

# MINNESOTA DEPARTMENT OF TRANSPORTATION

## CONSTRUCTION PLANS FOR 2022 STREET REHABILITATION PROJECT ST. FRANCIS, MINNESOTA

S.A.P. 235-105-001 LOCATED ON ROANOKE STREET FROM AMBASSADOR BOULEVARD TO 241ST AVENUE  
SECTION 25 - TOWNSHIP 34 - RANGE 25 & SECTION 30 - TOWNSHIP 34 - RANGE 24

### GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL APPLY.

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

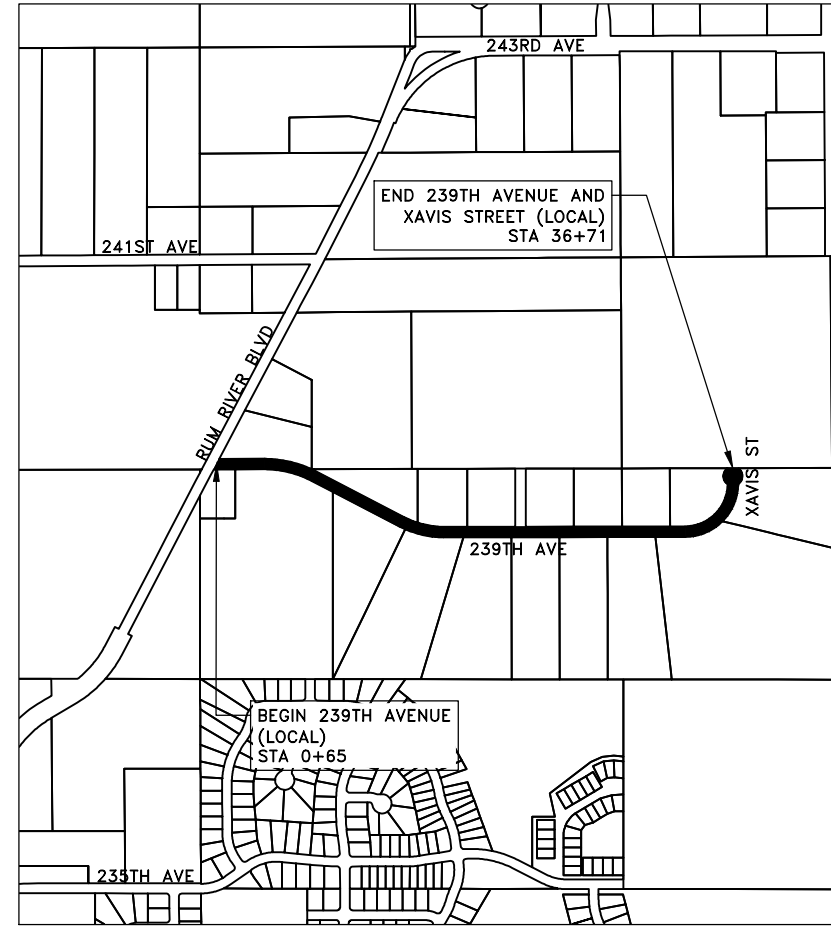
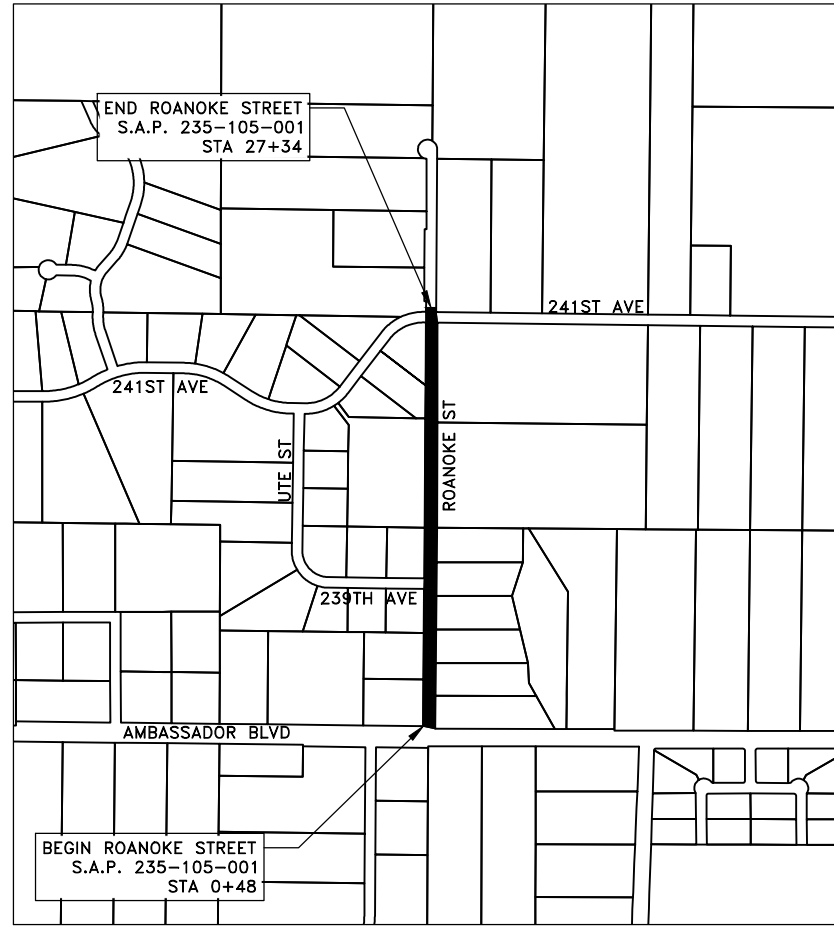
ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

ALL REQUIREMENTS OF THE PROJECT MANUAL FOR THE 2022 STREET REHABILITATION PROJECT.

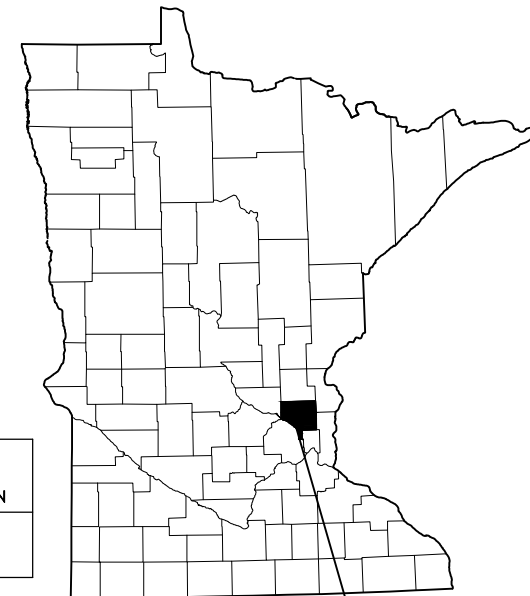
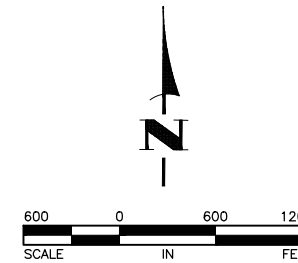
### SHEET INDEX

THIS PLAN CONTAINS 33 SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES AND SCHEDULES
3	GENERAL CONSTRUCTION NOTES AND PROJECT LEGEND
4	TYPICAL SECTIONS AND DETAILS
5	EROSION CONTROL DETAILS
6-10	EXISTING CONDITIONS AND TOPOGRAPHY - 239TH AVE AND XAVIS ST
11-22	CONSTRUCTION PLANS
X1-X11	CROSS SECTIONS



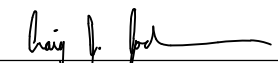
PROJECT LOCATIONS



CITY OF ST. FRANCIS,  
ANOKA COUNTY,  
MINNESOTA

PROJECT	STA. TO STA.	GROSS LENGTH (FEET)	BRIDGE LENGTH (FEET)	EXCEPTION LENGTH (FEET)	NET LENGTH (FEET)	NET LENGTH (MILES)	ADT (2022)	ADT (2042)	DESIGN ESAL	R VALUE	TON DESIGN	DESIGN SPEED	NUMBER OF LANES	NUMBER OF PARKING LANES	FUNCTIONAL CLASSIFICATION
S.A.P. 235-105-001 ROANOKE STREET	0+48 TO 27+34	2686	0	0	2686	0.51	583	711	55,469	50	10	30	2	0	COLLECTOR

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

  
CRAIG J. JOCHUM, P.E.  
HAKANSON ANDERSON  
DESIGN ENGINEER

23461 LIC. NO. DATE 4/12/22

DATE	REVISION

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

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Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
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ESTIMATED QUANTITIES						
ITEM NO.	Mn/DOT SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	S.A.P. 235-105-001 ROANOKE STREET	239TH AVENUE AND XAVIS STREET - LOCAL FUNDING
					ESTIMATED QUANTITY	ESTIMATED QUANTITY
1	2021.501	MOBILIZATION	LUMP SUM	1	0.24	0.76
2	2104.503	SAWING CONCRETE PAVEMENT - FULL DEPTH	LIN FT	40		40
3	2104.503	SAWING BITUMINOUS PAVEMENT - FULL DEPTH	LIN FT	174		174
4	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	163		163
5	2104.504	REMOVE CONCRETE PAVEMENT	SQ YD	60		60
6	2112.519	SUBGRADE PREPARATION	ROAD STATION	36		36
7	2211.509	AGGREGATE BASE CLASS 2	TON	305	110	195
8	2211.509	AGGREGATE BASE CLASS 5	TON	192		192
9	2215.504	FULL DEPTH RECLAMATION	SQ YD	10553		10553
10	2232.504	MILL BITUMINOUS SURFACE	SQ YD	171	150	21
11	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLONS	1053	530	523
12	2360.504	TYPE SP 9.5 WEARING COURSE MIXTURE (2:B) 2.5" THICK	SQ YD	313	144	169
13	2360.509	TYPE SP 4.75 BITUMINOUS MIXTURE FOR TIGHT BLADE LEVELING	TON	40	40	
14	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2:B)	TON	1712	720	992
15	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (2:B)	TON	1323		1323
16	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	60		60
17	2563.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1	0.24	0.76
18	2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.24	0.76
19	2573.503	SILT FENCE; TYPE MS	LIN FT	200		200
20	2574.507	LOAM TOPSOIL BORROW	CU YD	50		50
21	2575.604	SITE RESTORATION	SQ YD	200		200

BASIS OF ESTIMATED QUANTITIES	
AGGREGATE BASE CLASS 5	100 lbs/yd <sup>2</sup> /in
NON WEARING BITUMINOUS COURSE MIXTURE	110 lbs/yd <sup>2</sup> /in
WEARING COURSE BITUMINOUS MIXTURE	110 lbs/yd <sup>2</sup> /in
BITUMINOUS MATERIAL FOR TACK COAT - NEW ASPHALT	0.06 gal/yd <sup>2</sup>
BITUMINOUS MATERIAL FOR TACK COAT - OLD ASPHALT	0.07 gal/yd <sup>2</sup>
BITUMINOUS MATERIAL FOR TACK COAT - MILLED ASPHALT	0.08 gal/yd <sup>2</sup>
HYDRAULIC FIBER BONDED MATRIX	3500 lbs/acre
SEED MIX 25-121	122 lbs/acre
TYPE 1, COMMERCIAL FERTILIZER	300 lbs/acre

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*Craig J. Jochum*  
**CRAIG J. JOCHUM, P.E.**  
 Date 4/12/22 Lic. No. 23461

DESIGNED BY:  
CJJ  
 DRAWN BY:  
SGJ  
 CHECKED BY:  
TAE



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2022 STREET REHABILITATION PROJECT

ESTIMATED QUANTITIES AND SCHEDULES  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 2 OF 22 SHEETS

GENERAL CONSTRUCTION AND SOILS NOTES:

1. TOP OF THE GRADING SUBGRADE IS DEFINED AS THE BOTTOM OF THE CLASS 5 AGGREGATE BASE. ALL UNSTABLE MATERIAL SUCH AS TOPSOIL, SILTS, ORGANIC MATERIALS, MUCK, ETC. ENCOUNTERED DURING EXCAVATION WHICH IS NOT ACCOUNTED FOR IN THE ESTIMATED QUANTITIES WILL BE PAID AS "COMMON EXCAVATION".
2. STRIP AND STOCKPILE ALL INPLACE TOPSOIL AND SLOPE DRESSING IN AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING. IN AREAS OF STREET, SHOULDER, AND INTERSECTION CONSTRUCTION, THE EXPOSED SAND SHALL BE SURFACE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY, ASTM D698, IN AT LEAST THE UPPER 3 FT.
3. UNLESS OTHERWISE SHOWN IN THESE PLANS, THE GRADING SUBGRADE SHALL BE CONSTRUCTED OF SUITABLE GRADING MATERIAL. THE FILL SHALL BE PLACED IN 8" TO 10" LOOSE LIFTS, AND COMPACTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. ALL IMPORTED GRANULAR MATERIALS SHALL ALSO BE COMPACTED AS PREVIOUSLY DISCUSSED.
4. SUITABLE GRADING MATERIAL FOR THIS PROJECT SHALL CONSIST OF GRANULAR BORROW AND ALL ONSITE SOILS ENCOUNTERED WITH THE EXCEPTION OF TOPSOIL, SILT, DEBRIS, ORGANIC MATERIAL AND OTHER UNSTABLE MATERIAL. THE MATERIAL SHALL HAVE A CLASSIFICATION OF SP, SM OR SP-SM (USCS CLASSIFICATIONS).
5. IN ANY PAVEMENT WIDENING THE CONTRACTOR SHALL STRIVE TO SUBSTANTIALLY MATCH BACKFILL MATERIAL WITH IN PLACE SOILS TO FORESTALL ABRUPT FROST DIFFERENTIAL. GRANULAR FILL SHALL NOT BE PLACED BESIDE NON GRANULAR SOILS AND VICE VERSA.
6. WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT CUT VERTICALLY TO THE BOTTOM OF INPLACE SURFACING OR TOP OF GRADING SUBGRADE WHICHEVER IS DEEPER AT A 1(V):2(H) TO THE BOTTOM OF EXCAVATION.
7. PROVIDE A SAW CUT WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT AND AT TERMINI OF CONSTRUCTION TO ENSURE A UNIFORM JOINT.
8. BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH MN/DOT SPEC. 2104.
9. USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES. THE BITUMINOUS TACK COAT MATERIAL SHALL BE APPLIED AT A UNIFORM RATE OF PER THE BASIS OF ESTIMATED QUANTITIES BETWEEN BITUMINOUS LAYERS. THE APPLICATION RATES ARE FOR UNDILUTED EMULSIONS.
10. PERFORMANCE GRADED (PG) ASPHALT BINDER PG 58-28, SPEC. 3151, SHALL BE USED FOR ALL BITUMINOUS MIXES ON THIS PROJECT. SPECIFIC PG GRADES SHALL BE STATED IN THE SPECIAL PROVISIONS AND AT THE END OF THE MIX DESIGNATION NUMBER SHOWN ON THE TYPICAL SECTION.
11. THE BITUMINOUS MIXTURES SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS 2360 AND 3139.
12. IF NECESSARY, THE UTILITY COMPANIES WILL RELOCATE THEIR FACILITIES CONCURRENTLY WITH THE CONSTRUCTION OPERATIONS UNDER THIS CONTRACT. CONTRACTOR SHALL SCHEDULE CONSTRUCTION IN COOPERATION WITH UTILITY RELOCATION.
13. ALL TRENCH AND OTHER EXCAVATIONS GREATER THAN 24 INCHES DEEP SHALL BE BACKFILLED AT THE END OF EACH WORK DAY. EXTRA WORK REQUIRED TO BACKFILL AND CORRESPONDINGLY REMOVE MATERIAL THE NEXT WORK DAY SHALL BE INCIDENTAL.
14. THE CONTRACTOR SHALL POST THE SWPPP, AND OTHER REQUIRED DOCUMENTS ON SITE. THE METHOD OF POSTING SHALL BE APPROVED BY THE ENGINEER.

**LEGEND**

---	-903-	---	EXISTING CONTOUR
---	---	---	RIGHT-OF-WAY
---	---	---	SECTION LINE
---	---	---	EXISTING EASEMENT
---	W	---	DELINEATED WETLAND
G	G	G	GAS MAIN
T-BUR	T-BUR	T-BUR	BURIED TELEPHONE CABLE
U-OH	U-OH	U-OH	OVERHEAD UTILITY
P-OH	P-OH	P-OH	OVERHEAD ELECTRIC
P-BUR	P-BUR	P-BUR	BURIED ELECTRIC
x	x	x	WIRE FENCE
o	o	o	CHAIN LINK FENCE
>>	>>	>>	EXISTING STORM SEWER
>	>	>	EXISTING SANITARY SEWER
>>	>>	>>	PROPOSED STORM SEWER
>	>	>	PROPOSED SANITARY SEWER
			PROPOSED WATERMAIN
=====	=====	=====	EXISTING CONCRETE CURB AND GUTTER
=====	=====	=====	PROPOSED CONCRETE CURB AND GUTTER
			DRIPLINE
			DECIDUOUS AND CONIFEROUS TREES
			UTILITY PEDESTAL
			POWER POLE
			GUY WIRE
			CATCH BASIN INLETS
			STORM SEWER MANHOLE
			STORM SEWER APRON
			MAILBOX
			SIGN
			DETAIL NUMBER
			SHEET NUMBER
			SOIL BORING
			SB-5

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**CRAIG J. JOCHUM, P.E.**  
 Date 4/12/22 Lic. No. 23461

DESIGNED BY: CJJ  
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 CHECKED BY: TAE



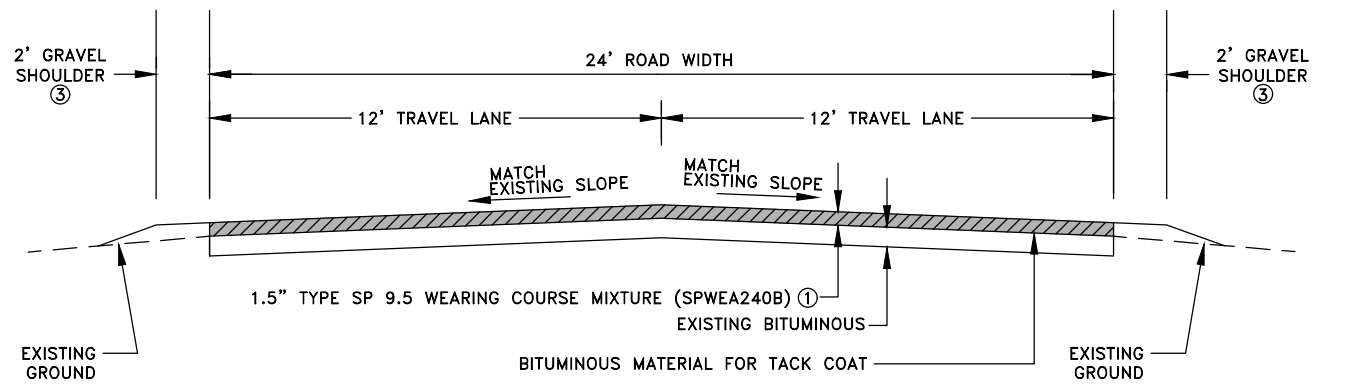
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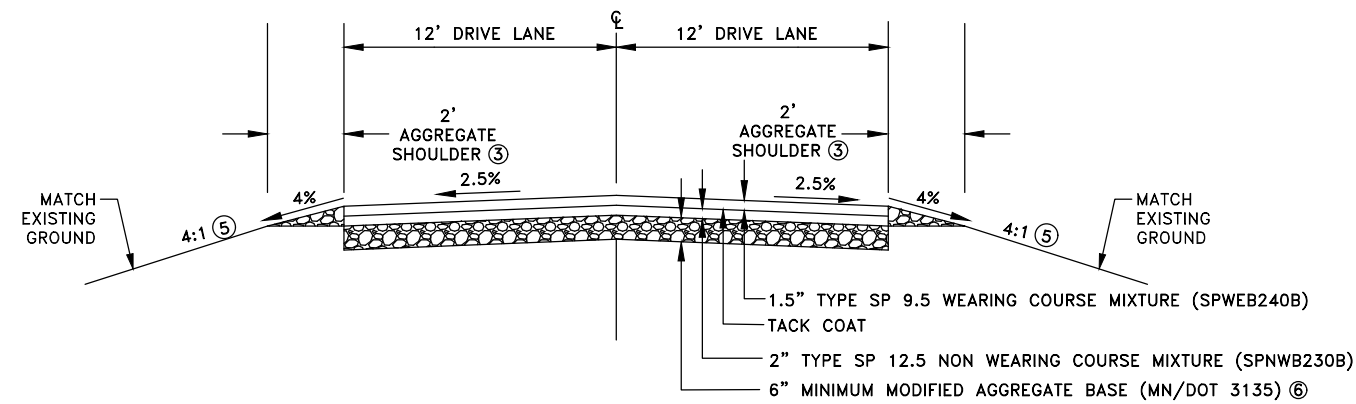
**GENERAL CONSTRUCTION NOTES  
 AND PROJECT LEGEND**

CITY OF ST. FRANCIS, MINNESOTA

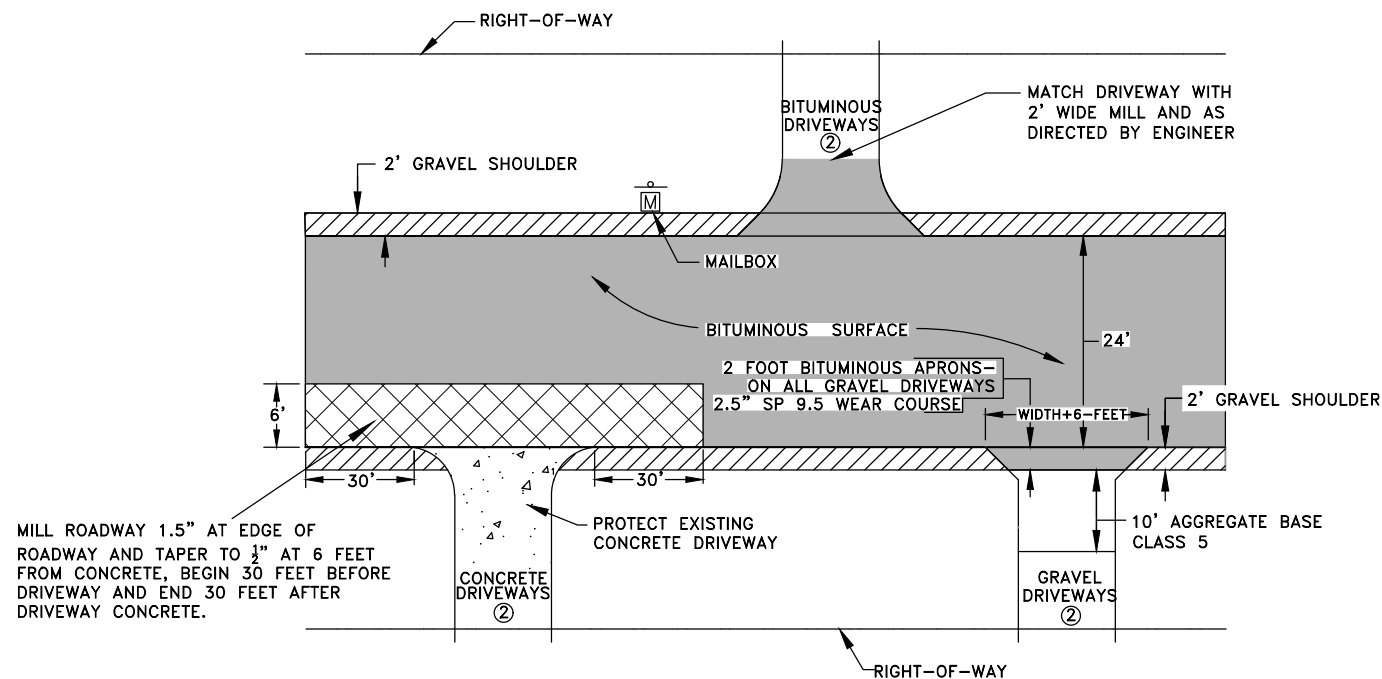
SHEET 3 OF 22 SHEETS



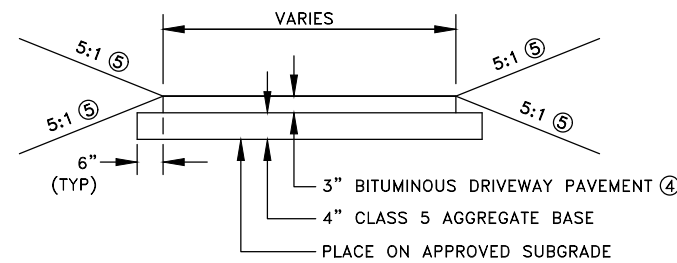
1 TYPICAL STREET SECTION - ROANOKE STREET  
N.T.S.



