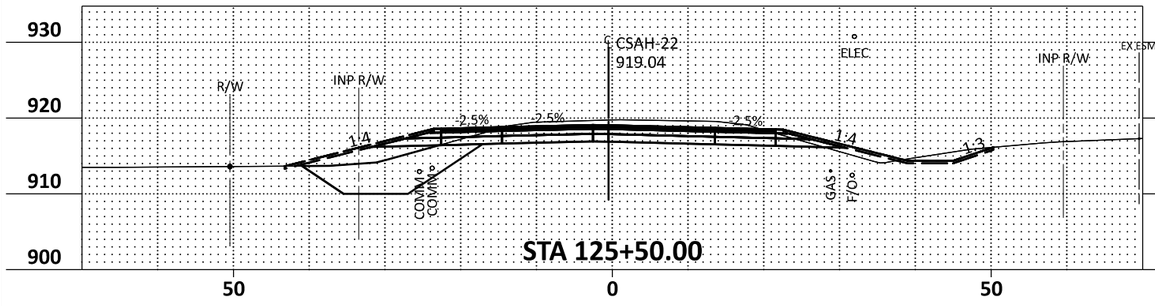

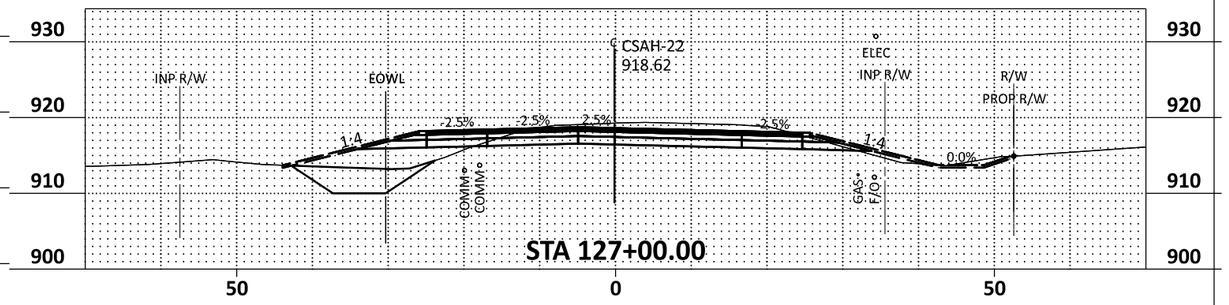

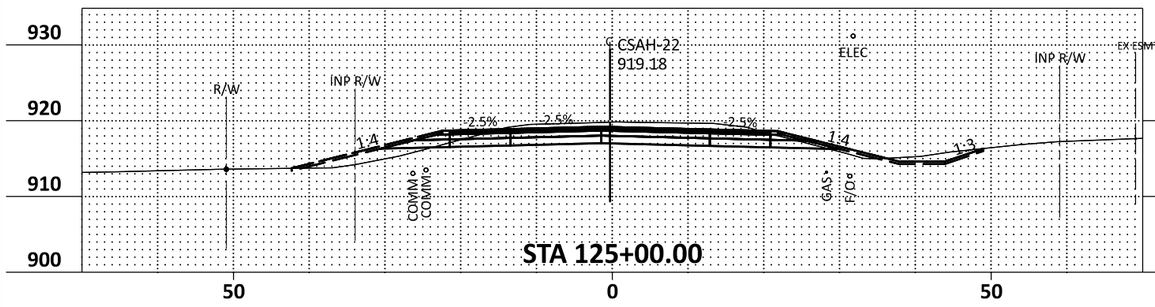

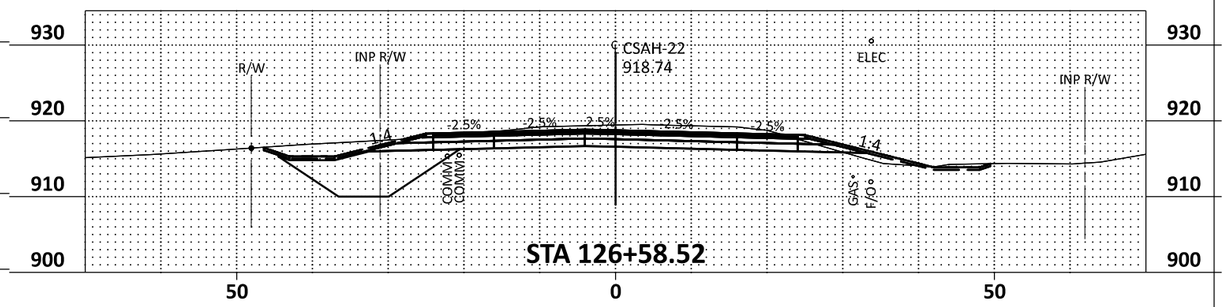

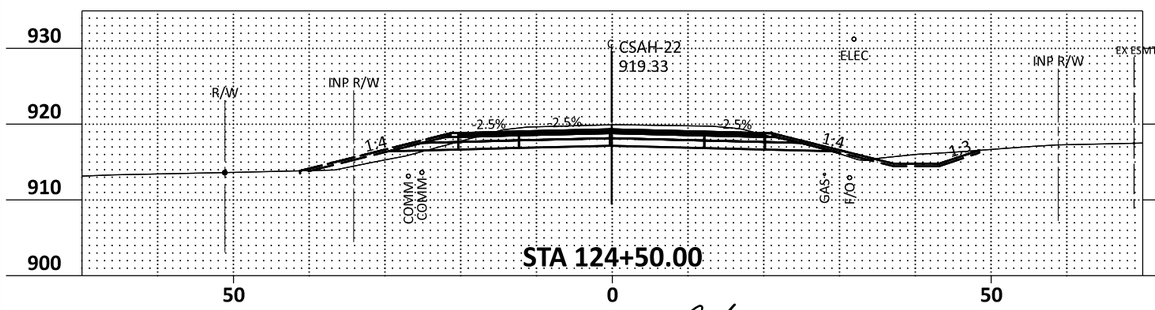

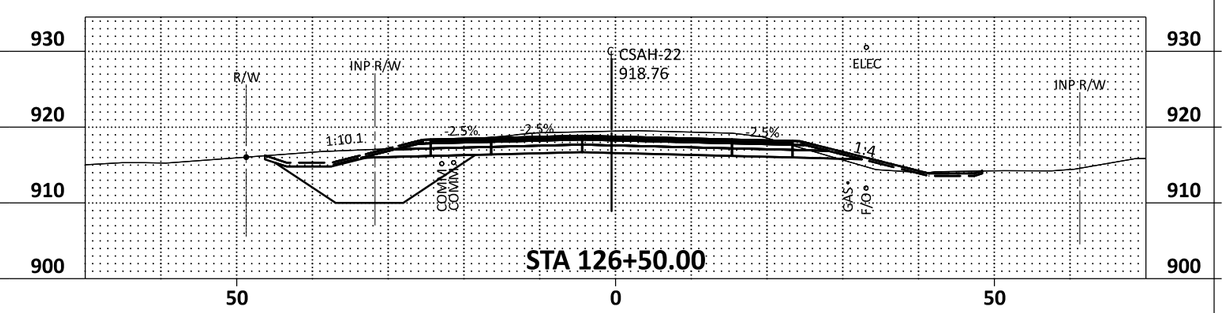

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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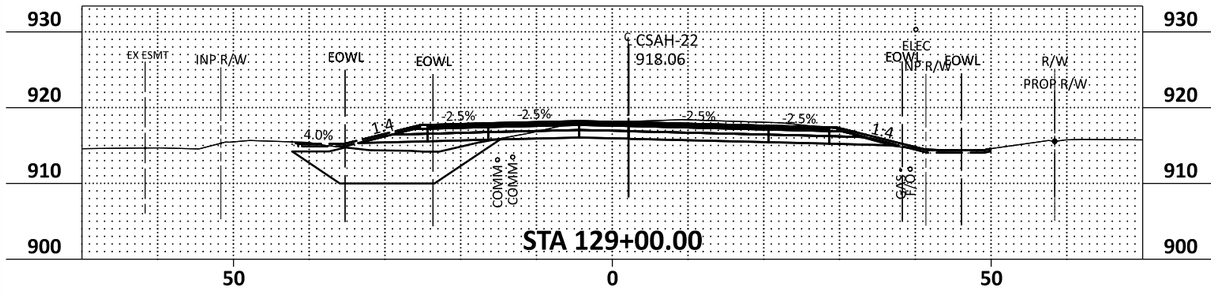

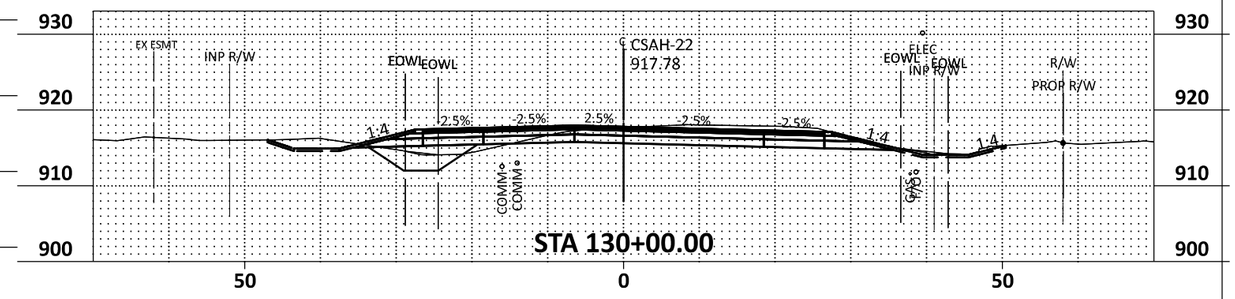

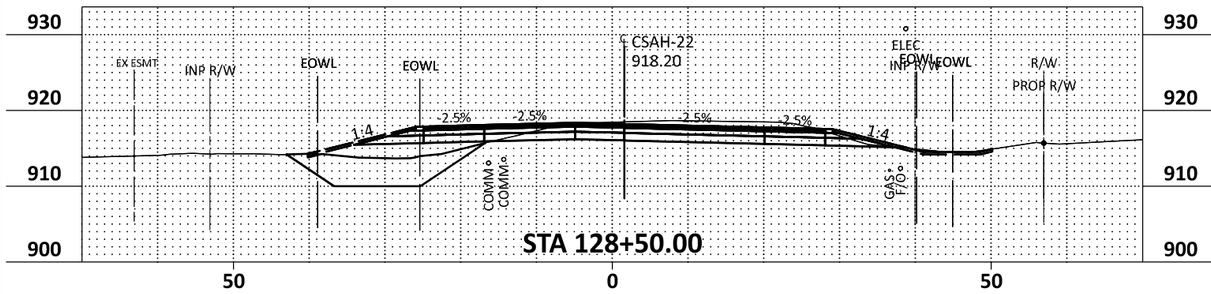

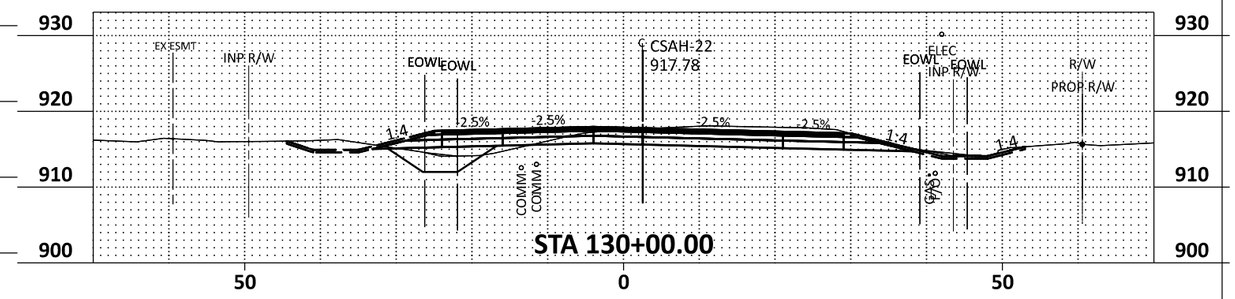

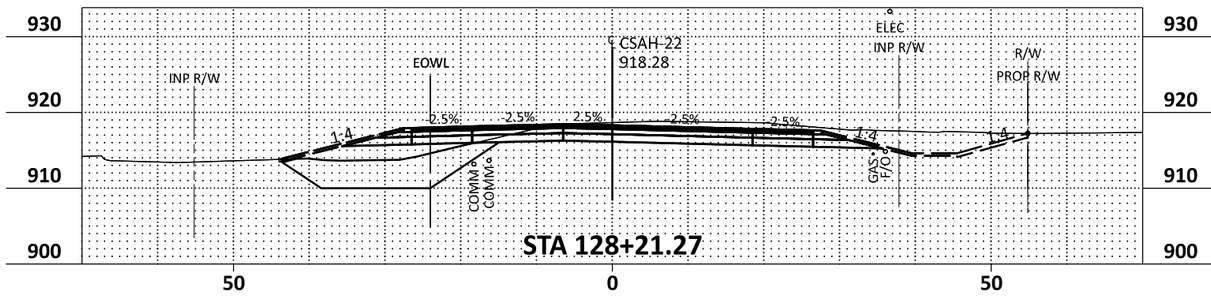

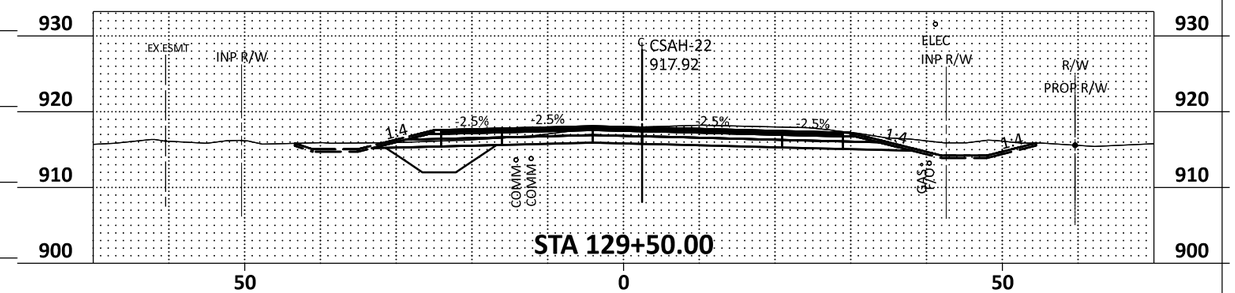

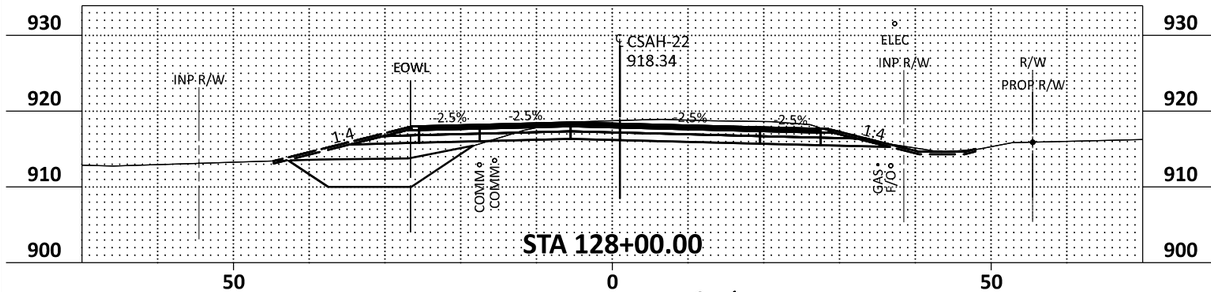

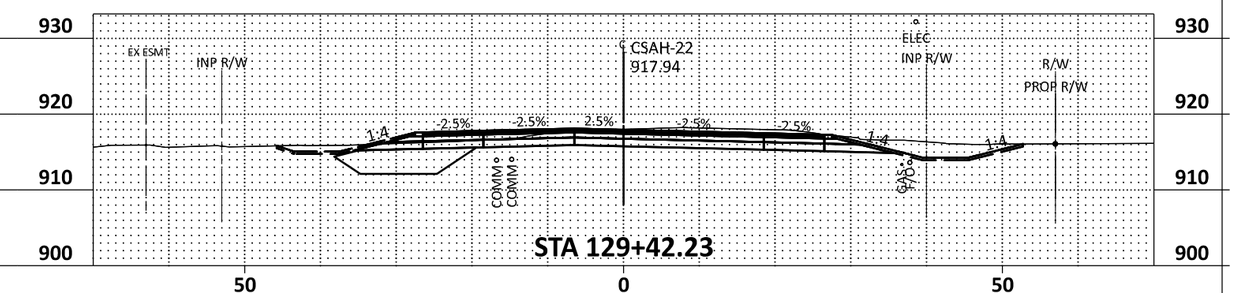

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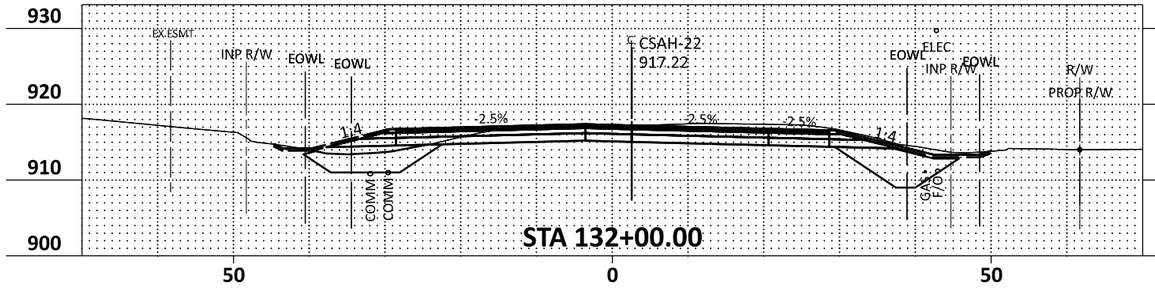

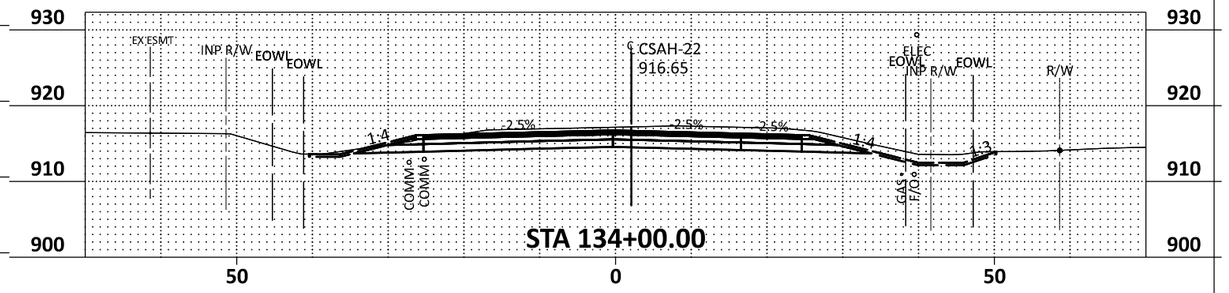

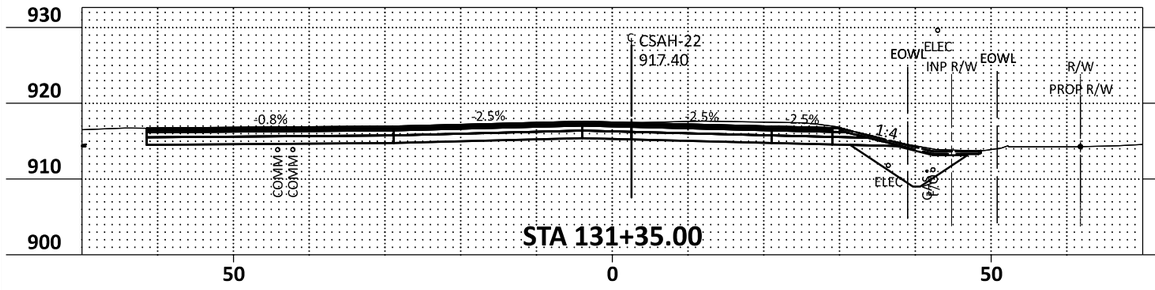

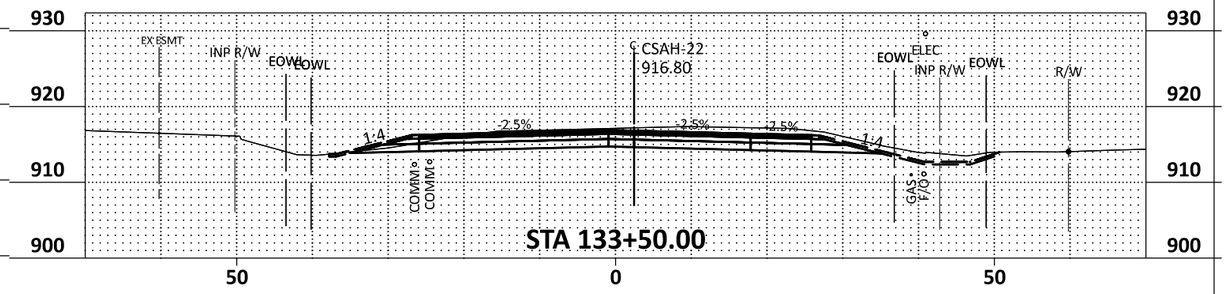

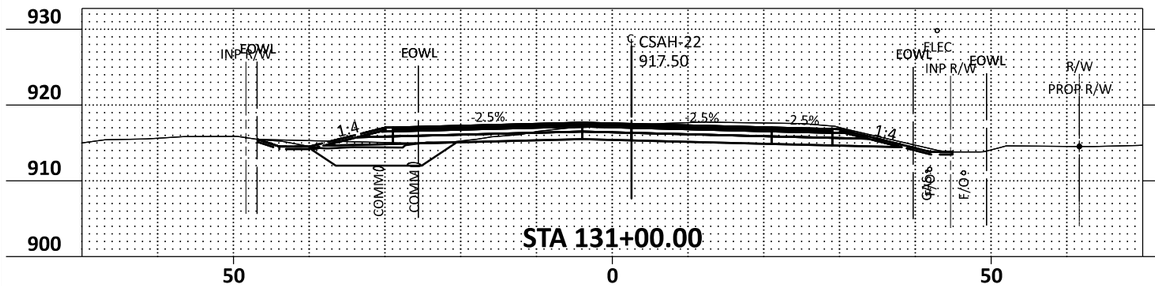

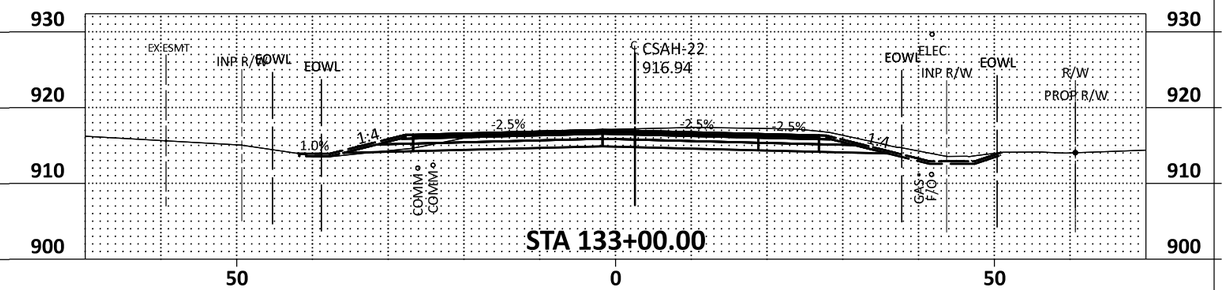

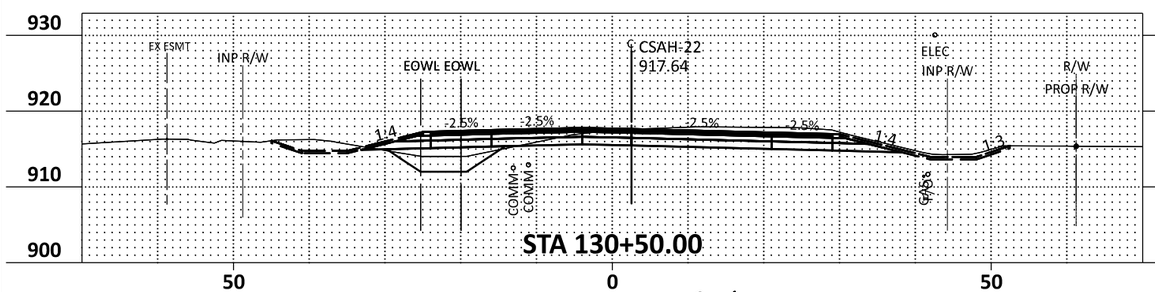

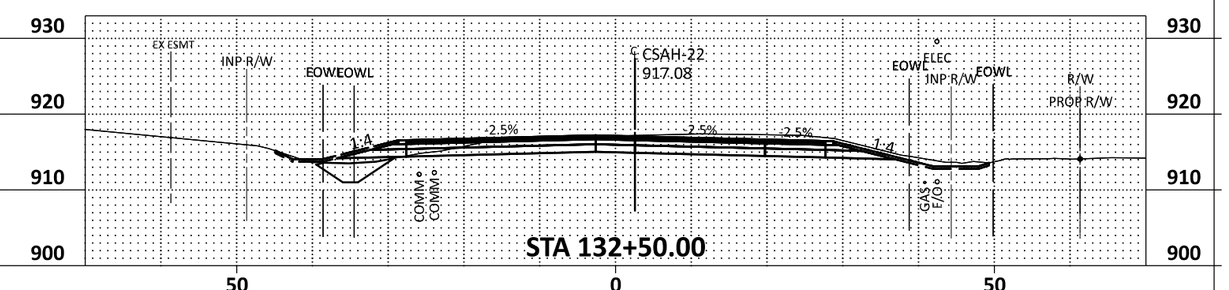

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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Sheet No. X9 of X31 Sheets

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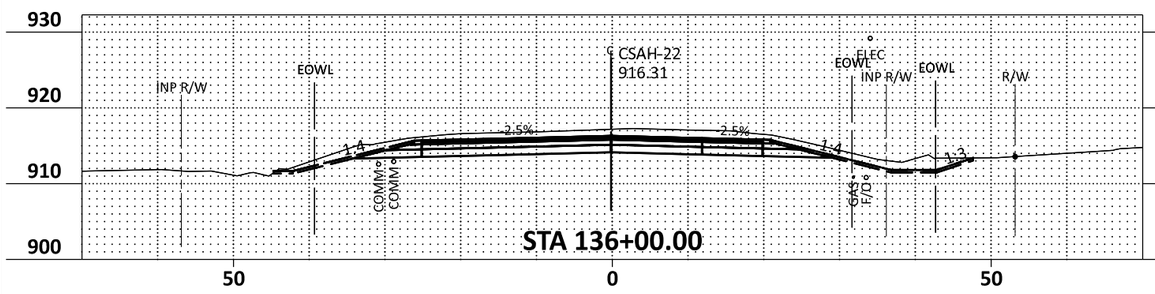