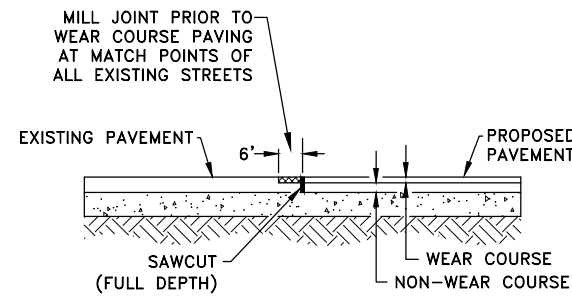
2 TYPICAL STREET SECTION - 239TH AVENUE AND XAVIS STREET  
NO SCALE



3 OVERLAY TYPICAL DRIVEWAY CONNECTIONS  
N.T.S.



4 BITUMINOUS DRIVEWAY SECTION  
NO SCALE



5 BITUMINOUS MILLING DETAIL  
N.T.S.

- REFERENCE NOTE:
- ① PRIOR TO CONSTRUCTION OF THE BITUMINOUS OVERLAY THE CONTRACTOR SHALL PATCH ALL PAVEMENT POTHOLES THAT ARE 1/2 INCH OR DEEPER. PATCH WILL BE PAID BY ITEM 2360 TYPE 4.75 BITUMINOUS MIXTURE FOR TIGHT BLADE LEVELING. MIX SHALL BE SPREAD BY GRADER, SKID STEER OR OTHER APPROPRIATE EQUIPMENT. PATCH MATERIAL SHALL BE COMPACTED WITH A STEEL DRUM ROLLER. PATCH SHALL BE TACK COATED PRIOR TO PLACEMENT. TACK COAT WILL BE PAID PER THE BID ITEM.
  - ② WHEN NECESSARY AND AS DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL MATCH DRIVEWAYS, BEYOND THE 2 FOOT GRAVEL SHOULDER, WITH TOPSOIL. ALL TOPSOIL AND DISTURBED AREAS SHALL BE RESTORED WITH TURF. RESTORATION WILL BE PAID PER ITEM 2575 SITE RESTORATION.
  - ③ SHOULDER SHALL BE BASE AGGREGATE CLASS 2.
  - ④ BITUMINOUS DRIVEWAY PAVEMENT SHALL BE PAID PER ITEM 2360-TYPE 12.5 WEARING COURSE MIXTURE (2,B) 3" THICK.
  - ⑤ ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED ON SHEET 5.
  - ⑥ CONTRACTOR SHALL RECLAIM, TO A MINIMUM OF 8 INCHES, IF THERE IS SUFFICIENT EXISTING BITUMINOUS AND AGGREGATE BASE. 6-INCHES SHALL BE THE MINIMUM BASE REQUIRED PRIOR TO PAVING.

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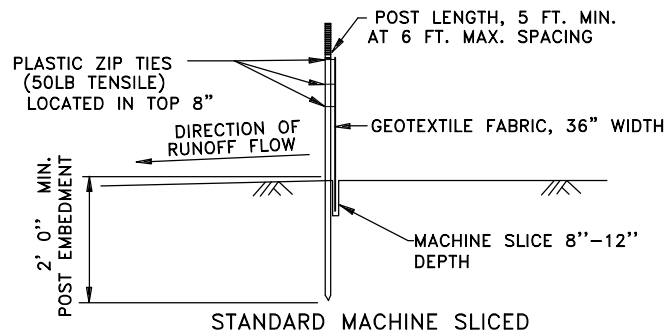
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2022 STREET REHABILITATION PROJECT

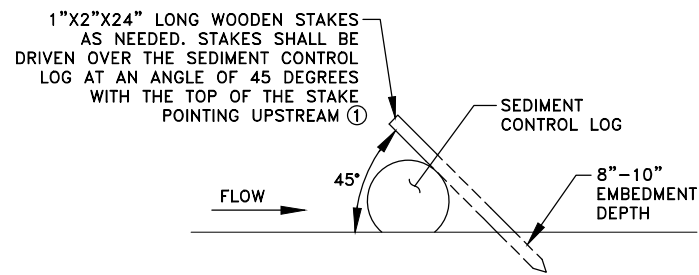
TYPICAL SECTIONS AND DETAILS  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 4 OF 22 SHEETS

S.A.P. 235-105-001



1  
5 **SILT FENCE DETAILS**  
TO PROTECT AREAS FROM SHEET FLOW  
(SEE SPEC. 3886)



2  
5 **SEDIMENT CONTROL LOG TYPE COMPOST**

GENERAL EROSION CONTROL NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL ACQUIRE THE MPCA-CONSTRUCTION STORMWATER GENERAL PERMIT. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED COVERING CONSTRUCTION ACTIVITIES. THE SWPPP IS INCLUDED IN THE PROJECT MANUAL.
2. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) PRIOR TO GRADING AND REMOVAL ACTIVITIES. BMP'S SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES AND POTENTIAL FOR EROSION HAS PASSED.
3. THE CONTRACTOR SHALL SCHEDULE THEIR OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME.
4. BMP'S SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND DOCUMENTED IN THE SWPPP INSPECTION LOG. WEEKLY LOGS MUST BE FORWARDED TO THE ENGINEER FOR REVIEW.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS APPROVED BY THE ENGINEER.
6. THE CONTRACTOR SHALL FILE NOTICE OF TERMINATION (NOT) WITH THE MPCA WHEN FINAL STABILIZATION IS APPROVED BY THE ENGINEER.
7. ALL LABOR, MATERIALS, AND EQUIPMENT COSTS NECESSARY TO MANAGE EROSION AND SEDIMENT IN ACCORDANCE WITH THE MN/DOT STANDARD SPECIFICATIONS, MN/DOT EROSION CONTROL HANDBOOK, AND ALL REQUIREMENTS INCLUDED IN THE PROJECT MANUAL SHALL BE PAID PER ITEM 2575-EROSION CONTROL, UNLESS OTHERWISE INCLUDED ON THE PROJECT BID FORM.
8. CONTRACTOR SHALL PROMPTLY SWEEP EXISTING STREETS WHEN ANY SEDIMENT TRACKING OCCURS.
9. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE GENERAL PERMIT, WHICH IS INCLUDED IN THE PROJECT MANUAL.
10. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE CERTIFICATION DOCUMENTATION FOR THE EROSION CONTROL SUPERVISOR AND INSTALLERS TO THE ENGINEER.
11. THE CONTRACTOR IS RESPONSIBLE FOR ALL INSPECTIONS AND MAINTENANCE AS OUTLINED IN PART IV.E INSPECTIONS AND MAINTENANCE OF THE GENERAL PERMIT, WHICH IS INCLUDED IN THE PROJECT MANUAL.
12. CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE COMPLETED LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. DEPENDING ON THE CONTRACTOR'S OPERATION, TEMPORARY SEEDING AND MULCHING MAY BE REQUIRED TO MEET THE REQUIREMENTS OF THE SPECIFICATIONS AND SWPPP. ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR TEMPORARY SEEDING AND MULCHING SHALL BE INCIDENTAL.
13. EROSION CONTROL SHALL CONFORM TO THE MN/DOT EROSION CONTROL HANDBOOK.
14. WHEN SEDIMENTS DEPOSIT IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
15. PRIOR TO SEEDING, SOIL SHALL BE PREPARED PER MN/DOT SPEC 2574.3.A.4.
16. ALL DISTURBED AREAS REQUIRE TOPSOIL, MN/DOT SEED MIXTURE 25-121, TYPE 1 FERTILIZER AND EITHER HYDRAULIC BONDED FIBER MATRIX OR CATEGORY 3 EROSION CONTROL BLANKET. SEED SHALL BE PLACED BY HYDROSEEDING AND SHALL BE IN ACCORDANCE WITH MN/DOT SPEC. 2575. APPLICATION OF THE HYDRAULIC BONDED FIBER MATRIX SHALL BE COMPLETED SEPARATELY FROM THE HYDROSEEDING. PLACE HYDRAULIC BONDED FIBER MATRIX PER MN/DOT SPEC 2575.3.E.2.d. RATES OF SEED, FERTILIZER AND HYDRAULIC STABILIZED FIBER MATRIX PLACEMENT SHALL BE IN ACCORDANCE WITH THE BASIS OF ESTIMATED QUANTITIES SCHEDULE SHOWN ON SHEET 2.

REFERENCE NOTES:

- ① PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.

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DESIGNED BY:  
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

**EROSION CONTROL DETAILS**

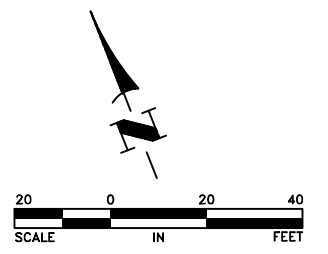
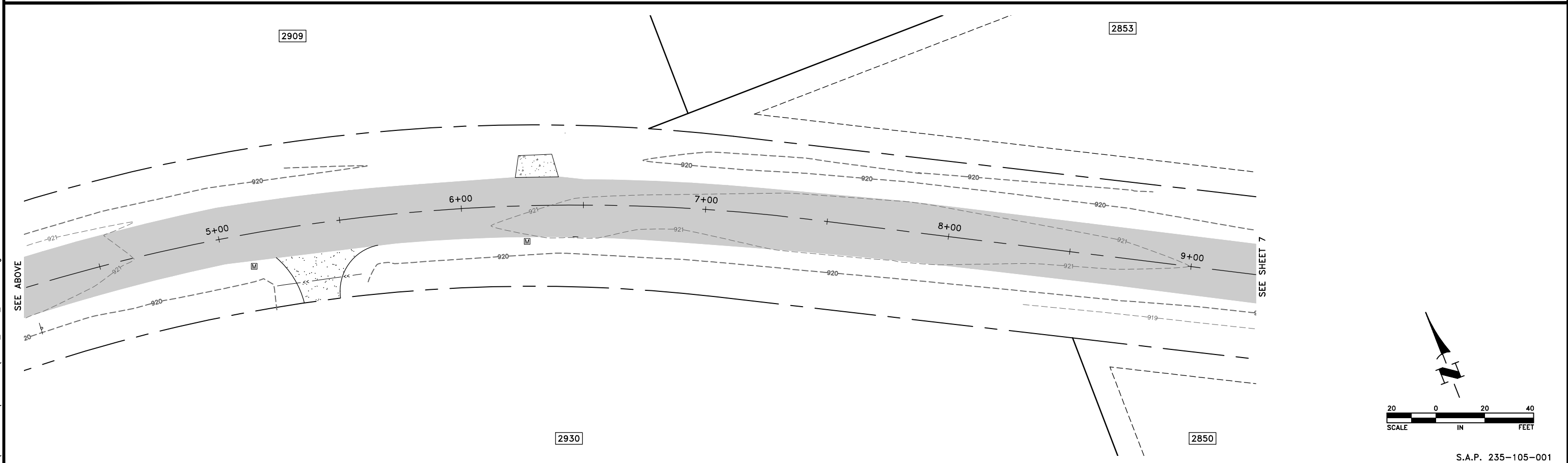
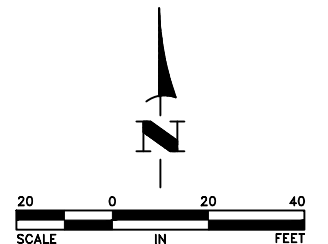
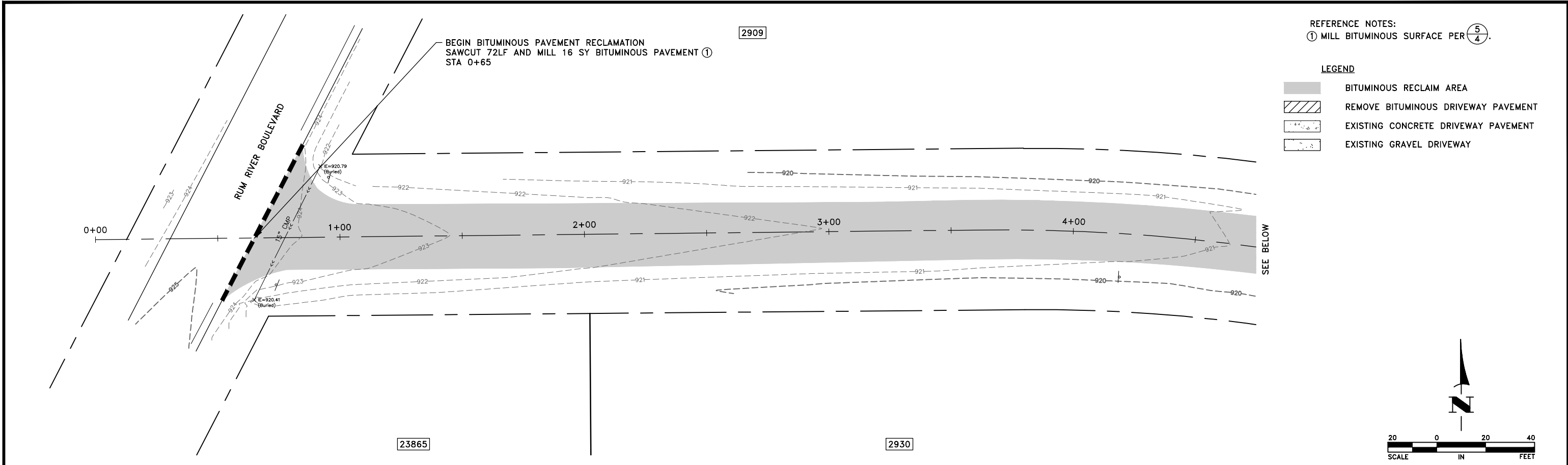
CITY OF ST. FRANCIS, MINNESOTA

SHEET  
5  
OF  
22  
SHEETS

REFERENCE NOTES:  
 ① MILL BITUMINOUS SURFACE PER  $\frac{5}{4}$ .

LEGEND

-  BITUMINOUS RECLAIM AREA
-  REMOVE BITUMINOUS DRIVEWAY PAVEMENT
-  EXISTING CONCRETE DRIVEWAY PAVEMENT
-  EXISTING GRAVEL DRIVEWAY



S.A.P. 235-105-001

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DATE	REVISION

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

*Craig J. Jochim*  
 CRAIG J. JOCHIM, P.E.  
 Date 4/12/22 Lic. No. 23461

DESIGNED BY: CJJ  
 DRAWN BY: SGJ  
 CHECKED BY: TAE

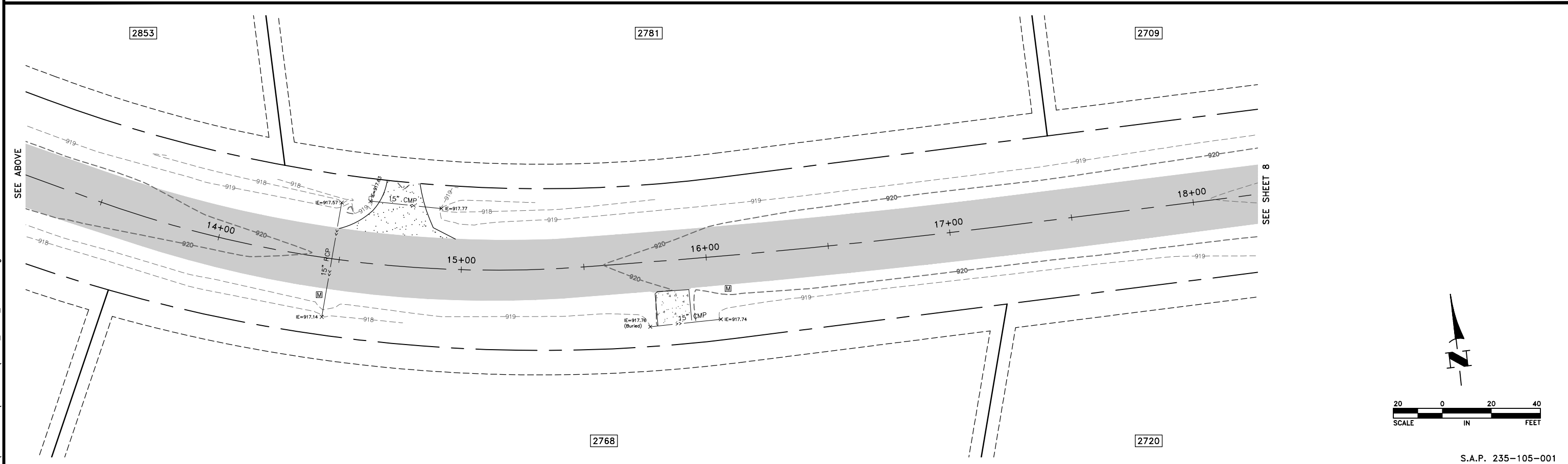
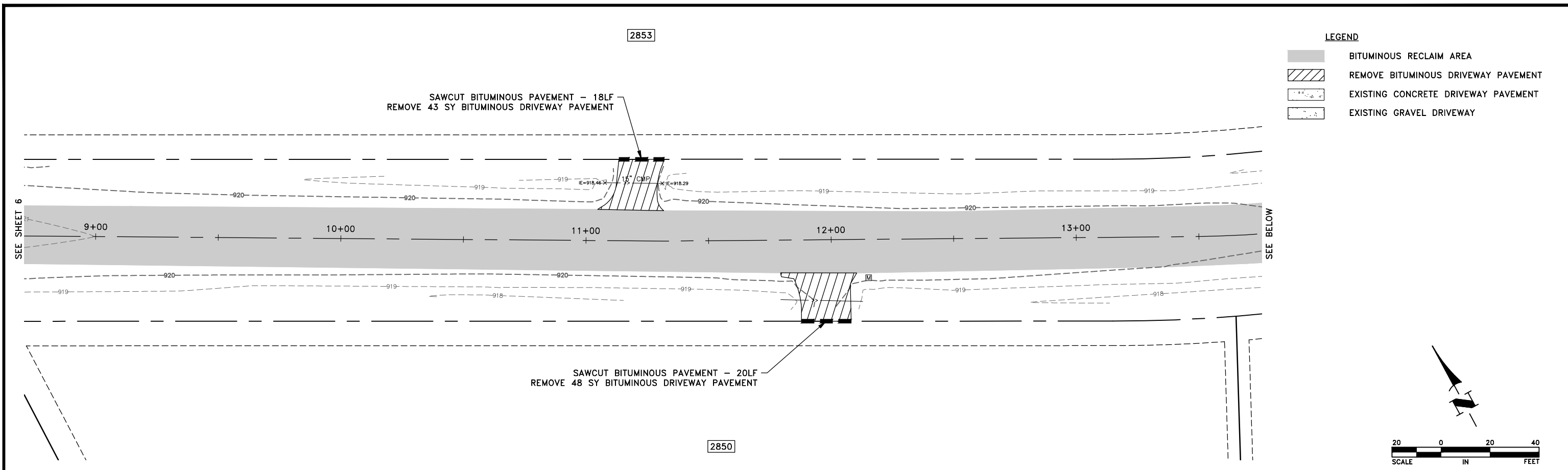


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2022 STREET REHABILITATION PROJECT

EXISTING CONDITIONS AND TOPOGRAPHY  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 6 OF 22 SHEETS



Apr 13, 2022 - 3:33pm  
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2022 STREET REHABILITATION PROJECT

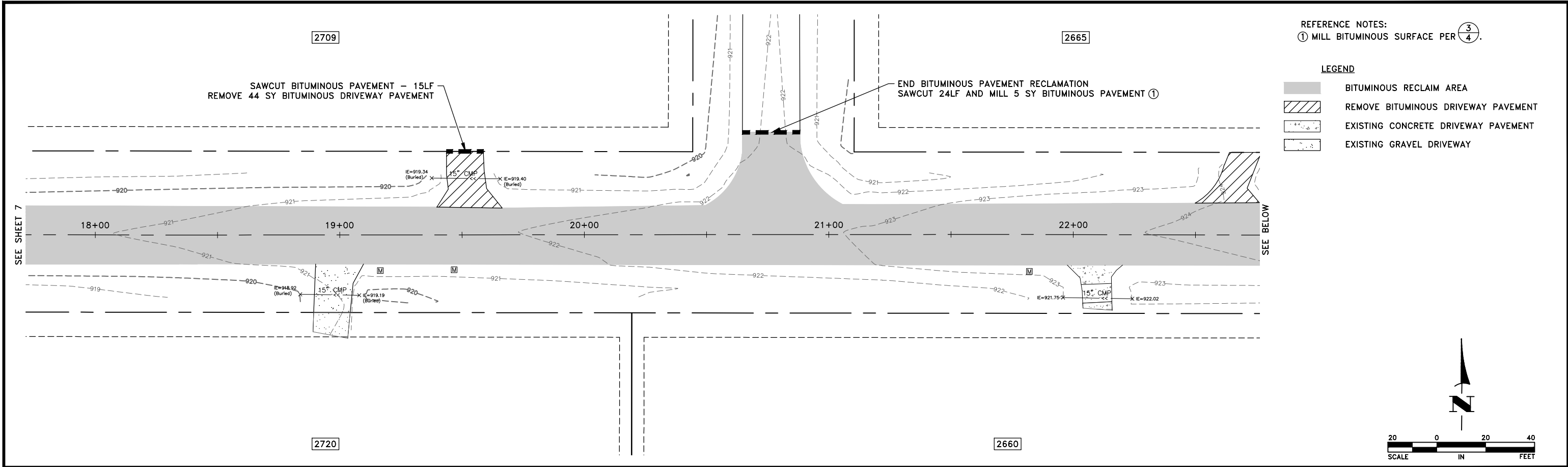
EXISTING CONDITIONS AND TOPOGRAPHY

239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 7 OF 22 SHEETS

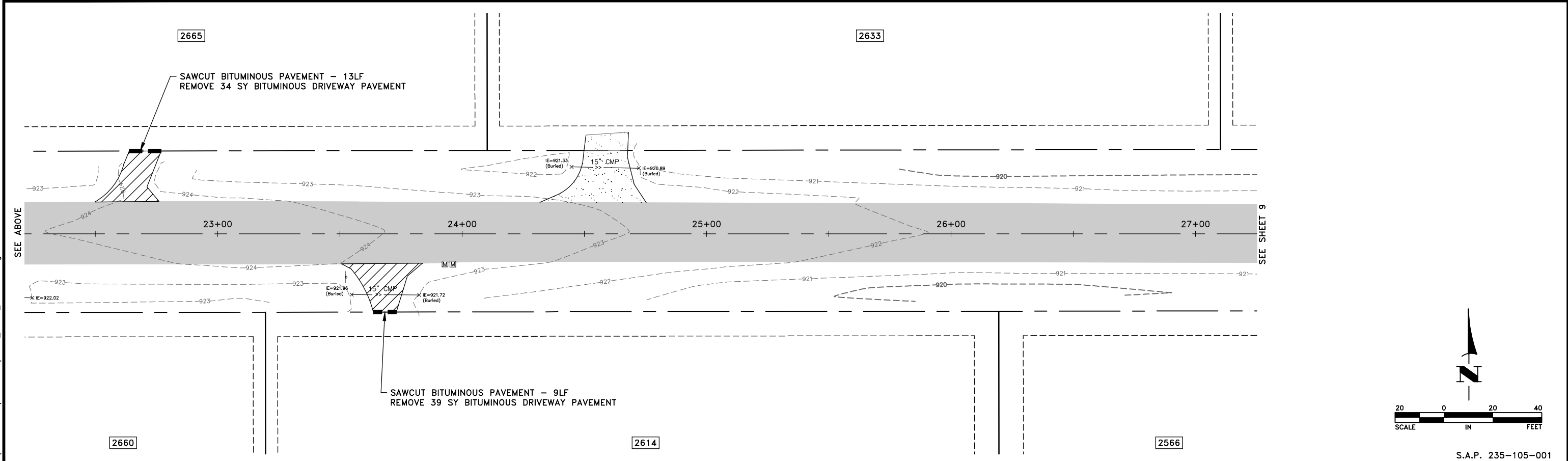
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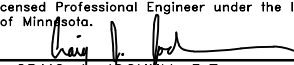
REFERENCE NOTES:  
① MILL BITUMINOUS SURFACE PER (3/4)

- LEGEND**
- BITUMINOUS RECLAIM AREA
  - REMOVE BITUMINOUS DRIVEWAY PAVEMENT
  - EXISTING CONCRETE DRIVEWAY PAVEMENT
  - EXISTING GRAVEL DRIVEWAY



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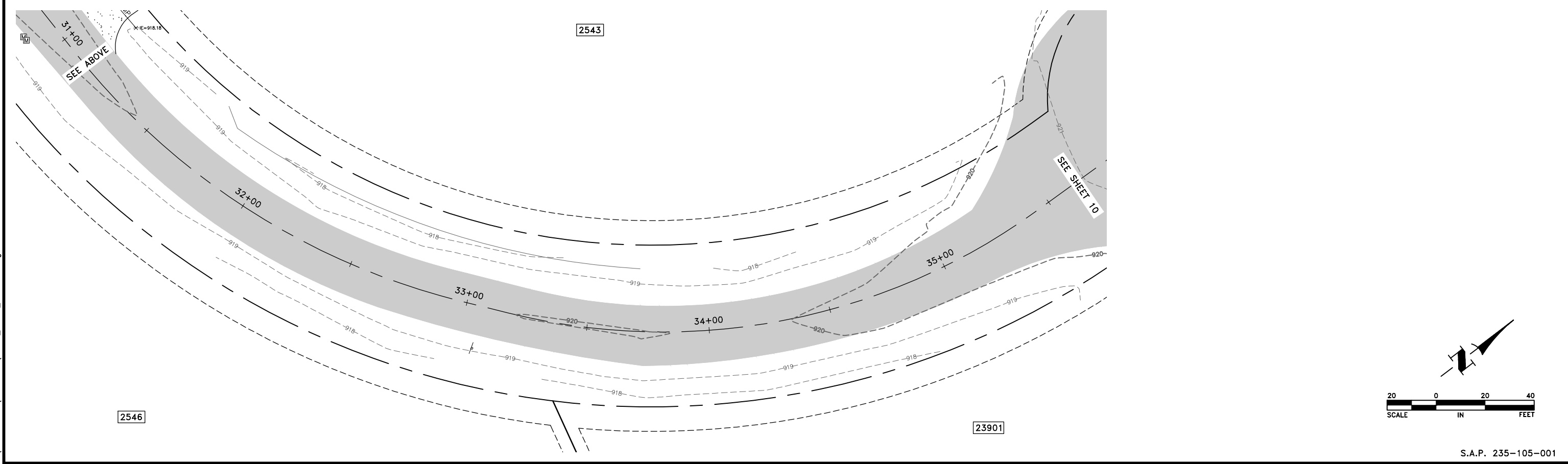
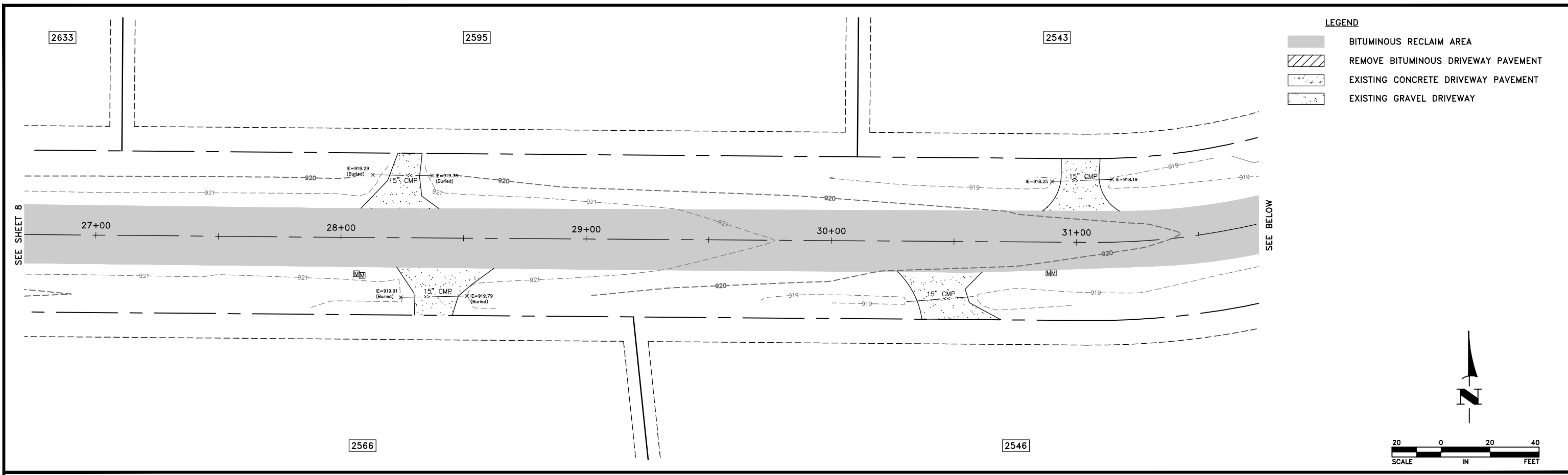
**2022 STREET REHABILITATION PROJECT**

**EXISTING CONDITIONS AND TOPOGRAPHY**

**239TH AVENUE**  
**CITY OF ST. FRANCIS, MINNESOTA**

SHEET 8 OF 22 SHEETS

S.A.P. 235-105-001



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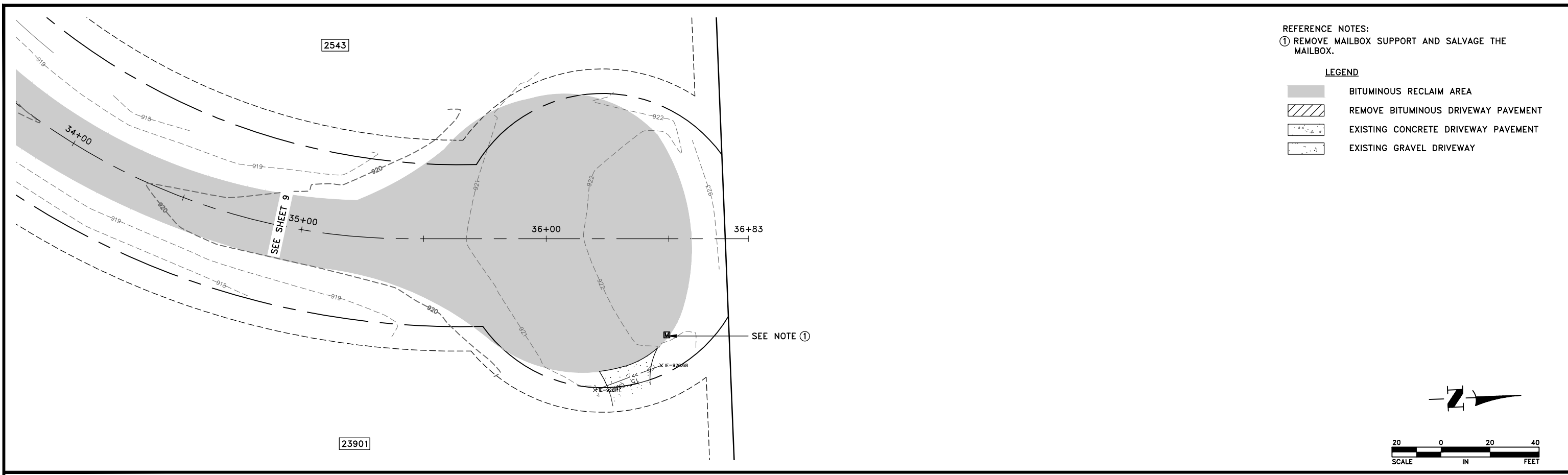
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**2022 STREET REHABILITATION PROJECT**

**EXISTING CONDITIONS AND TOPOGRAPHY**  
 239TH AVENUE AND XAVIS STREET  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 9 OF 22 SHEETS

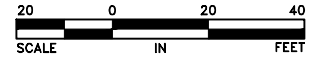
S.A.P. 235-105-001



REFERENCE NOTES:  
 ① REMOVE MAILBOX SUPPORT AND SALVAGE THE MAILBOX.

LEGEND

- BITUMINOUS RECLAIM AREA
- REMOVE BITUMINOUS DRIVEWAY PAVEMENT
- EXISTING CONCRETE DRIVEWAY PAVEMENT
- EXISTING GRAVEL DRIVEWAY

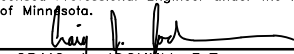


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 CRAIG J. JOCHEM, P.E.  
 Date 4/12/22 Lic. No. 23461

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DRAWN BY:  
SGJ

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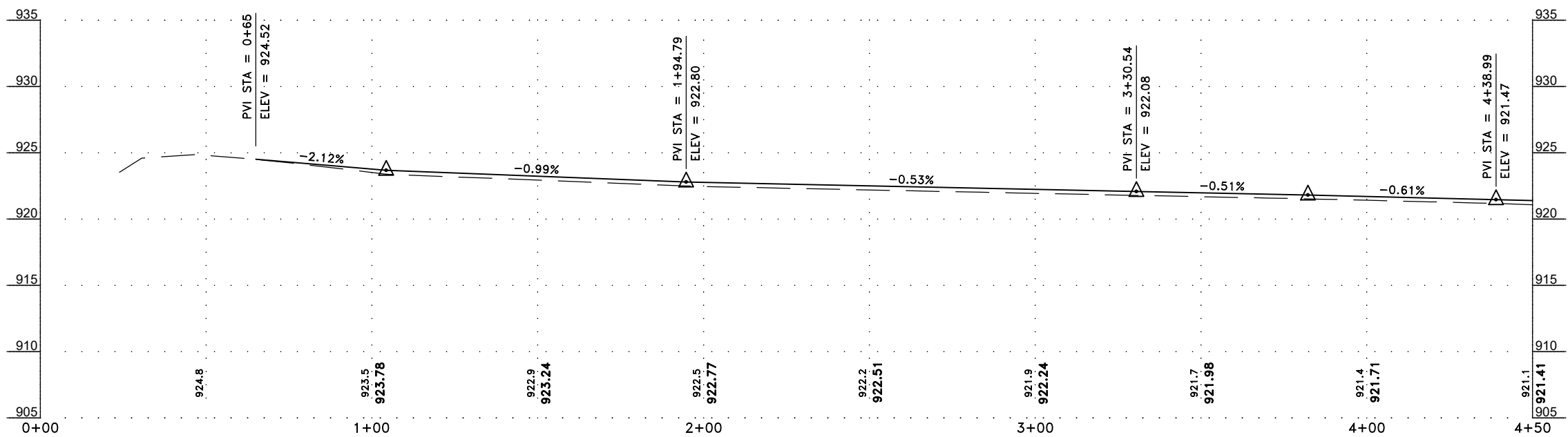
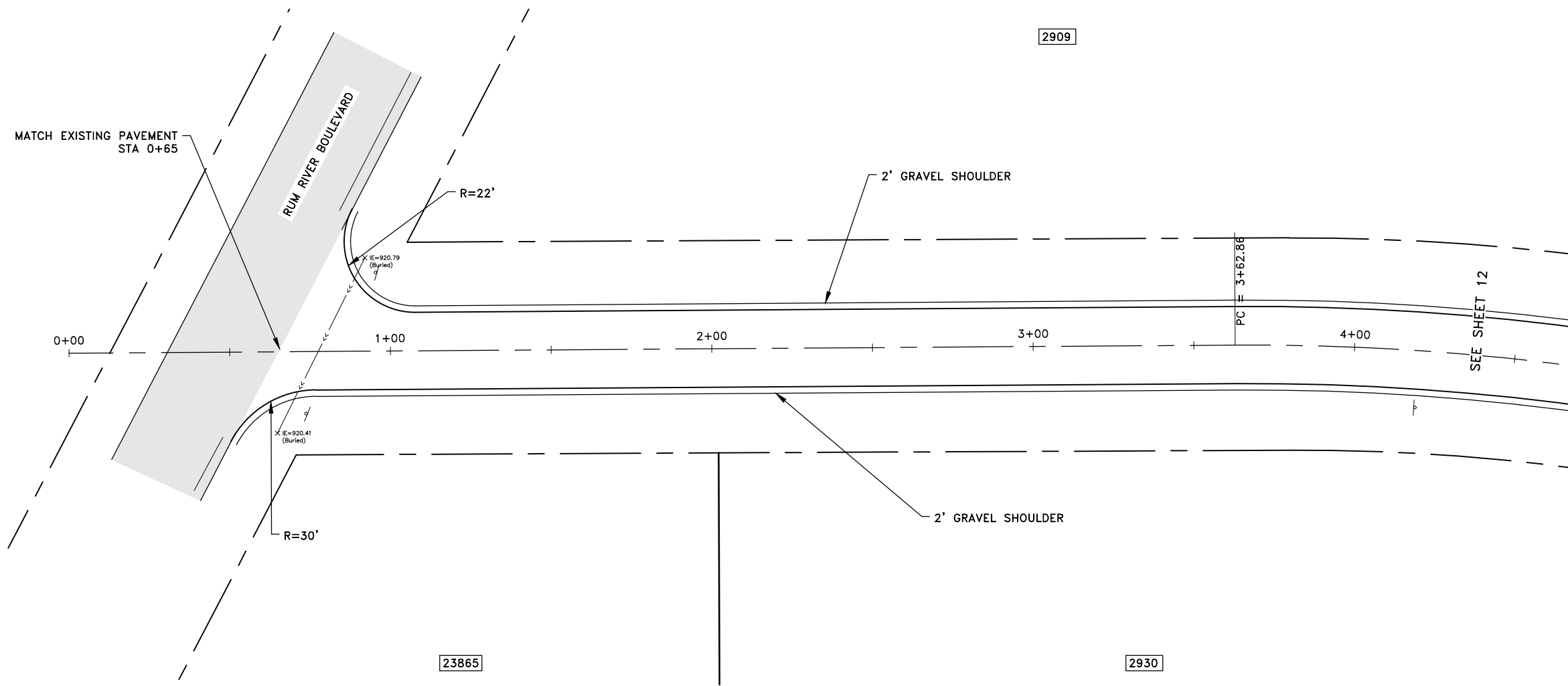
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2022 STREET REHABILITATION PROJECT

EXISTING CONDITIONS AND TOPOGRAPHY

**XAVIS STREET**  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET  
10  
OF  
22  
SHEETS



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**CRAIG J. JOCHEM, P.E.**  
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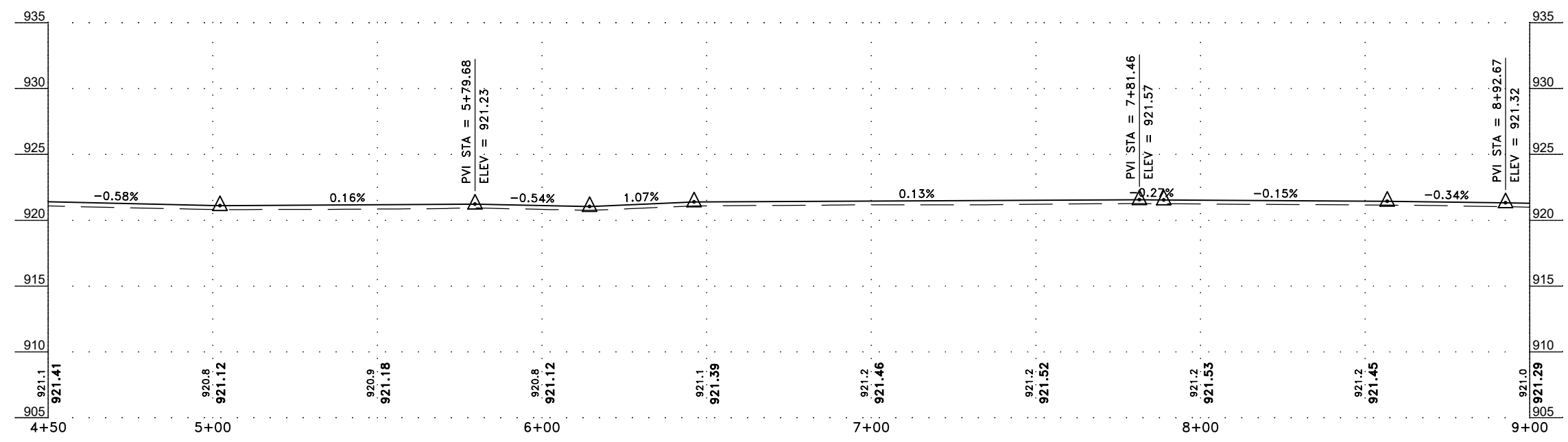
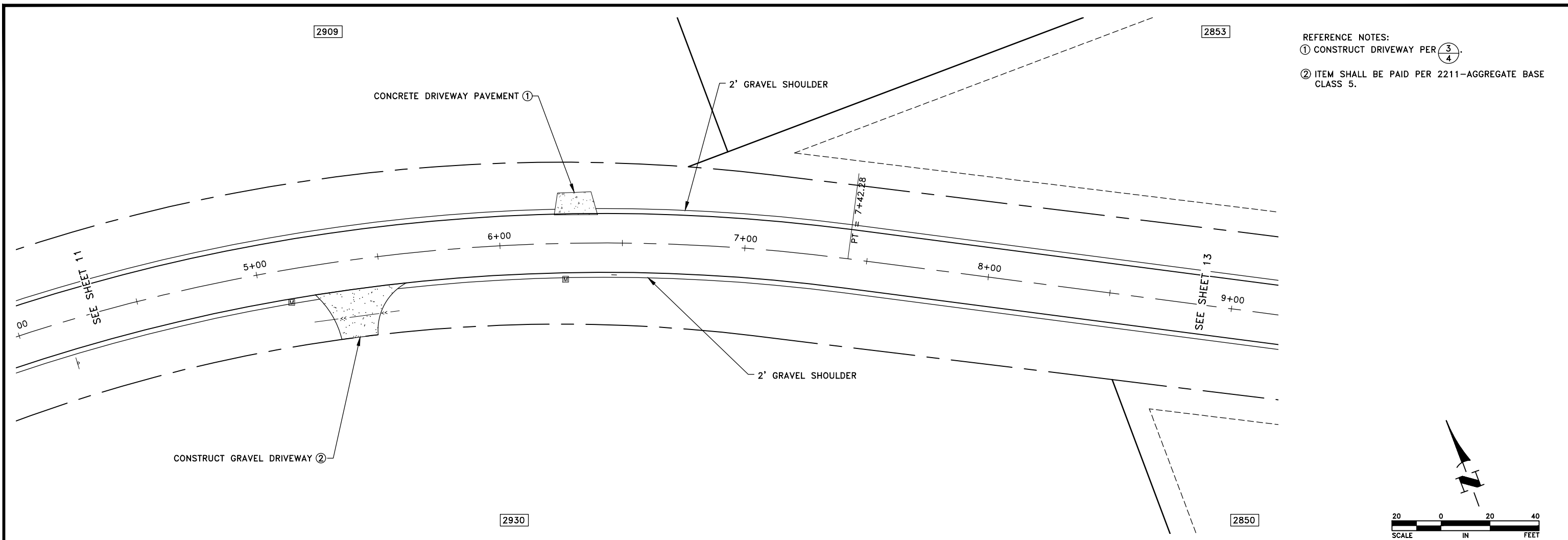
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2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 11 OF 22 SHEETS

S.A.P. 235-105-001



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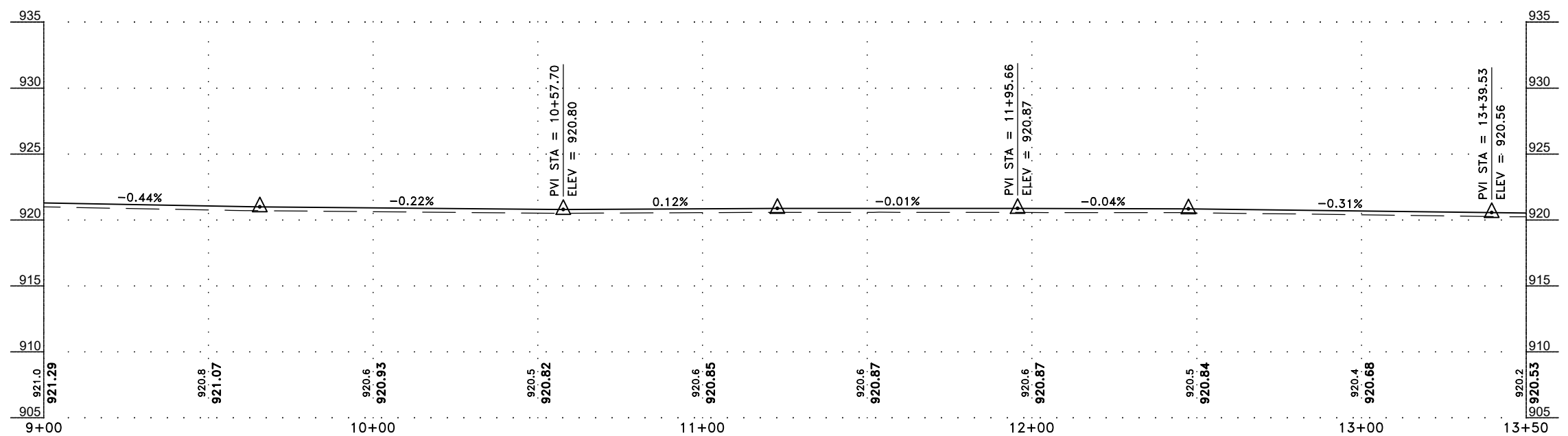
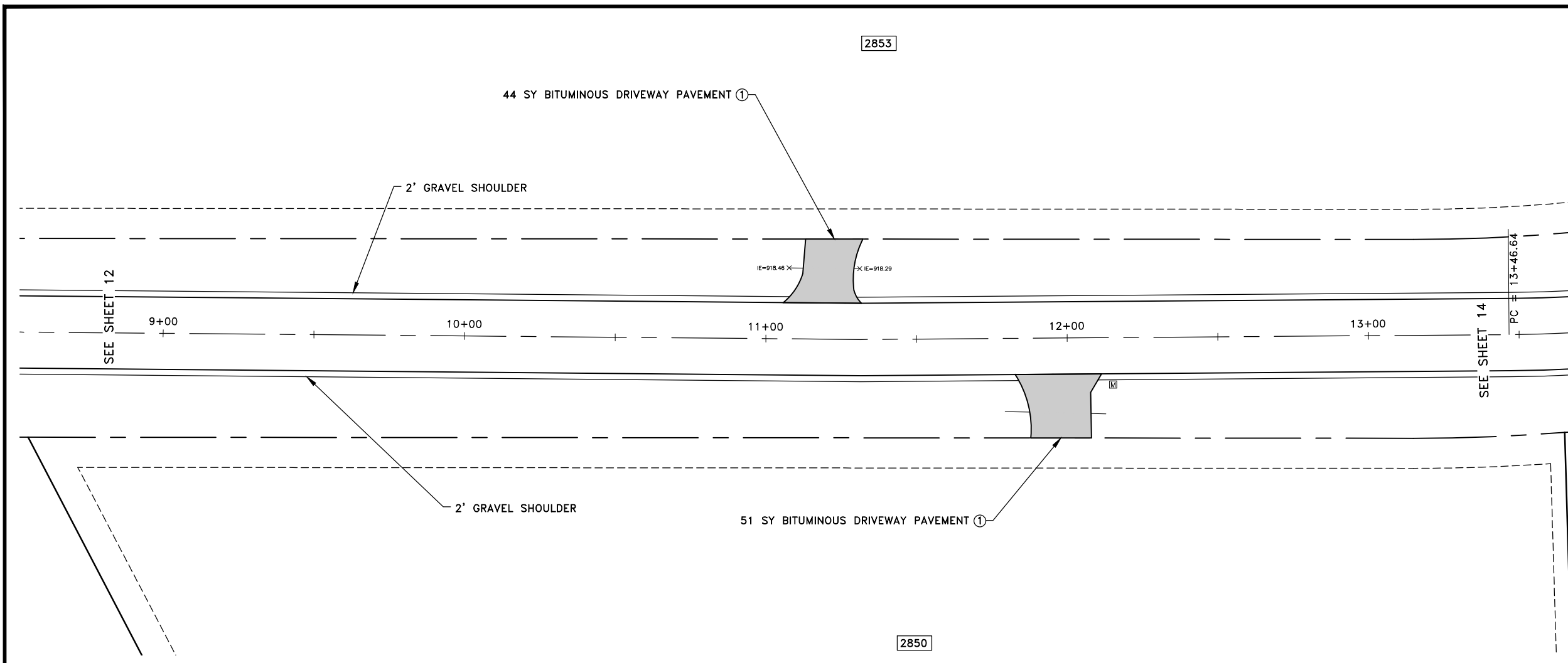
2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 12 OF 22 SHEETS

S.A.P. 235-105-001

REFERENCE NOTES:  
 ① CONSTRUCT DRIVEWAY PER ④.



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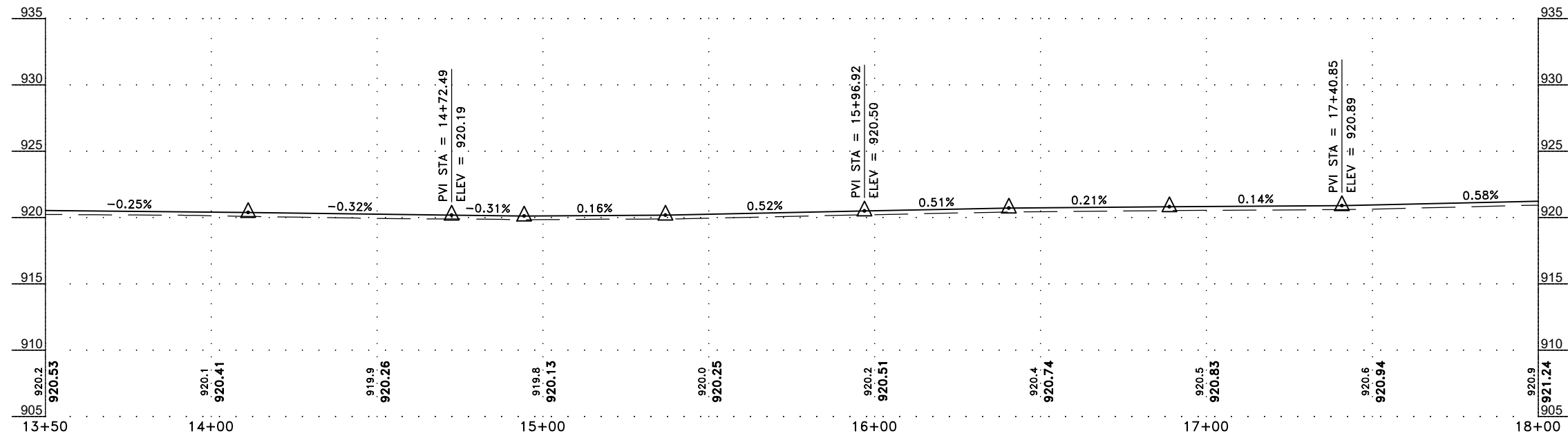
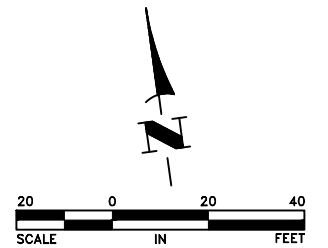
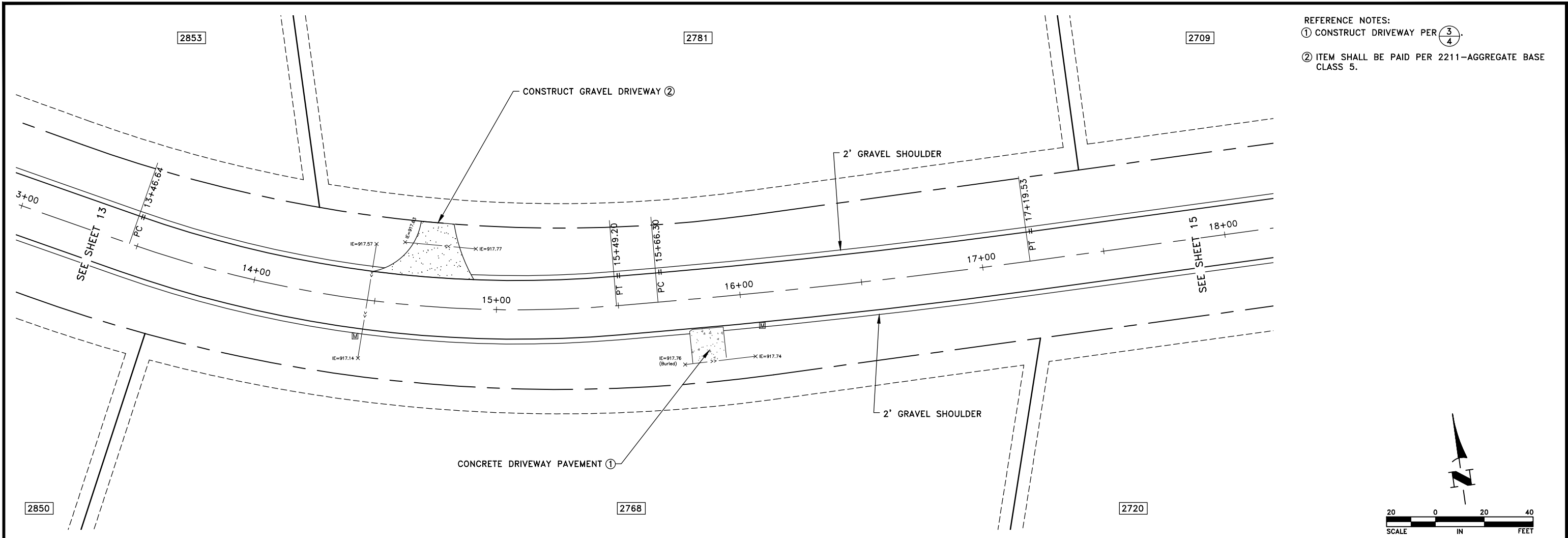
2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 13 OF 22 SHEETS

S.A.P. 235-105-001

- REFERENCE NOTES:
- ① CONSTRUCT DRIVEWAY PER  $\frac{3}{4}$
  - ② ITEM SHALL BE PAID PER 2211-AGGREGATE BASE CLASS 5.