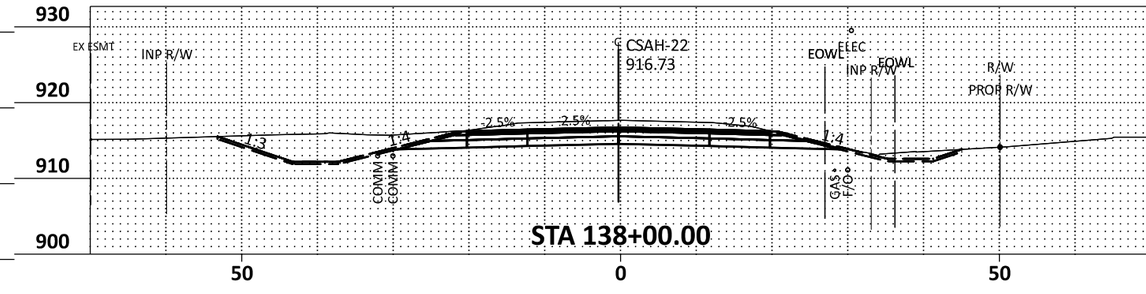

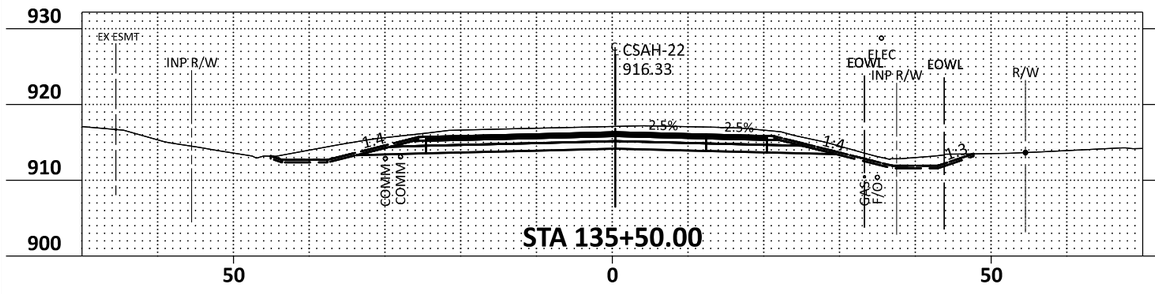

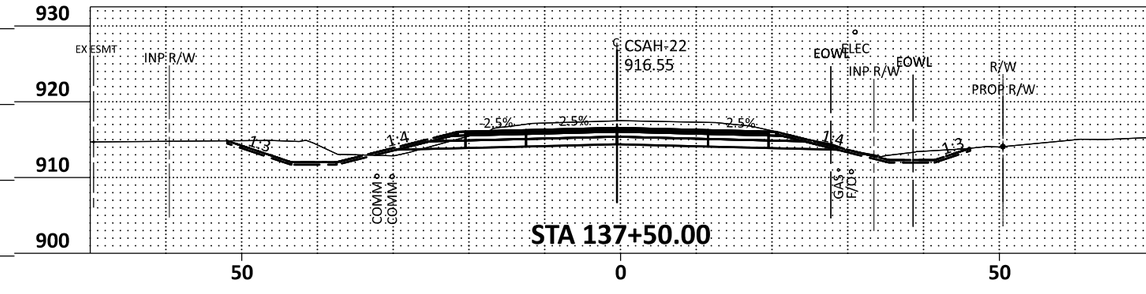

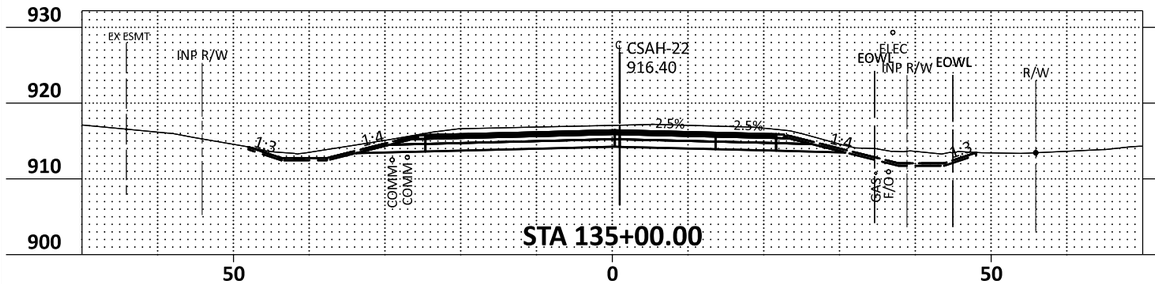

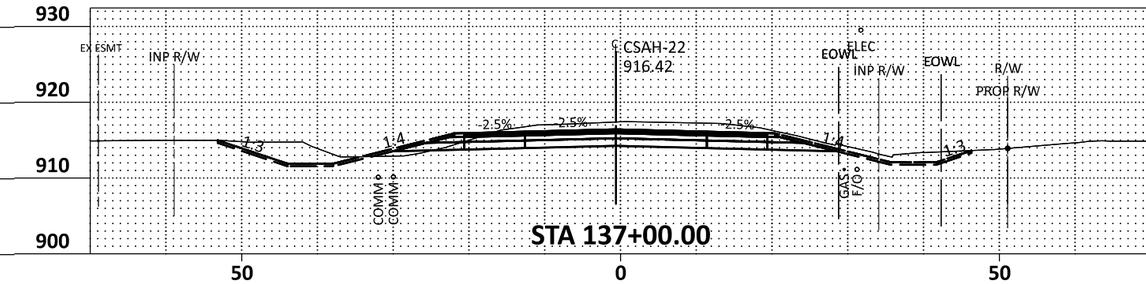

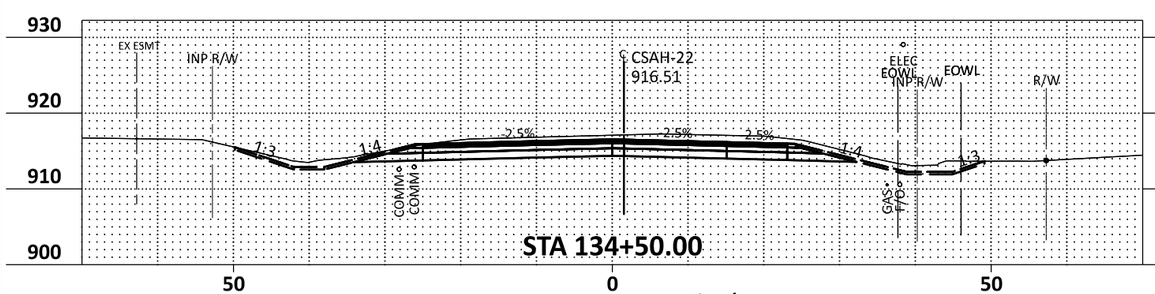

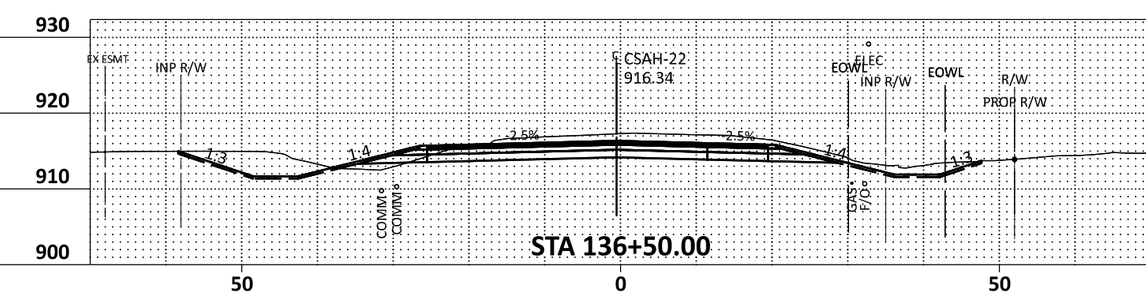

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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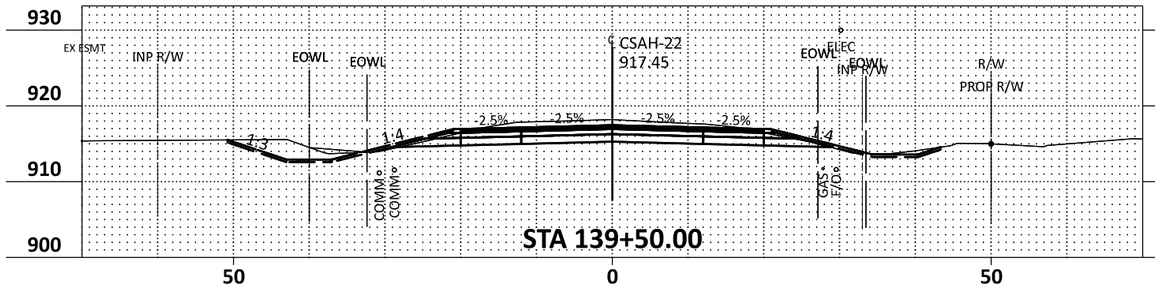

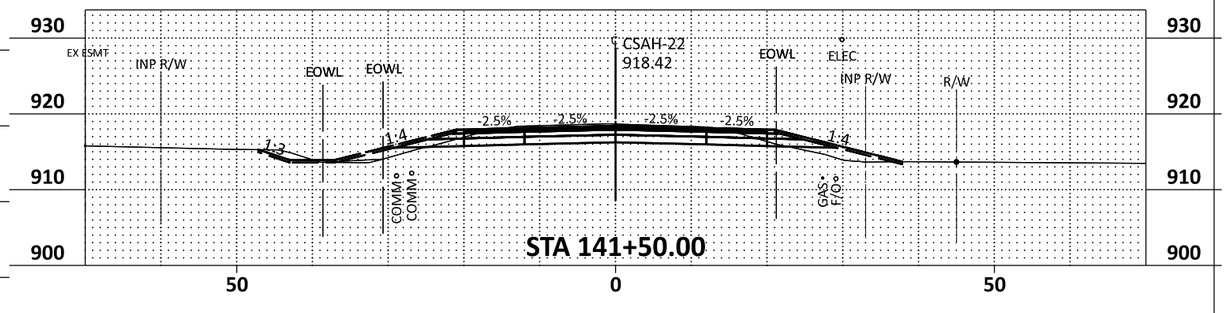

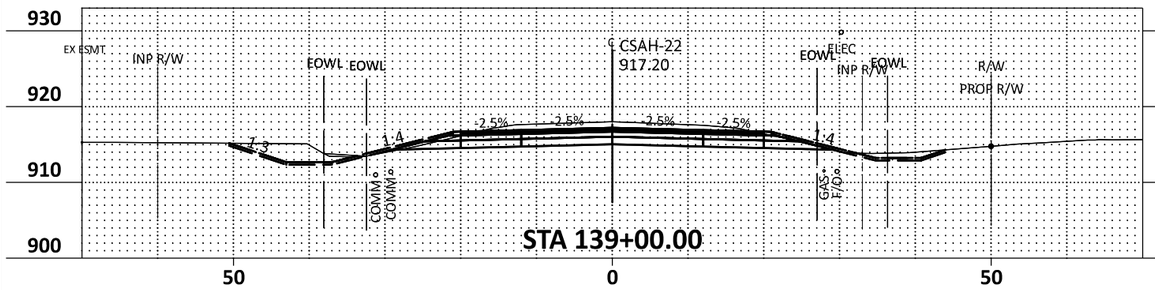

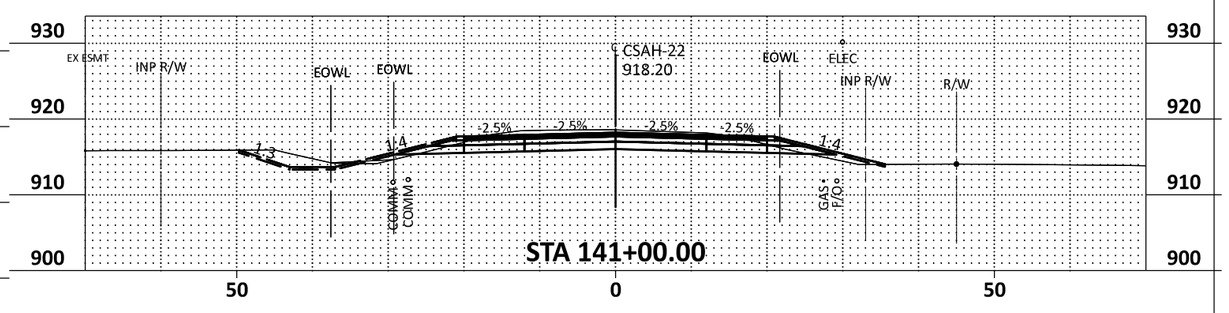

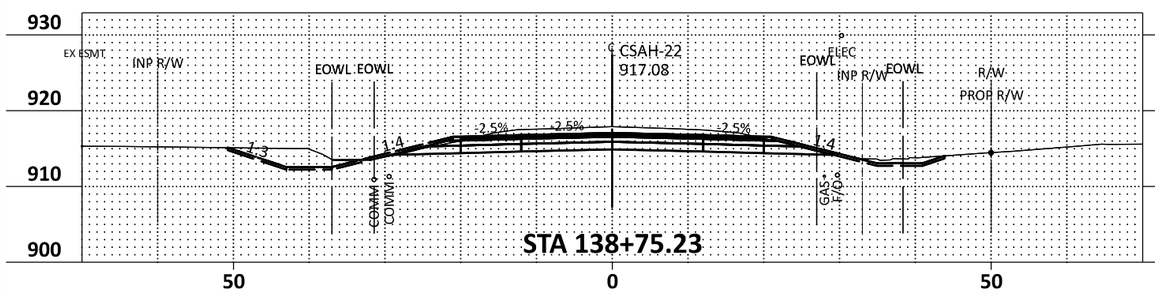

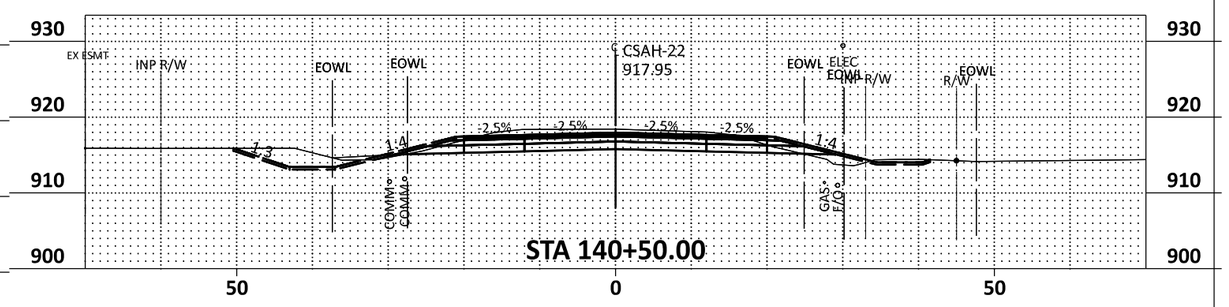

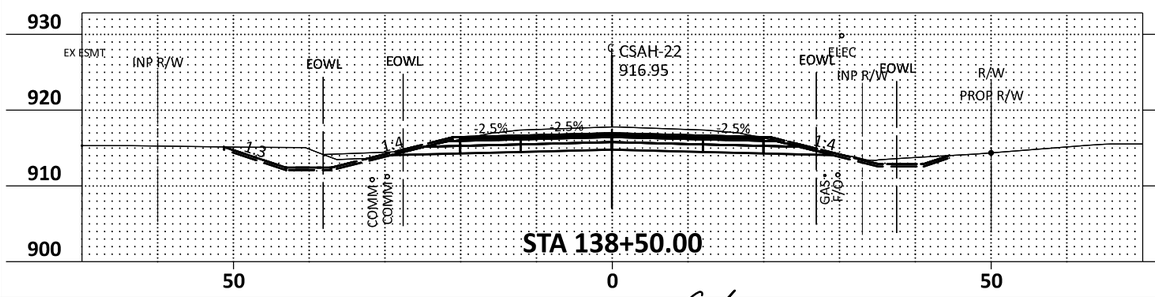

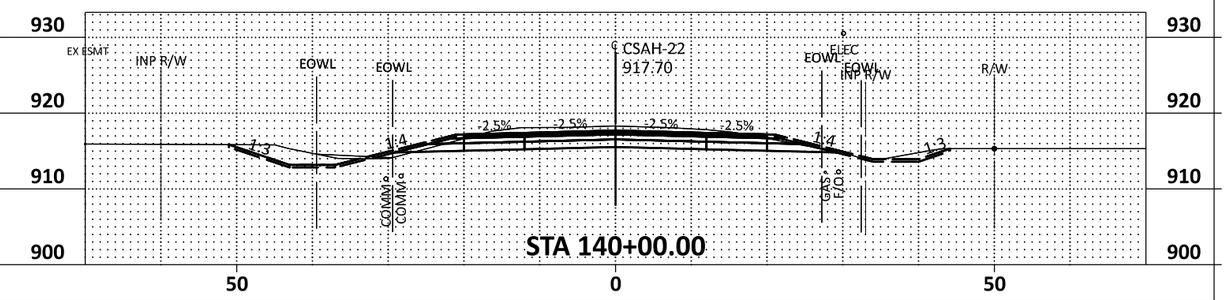

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DESIGNED BY:	AJF
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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X11 of X31 Sheets

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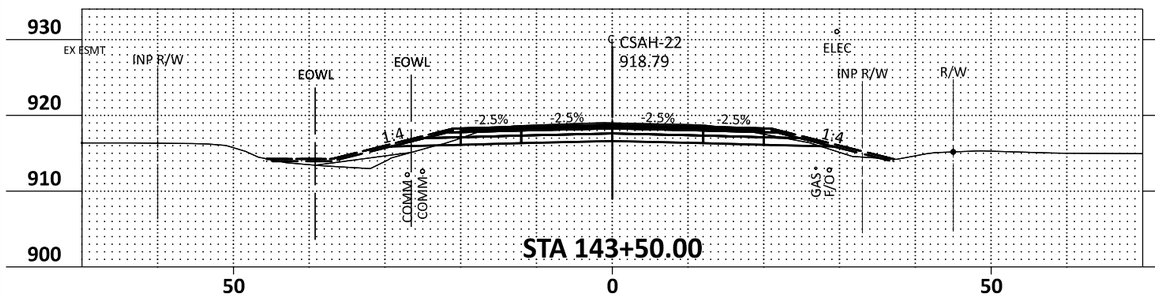

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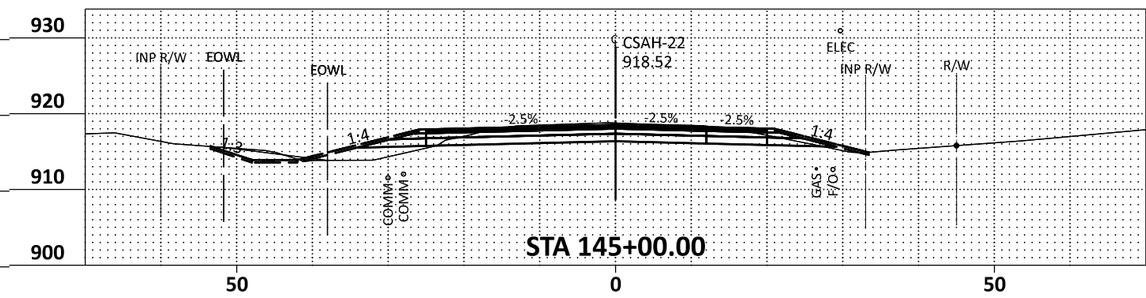

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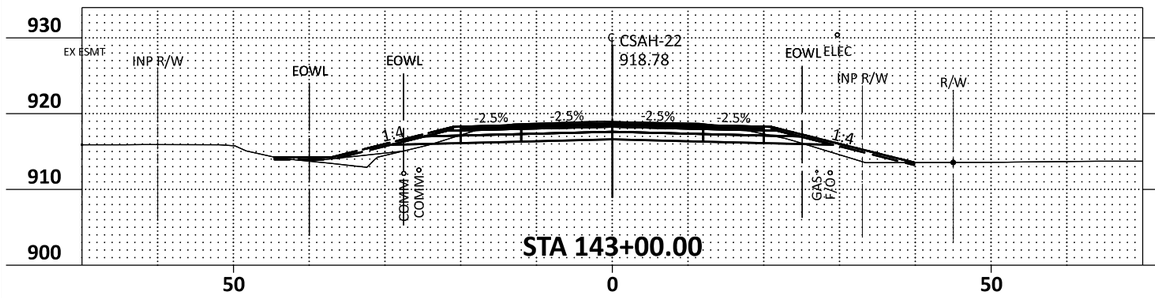

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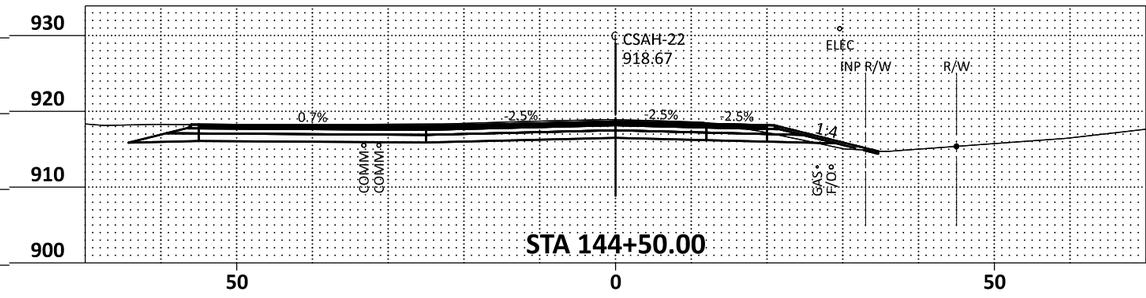

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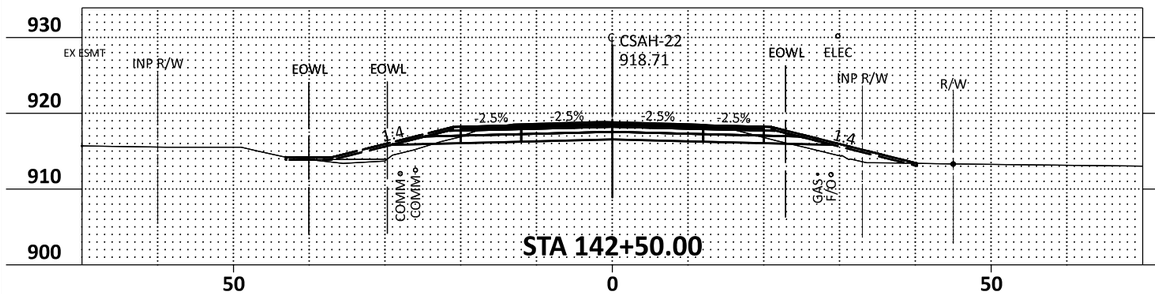

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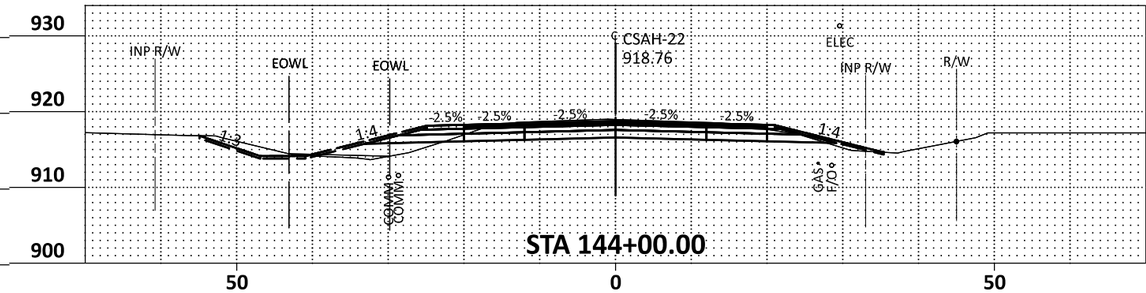

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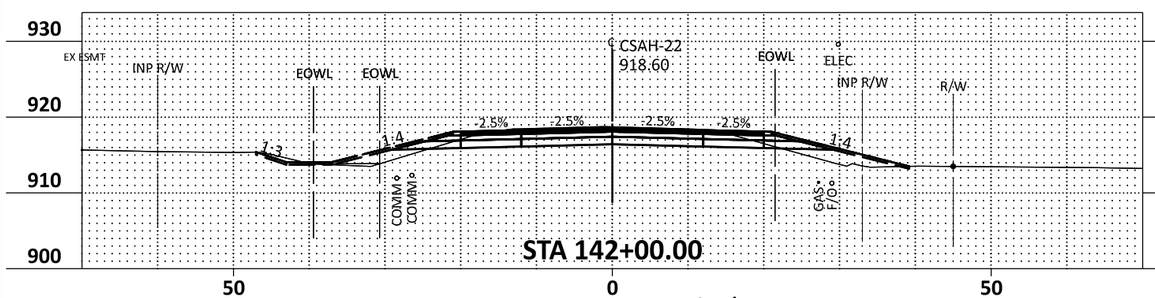

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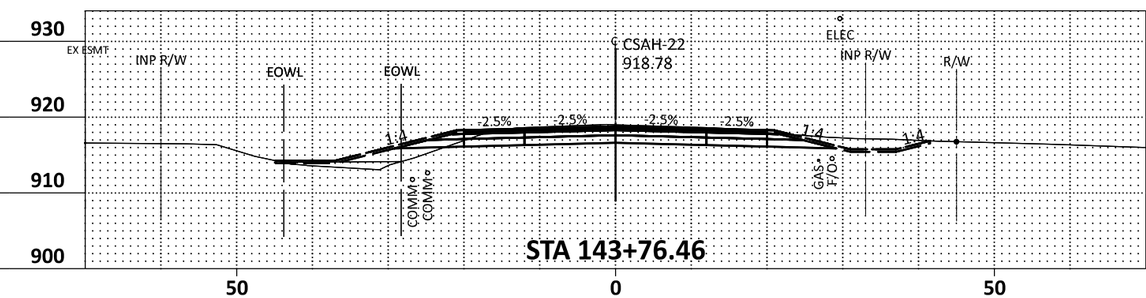

STA 143+76.46

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X12 of X31 Sheets

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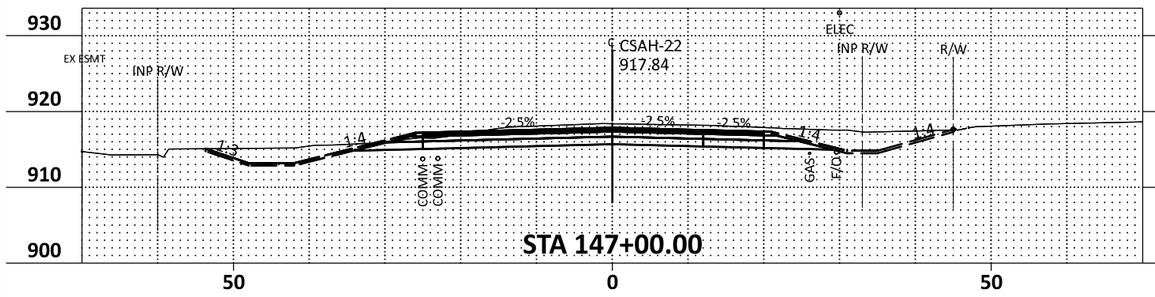