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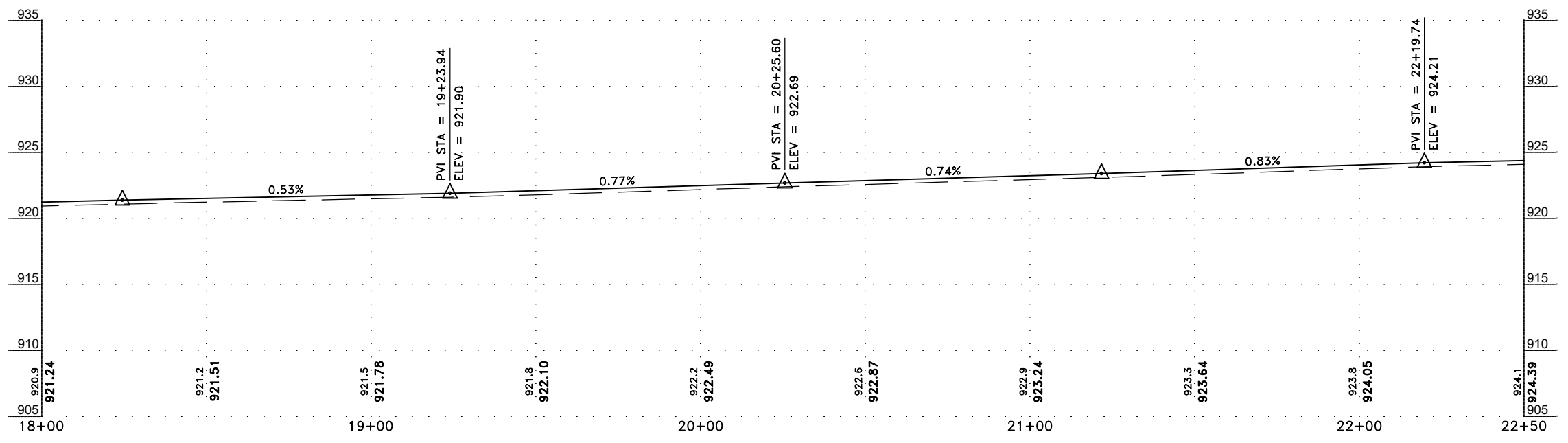
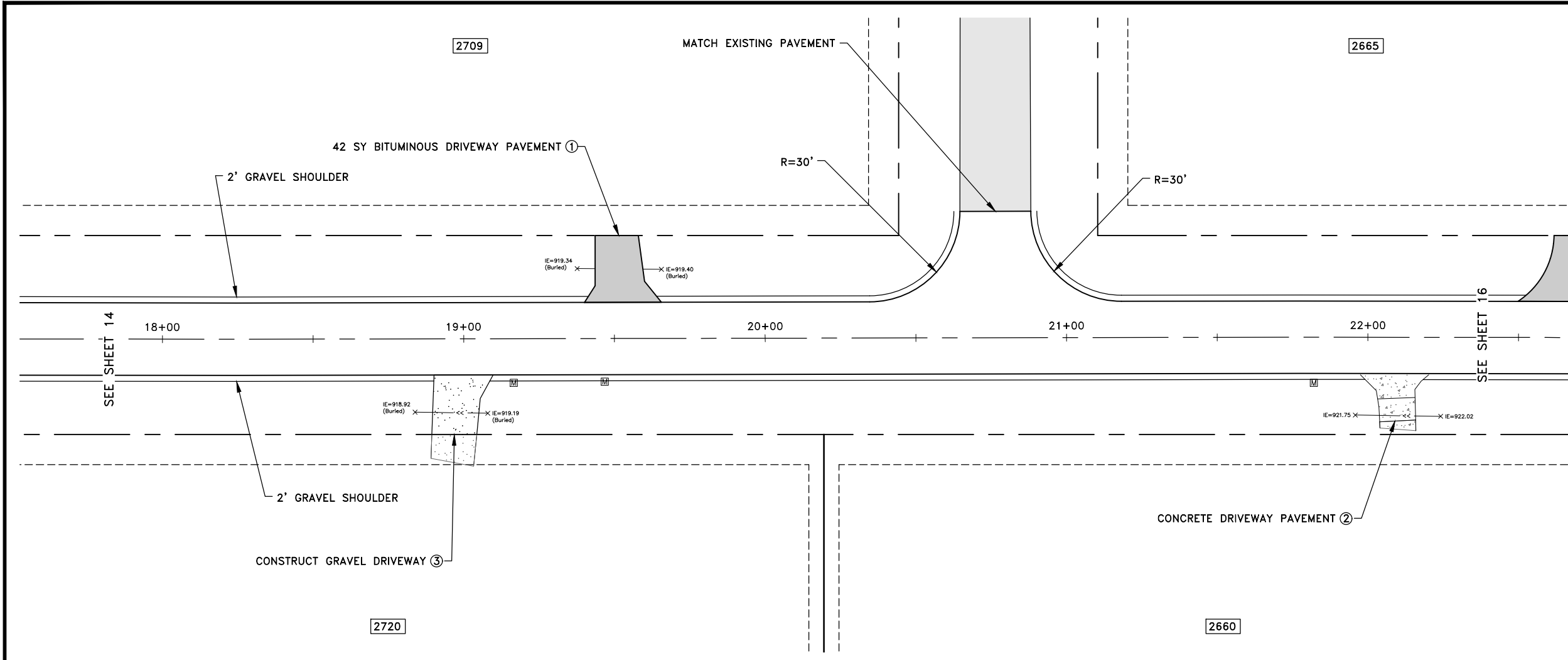
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**2022 STREET REHABILITATION PROJECT**

**CONSTRUCTION PLANS**  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 14 OF 22 SHEETS

- REFERENCE NOTES:
- ① CONSTRUCT DRIVEWAY PER  $\frac{4}{4}$ .
  - ② CONSTRUCT DRIVEWAY PER  $\frac{3}{4}$ .
  - ③ ITEM SHALL BE PAID PER 2211-AGGREGATE BASE CLASS 5.



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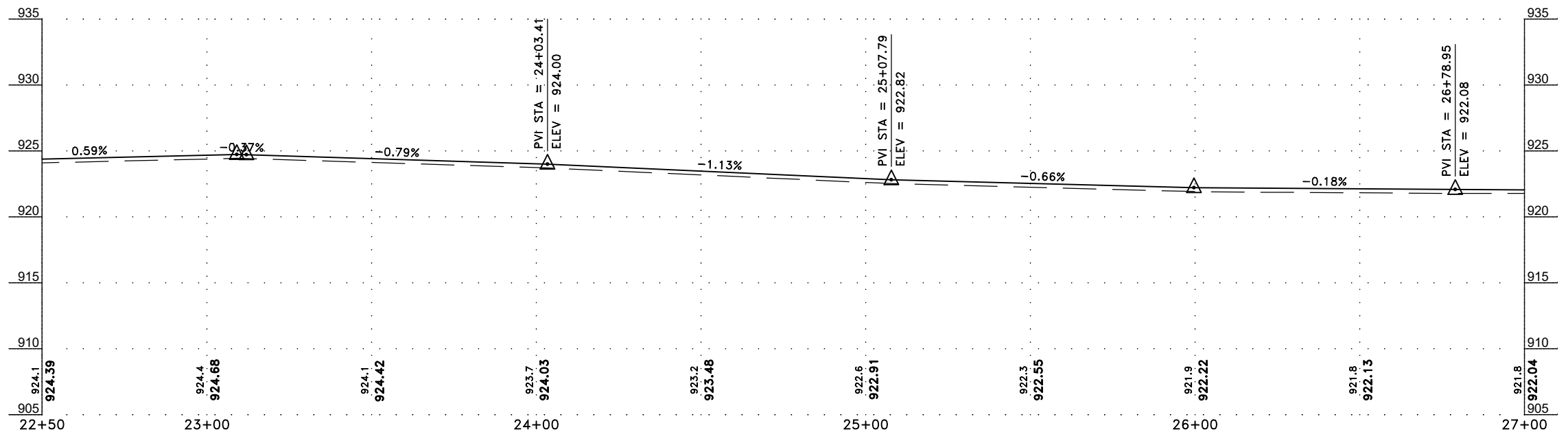
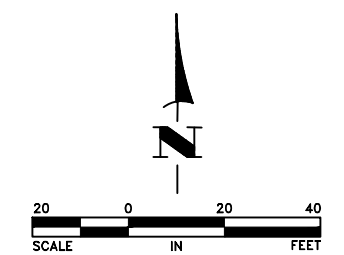
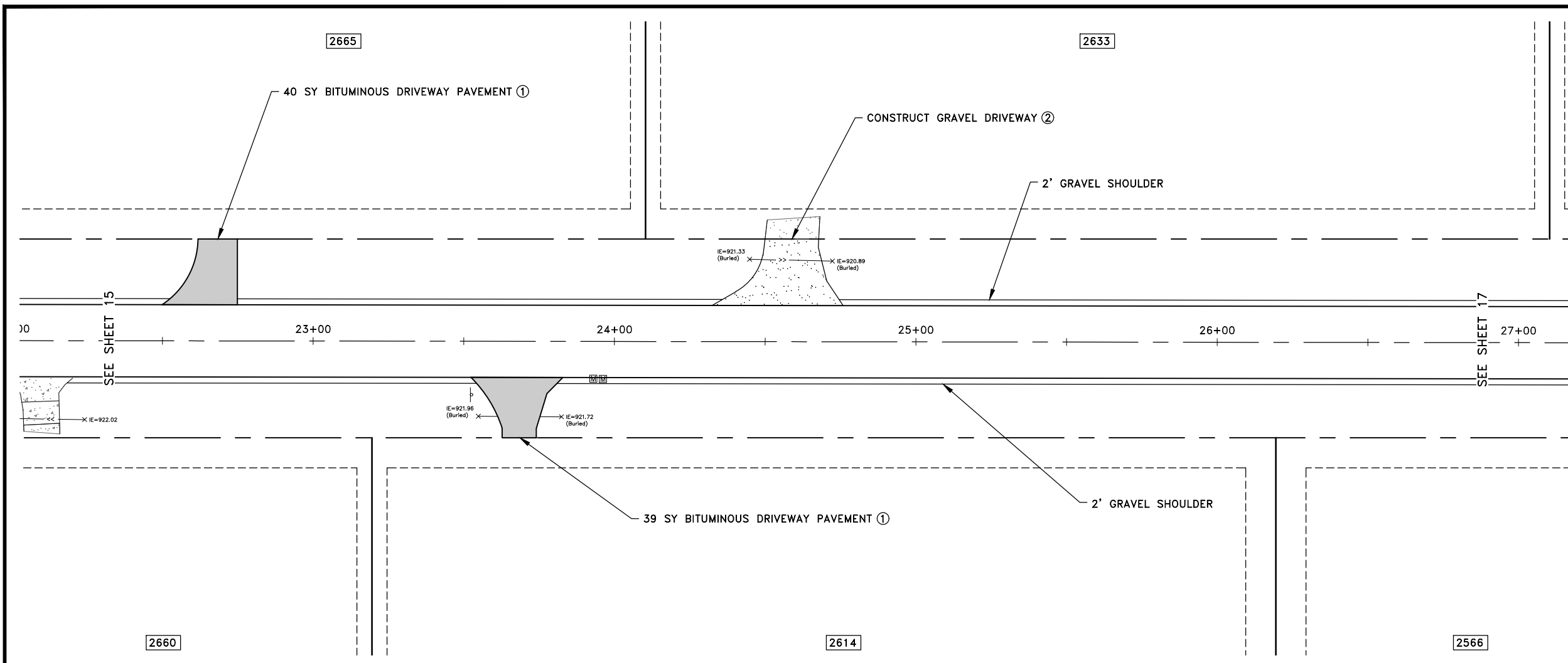
2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 15 OF 22 SHEETS

S.A.P. 235-105-001

REFERENCE NOTES:  
 ① CONSTRUCT DRIVEWAY PER  $\frac{4}{4}$ .  
 ② ITEM SHALL BE PAID PER 2211-AGGREGATE BASE CLASS 5.



S.A.P. 235-105-001

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 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

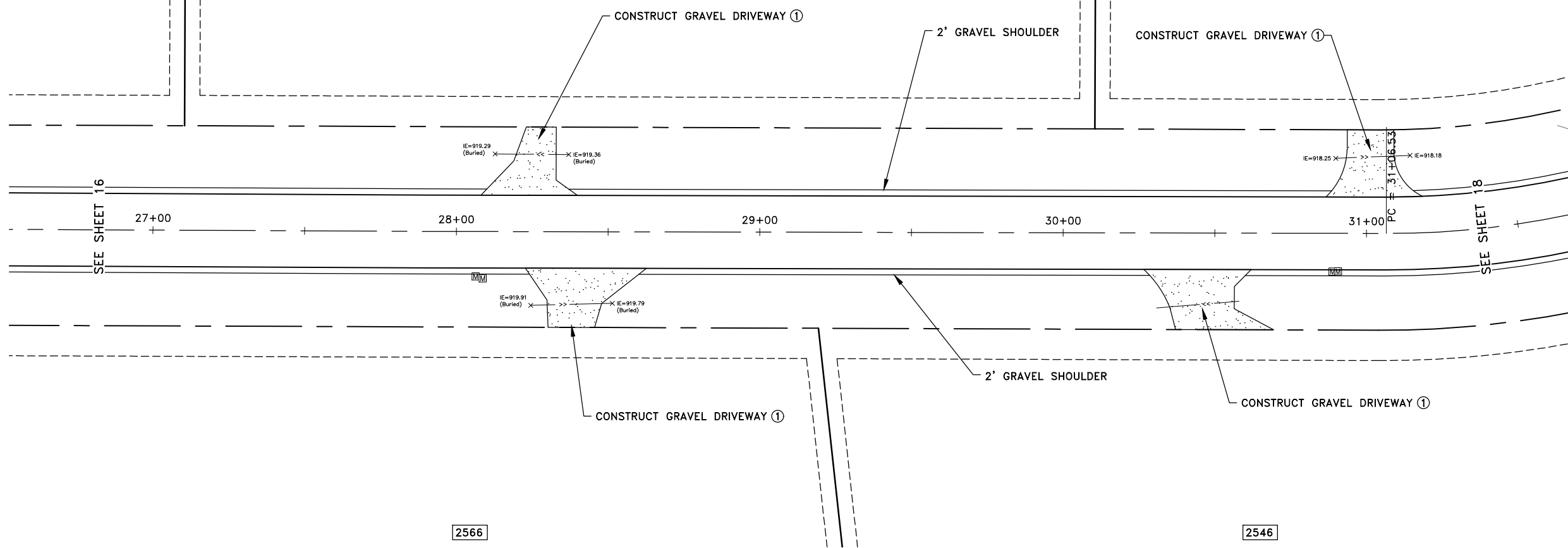
SHEET 16 OF 22 SHEETS

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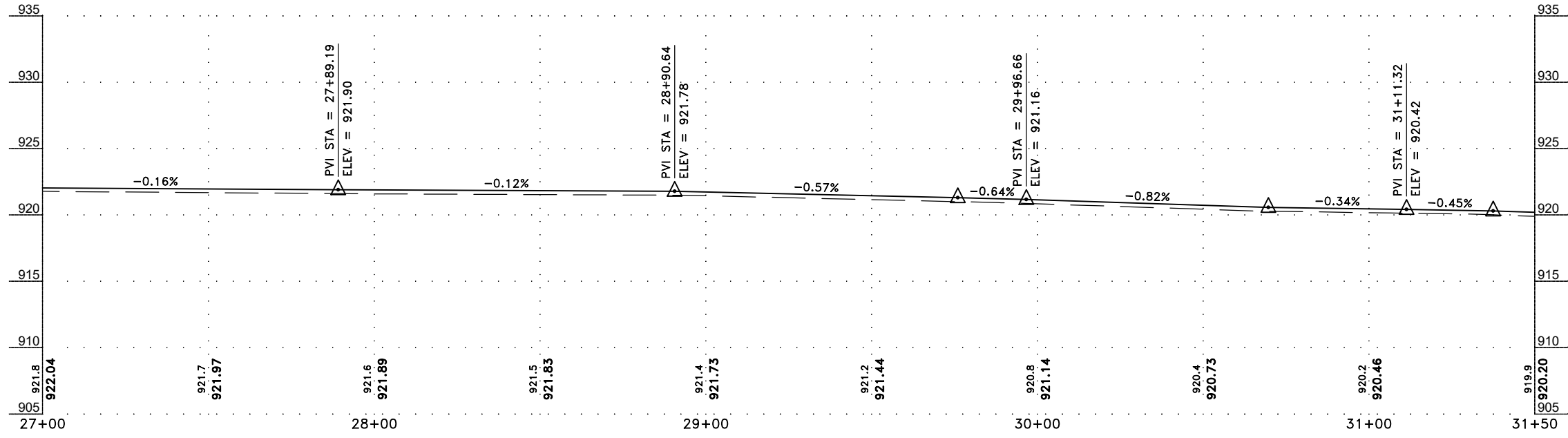
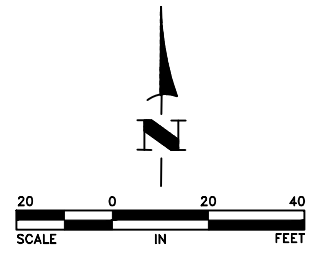
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REFERENCE NOTES:  
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Apr 13, 2022 3:34pm  
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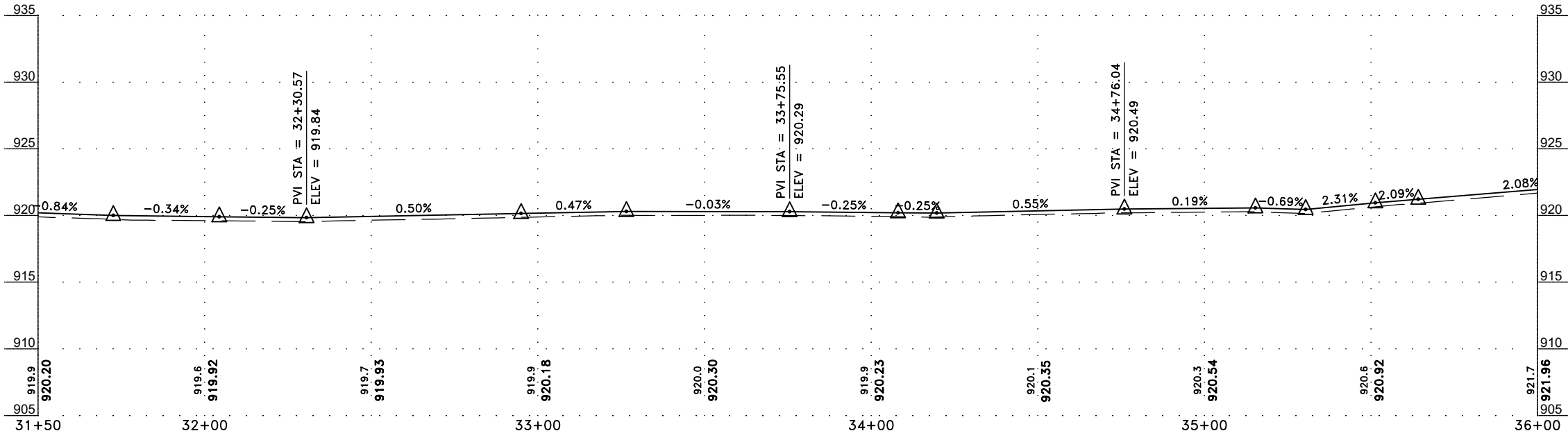
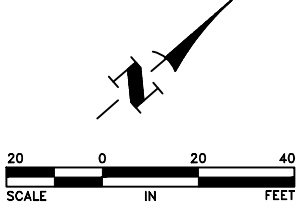
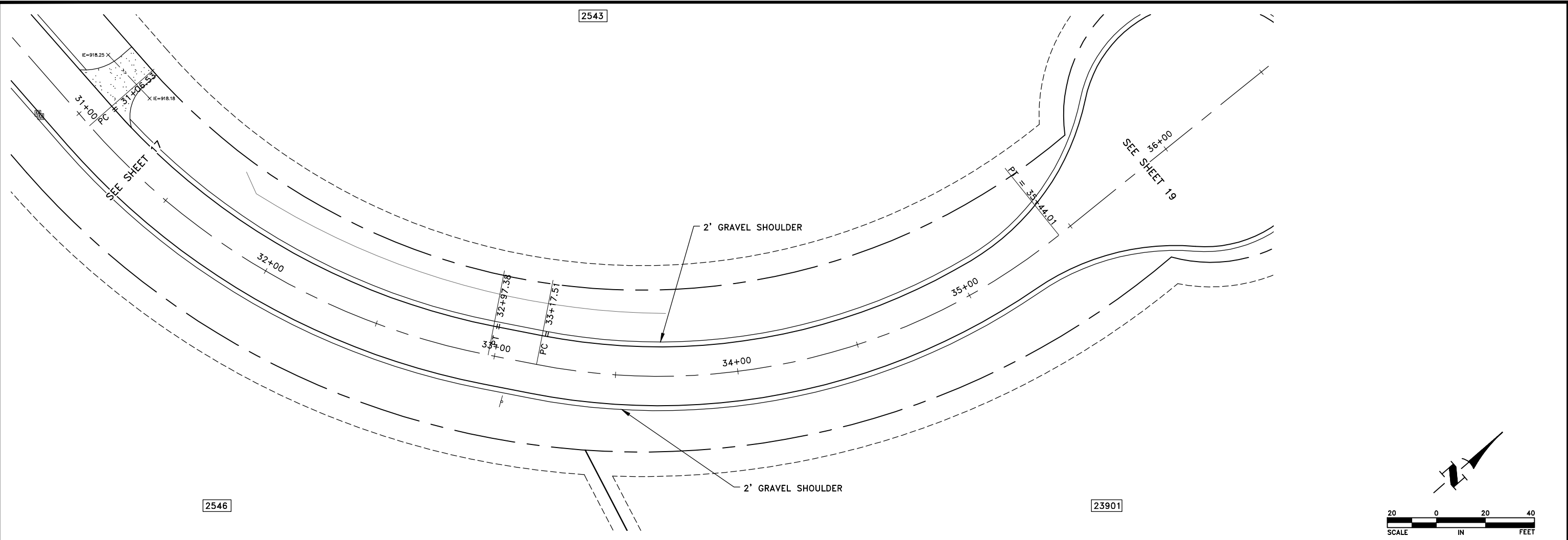
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2022 STREET REHABILITATION PROJECT

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 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 17 OF 22 SHEETS

SF321



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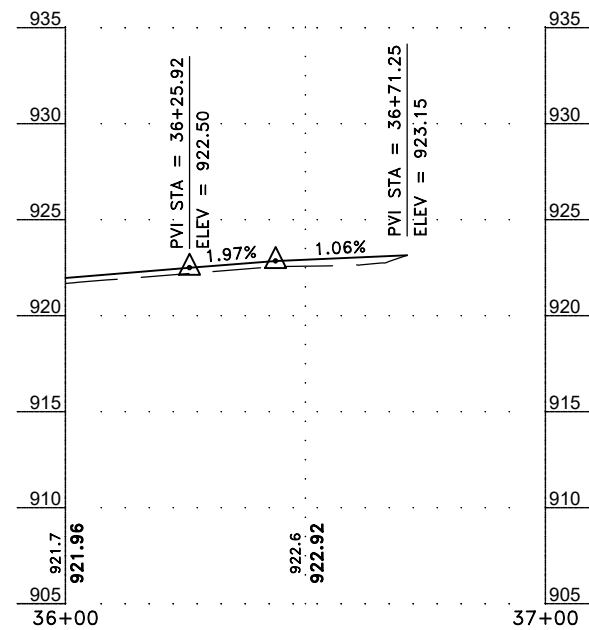
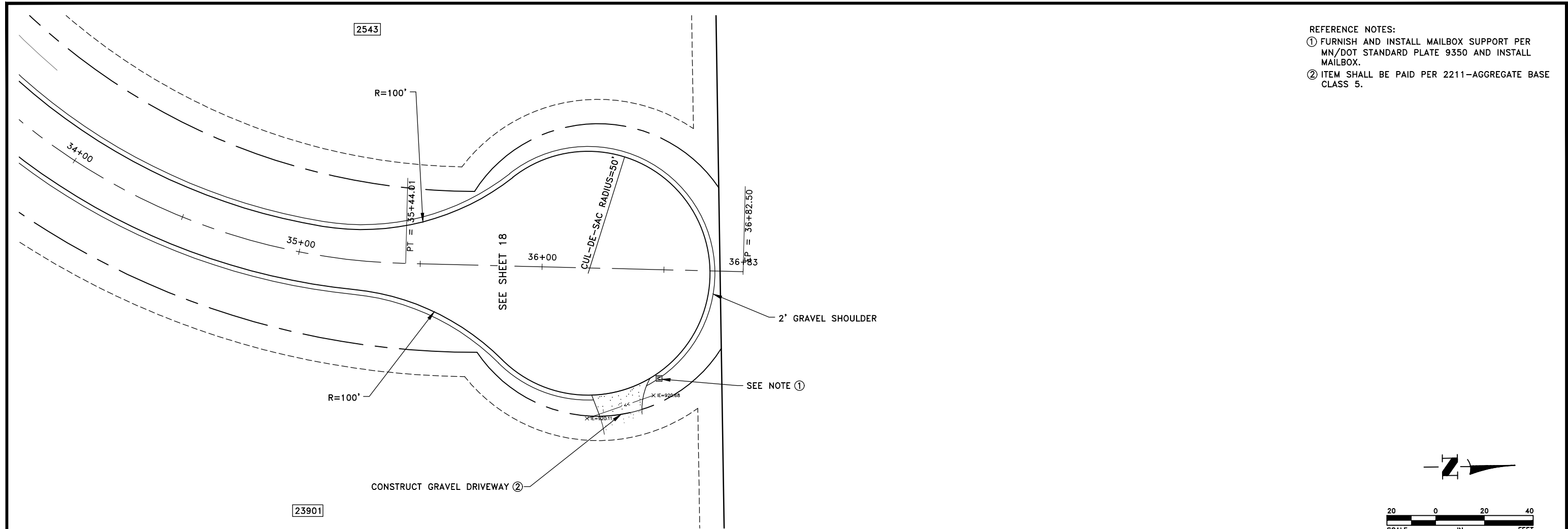
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2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 239TH AVENUE AND XAVIS STREET  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 18 OF 22 SHEETS

- REFERENCE NOTES:
- ① FURNISH AND INSTALL MAILBOX SUPPORT PER MN/DOT STANDARD PLATE 9350 AND INSTALL MAILBOX.
  - ② ITEM SHALL BE PAID PER 2211-AGGREGATE BASE CLASS 5.



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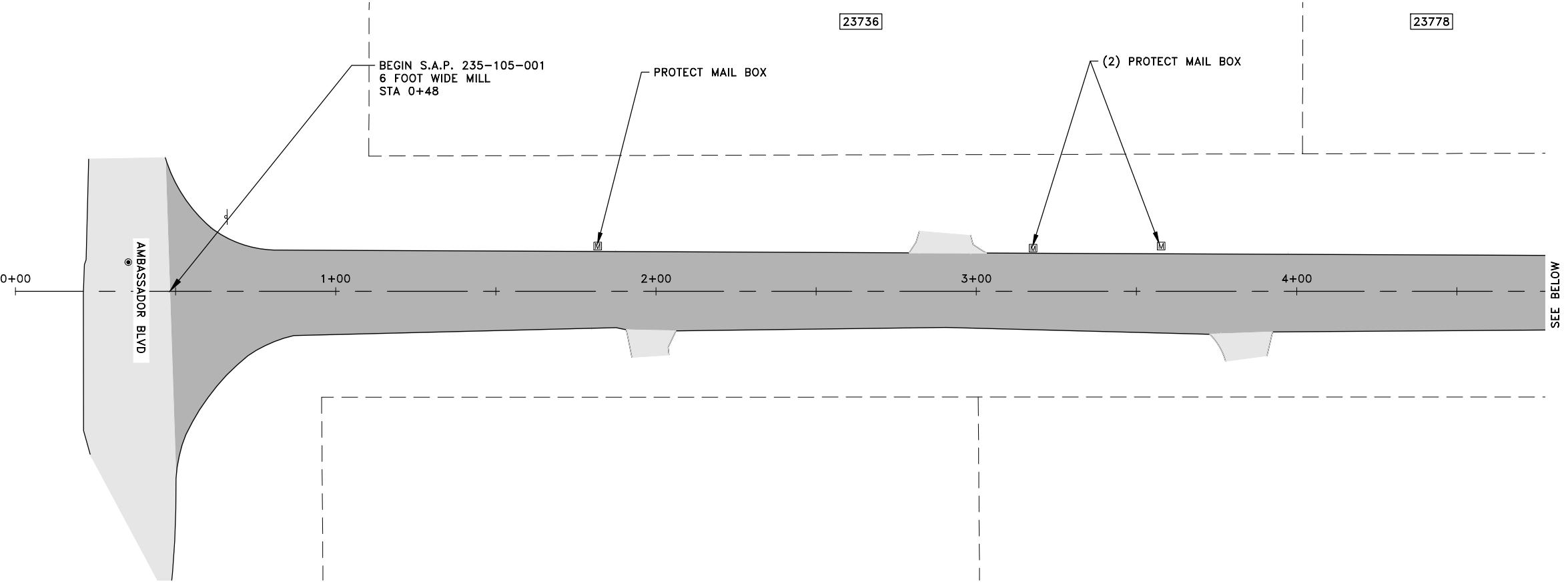
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**2022 STREET REHABILITATION PROJECT**

**CONSTRUCTION PLANS**  
**XAVIS STREET**  
**CITY OF ST. FRANCIS, MINNESOTA**

S.A.P. 235-105-001

SHEET 19 OF 22 SHEETS

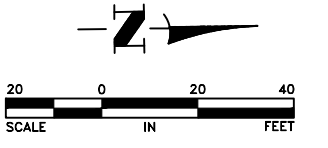
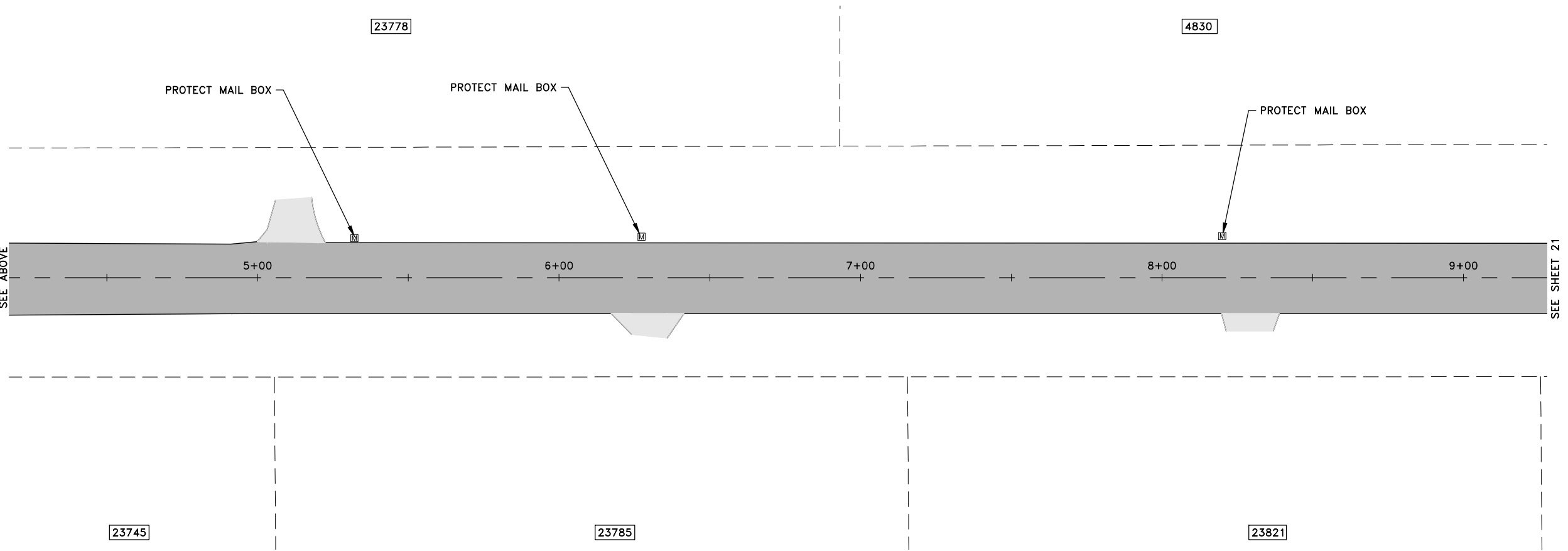
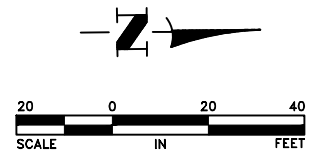


**LEGEND**

- BITUMINOUS OVERLAY 1.5" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA240B). SEE  $\frac{1}{4}$ .
- EXISTING BITUMINOUS PAVEMENT

**GENERAL NOTES:**

1. FOR CONSTRUCTION AT DRIVEWAYS SEE  $\frac{5}{4}$ .



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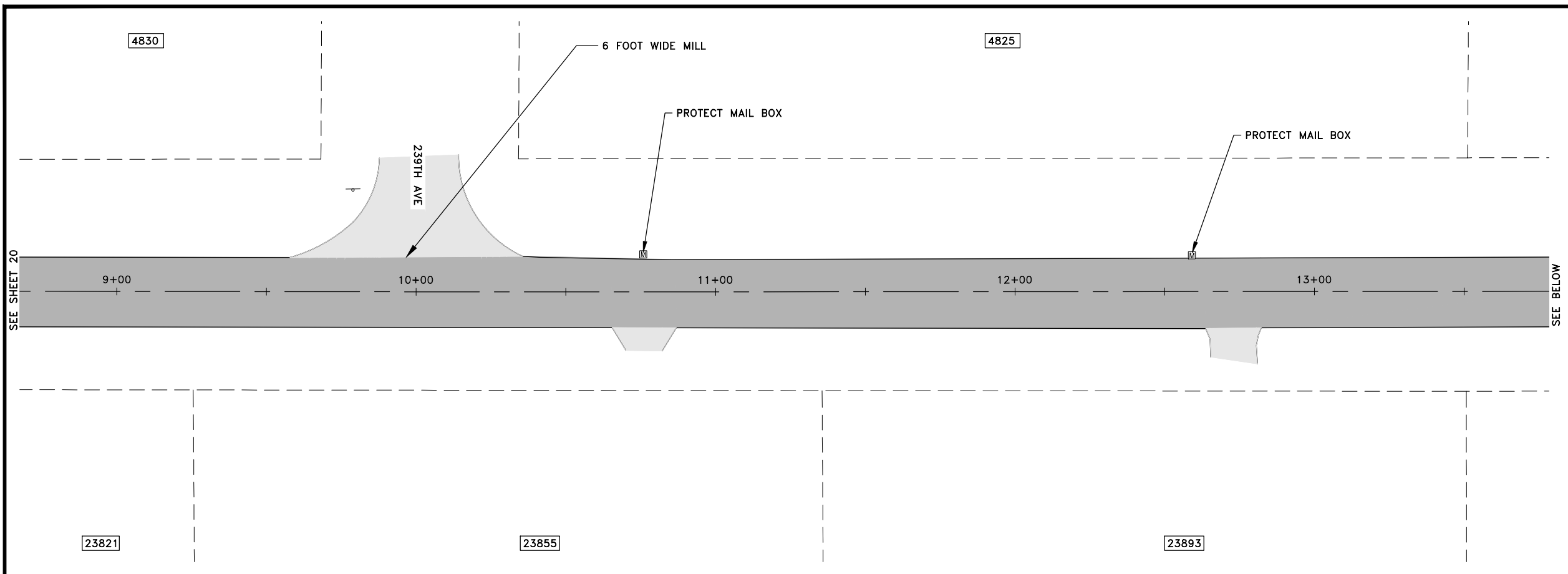
2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 ROANOKE STREET  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 20 OF 22 SHEETS

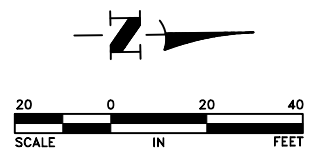
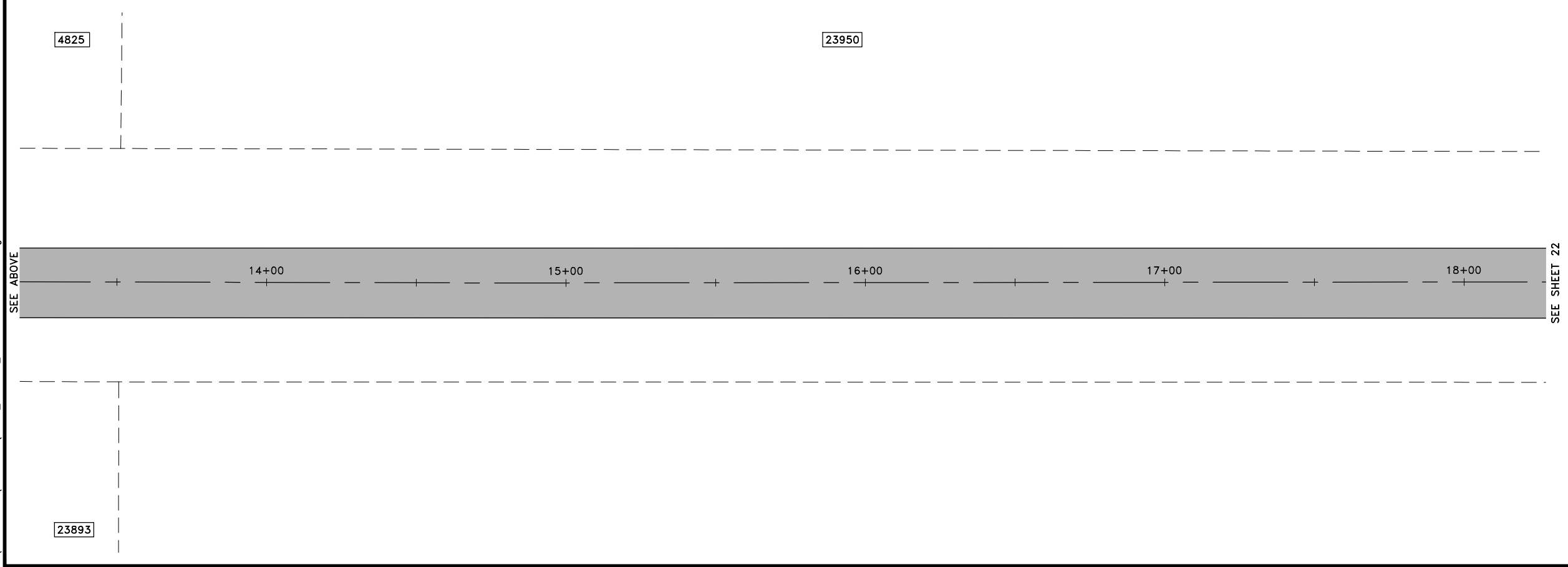
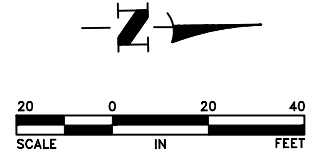
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Apr 13, 2022 - 3:34pm



- LEGEND**
- BITUMINOUS OVERLAY 1.5" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA240B). SEE (1/4).
  - EXISTING BITUMINOUS PAVEMENT

**GENERAL NOTES:**  
1. FOR CONSTRUCTION AT DRIVEWAYS SEE (5/4).



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DATE	REVISION

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

*Craig J. Jochum*  
**CRAIG J. JOCHUM, P.E.**  
 Date 4/12/22 Lic. No. 23461

DESIGNED BY: CJJ  
 DRAWN BY: SGJ  
 CHECKED BY: TAE



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**2022 STREET REHABILITATION PROJECT**

**CONSTRUCTION PLANS**  
**ROANOKE STREET**  
**CITY OF ST. FRANCIS, MINNESOTA**

SHEET **21** OF **22** SHEETS

23950

4874

LEGEND

BITUMINOUS OVERLAY 1.5" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA240B). SEE 1/4.

EXISTING BITUMINOUS PAVEMENT

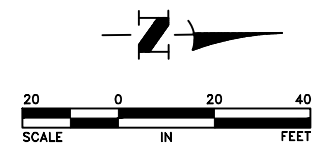
GENERAL NOTES:

1. FOR CONSTRUCTION AT DRIVEWAYS SEE 5/4.

SEE SHEET 21

SEE BELOW

18+00 19+00 20+00 21+00 22+00



4874

4838

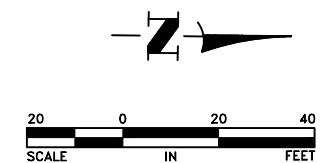
241ST AVE

6 FOOT WIDE MILL

END S.A.P. 235-105-001

SEE ABOVE

23+00 24+00 PC = 24+46.86 25+00 PT = 25+17.62 26+00 27+00



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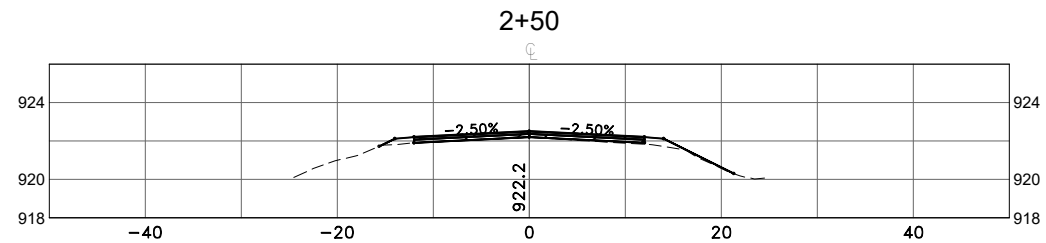
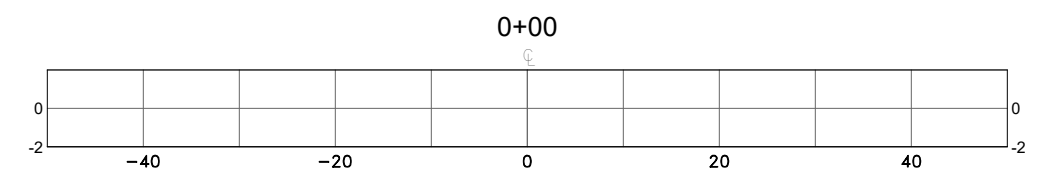
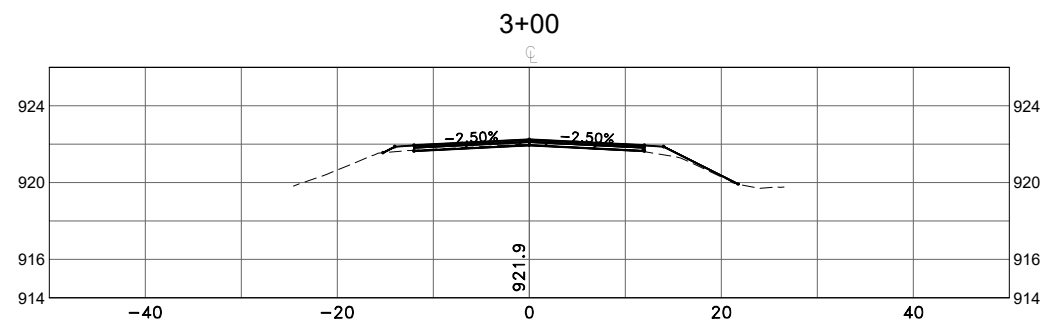
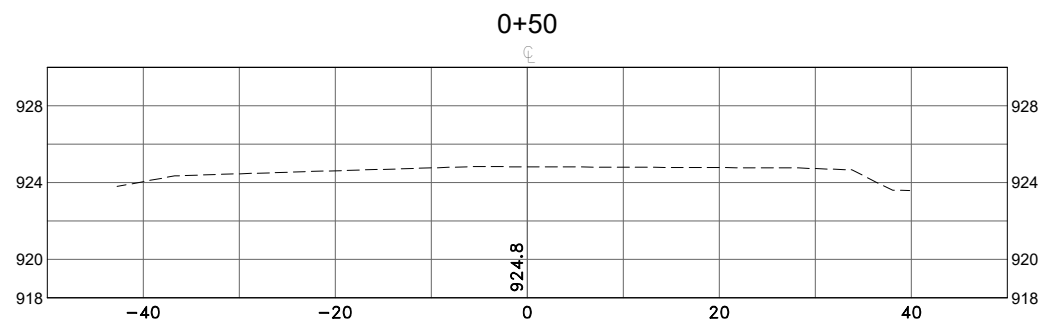
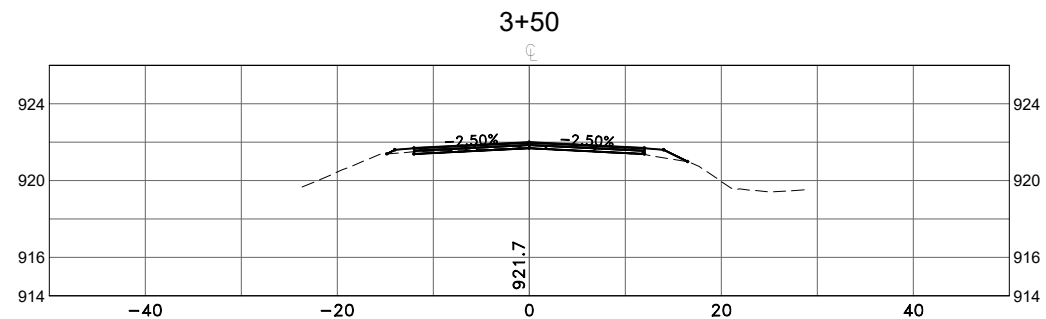
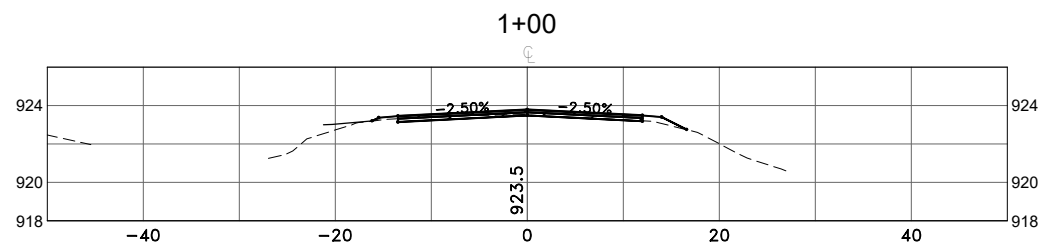
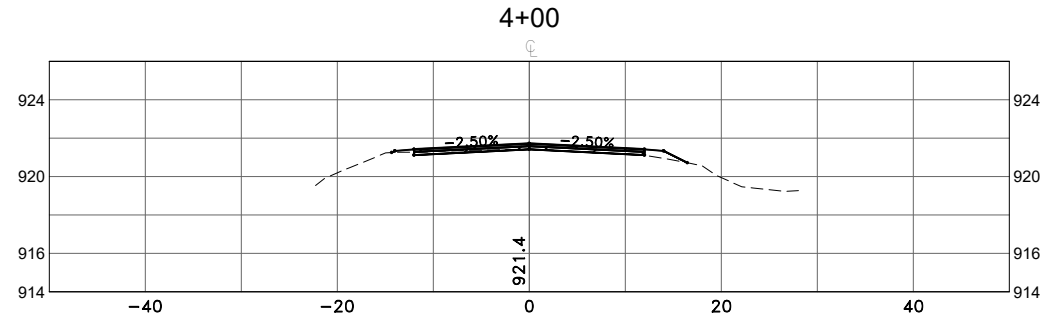
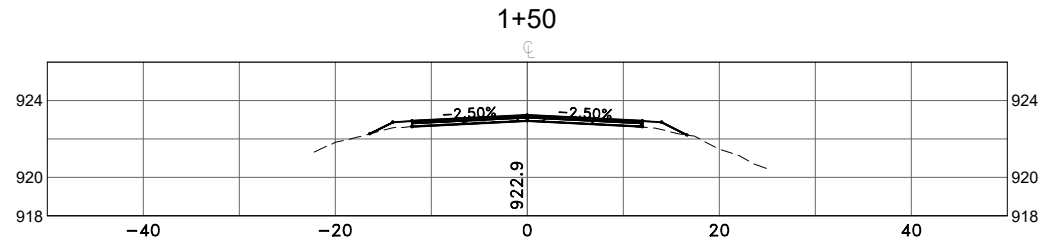
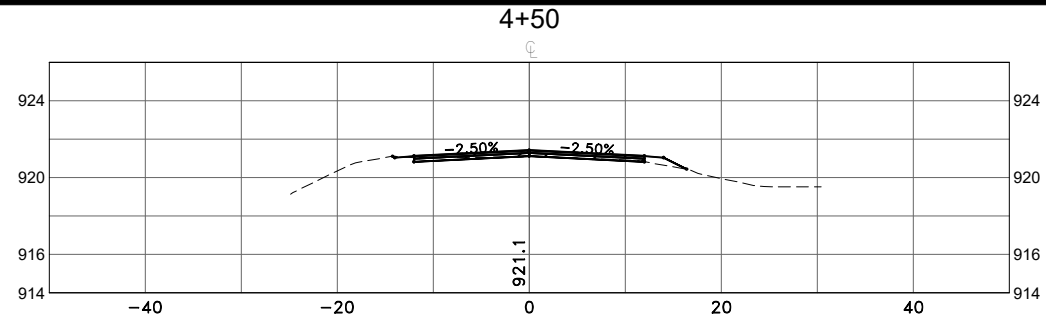
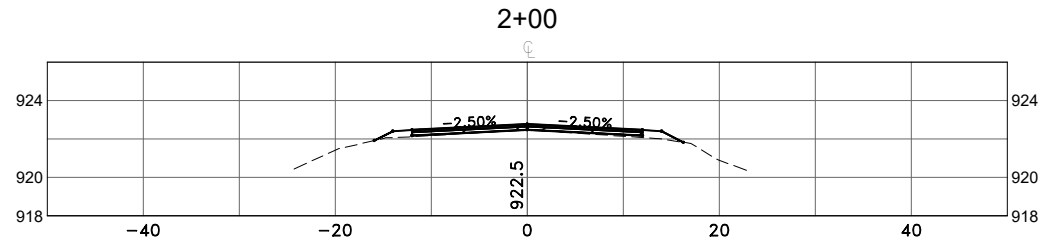
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2022 STREET REHABILITATION PROJECT