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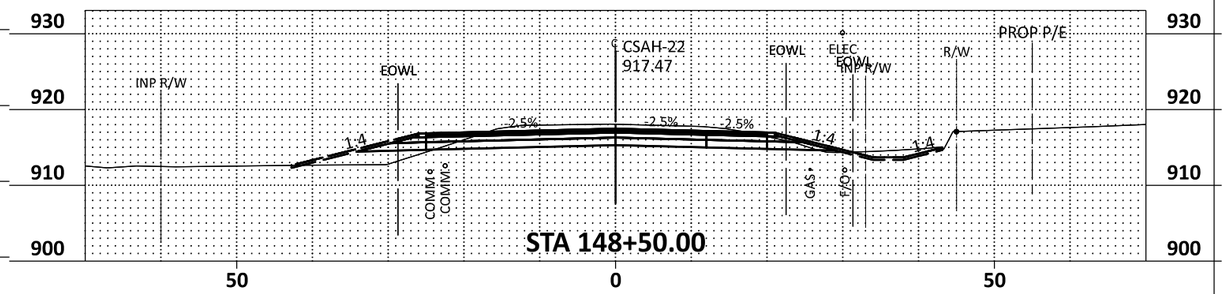

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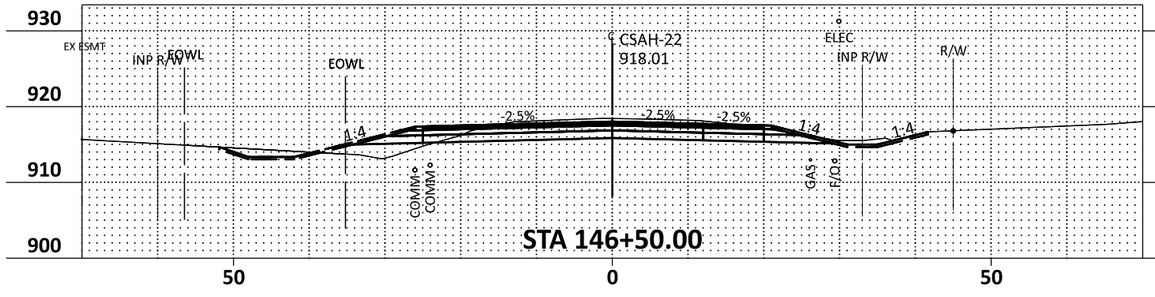

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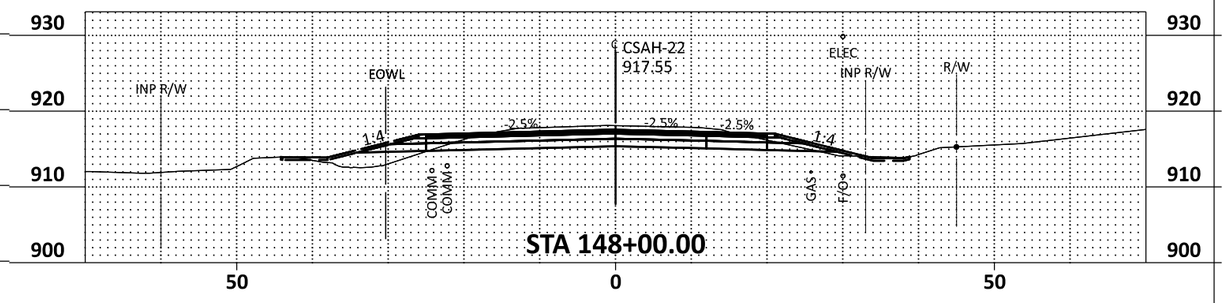

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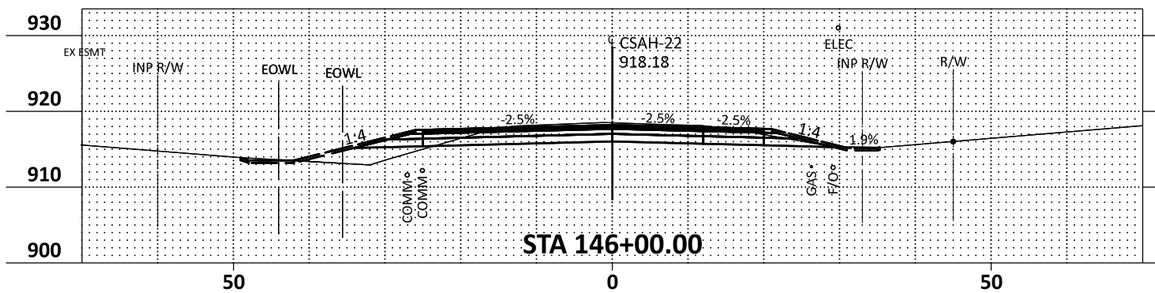

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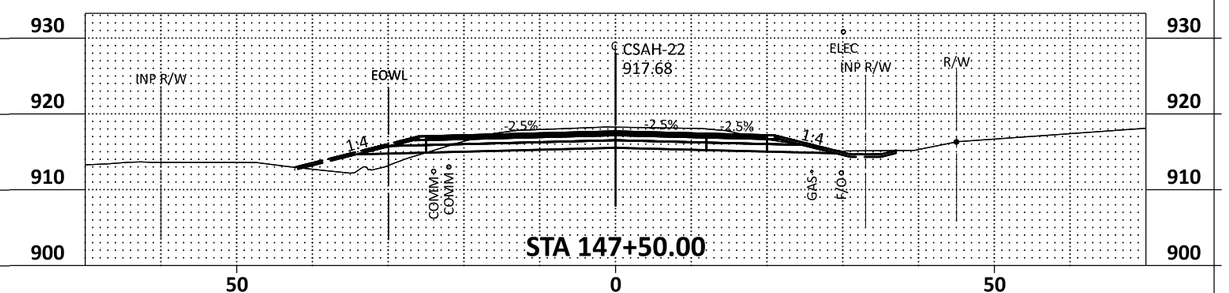

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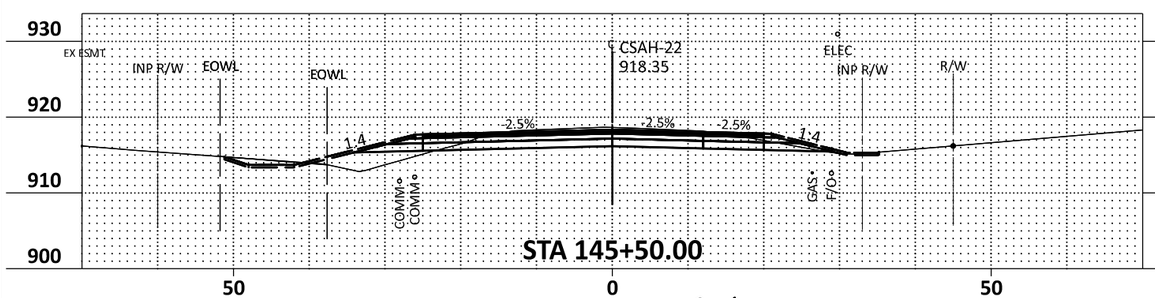

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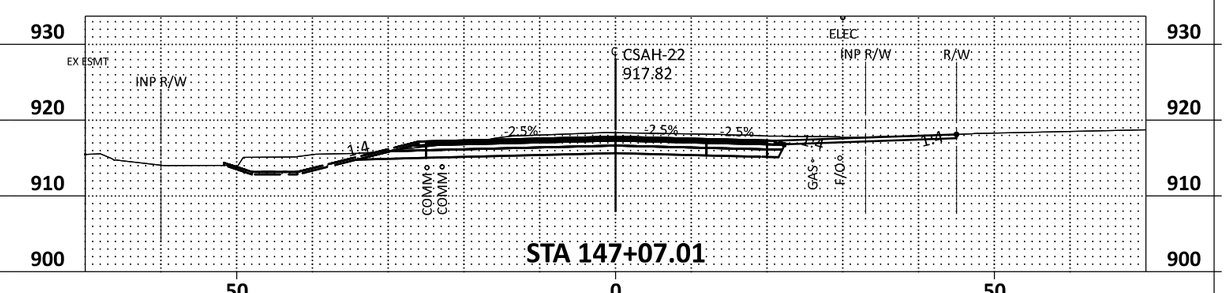

STA 147+07.01

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DESIGNED BY:	AJF
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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X13 of X31 Sheets

PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-900xsp-001

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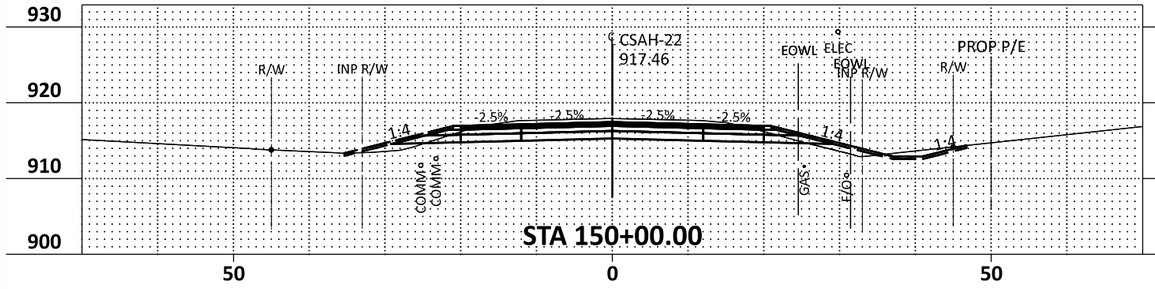

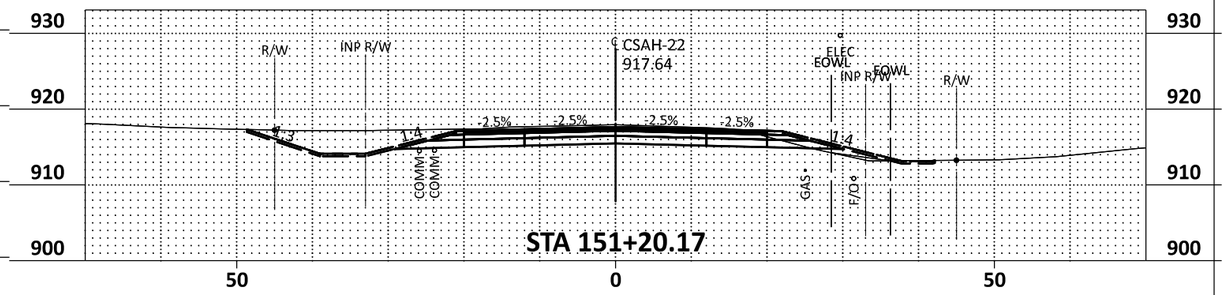

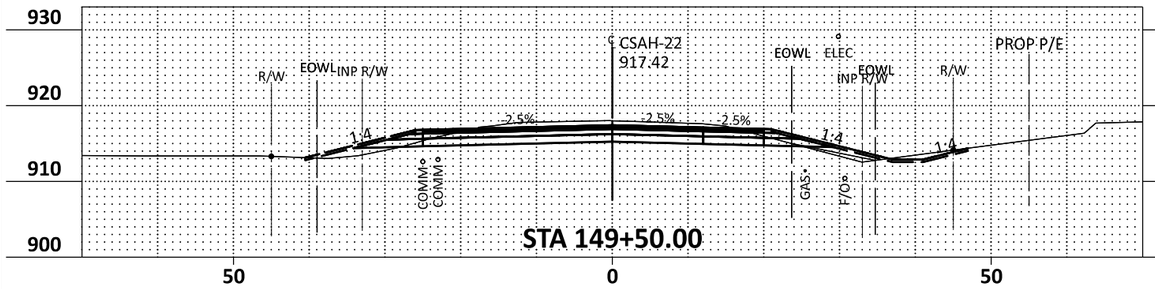

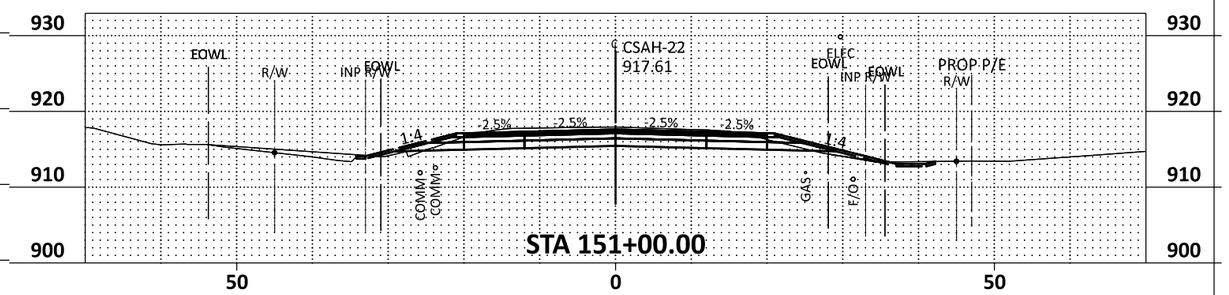

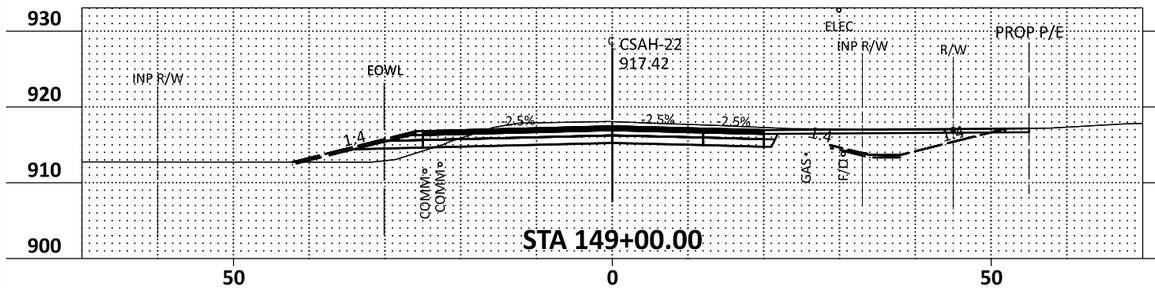

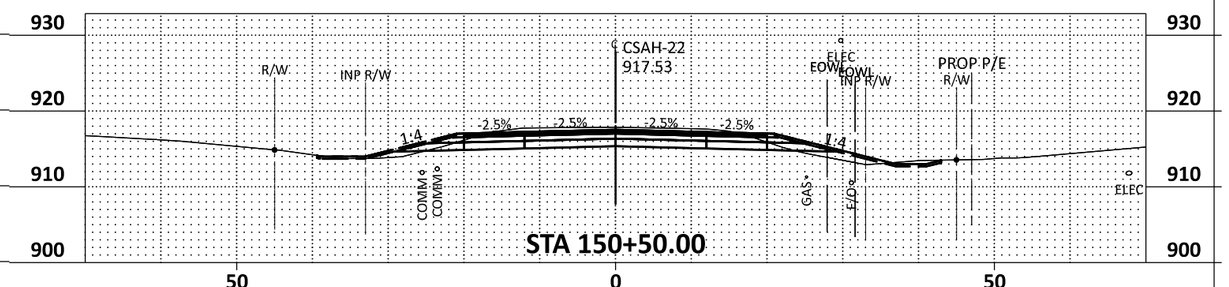

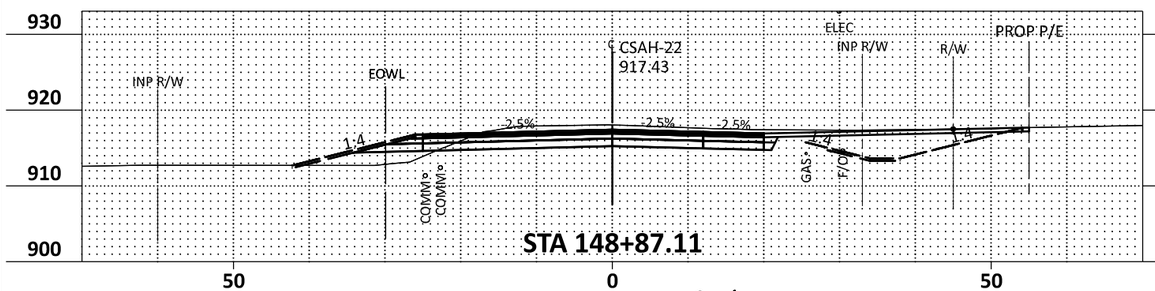

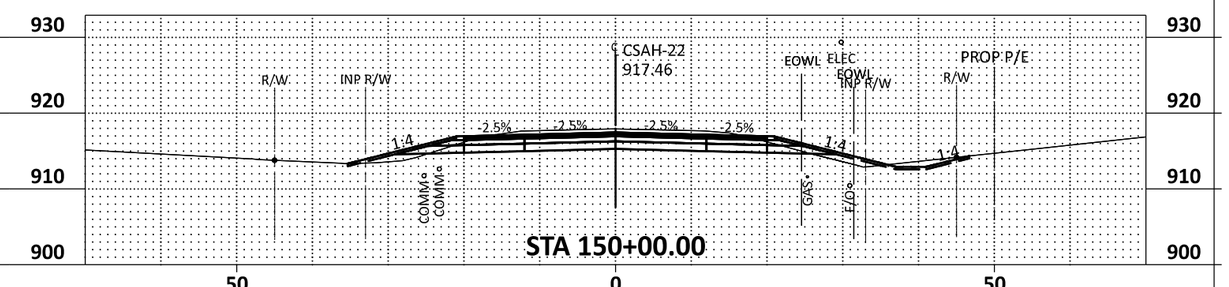

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X14 of X31 Sheets

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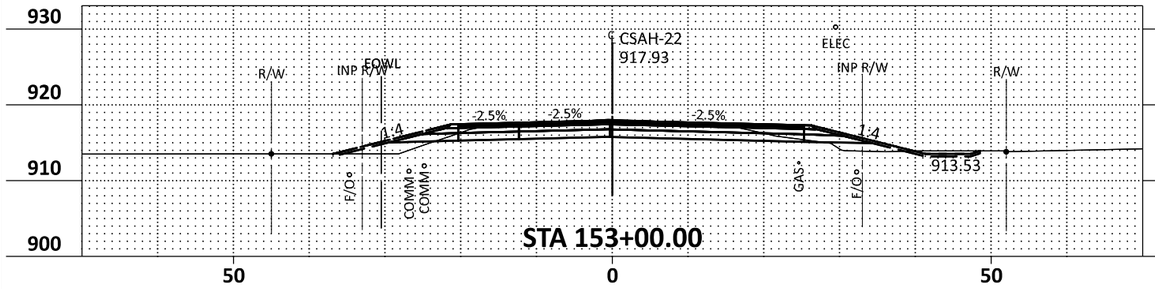

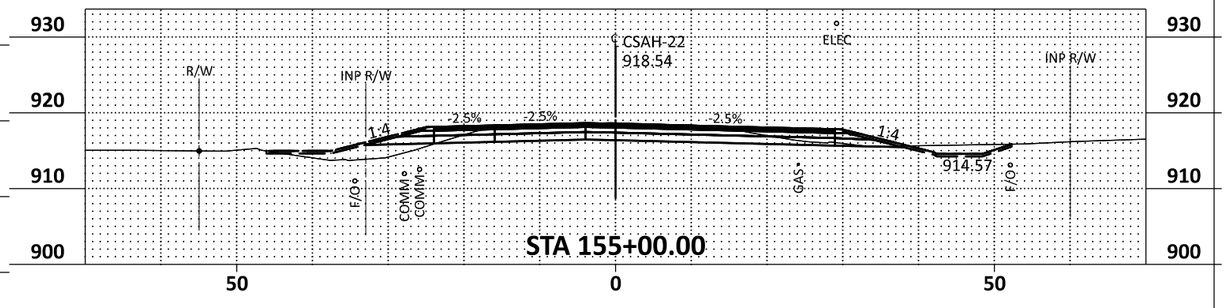

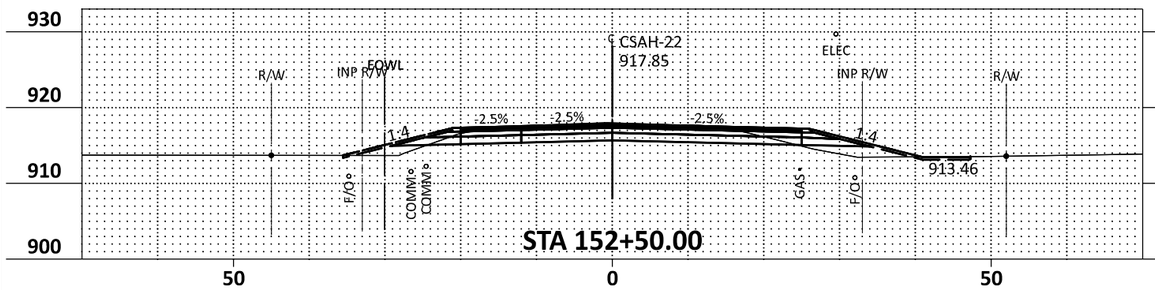

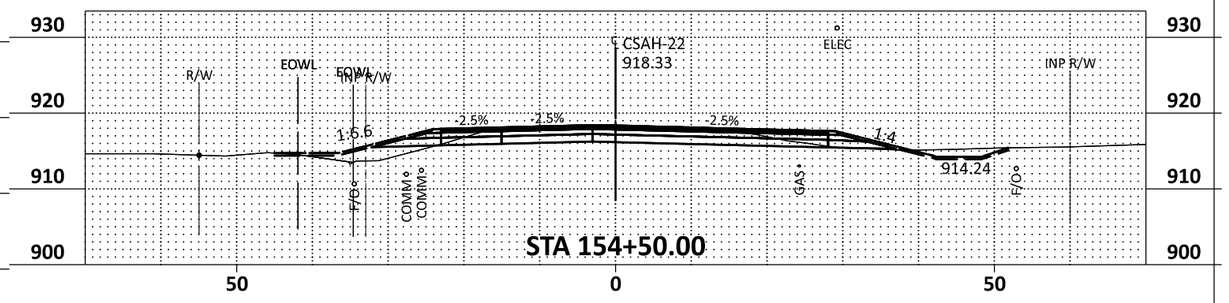

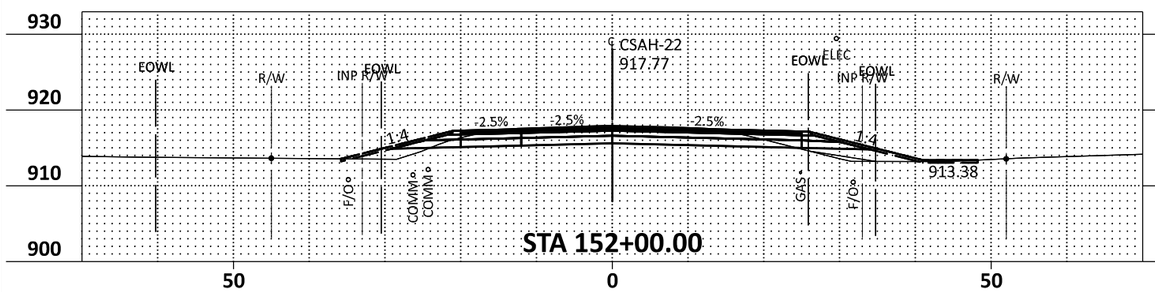

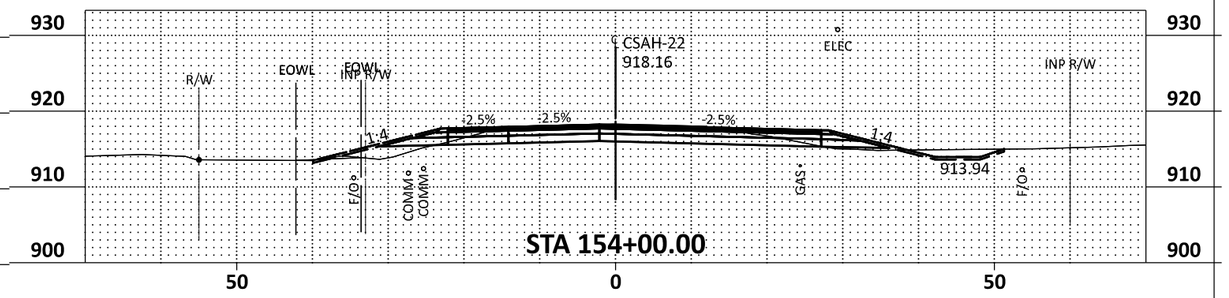

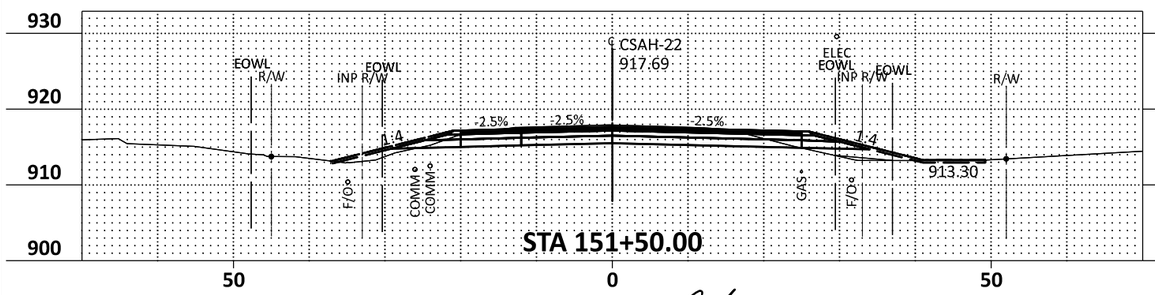

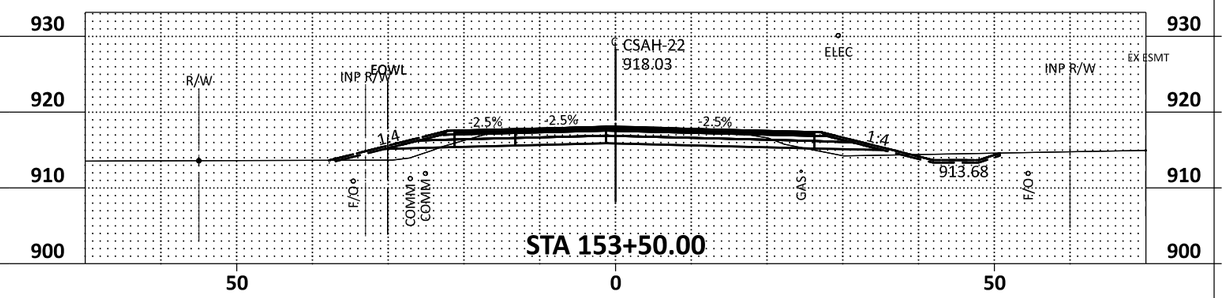

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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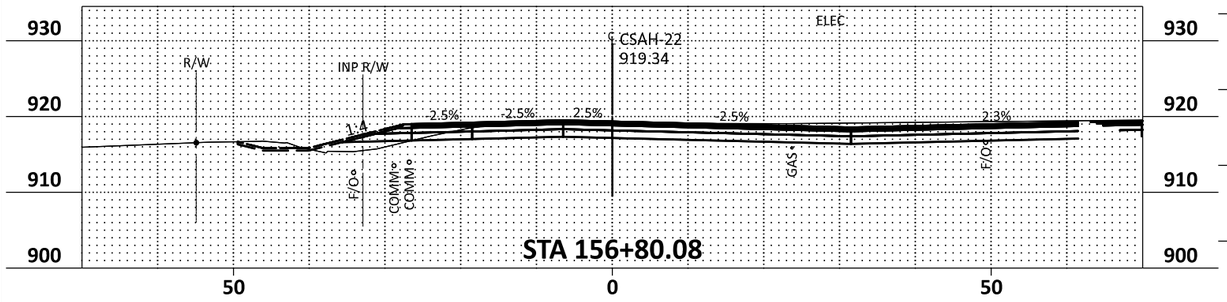

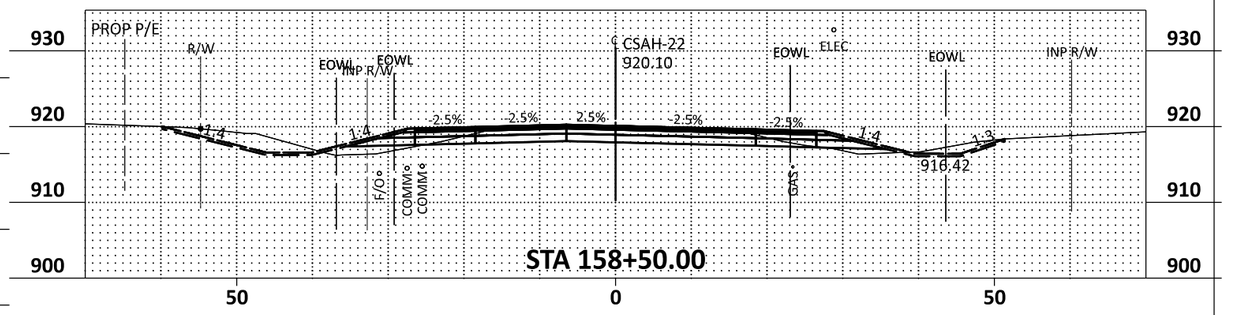

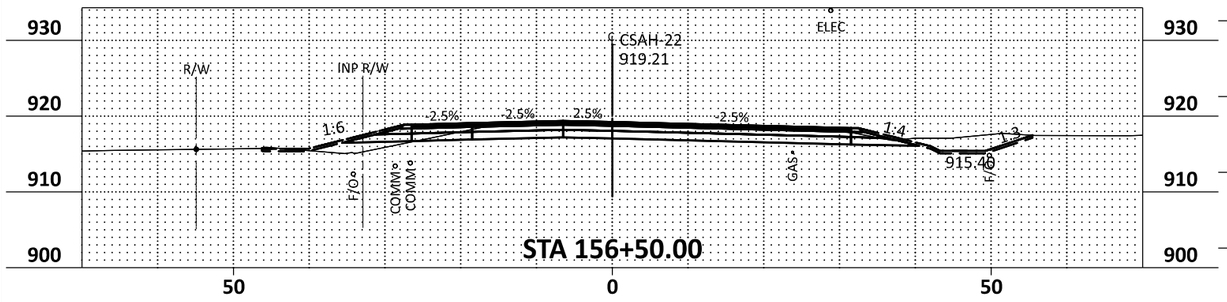

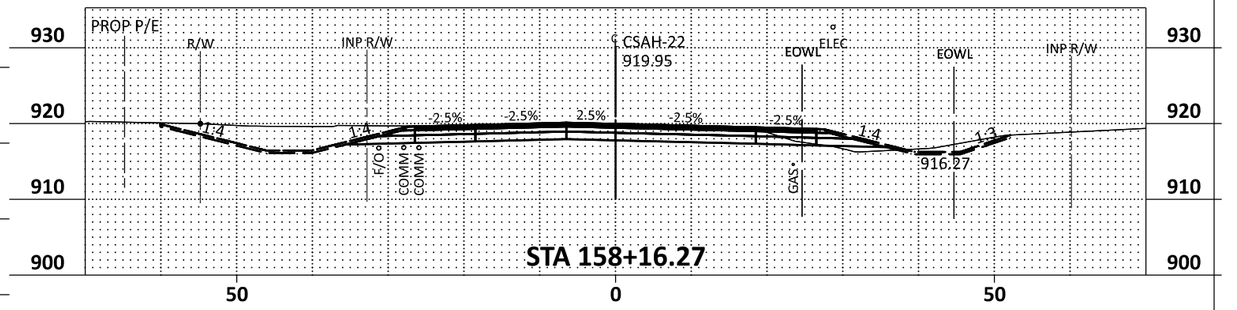

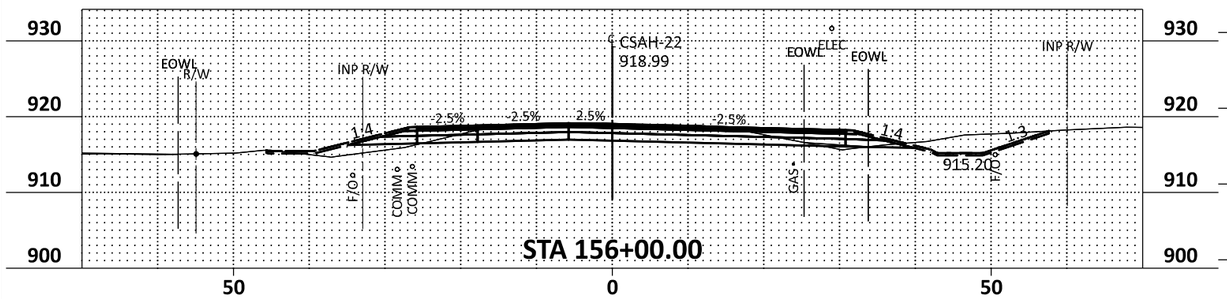

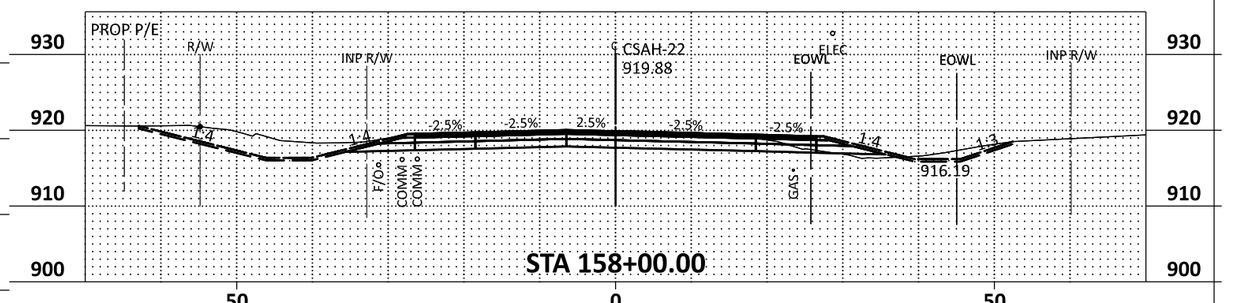

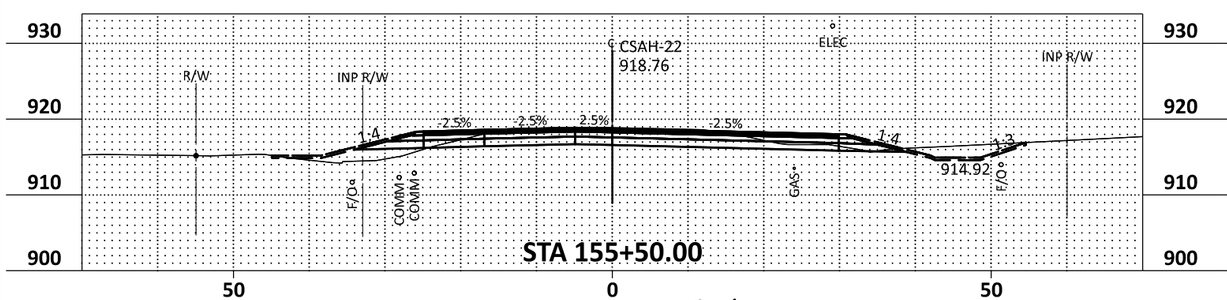

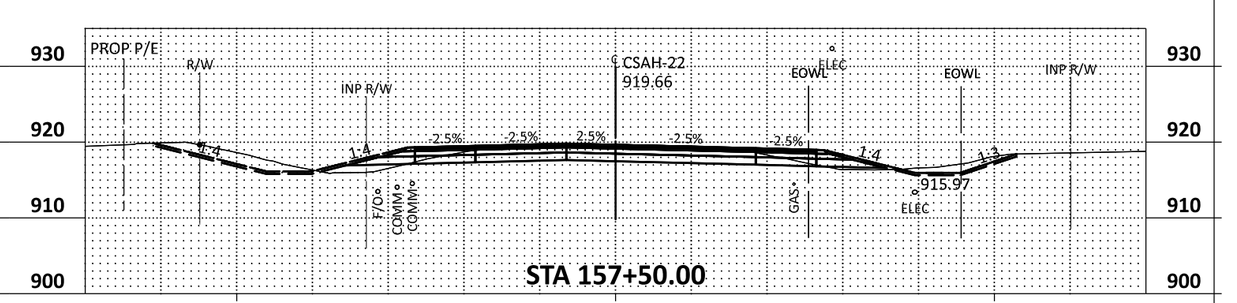

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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Sheet No. X16 of X31 Sheets

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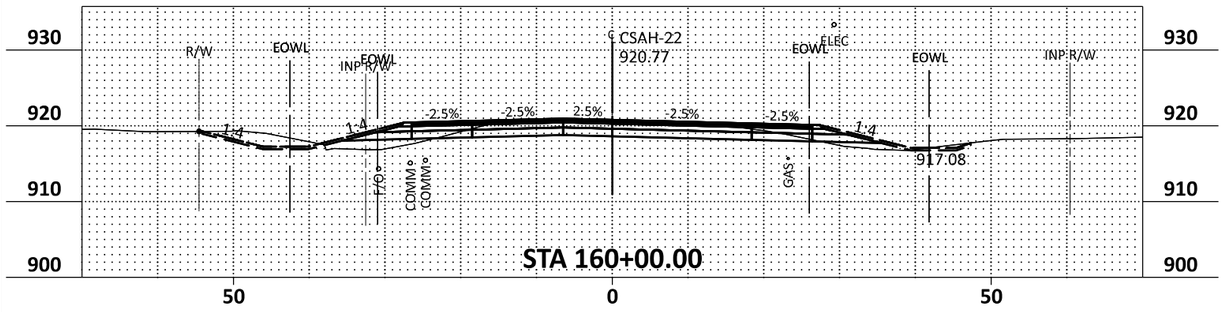

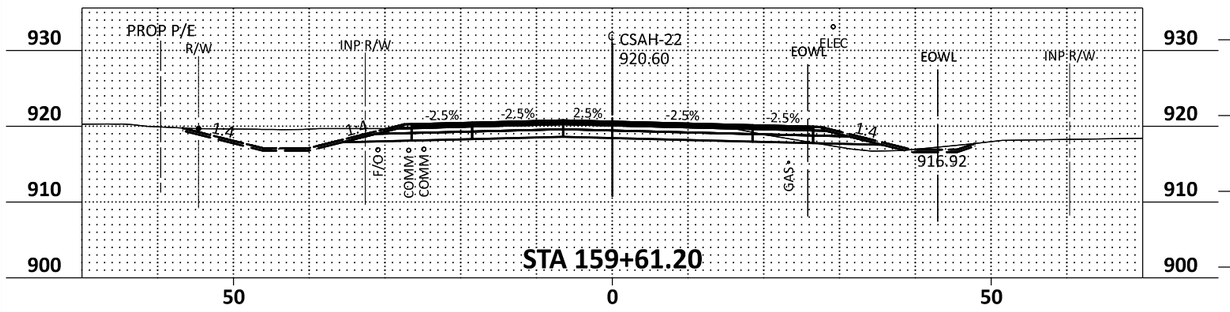

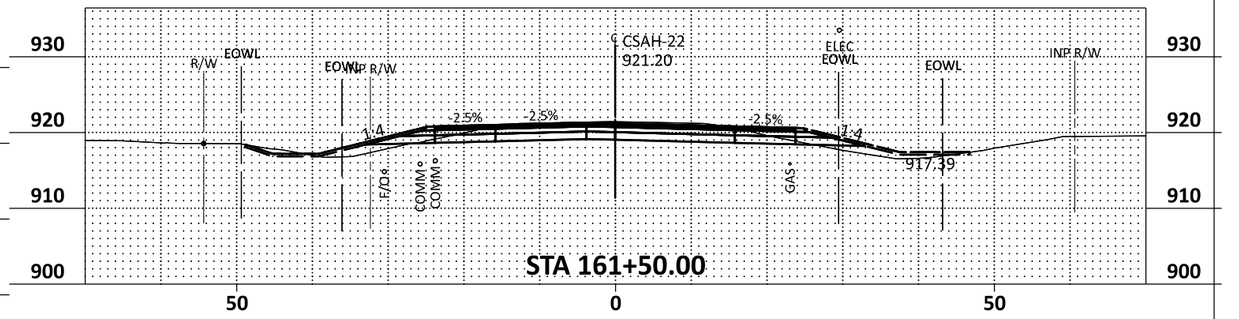

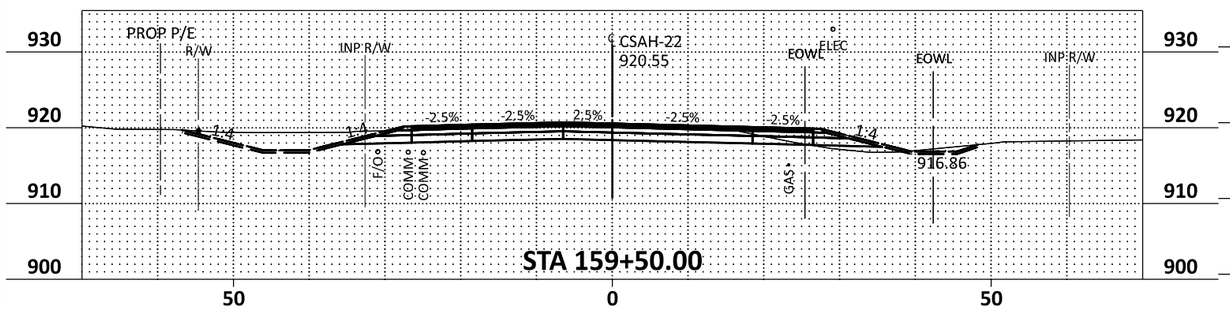

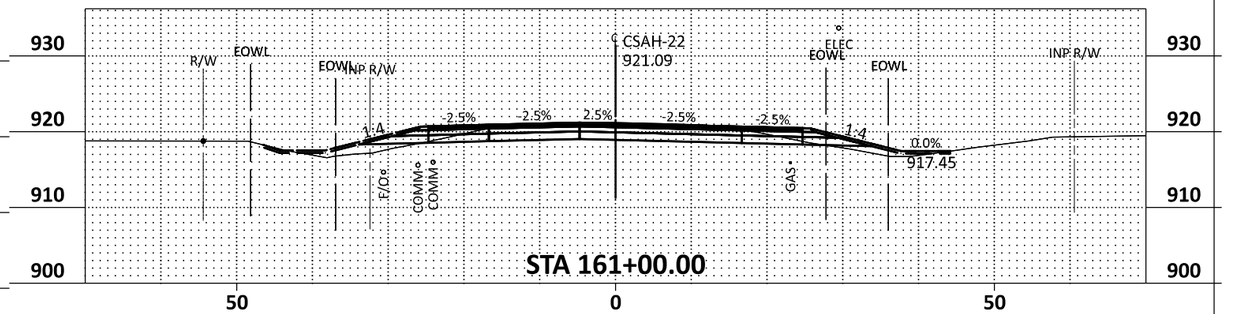

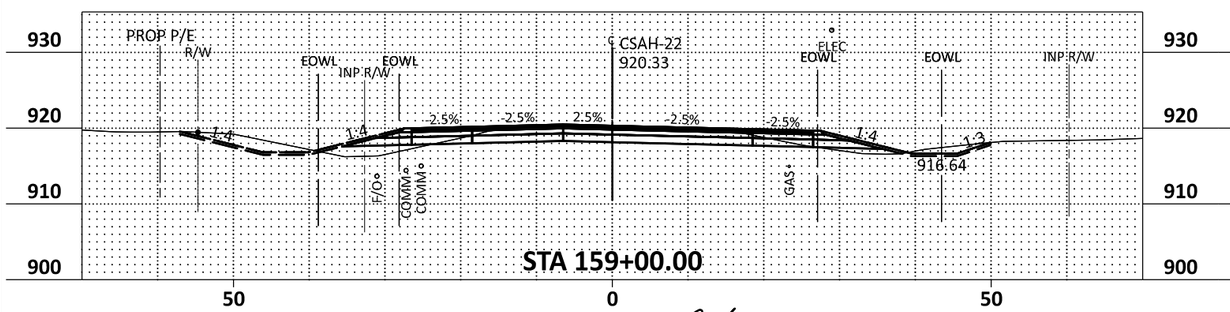

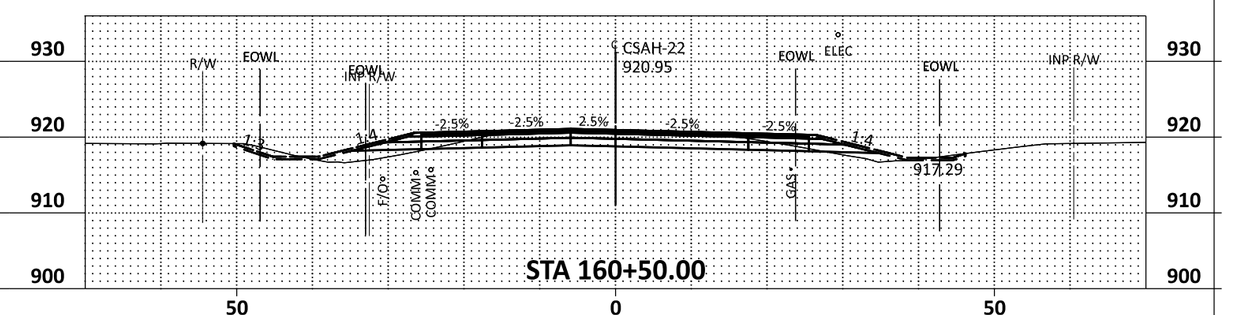

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X17 of X31 Sheets

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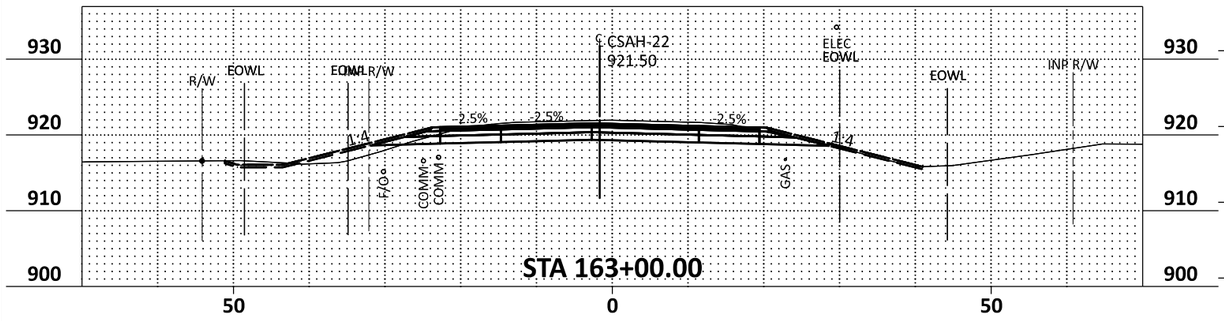

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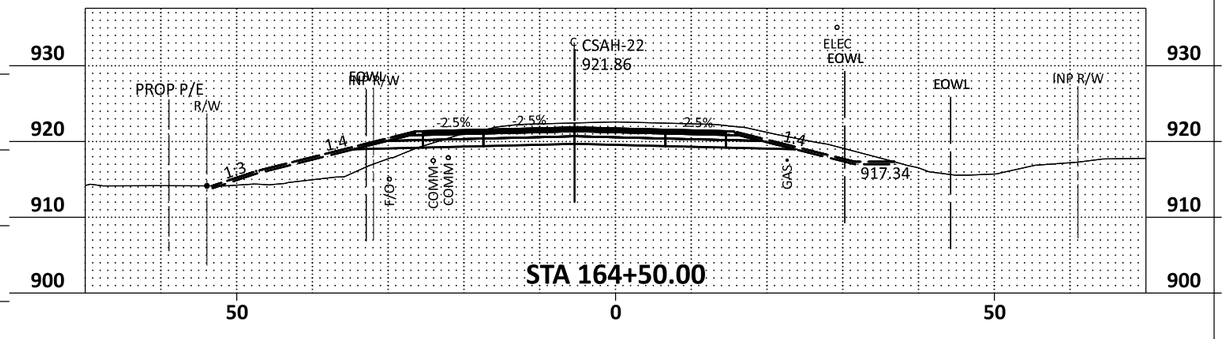

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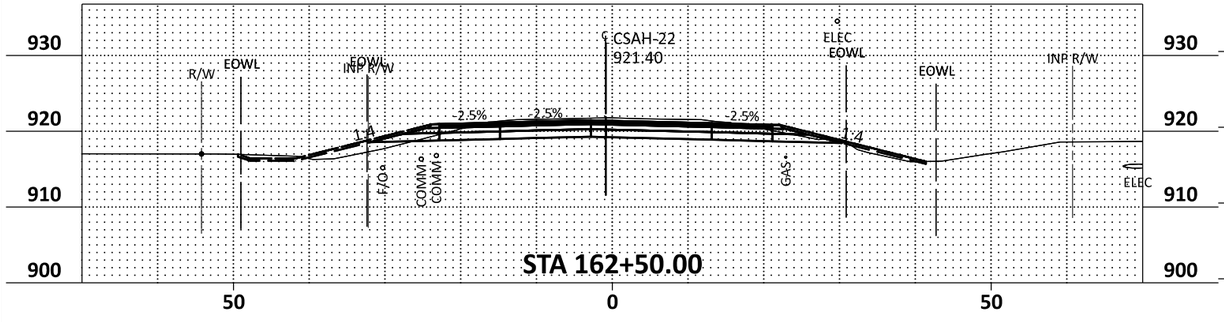

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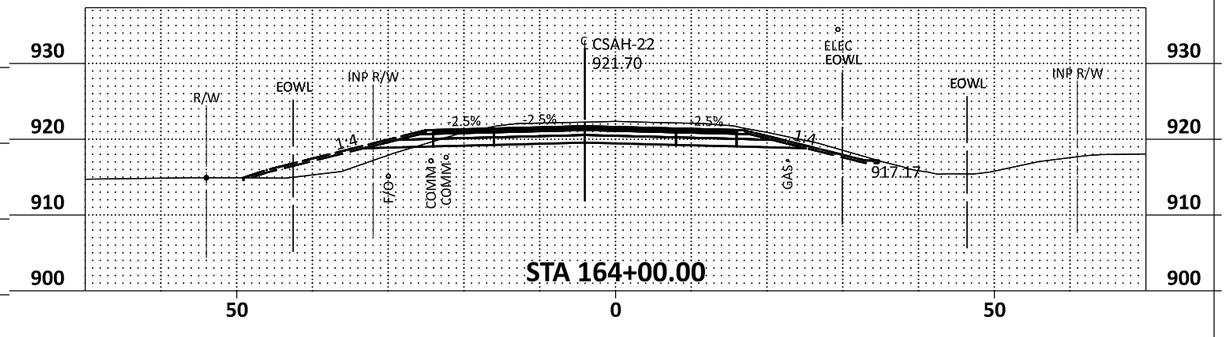

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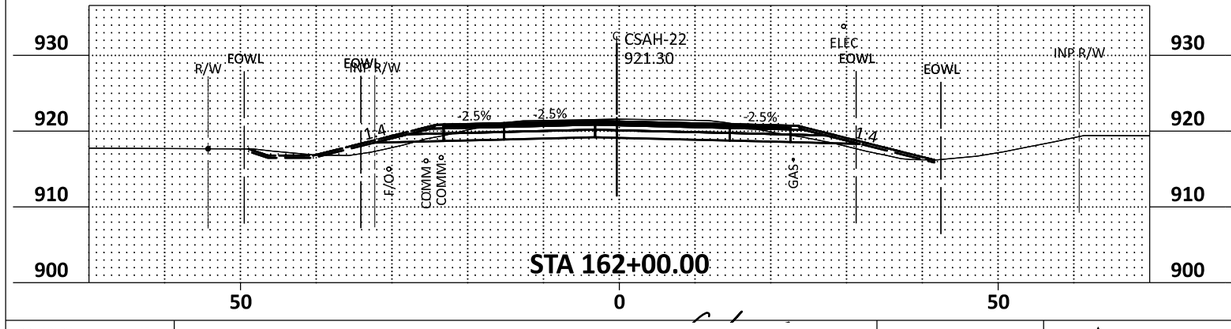

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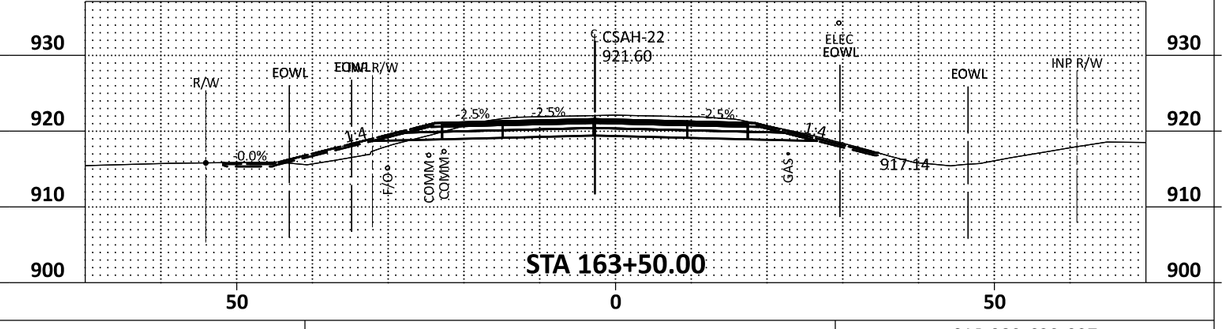