CONSTRUCTION PLANS  
 ROANOKE STREET  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET 22 OF 22 SHEETS

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SGJ  
CHECKED BY:  
TAE



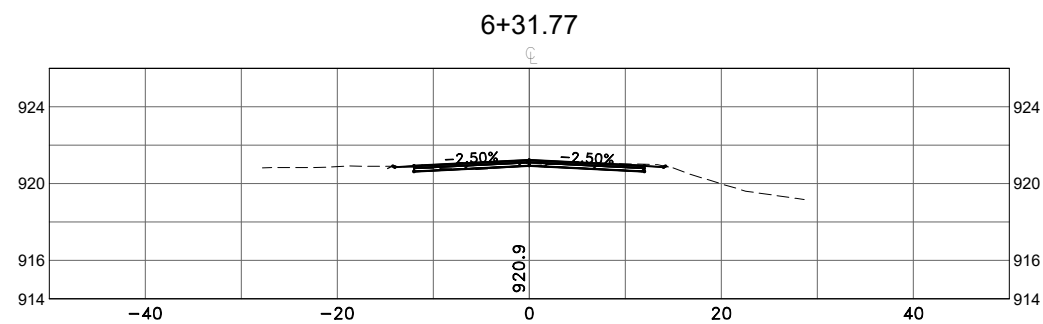
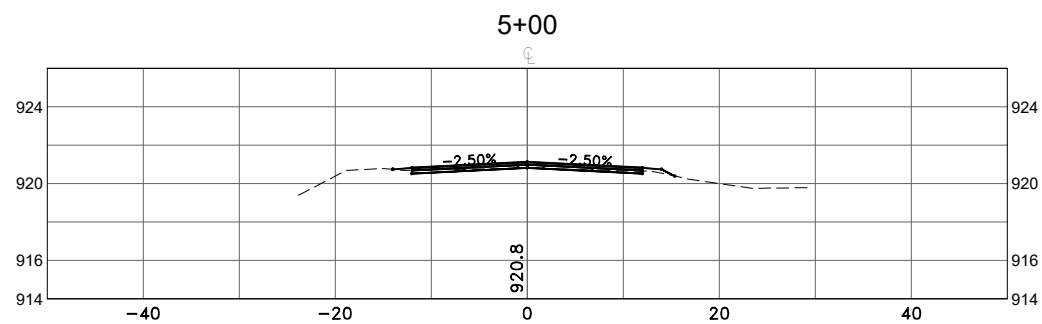
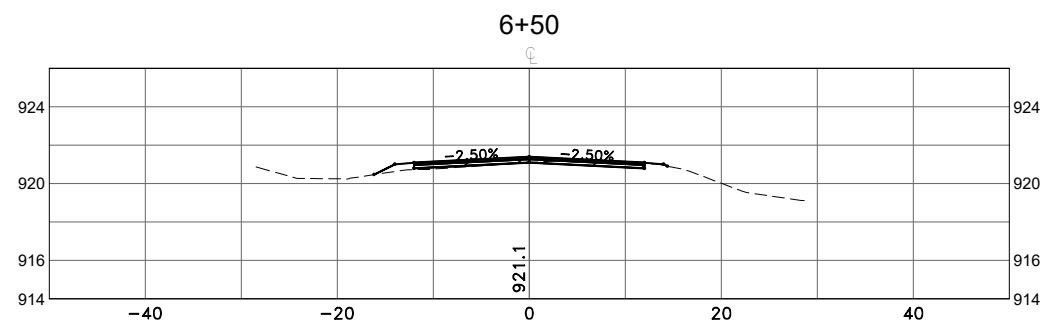
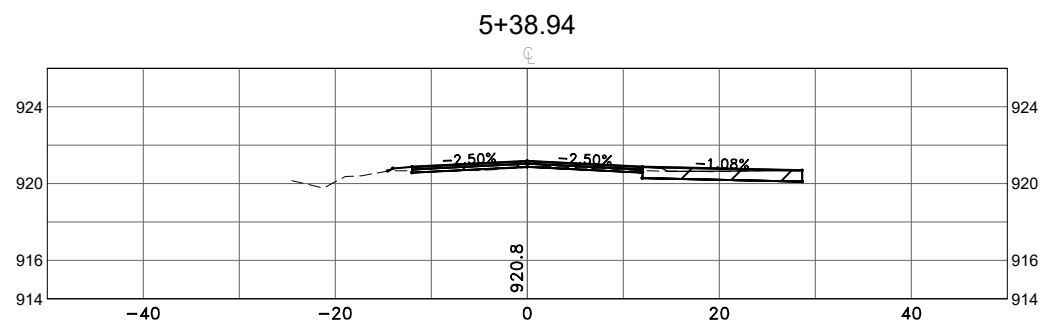
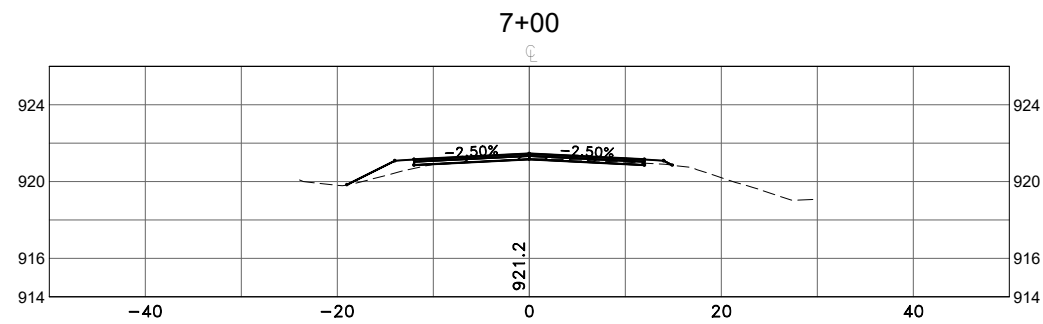
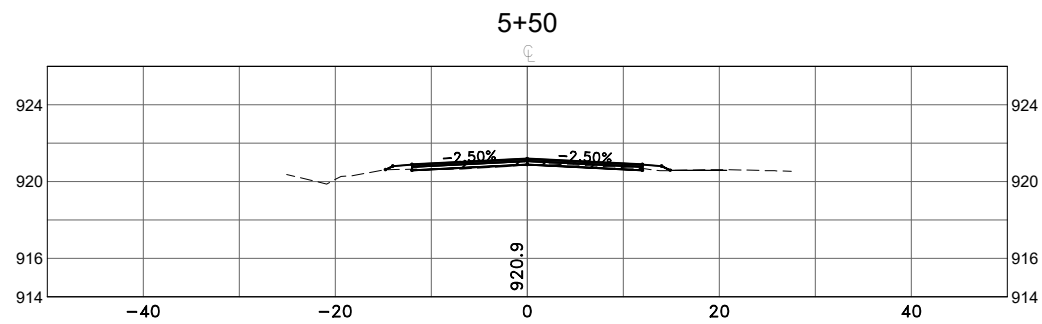
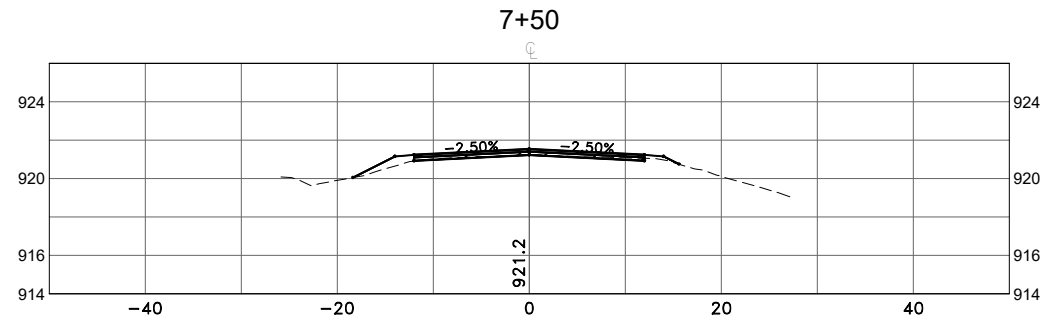
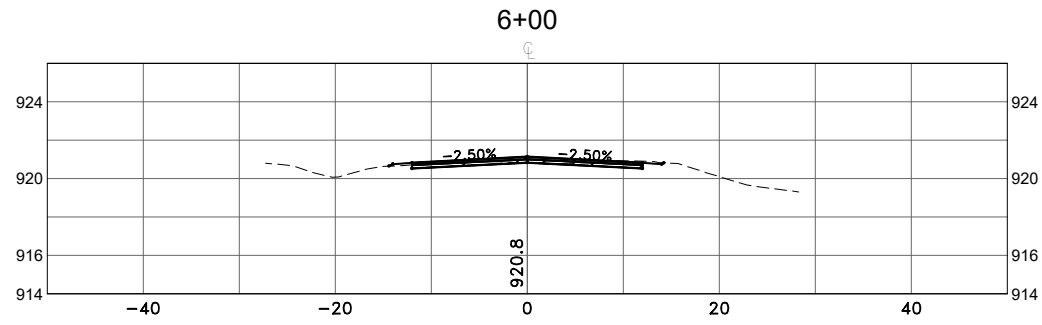
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2022 STREET REHABILITATION PROJECT

CROSS SECTIONS  
239TH AVENUE  
CITY OF ST. FRANCIS, MINNESOTA

SHEET  
X1  
OF  
X11  
SHEETS

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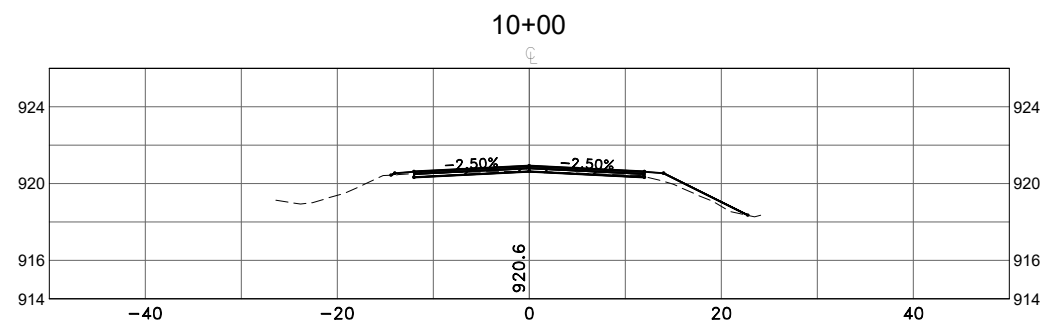
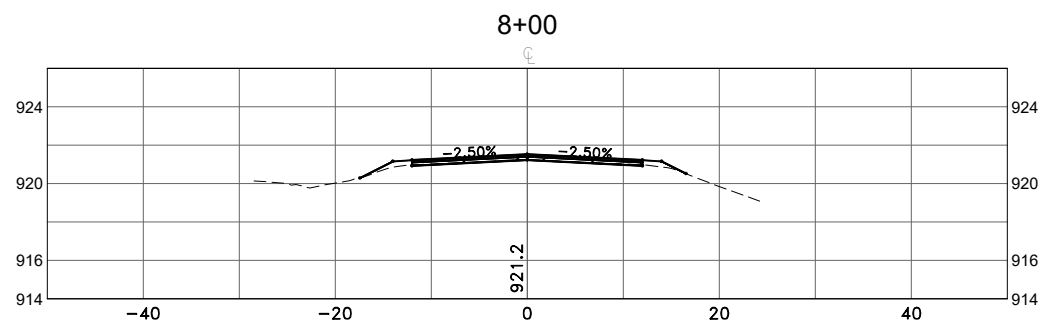
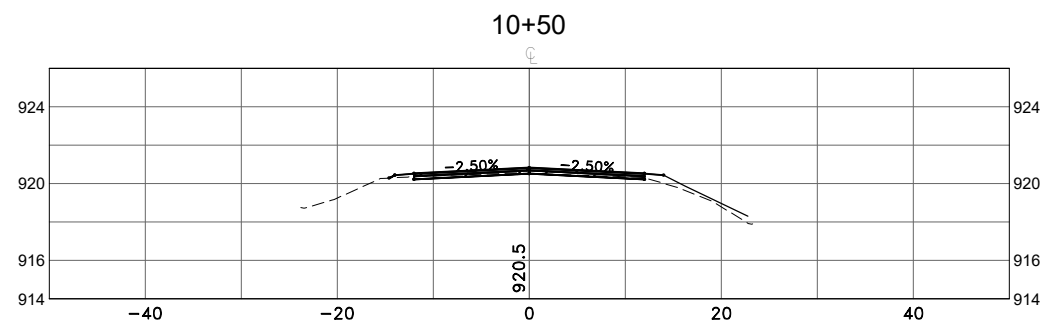
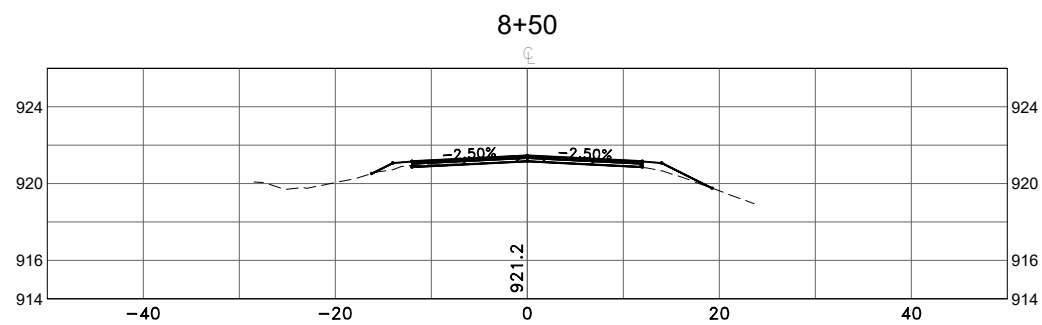
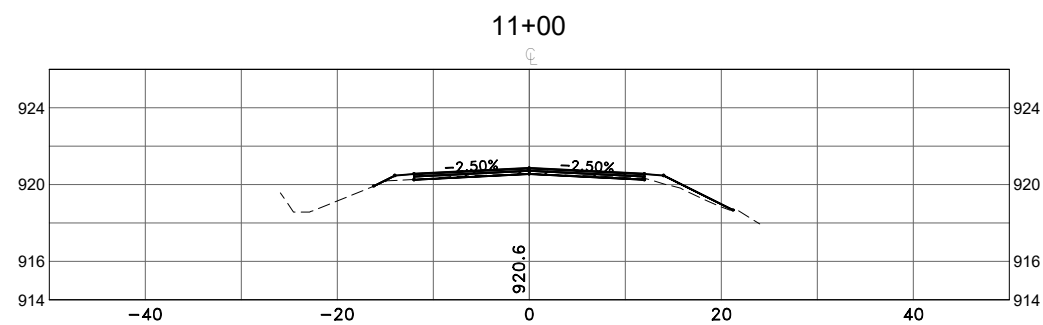
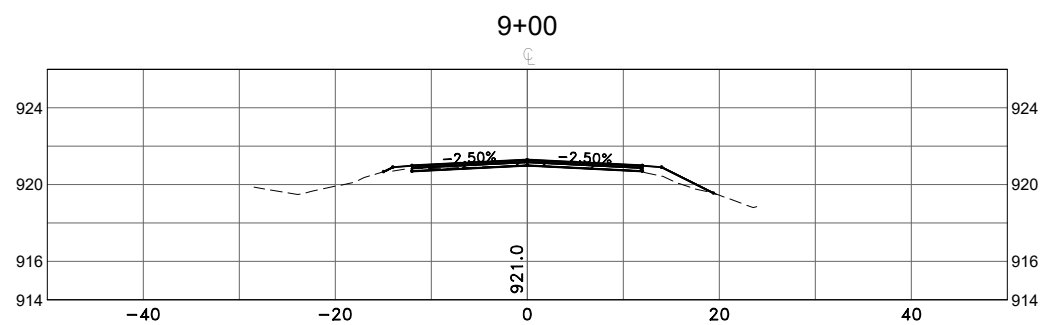
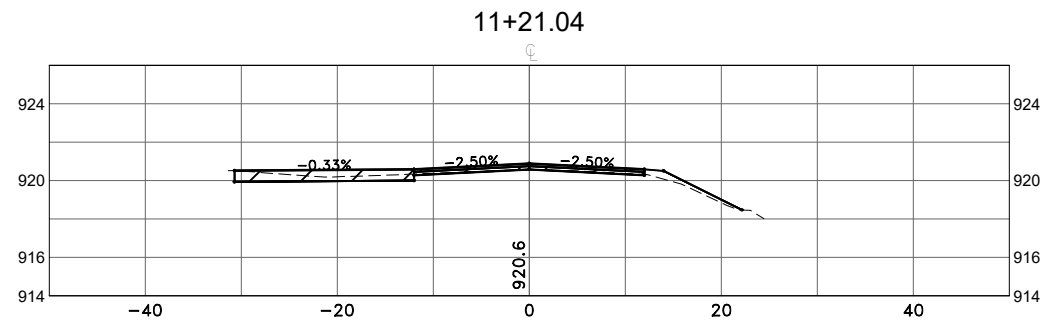
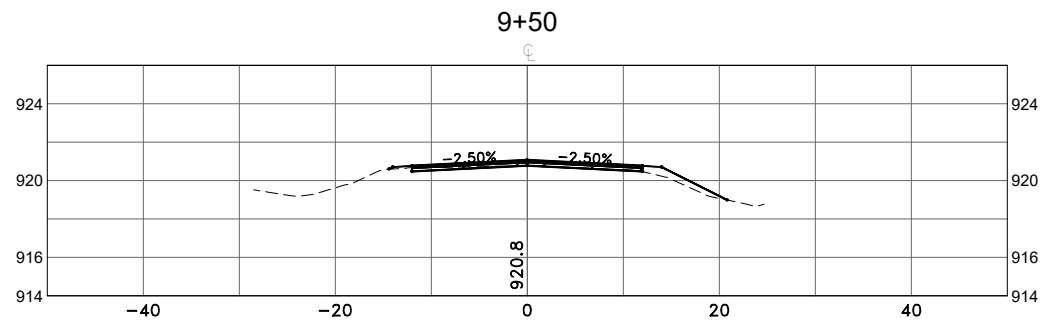
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CROSS SECTIONS  
239TH AVENUE  
CITY OF ST. FRANCIS, MINNESOTA

SHEET  
X2  
OF  
X11  
SHEETS

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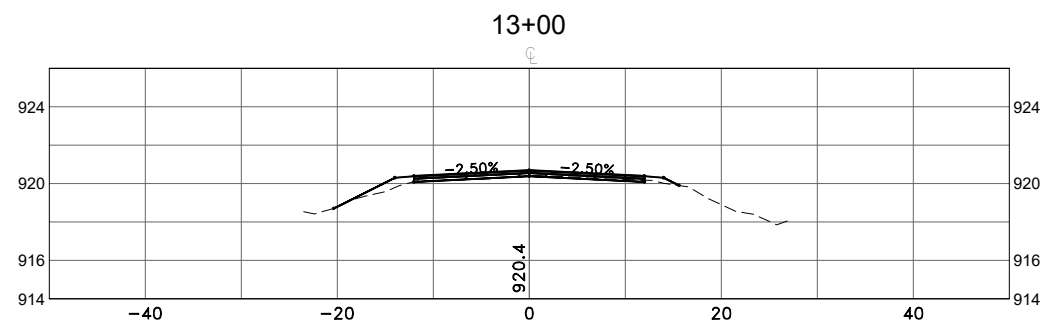
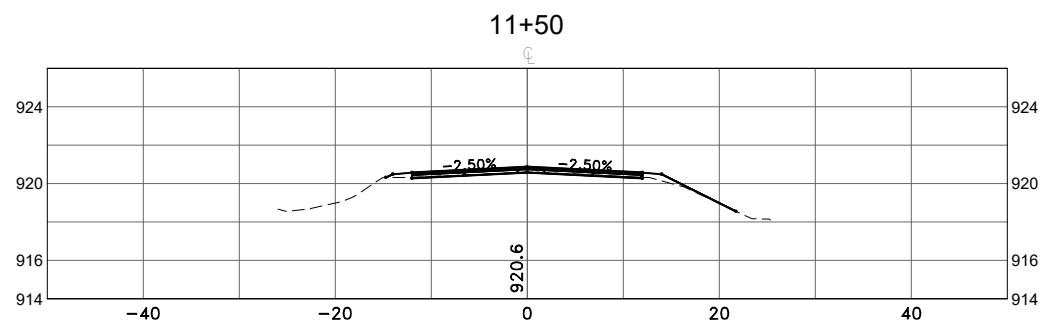
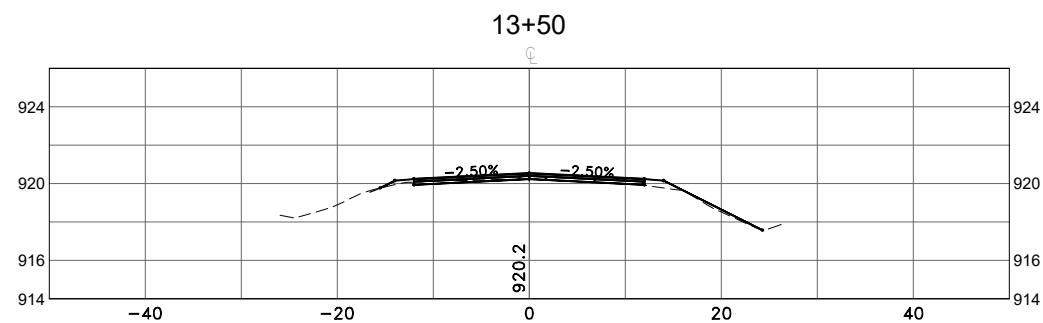
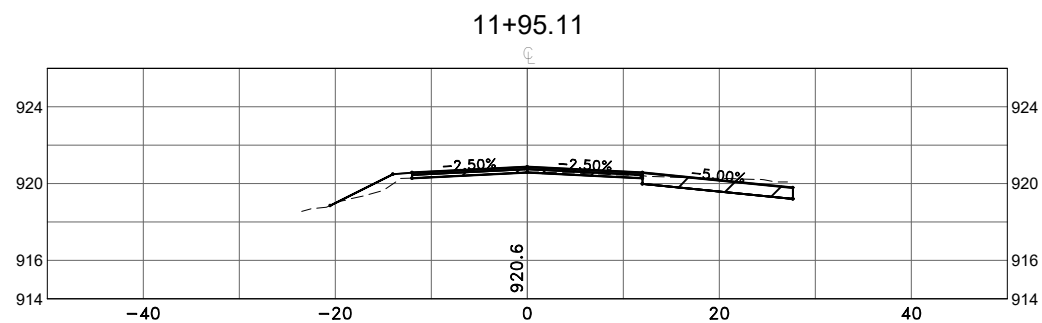
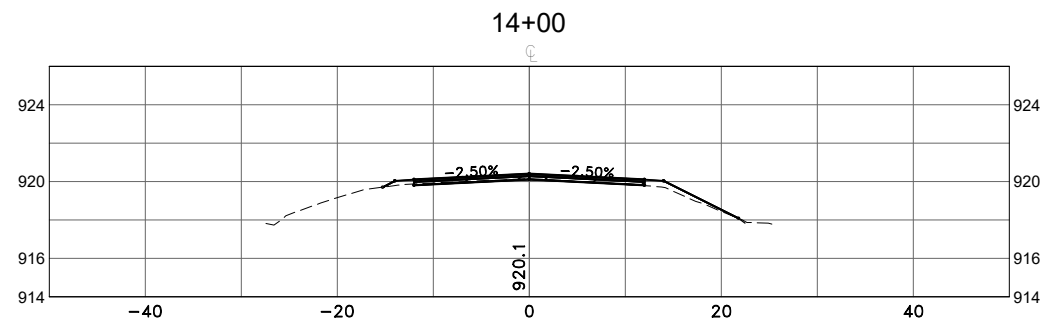
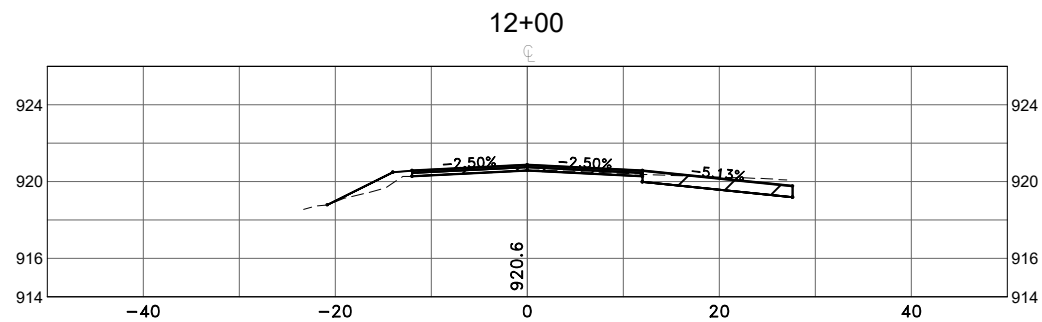
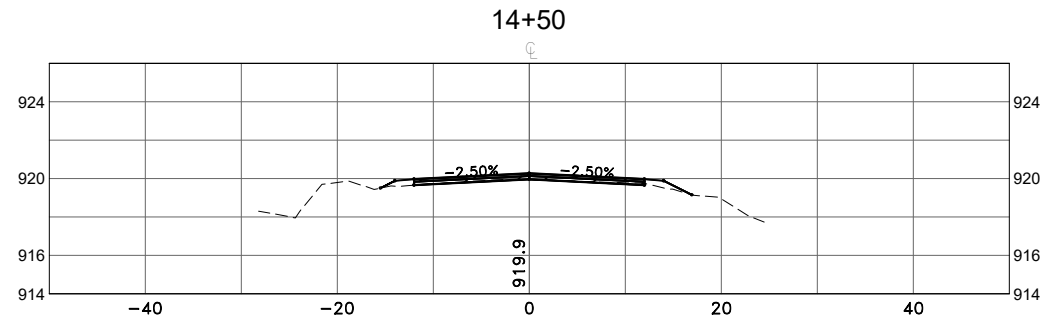
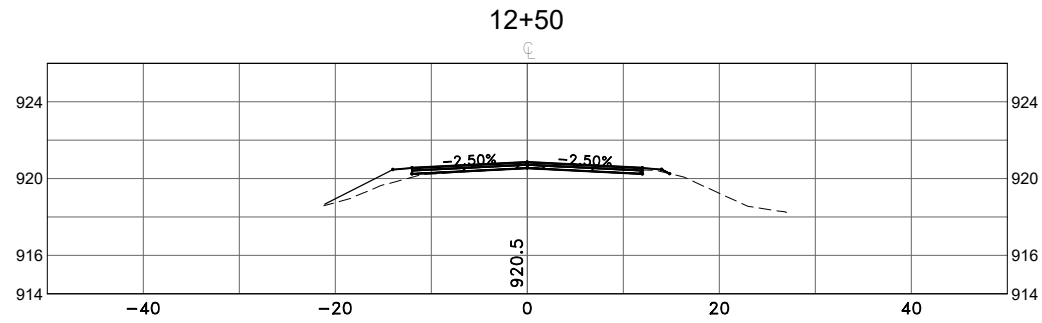
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CITY OF ST. FRANCIS, MINNESOTA