STA 163+50.00

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ANOKA COUNTY

CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X18 of X31 Sheets

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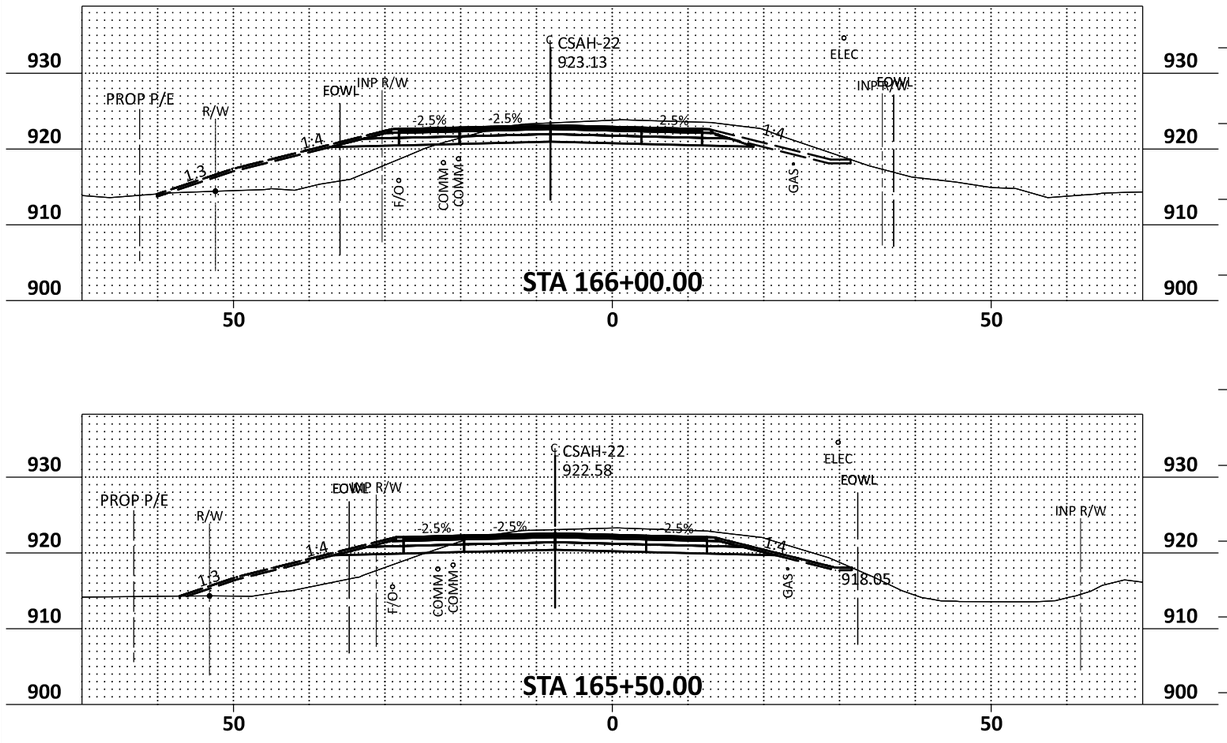

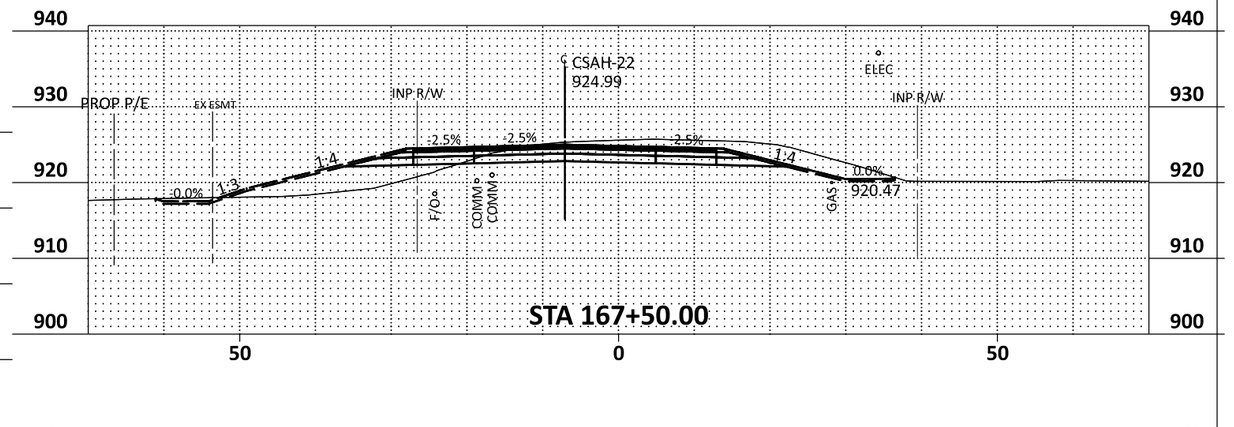

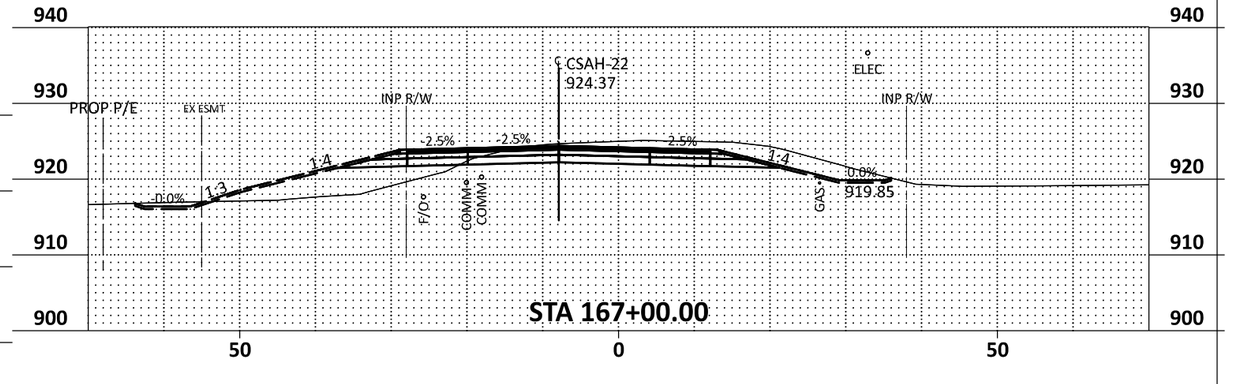

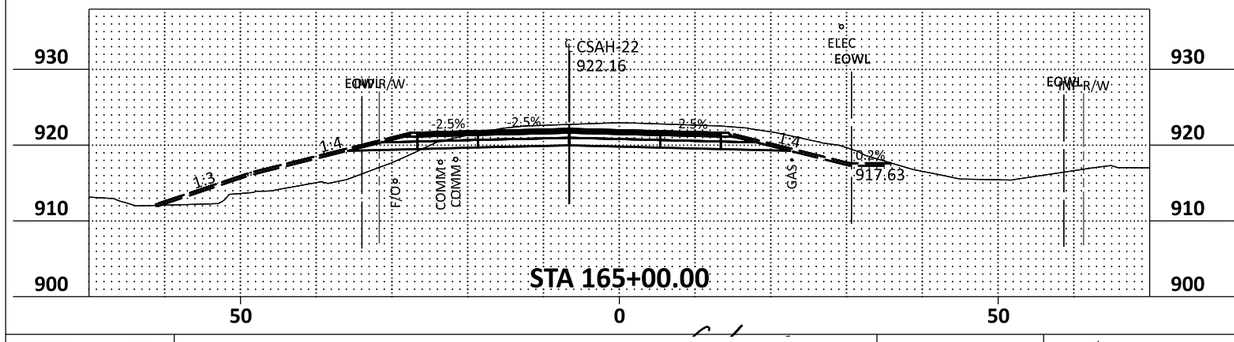

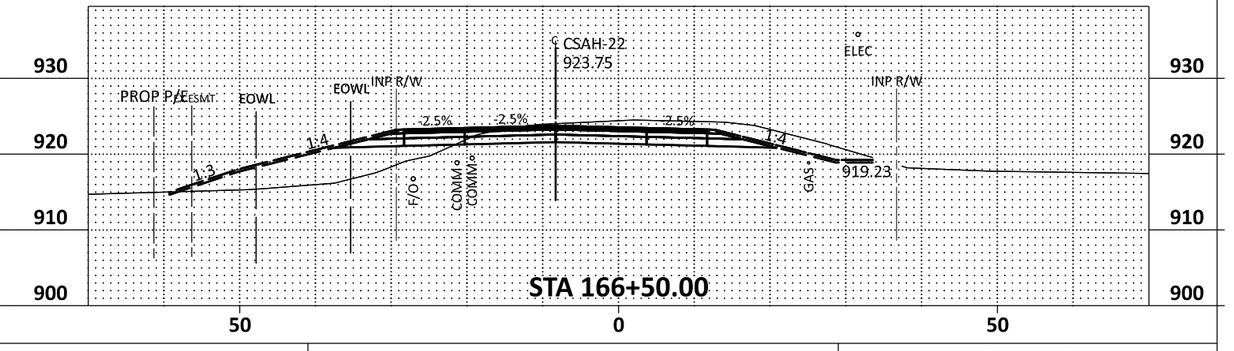

DRAWN BY:	AJF	wsb	ANOKA COUNTY	**CSAH 22 (Baugh Street NW) Reconstruction**	CROSS SECTIONS	SAP 002-622-037
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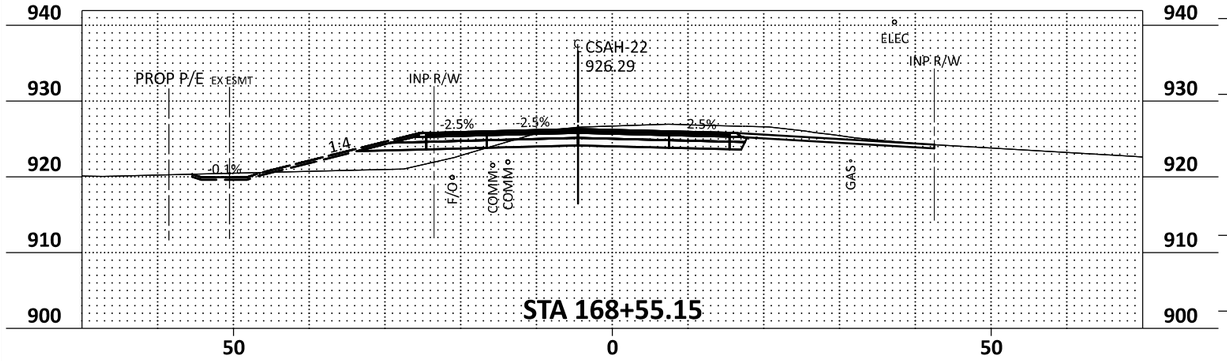
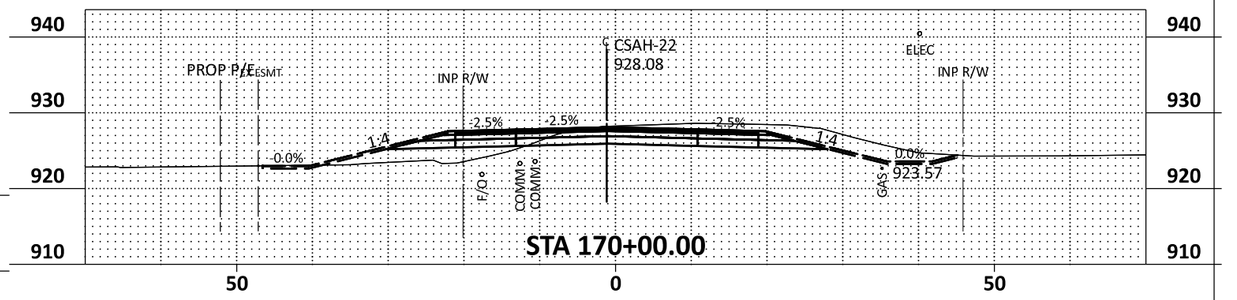
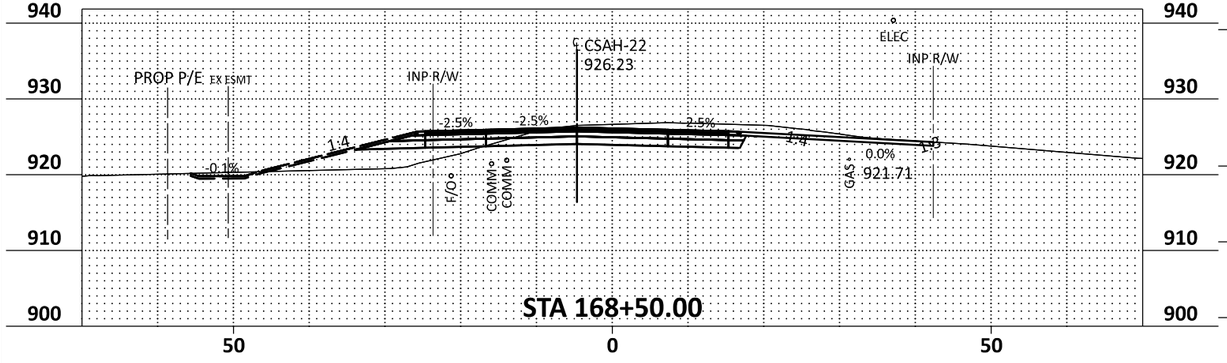
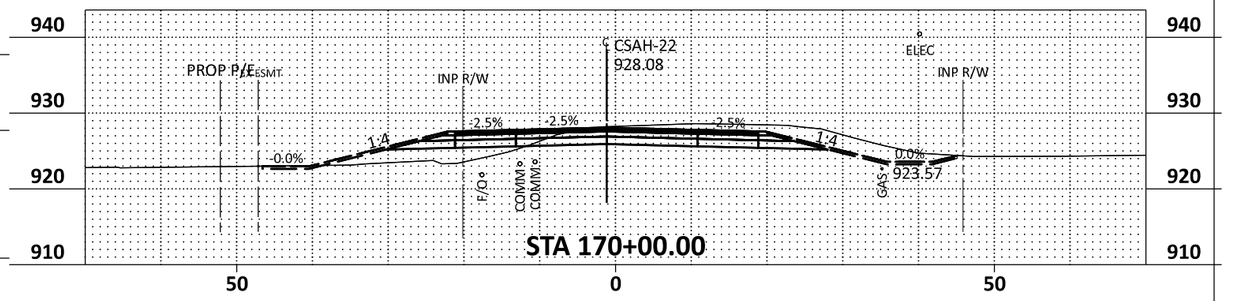
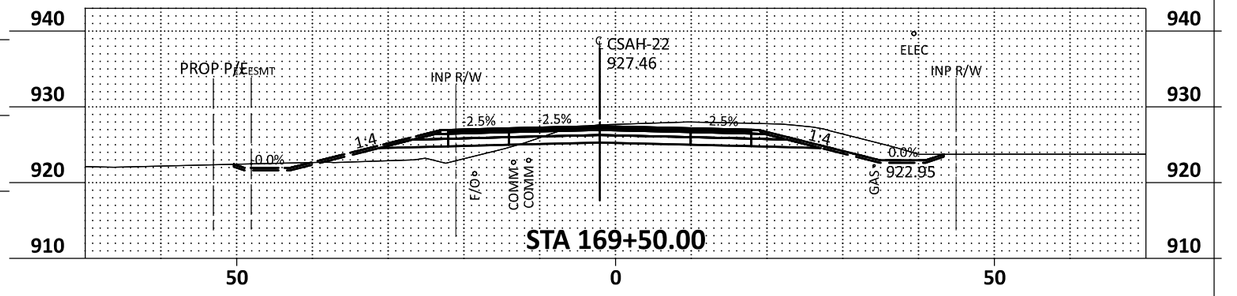
PATH & FILENAME: Projects\Minnesota\026054-000\05_Discipline\Roadway\03_Sheets\026054-000-900ksp-001

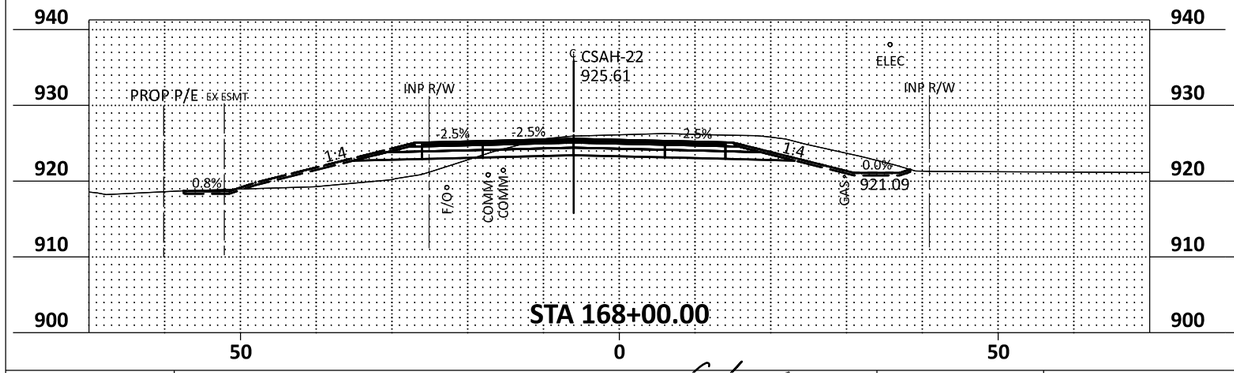


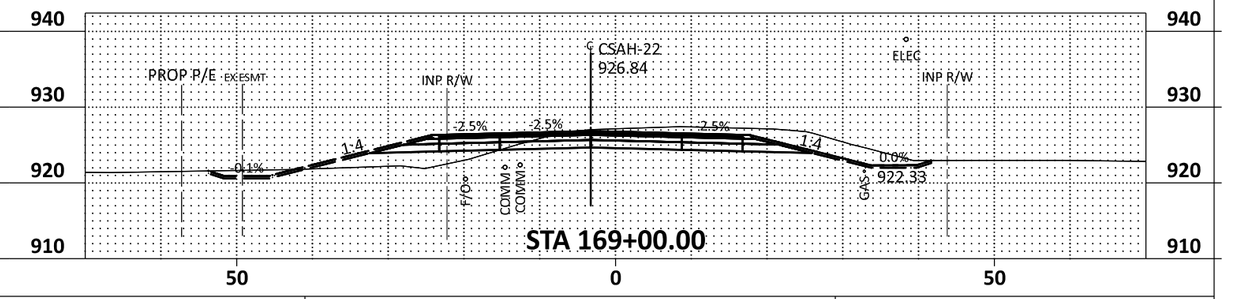












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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X20 of X31 Sheets

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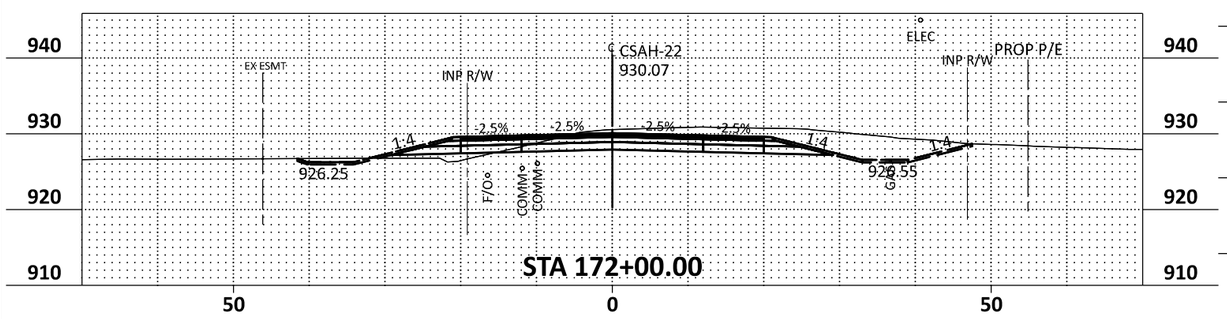

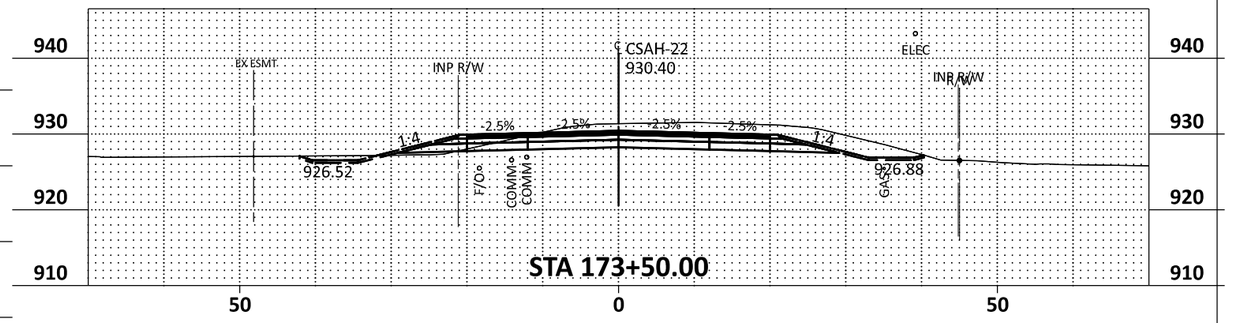

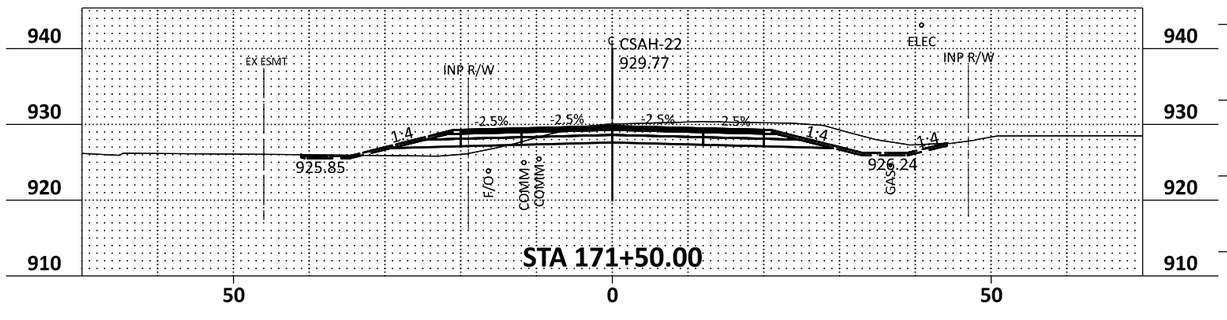

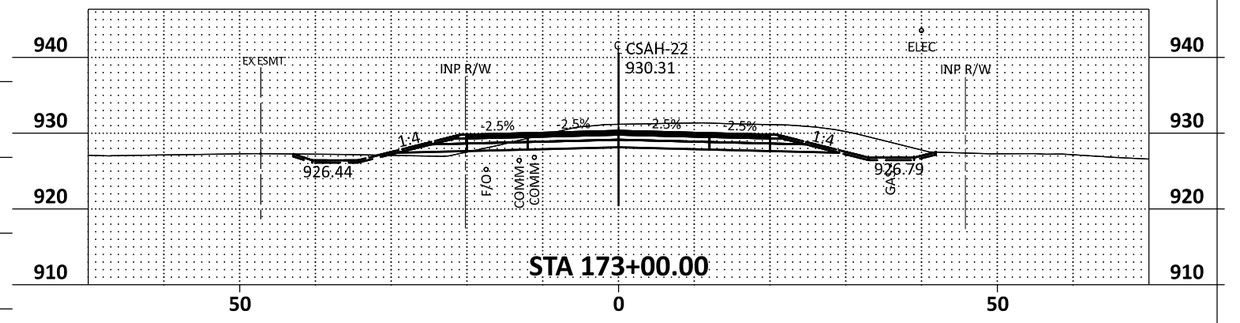

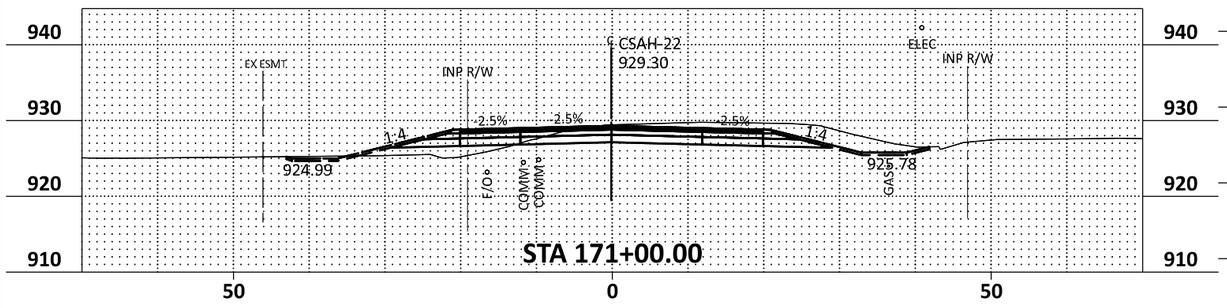

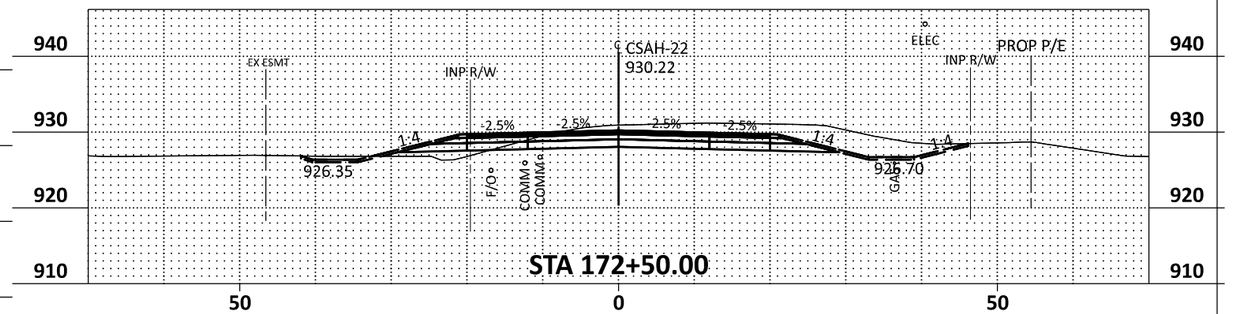

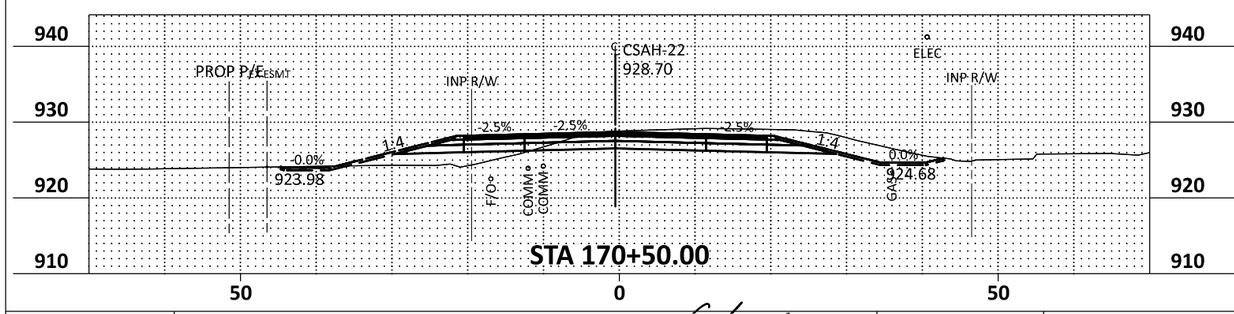

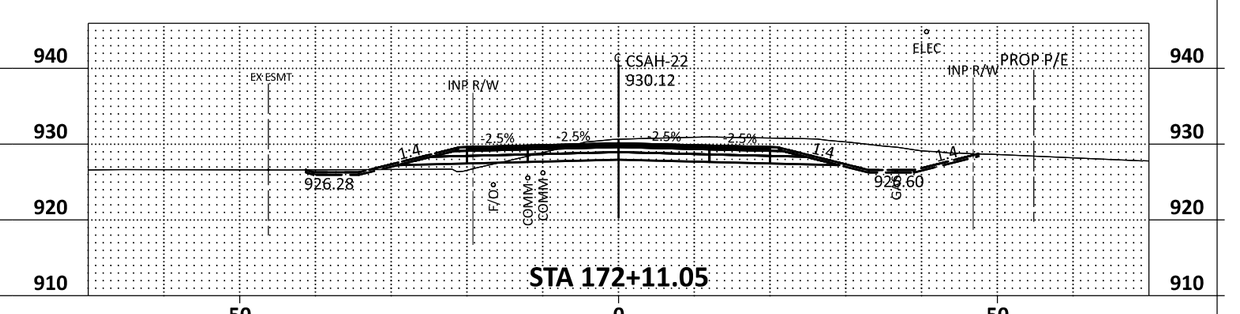

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X21 of X31 Sheets

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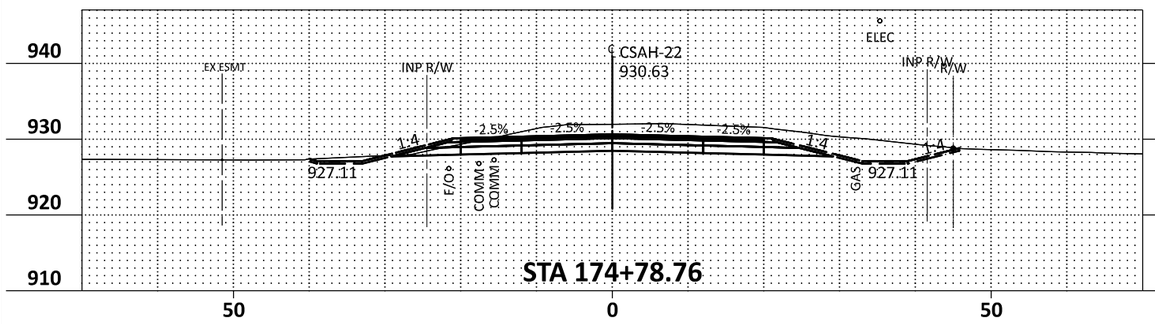

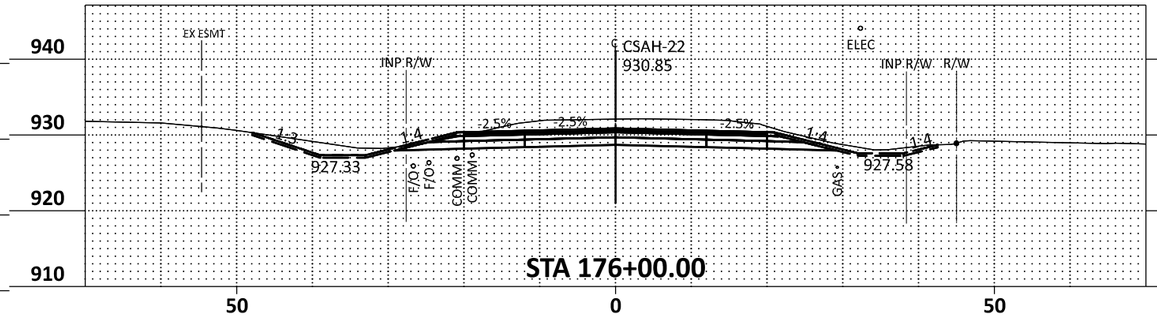

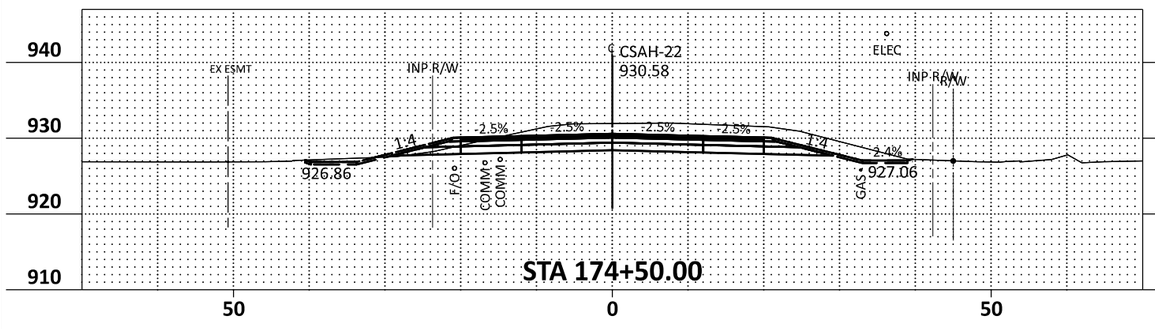

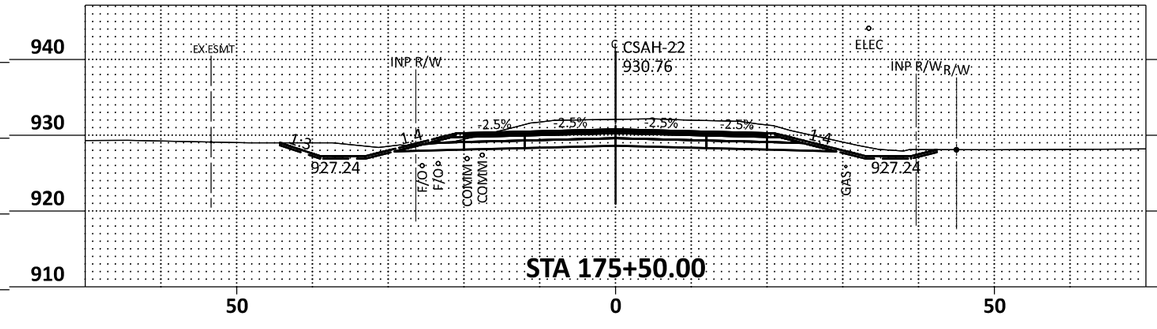

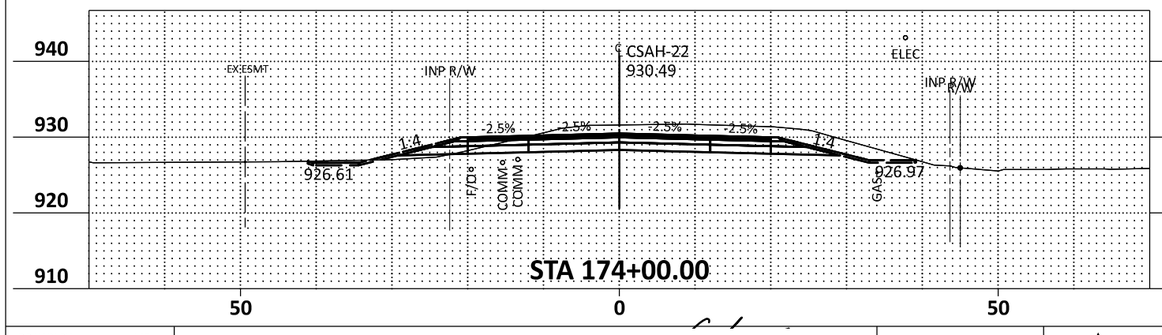

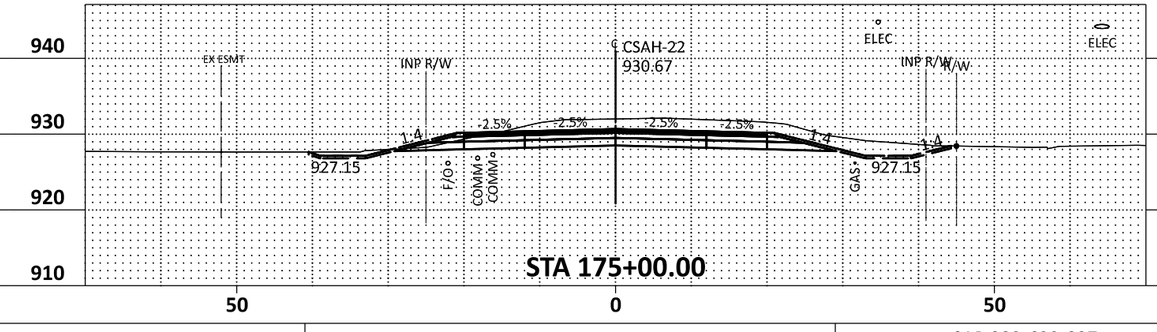

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

SAP 002-622-037

Sheet No. X22 of X31 Sheets

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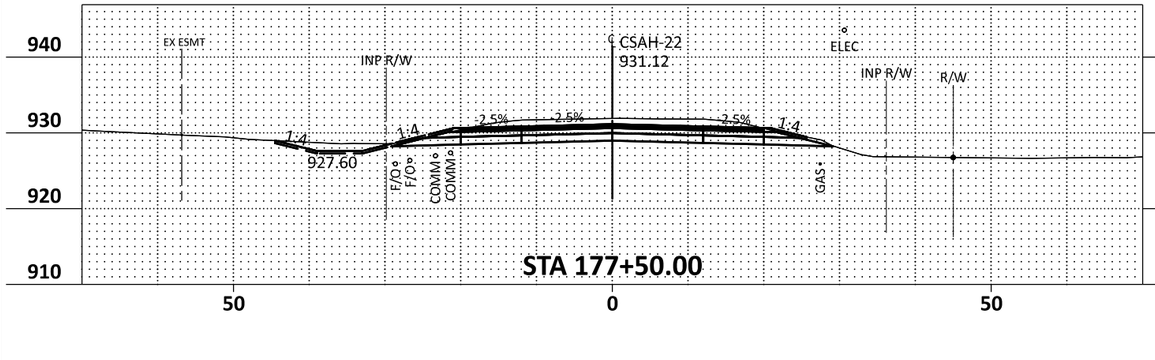

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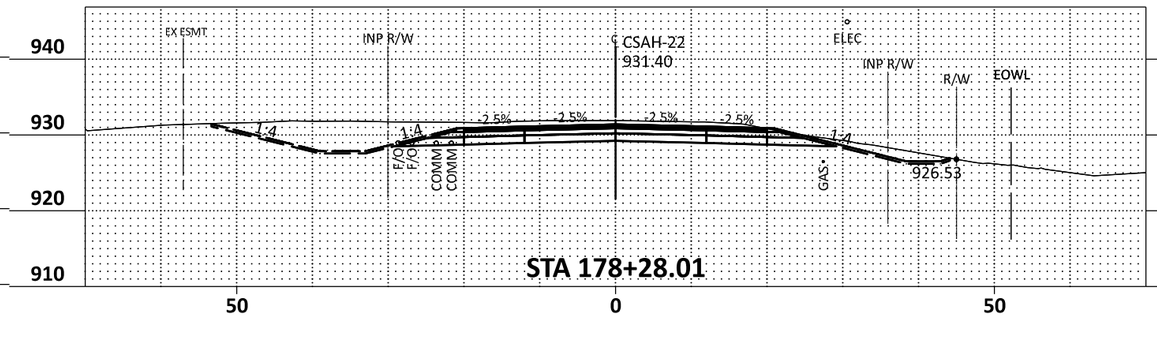

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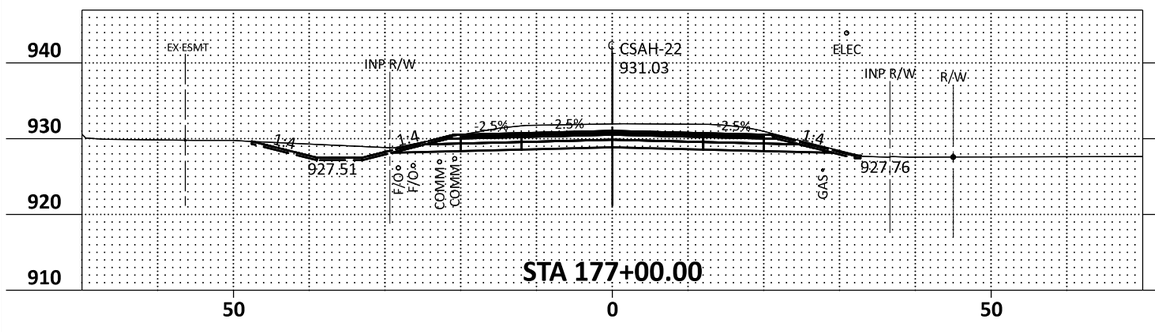

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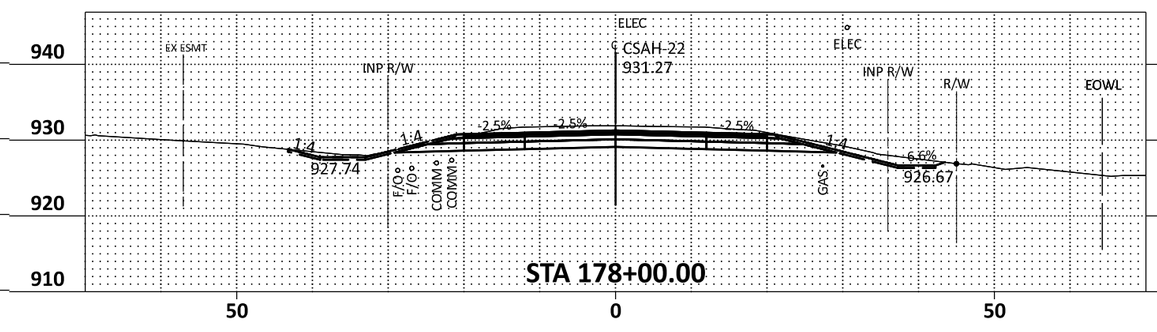

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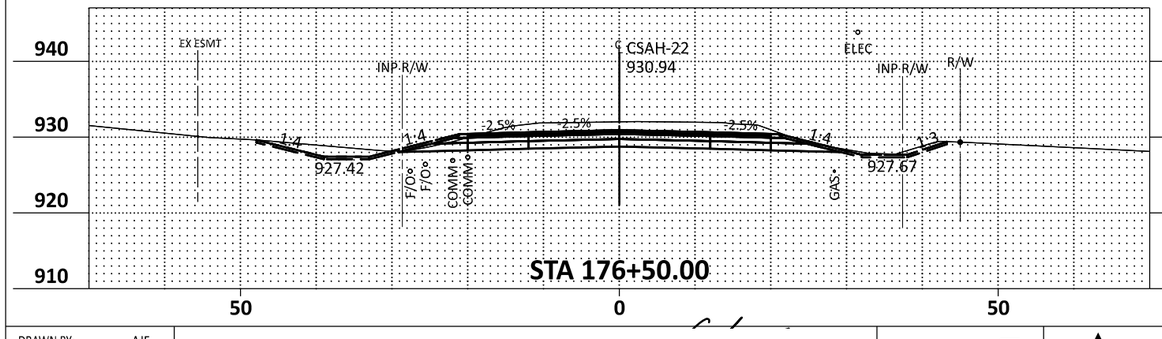

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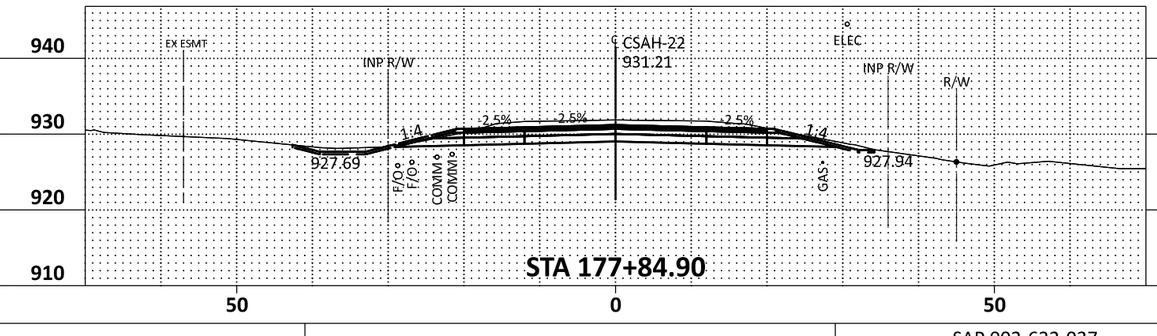

STA 177+84.90

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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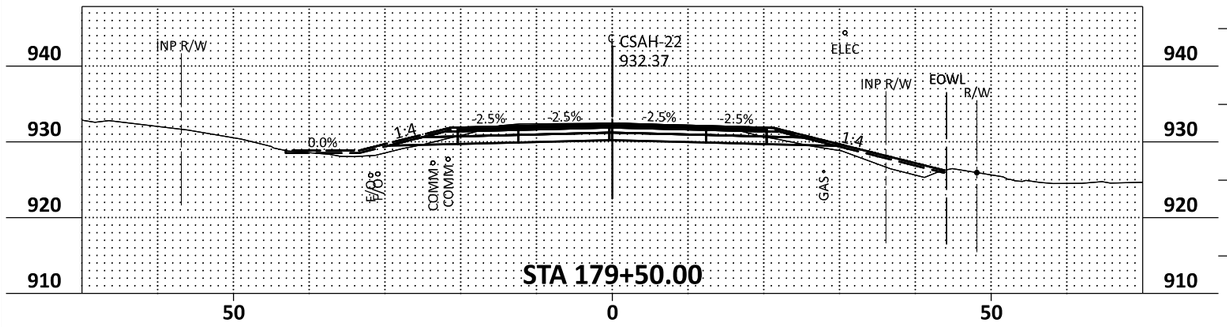

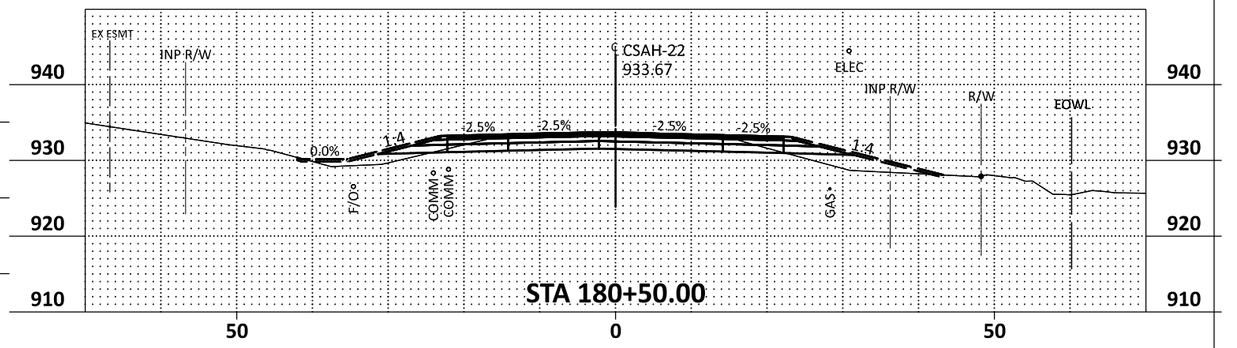

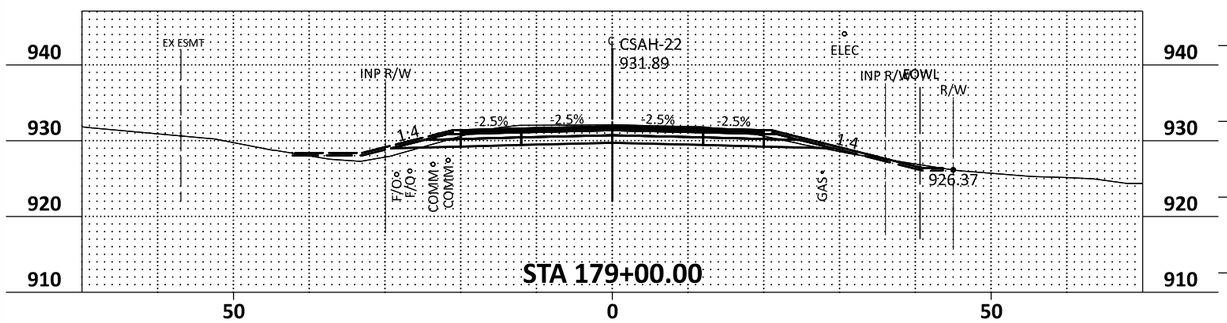

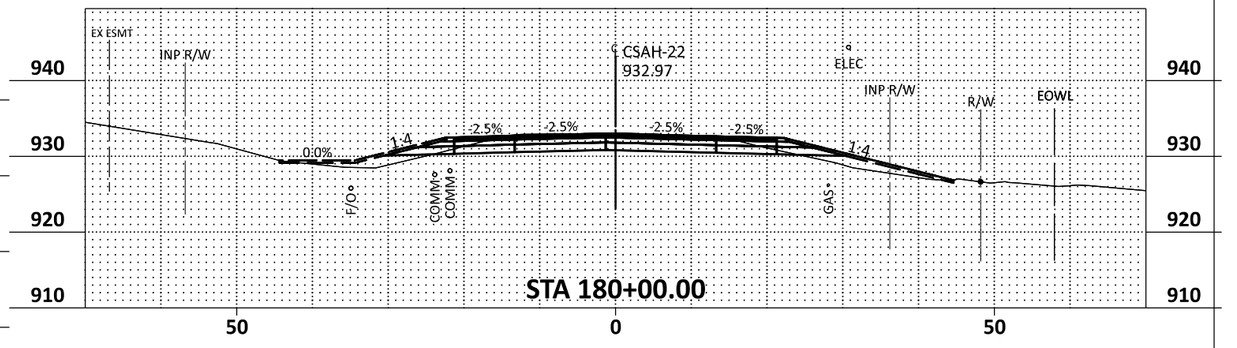

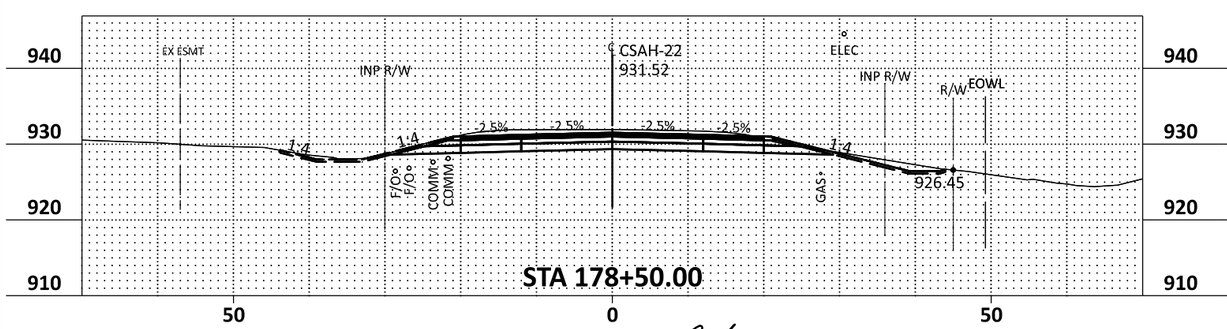

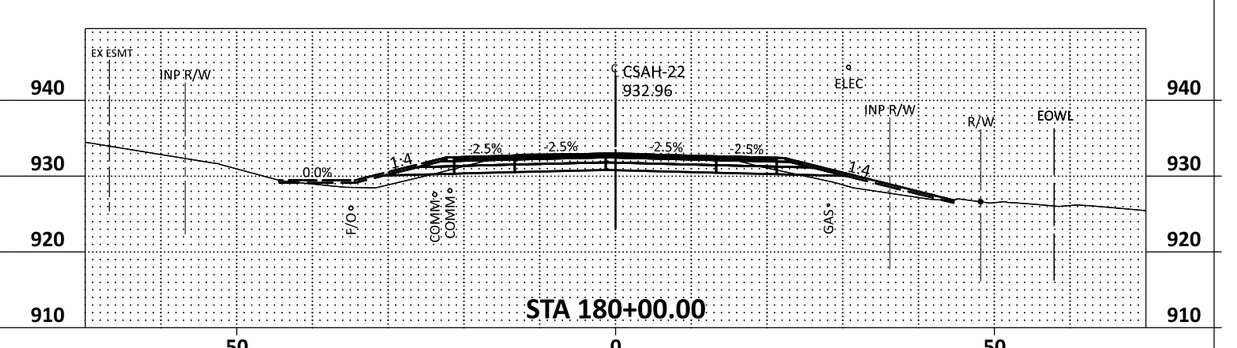

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CSAH 22 (Baugh Street NW) Reconstruction

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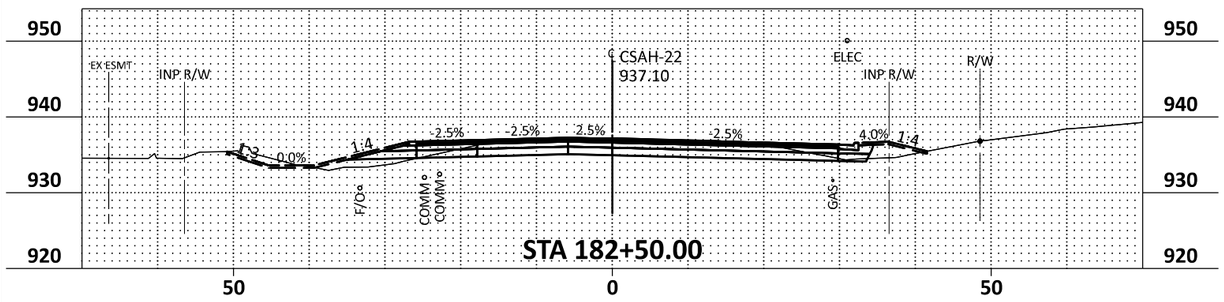

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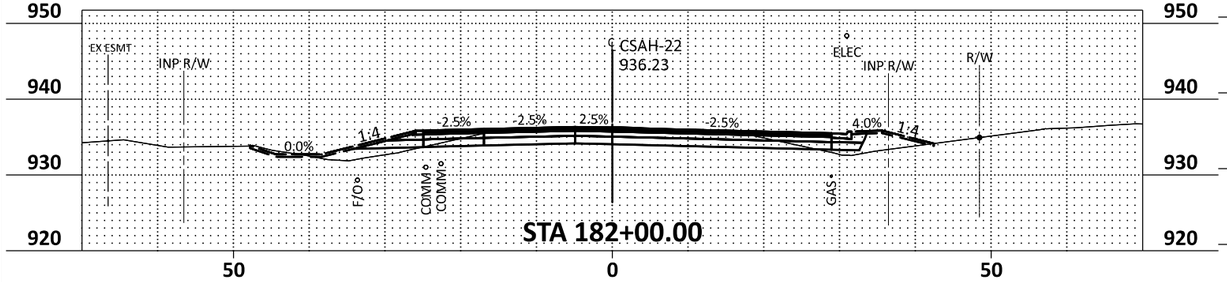