SHEET X3  
OF X11 SHEETS

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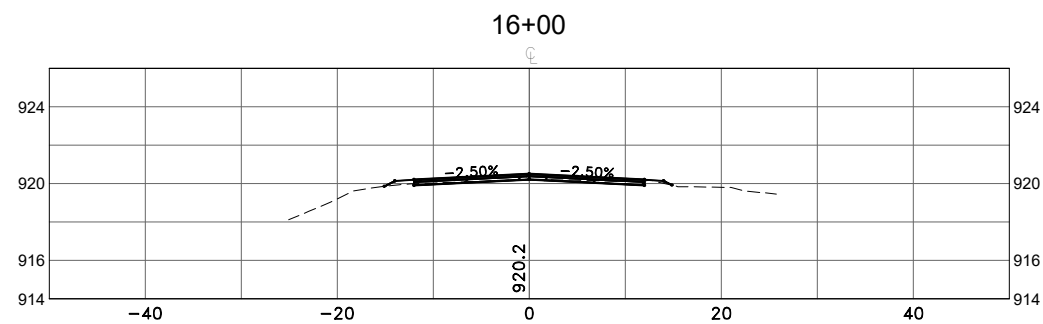
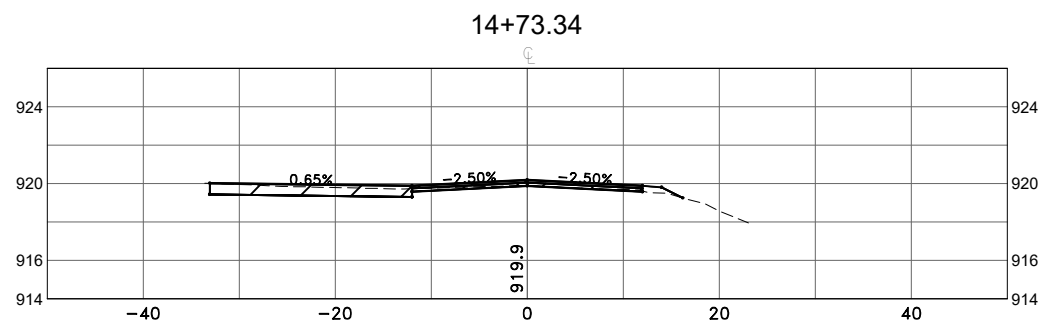
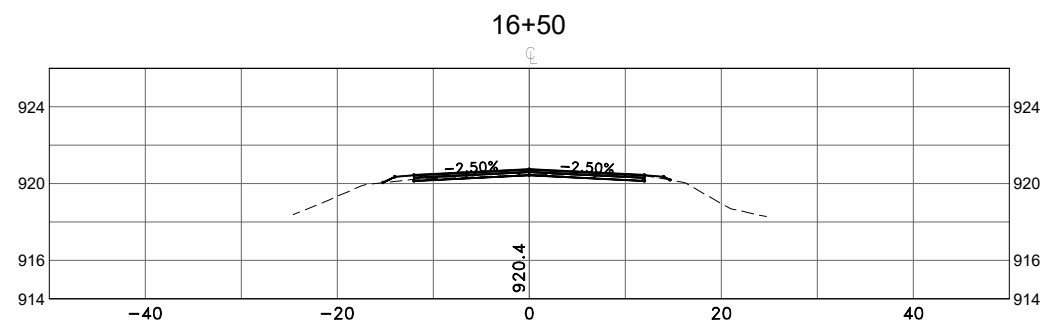
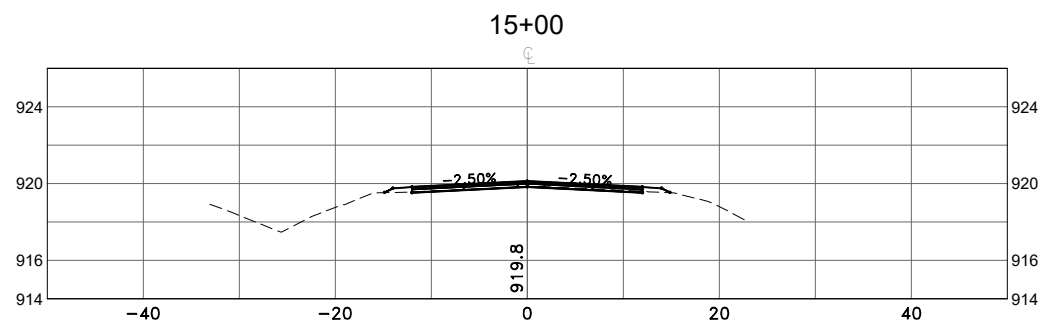
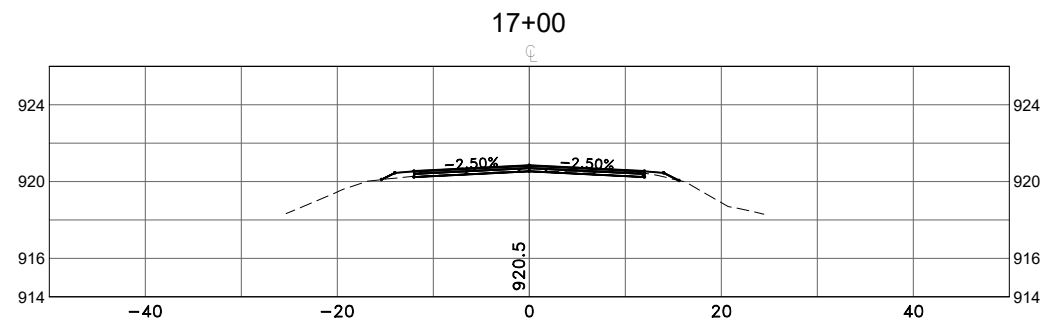
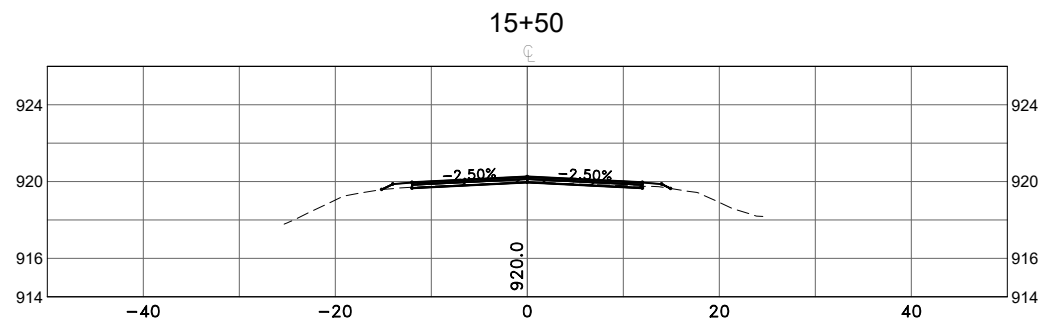
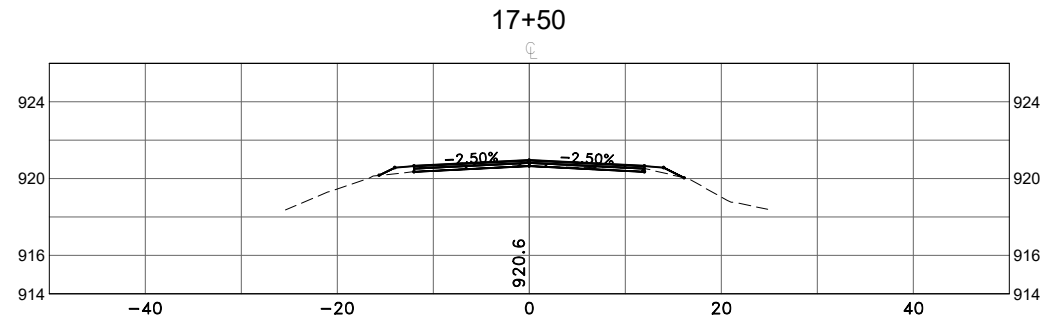
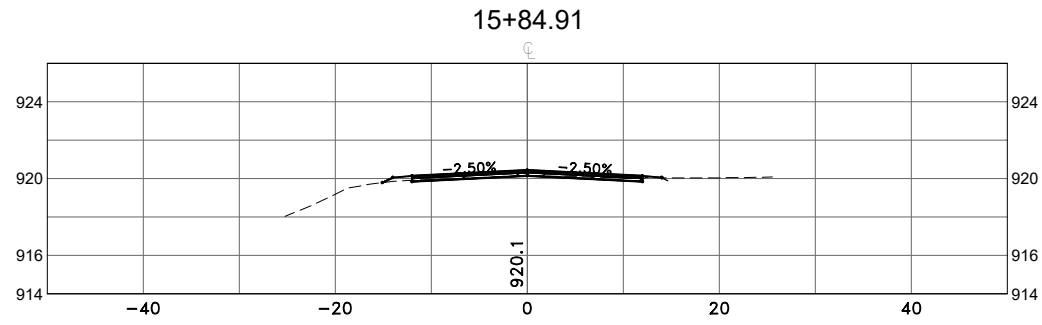
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239TH AVENUE  
CITY OF ST. FRANCIS, MINNESOTA

SHEET  
X4  
OF  
X11  
SHEETS

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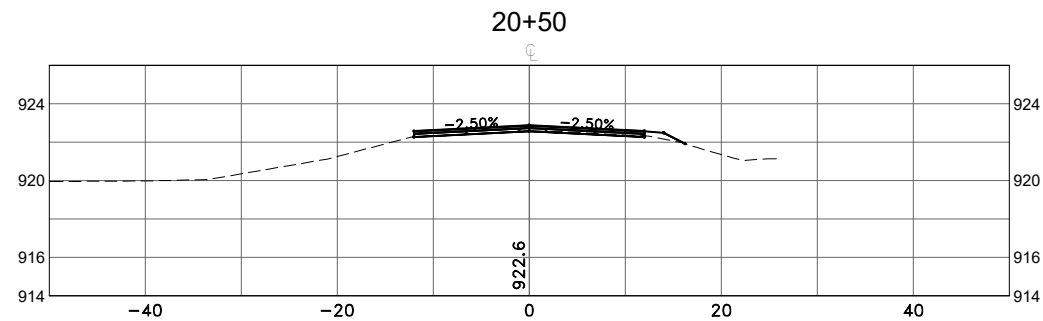
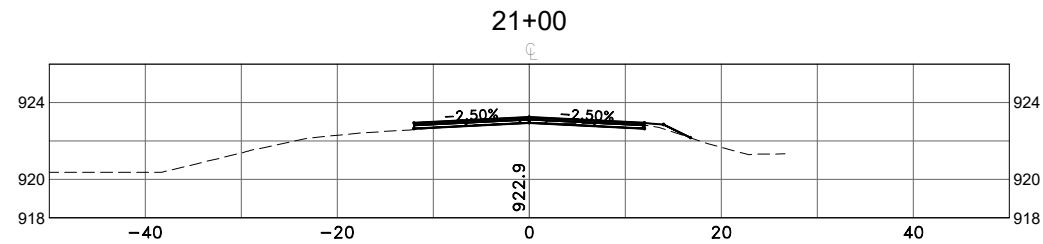
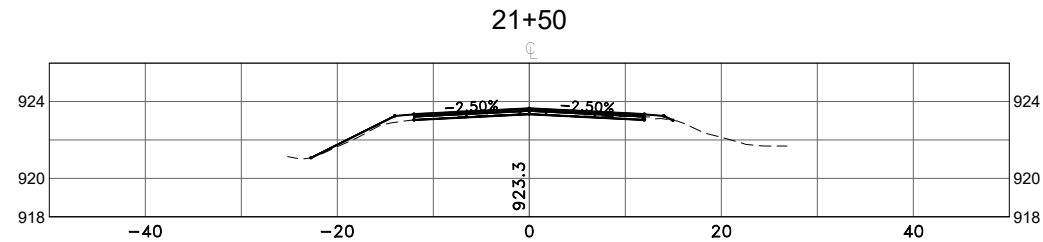
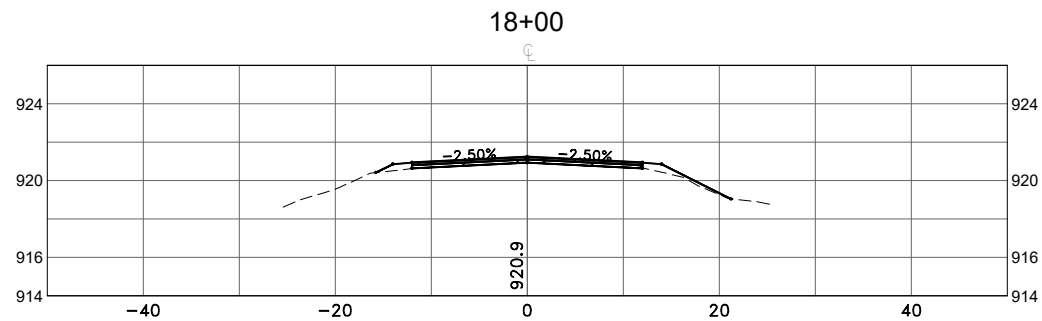
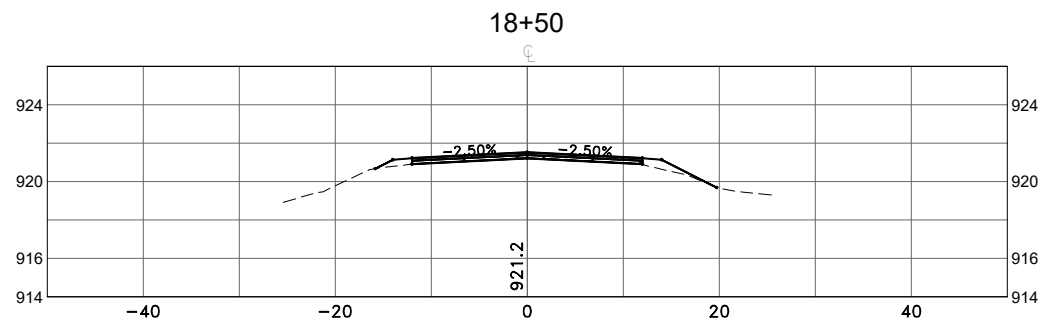
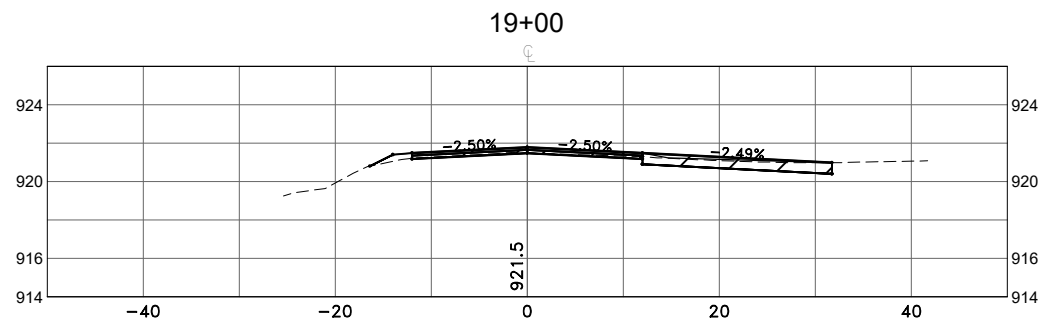
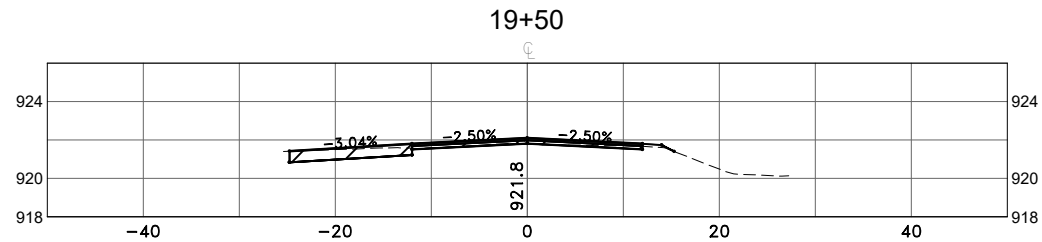
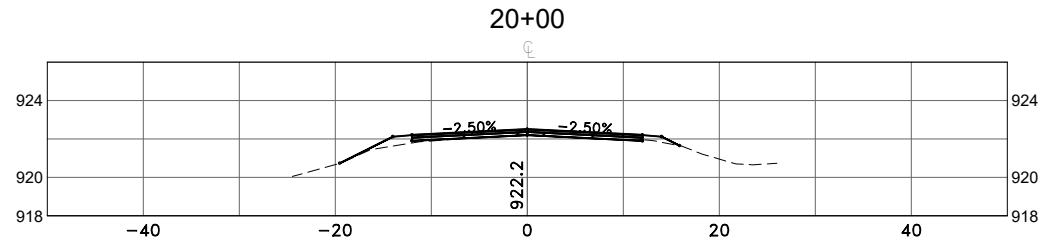
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2022 STREET REHABILITATION PROJECT

CROSS SECTIONS  
 239TH AVENUE  
 CITY OF ST. FRANCIS, MINNESOTA

SHEET  
 X5  
 OF  
 X11  
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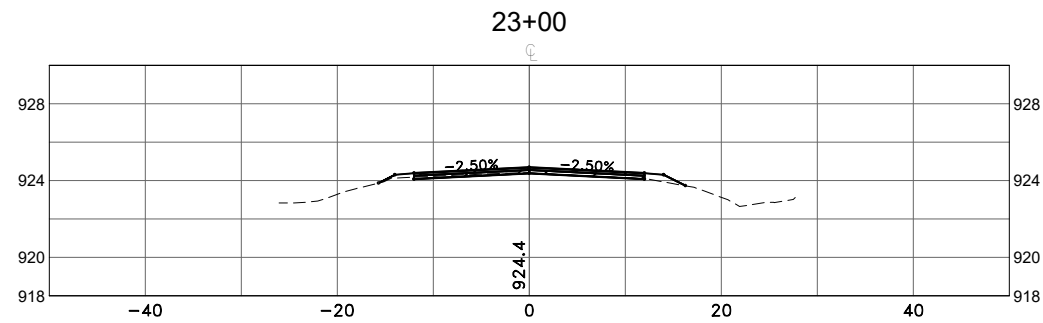
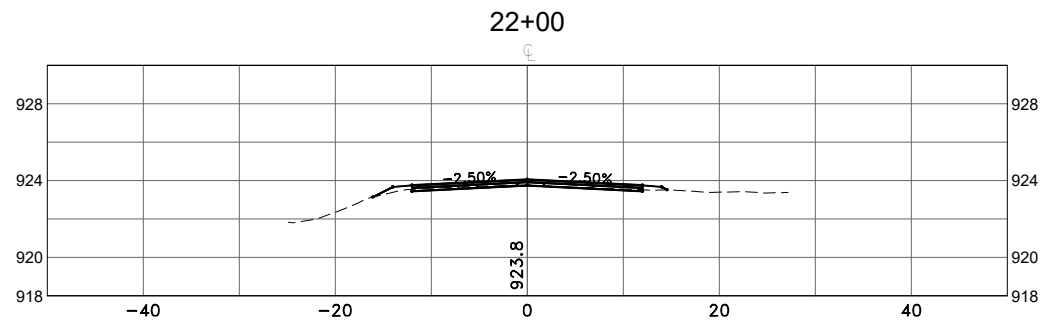
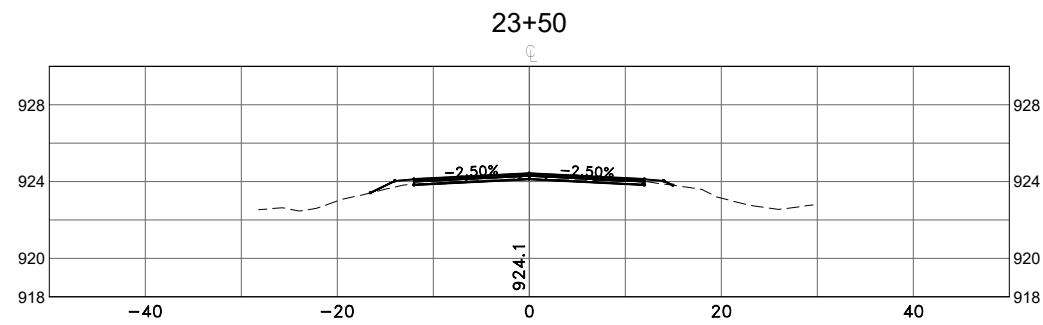
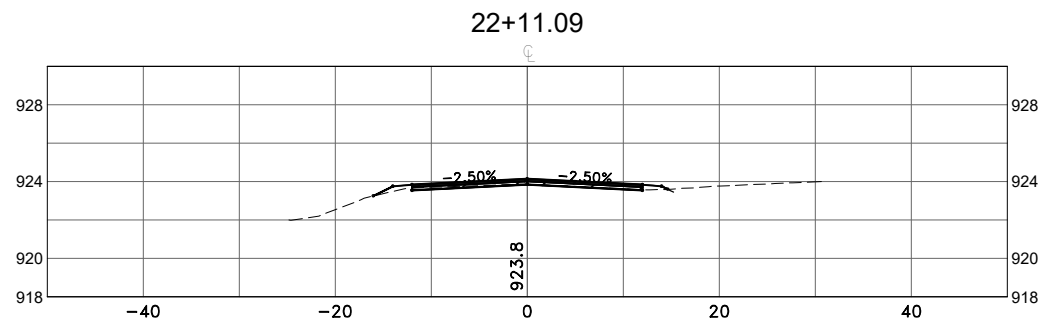
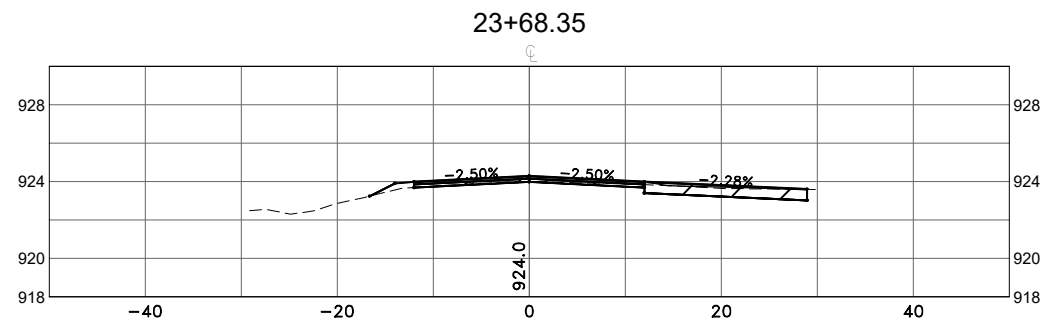
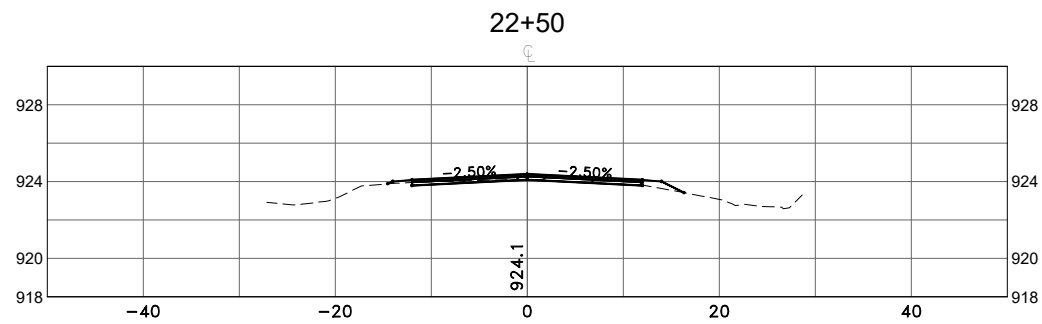
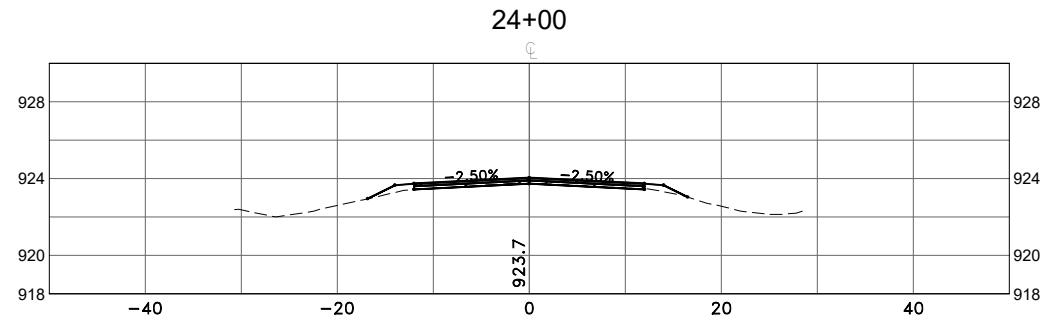
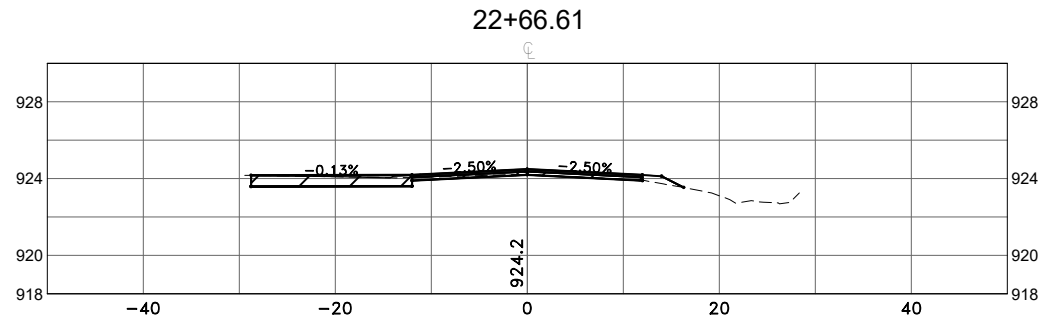
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2022 STREET REHABILITATION PROJECT