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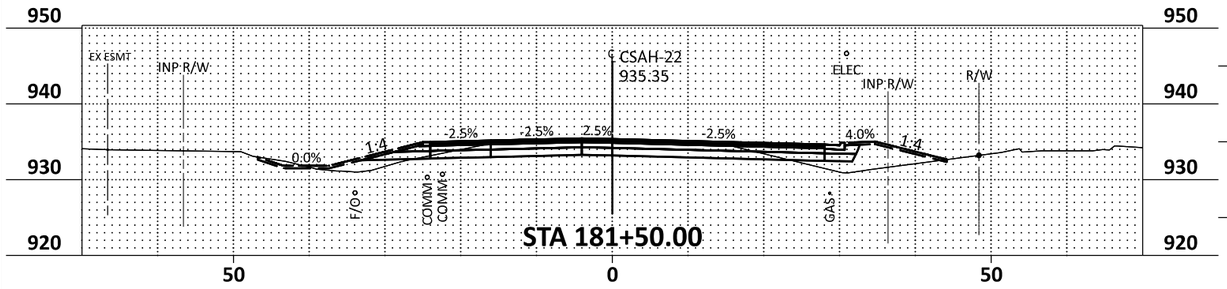

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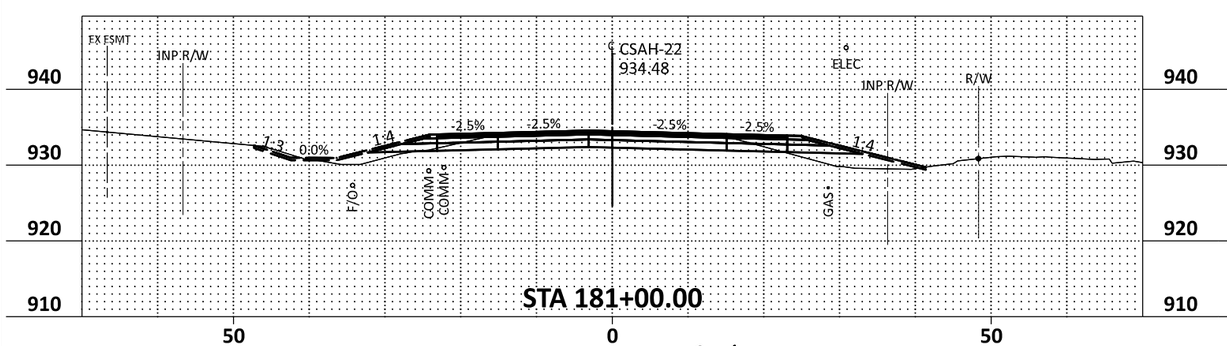

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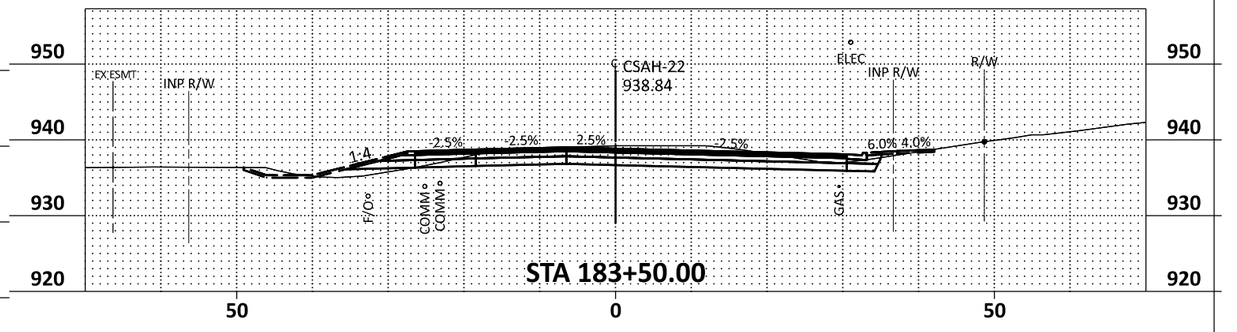

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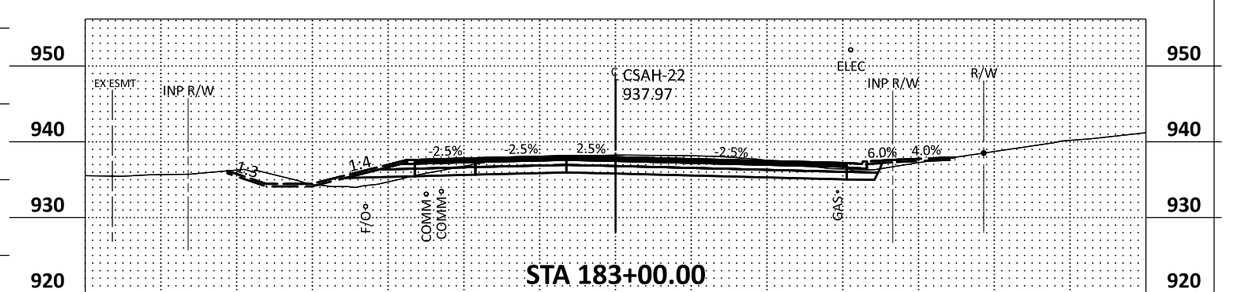

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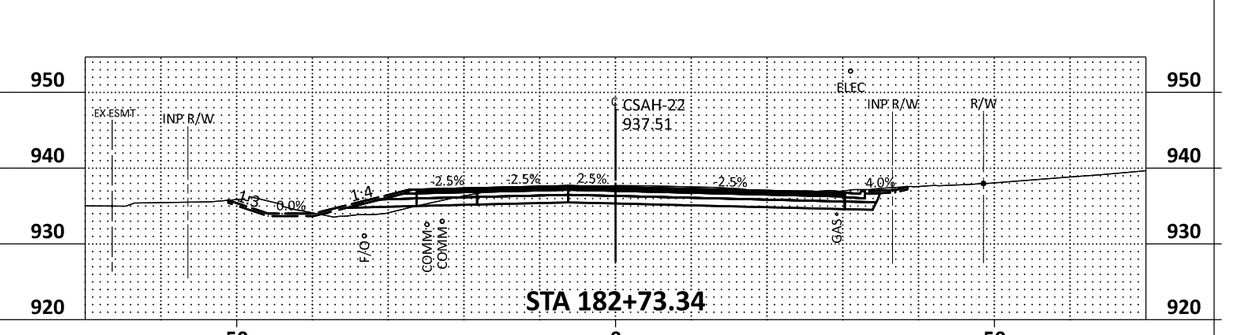

STA 182+73.34

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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Sheet No. X25 of X31 Sheets

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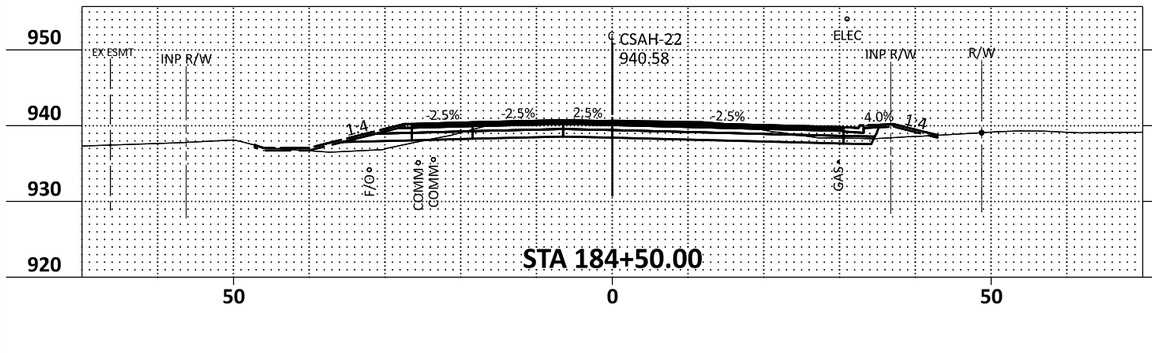

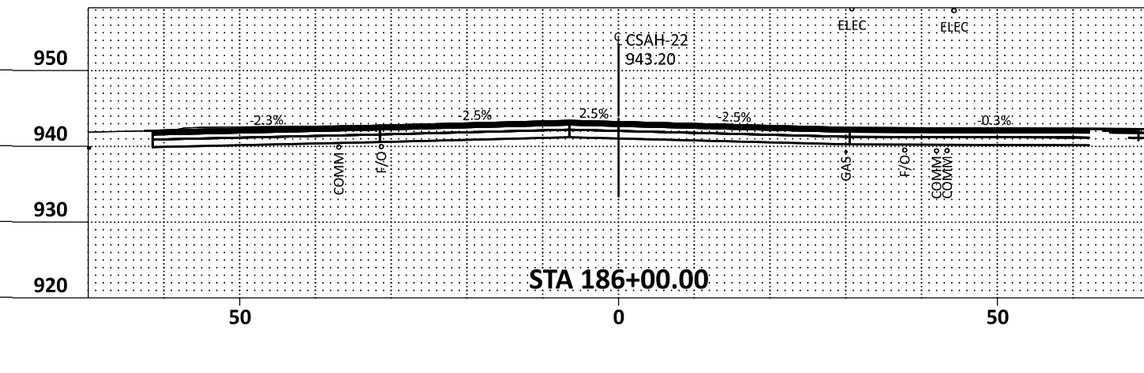

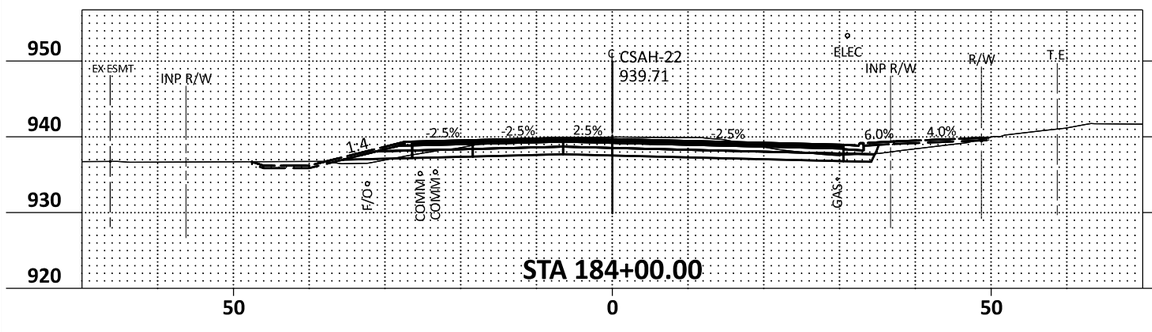

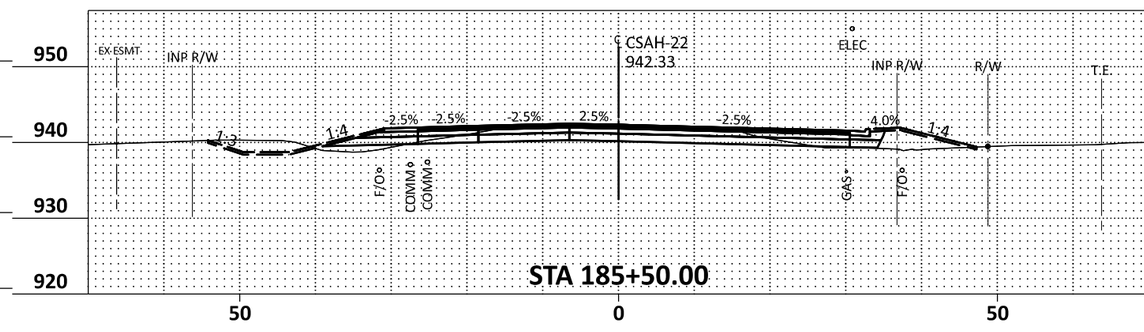

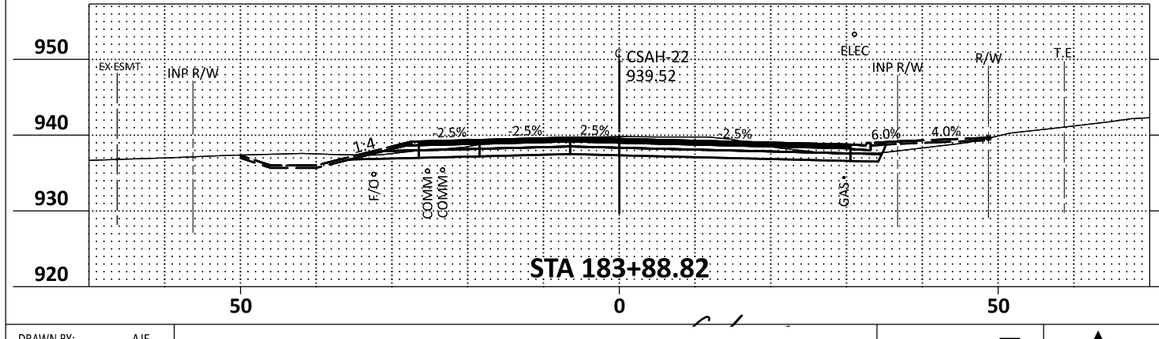

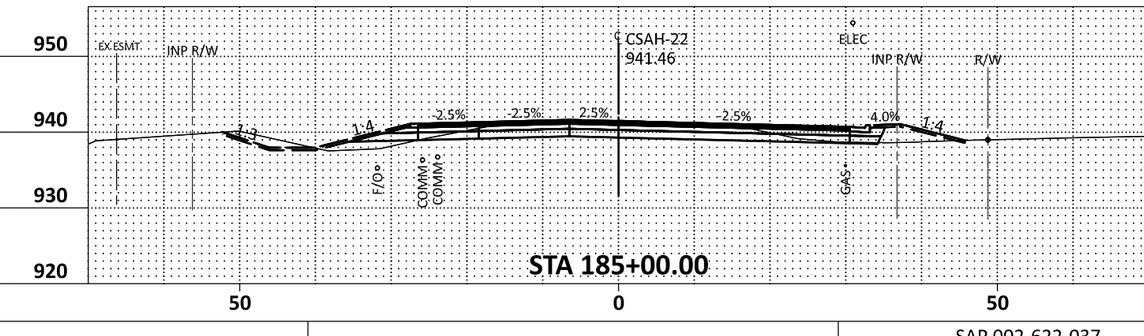

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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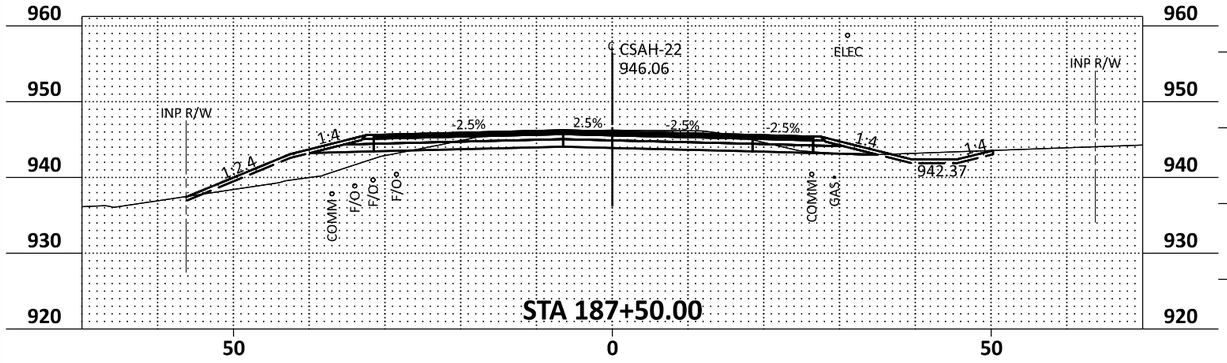

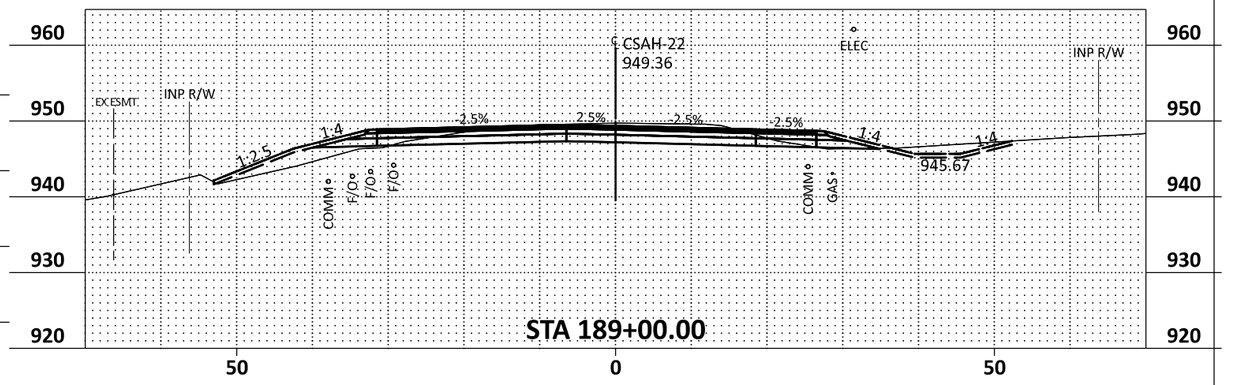

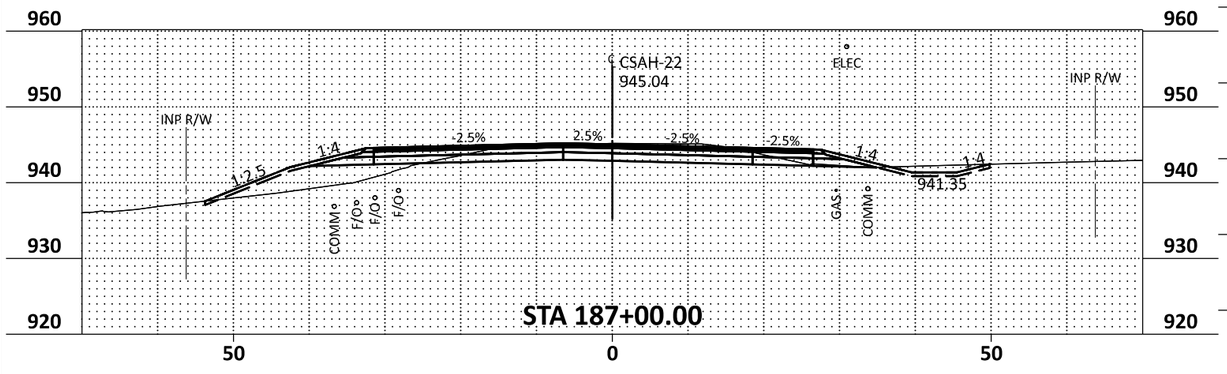

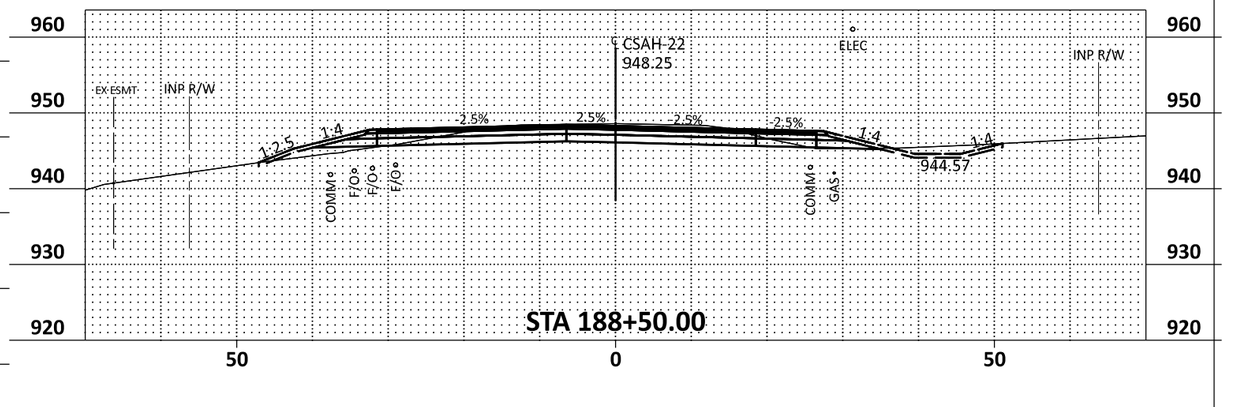

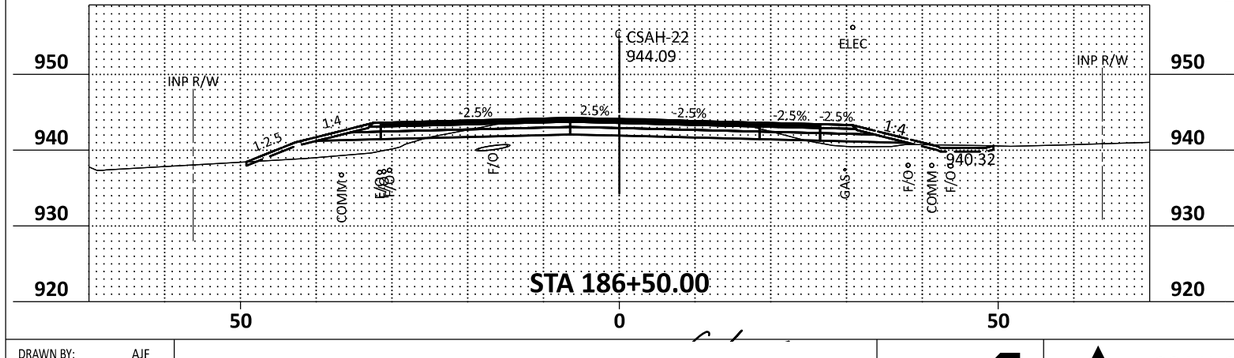

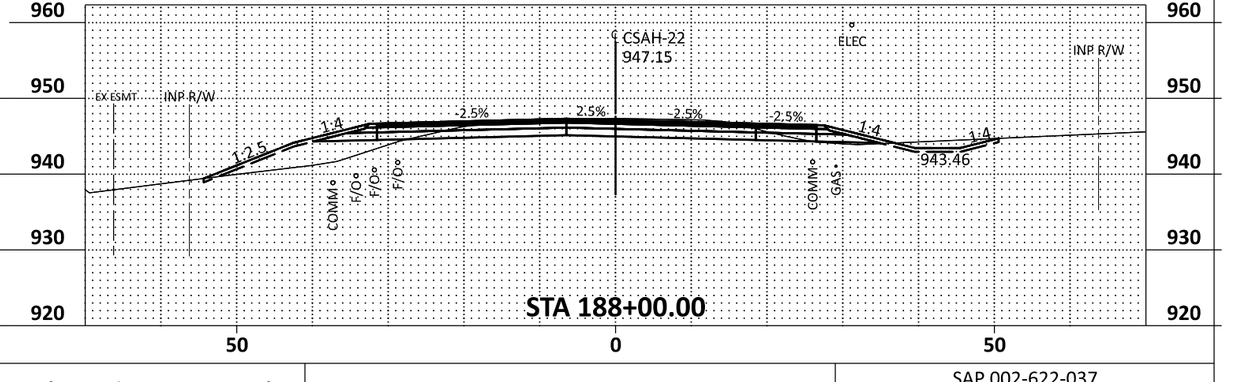

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CSAH 22 (Baugh Street NW) Reconstruction

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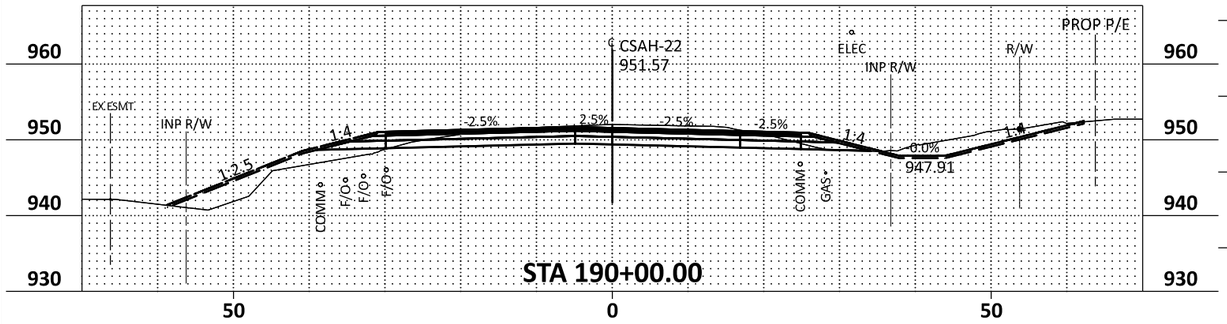