CROSS SECTIONS  
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 CITY OF ST. FRANCIS, MINNESOTA

SHEET  
 X6  
 OF  
 X11  
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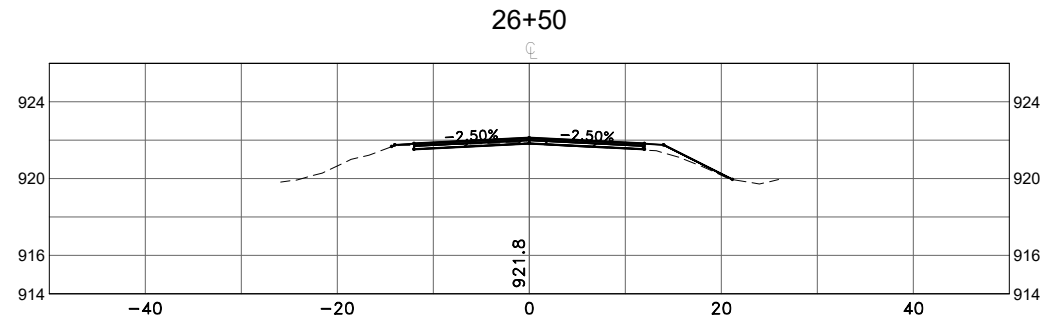
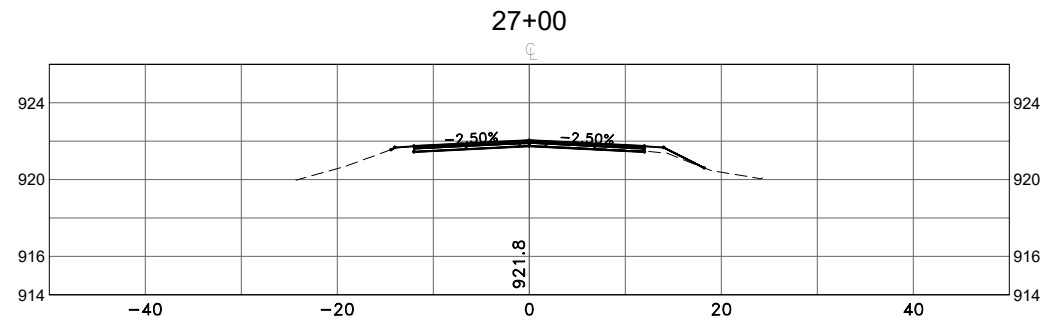
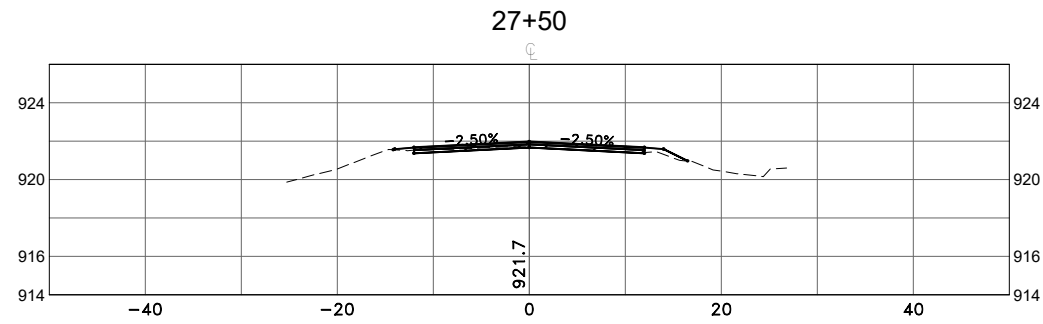
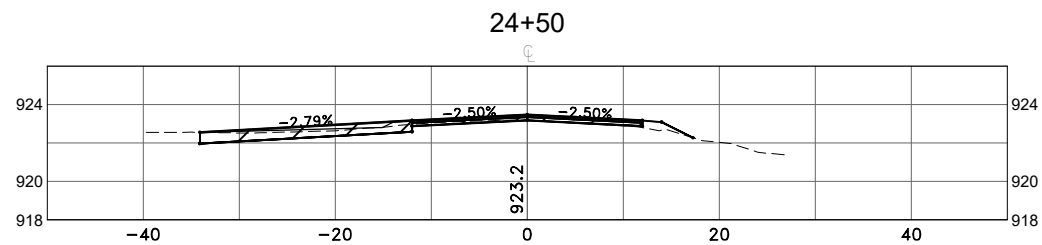
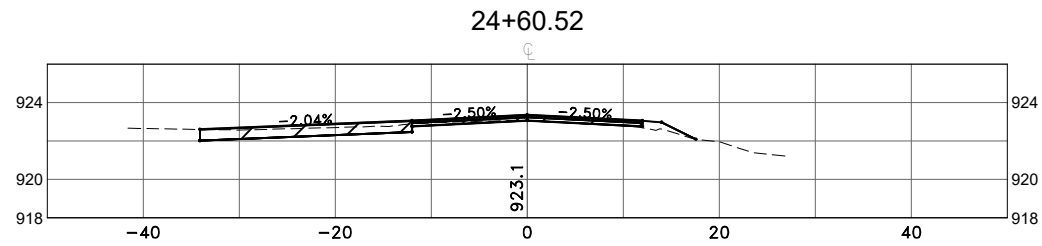
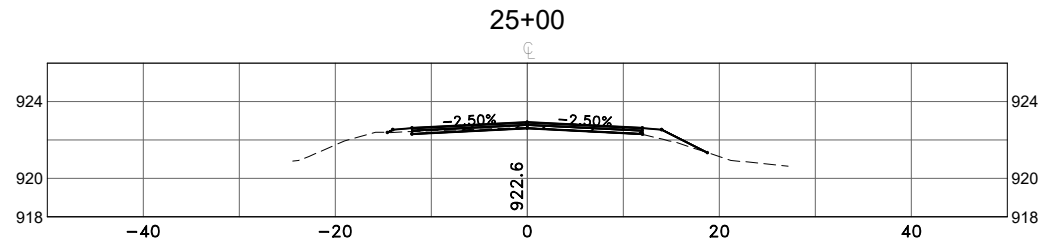
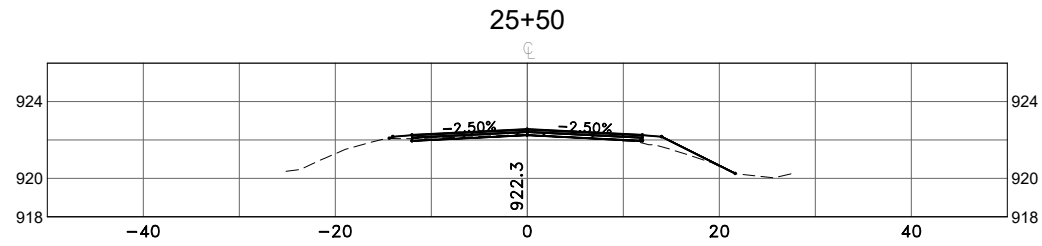
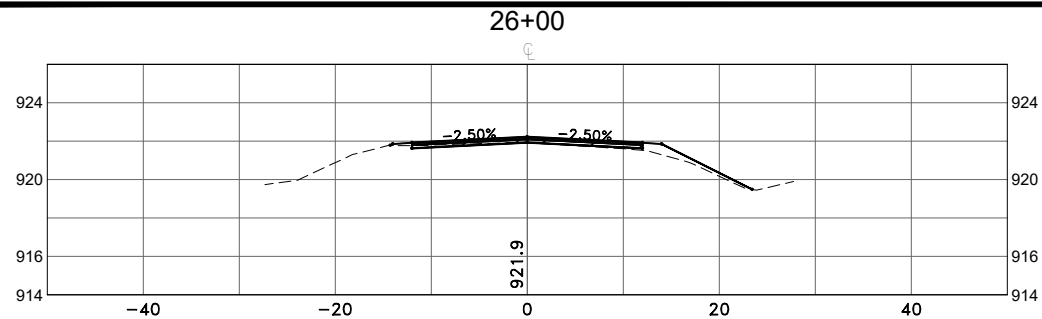
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CJJ  
DRAWN BY:  
SGJ  
CHECKED BY:  
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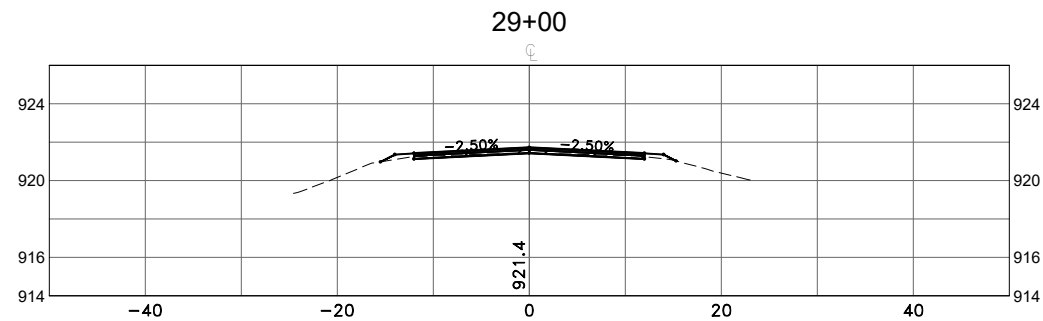
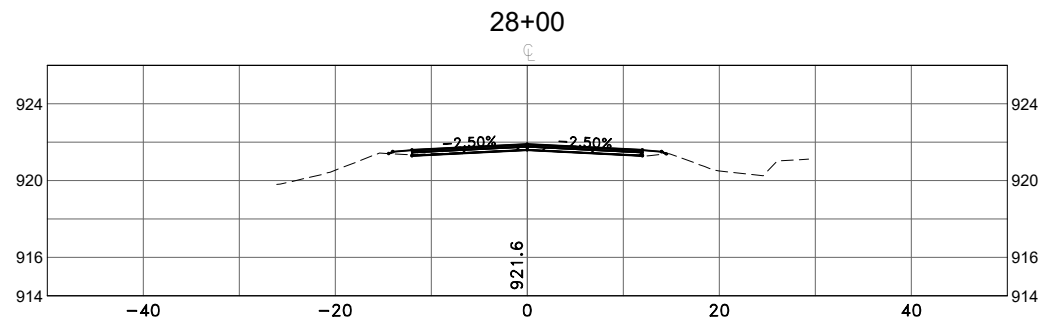
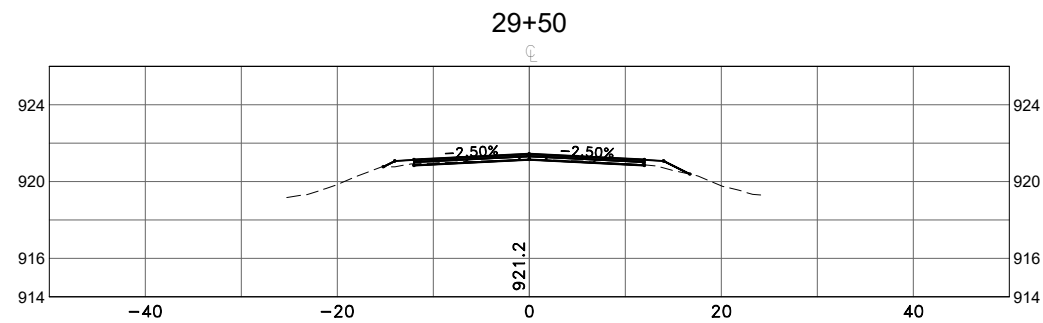
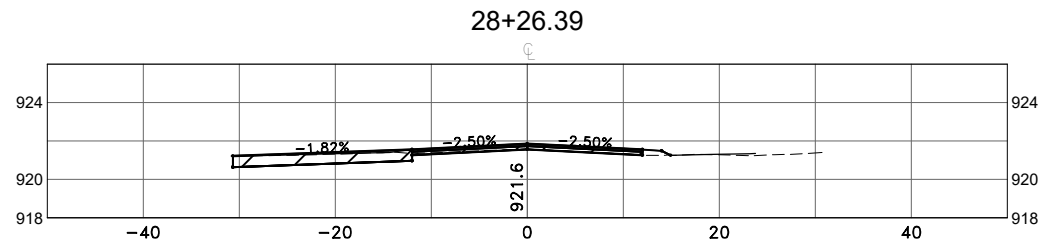
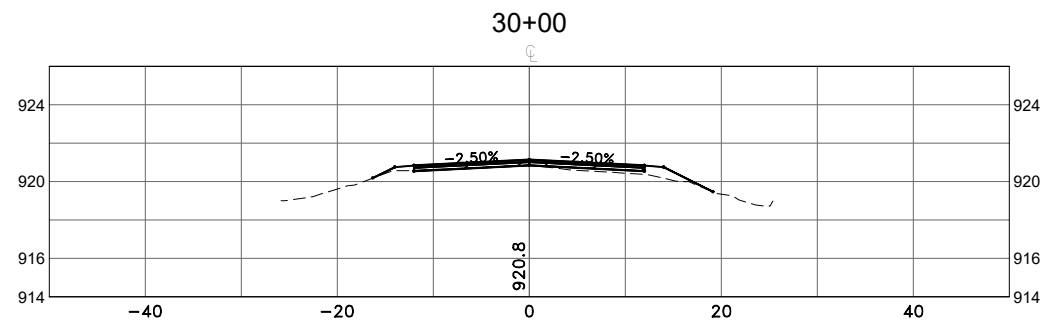
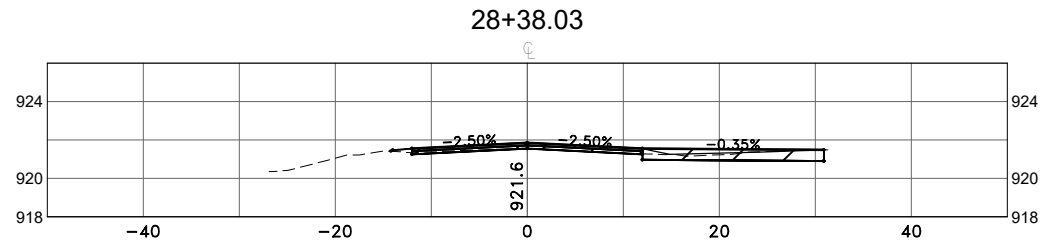
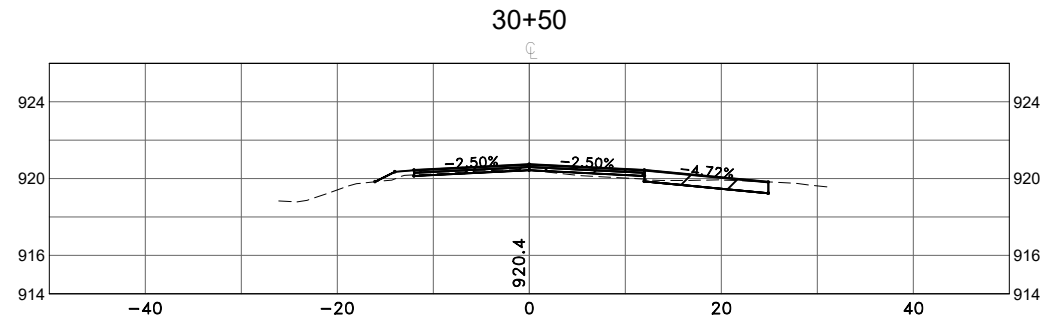
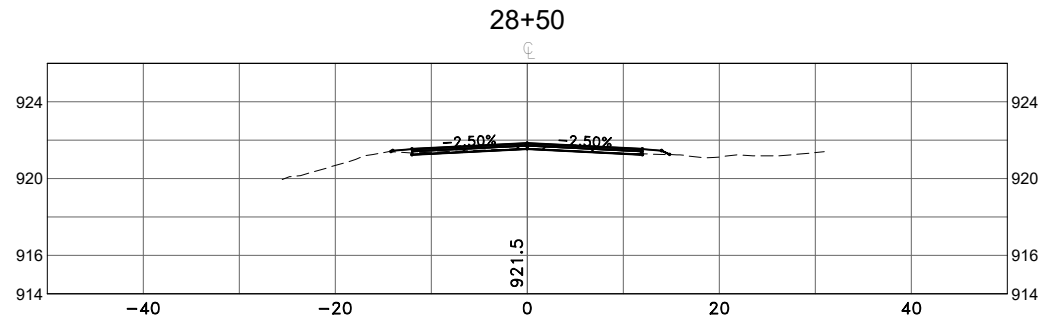
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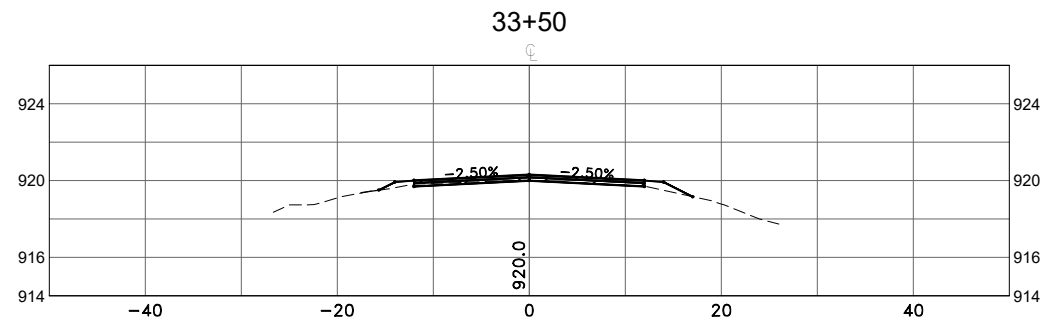
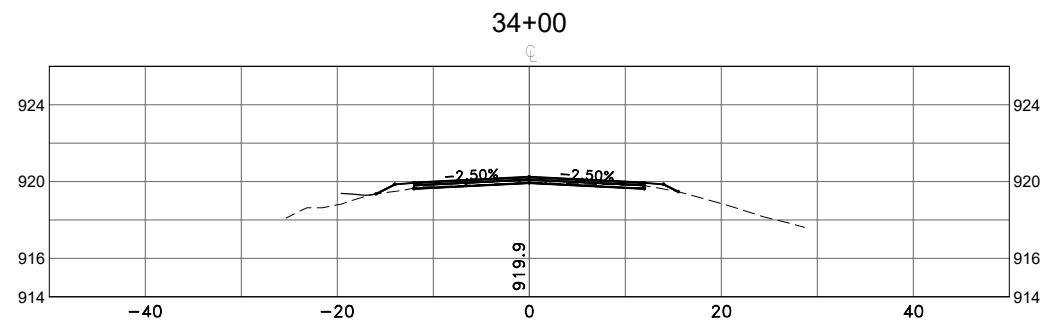
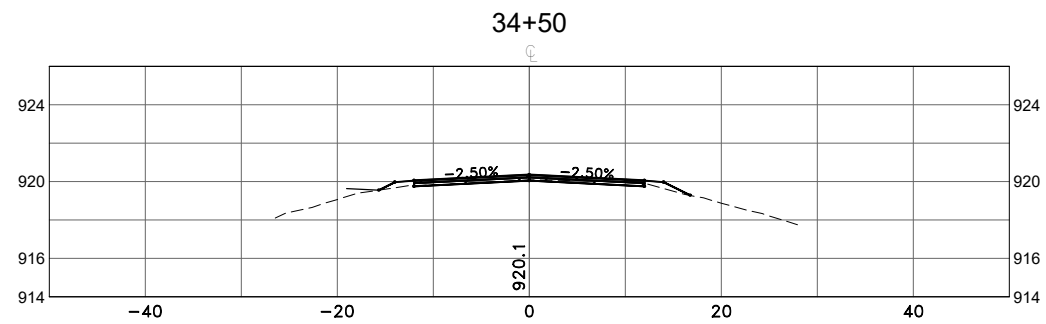
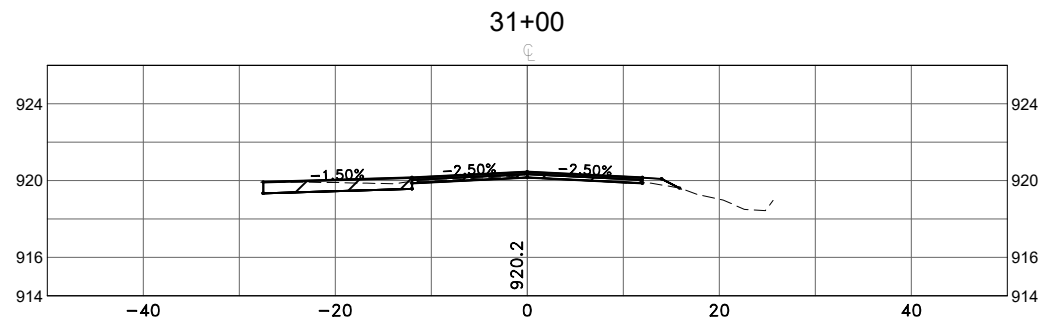
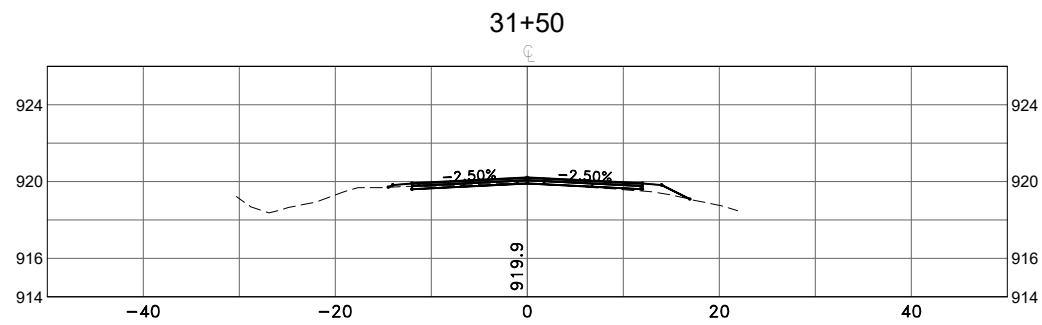
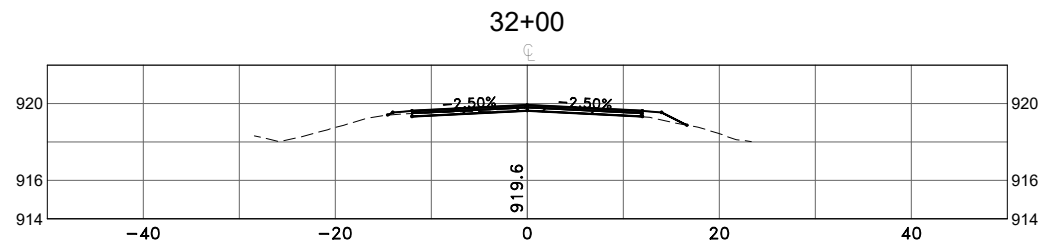
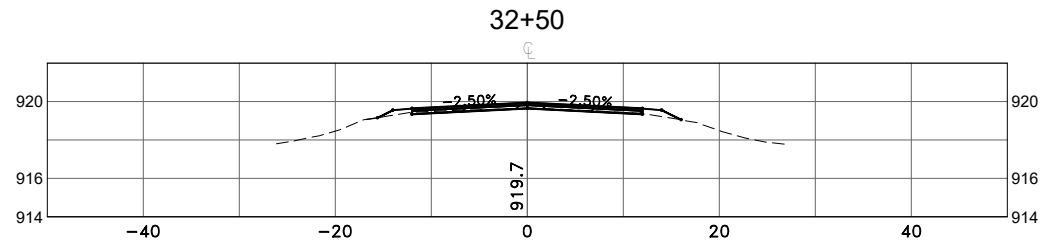
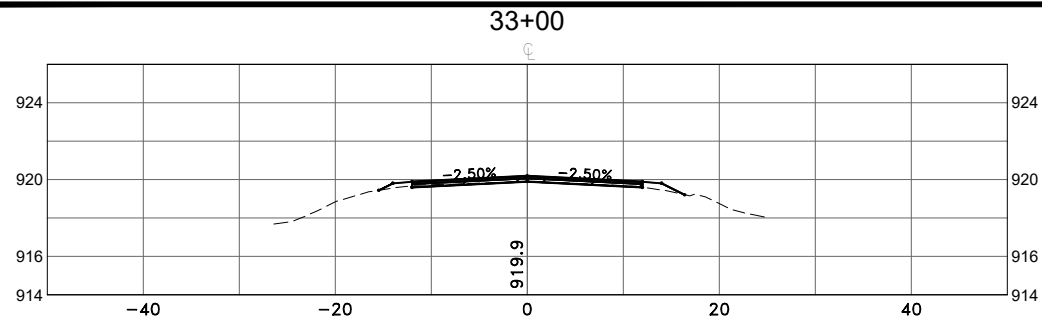
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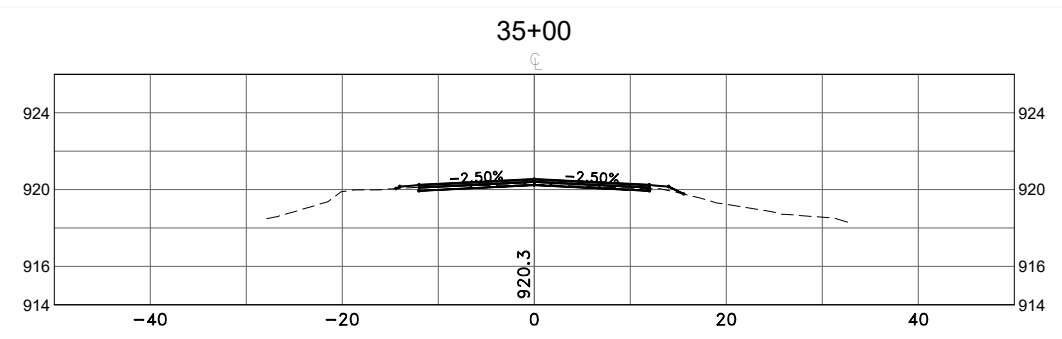
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