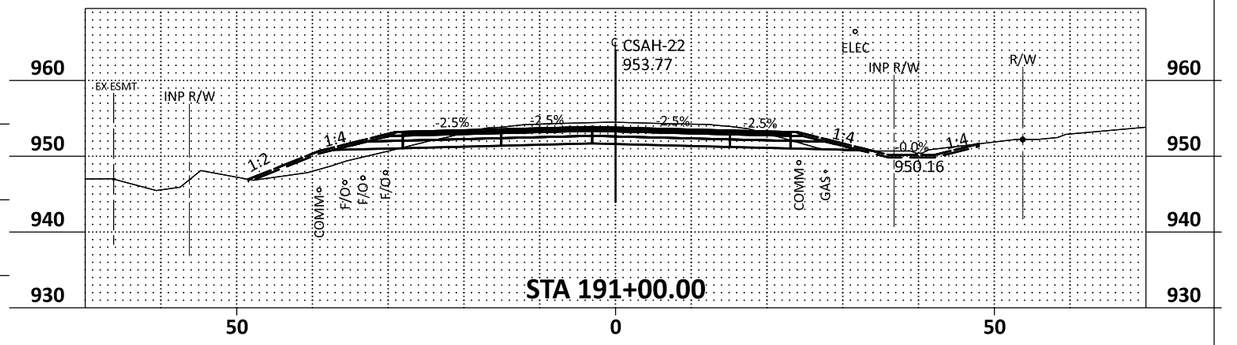

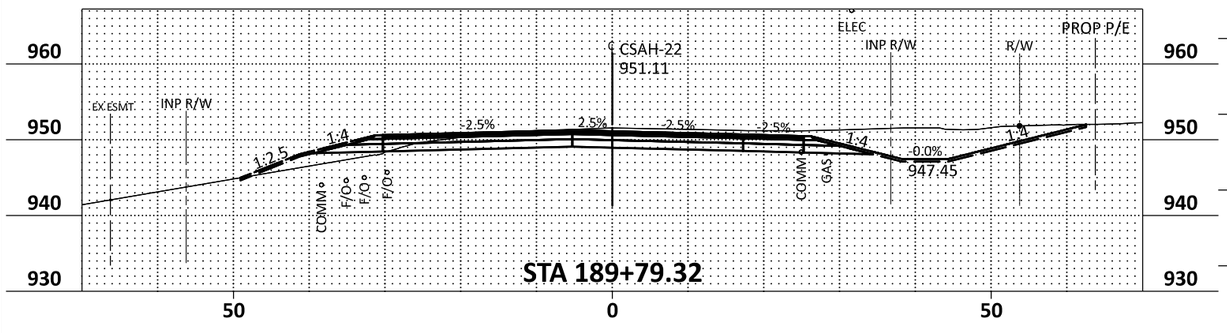

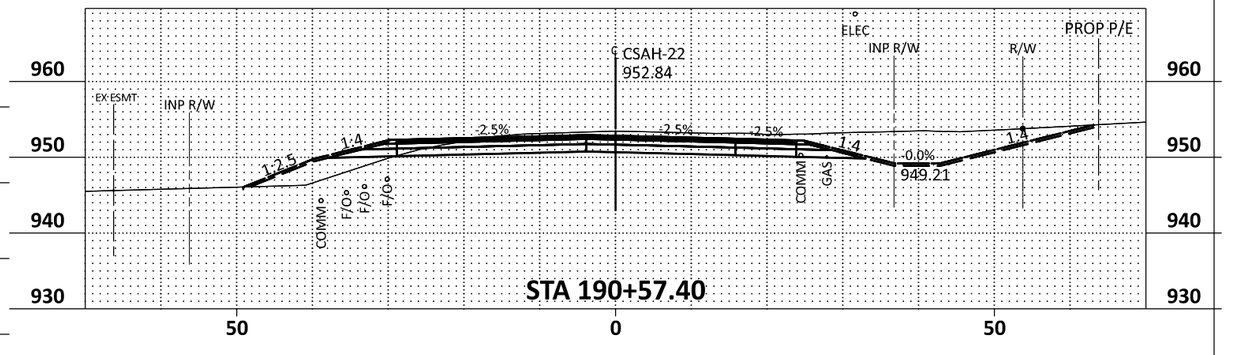

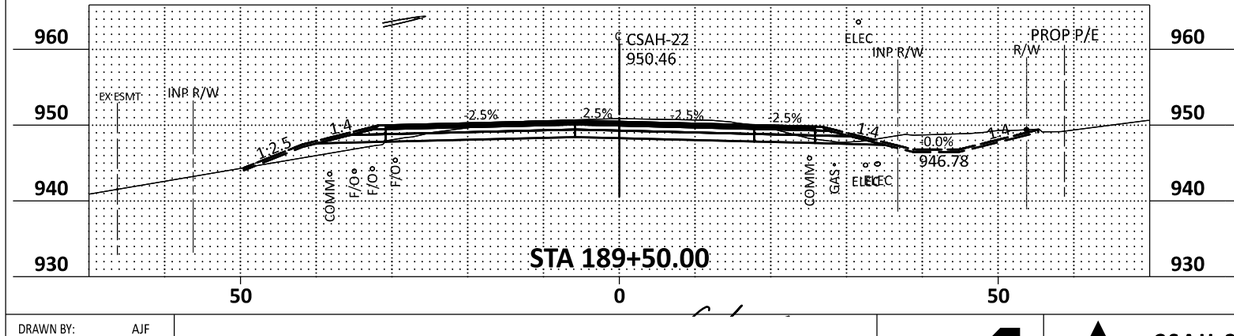

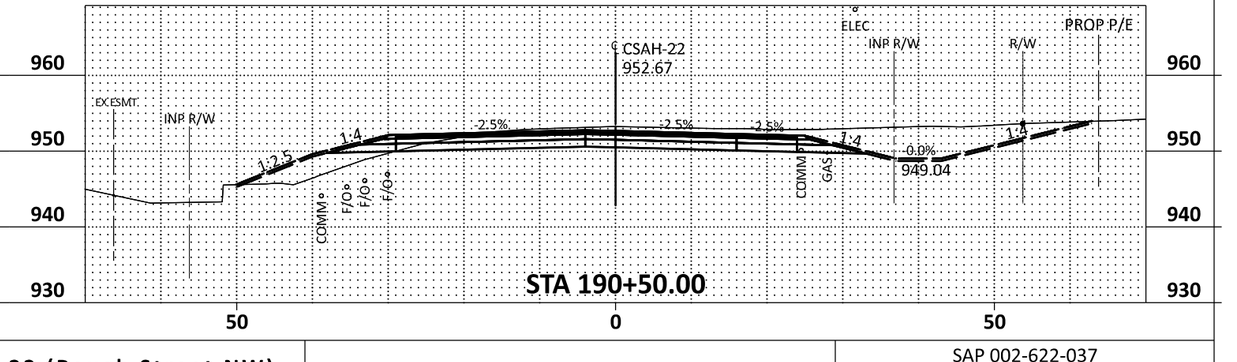

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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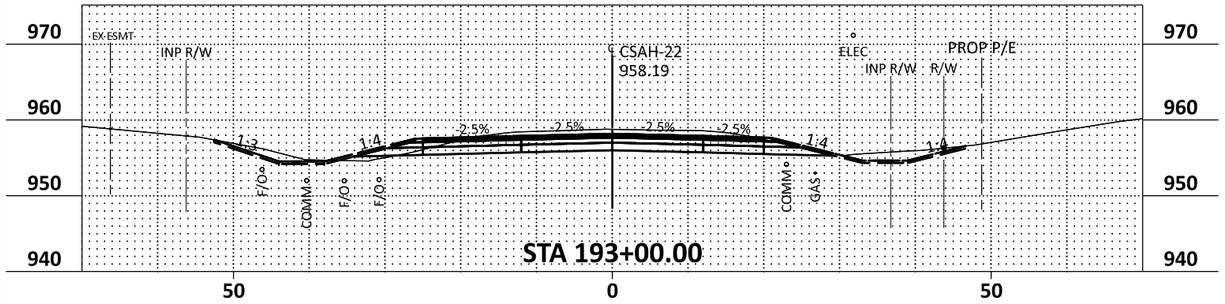

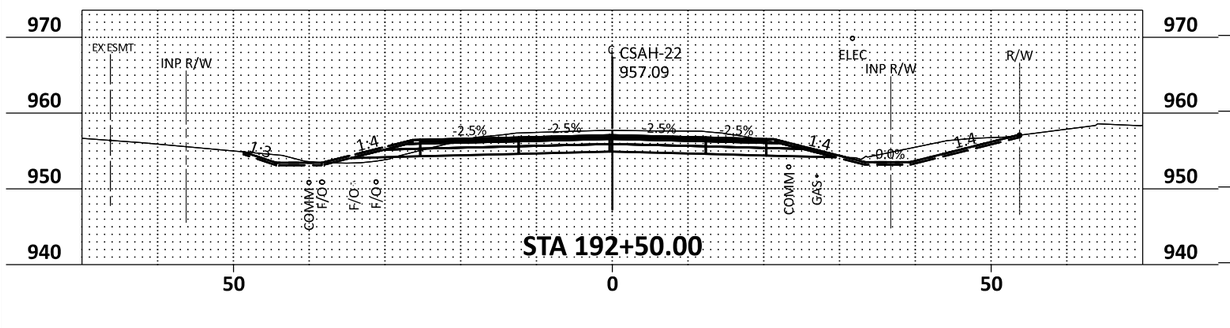

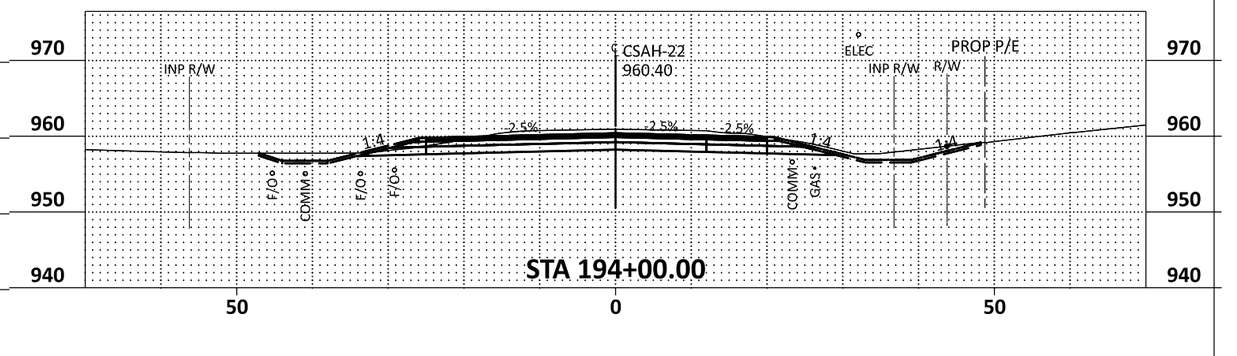

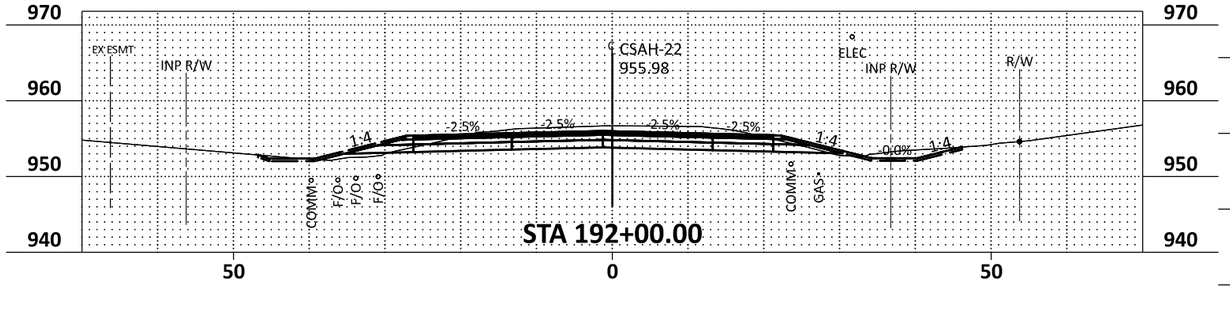

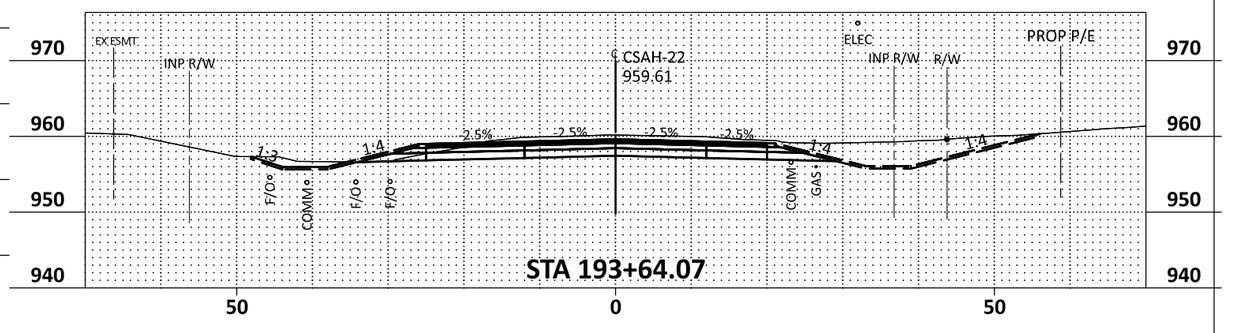

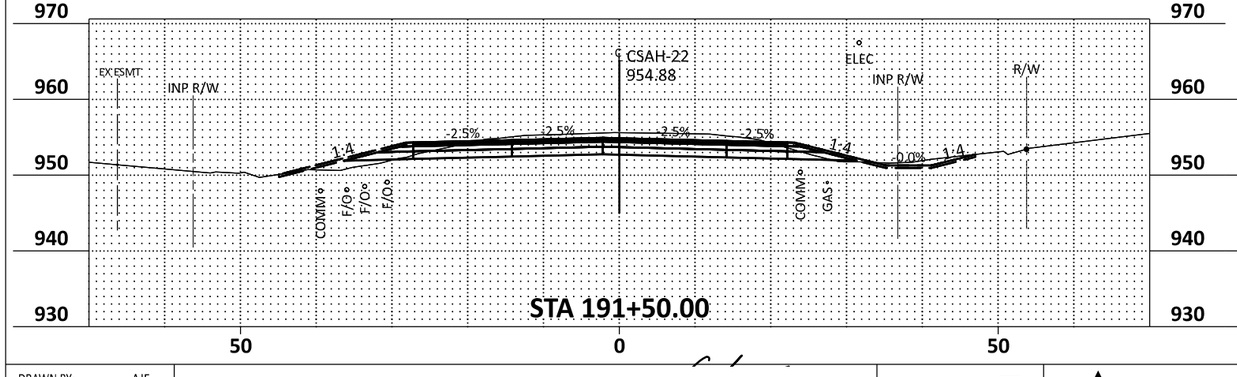

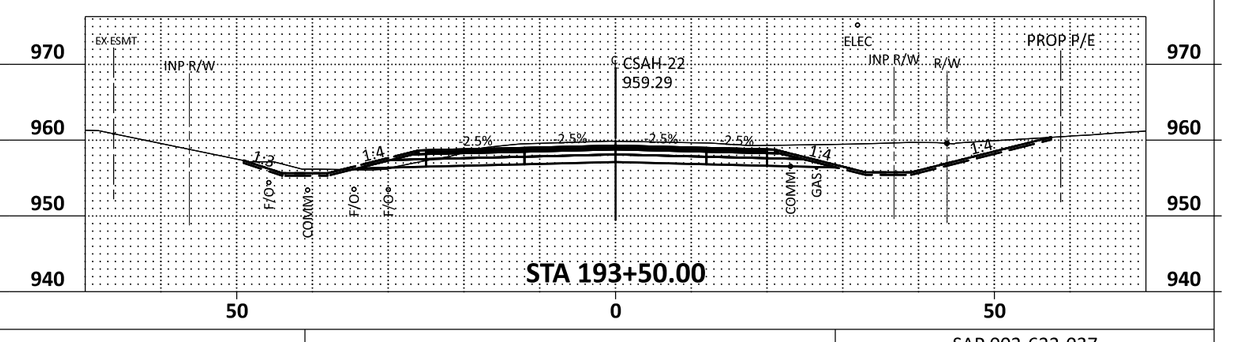

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CSAH 22 (Baugh Street NW) Reconstruction

CROSS SECTIONS

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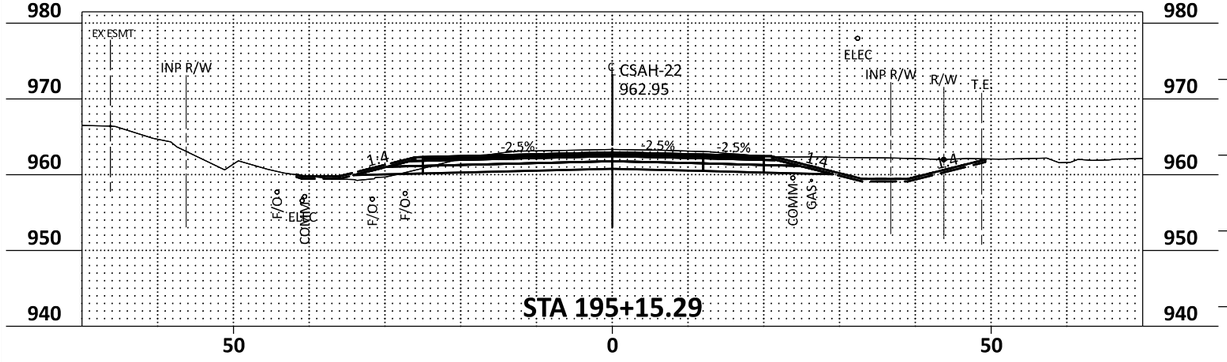

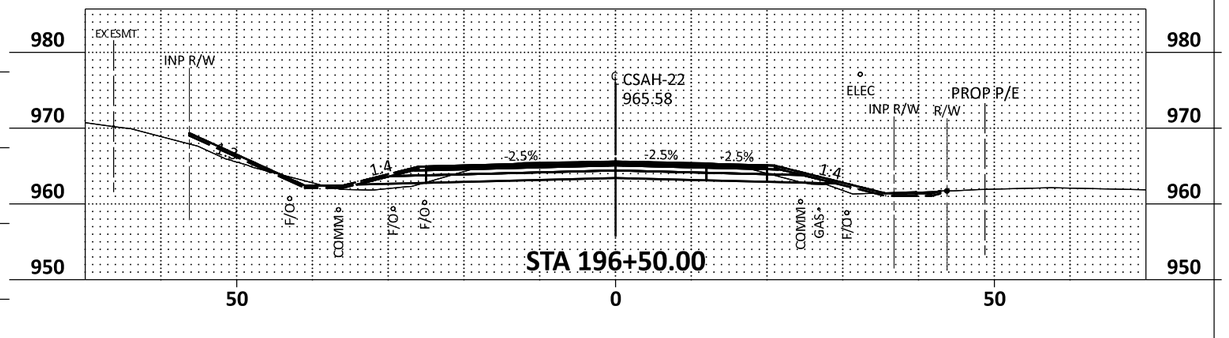

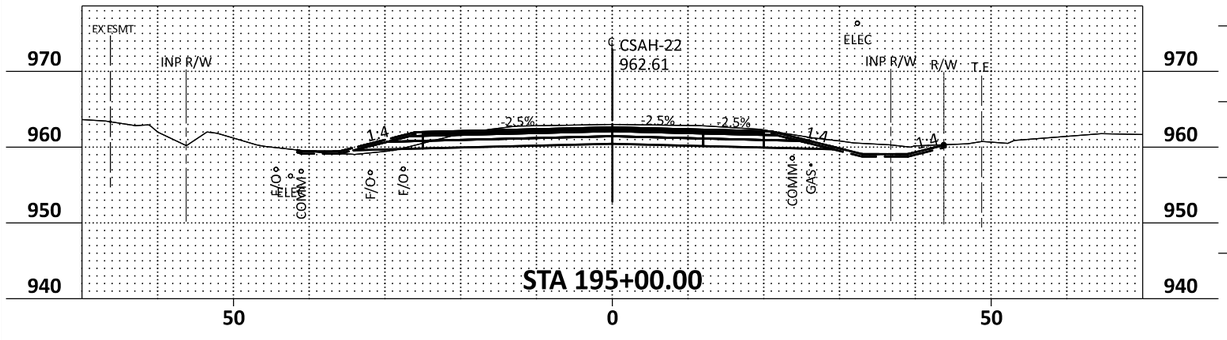

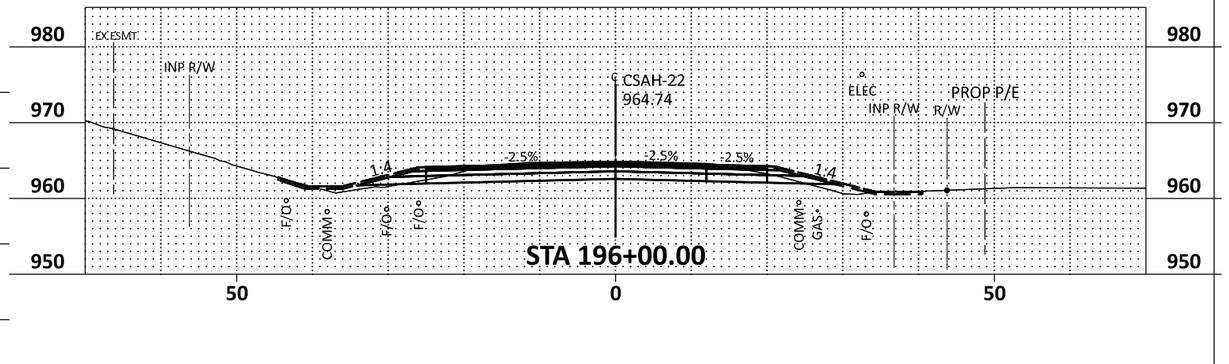

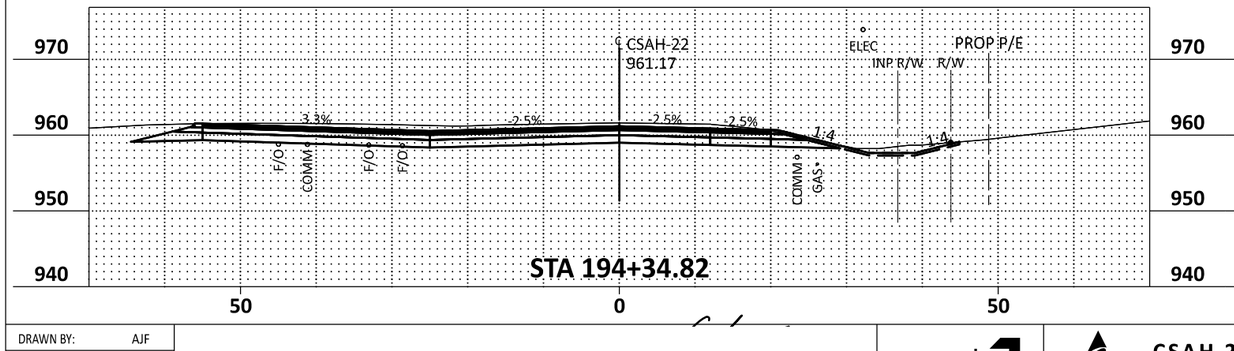

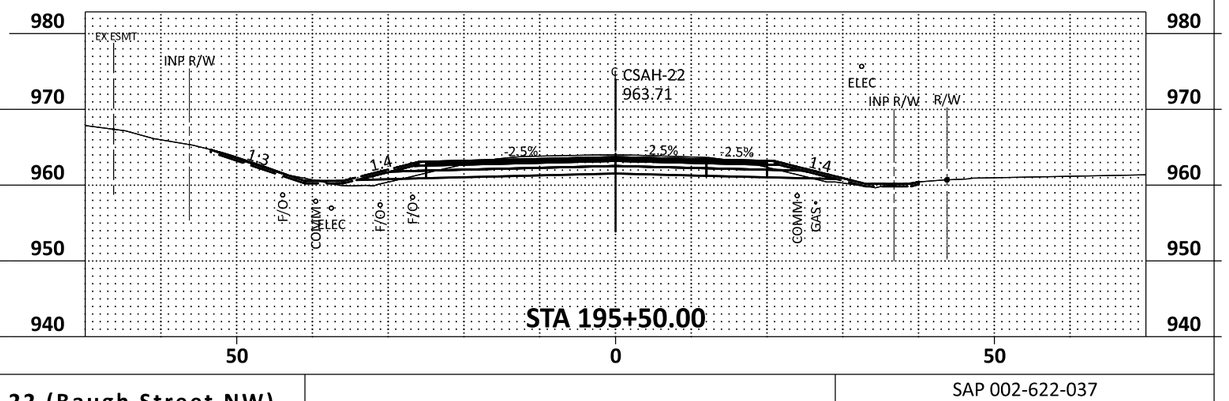

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Sheet No. X30 of X31 Sheets

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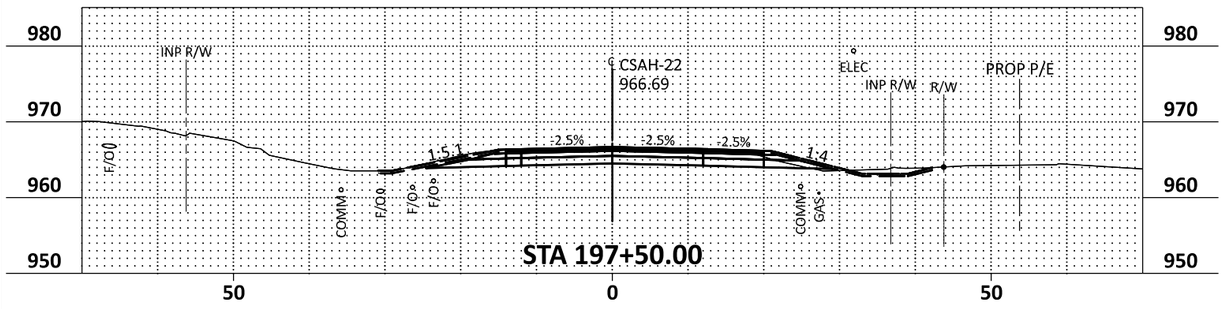

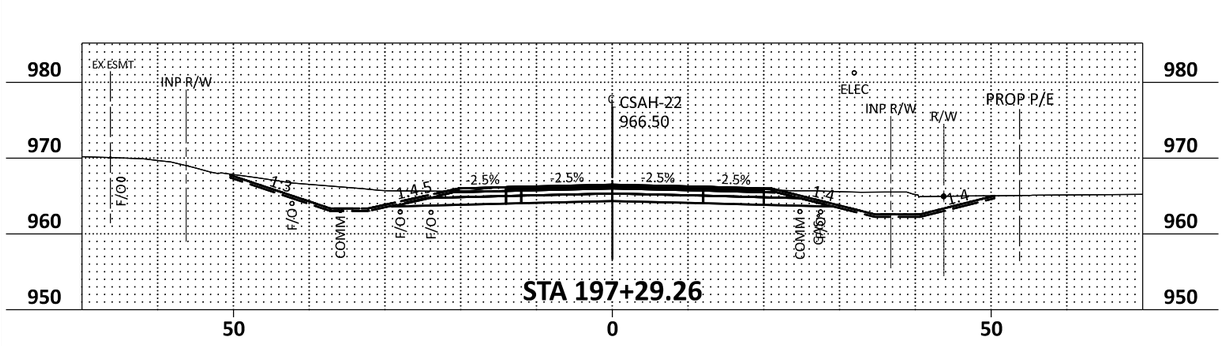

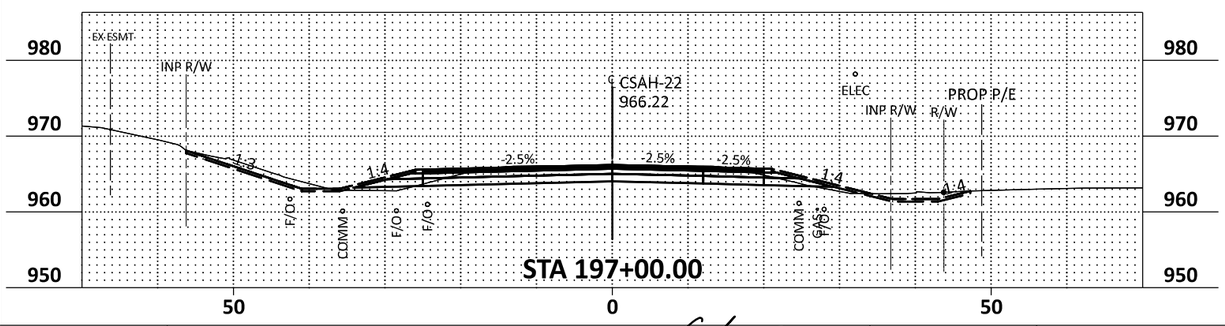

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