SHARED USE PATH DESIGN DATA				
Traffic	Average Daily			
Current N/A	Pass: N/A	Trucks: N/A	Total: N/A	
Forecast N/A	Pass: N/A	Trucks: N/A	Total: N/A	
Clear Zone Distance: 2 FT		Design Speed: 20 MPH		
Minimum Sight Dist. for Stopping:N/A		Bridges: N/A		
Sight Dist. for No Passing Zone: N/A				
Pavement Design Life: N/A				

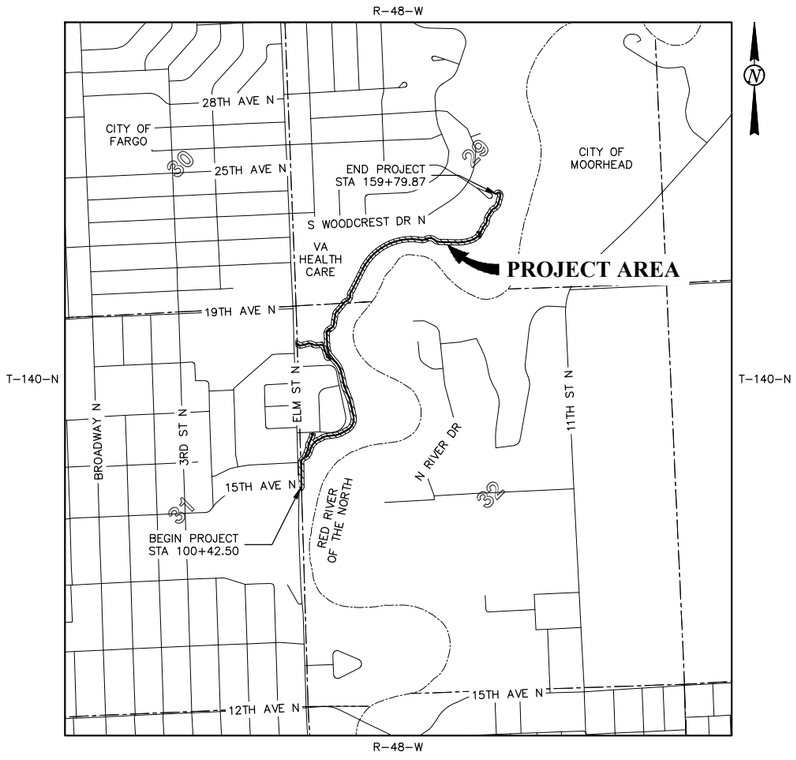
	STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
	ND	**TMA-CRP-8-984(182)**	**24298**	**1**	**1**

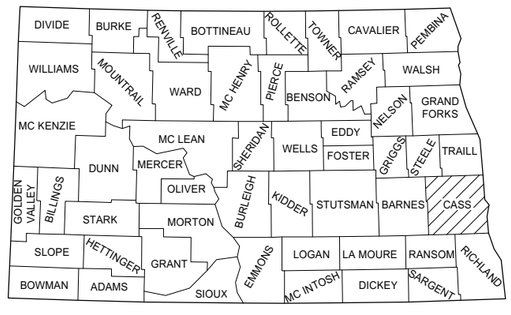
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

TMA-CRP-8-984(182)
SN-25-B0
CASS COUNTY
15TH AVE N RED RIVER TRAIL
ALONG THE RED RIVER FROM 15TH AVE N TO WOODCREST DR N
GRADING AND CONCRETE SHARED USE PATH

GOVERNING SPECIFICATIONS	Date Published and Adopted by the North Dakota Department of Transportation
Standard Specifications	7/1/2024
Supplemental Specifications	NONE

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
TMA-CRP-8-984(182)	1.125	1.125





STATE COUNTY MAP

DESIGNERS

GUNNAR COWING

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

APPROVED DATE 7/22/2025

Tom Knakmuhs
FARGO
CITY ENGINEER

REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

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PLAN SECTIONS

LIST OF STANDARD DRAWINGS

Number	Description
D-261-1	Erosion Control - Fiber Roll Placement Details
D-704-7	Breakaway Systems For Construction Zone Signs - Perforated Tube
D-704-8	Breakaway Systems For Construction Zone Signs - U-Channel Post
D-704-13	Barricade And Channelizing Device Details
D-704-14	Construction Sign Punching And Mounting Details
D-704-25	Lane Closures On Urban Streets Layouts
D-704-50	Portable Sign Support Assembly
D-708-6	Erosion And Siltation Controls - Median Or Ditch Inlet Protection
D-714-1	Reinforced Concrete Pipe Culverts And End Sections (Round Pipe)
D-714-4	Round Corrugated Steel Pipe Culverts And End Sections
D-752-2	Chain Link Fence

SPECIAL PROVISIONS

Number	Description
SSP 1	Temporary Erosion and Sediment Best Management Practices
PSP 50(24)	Permits and Environmental Considerations
SP 374(24)	Temporary Pedestrian Facility
SP 375(24)	City of Fargo Specifications for Construction
SP 459(24)	Commercial Grade Hot Mix Asphalt
SP 467(24)	Utility Coordination

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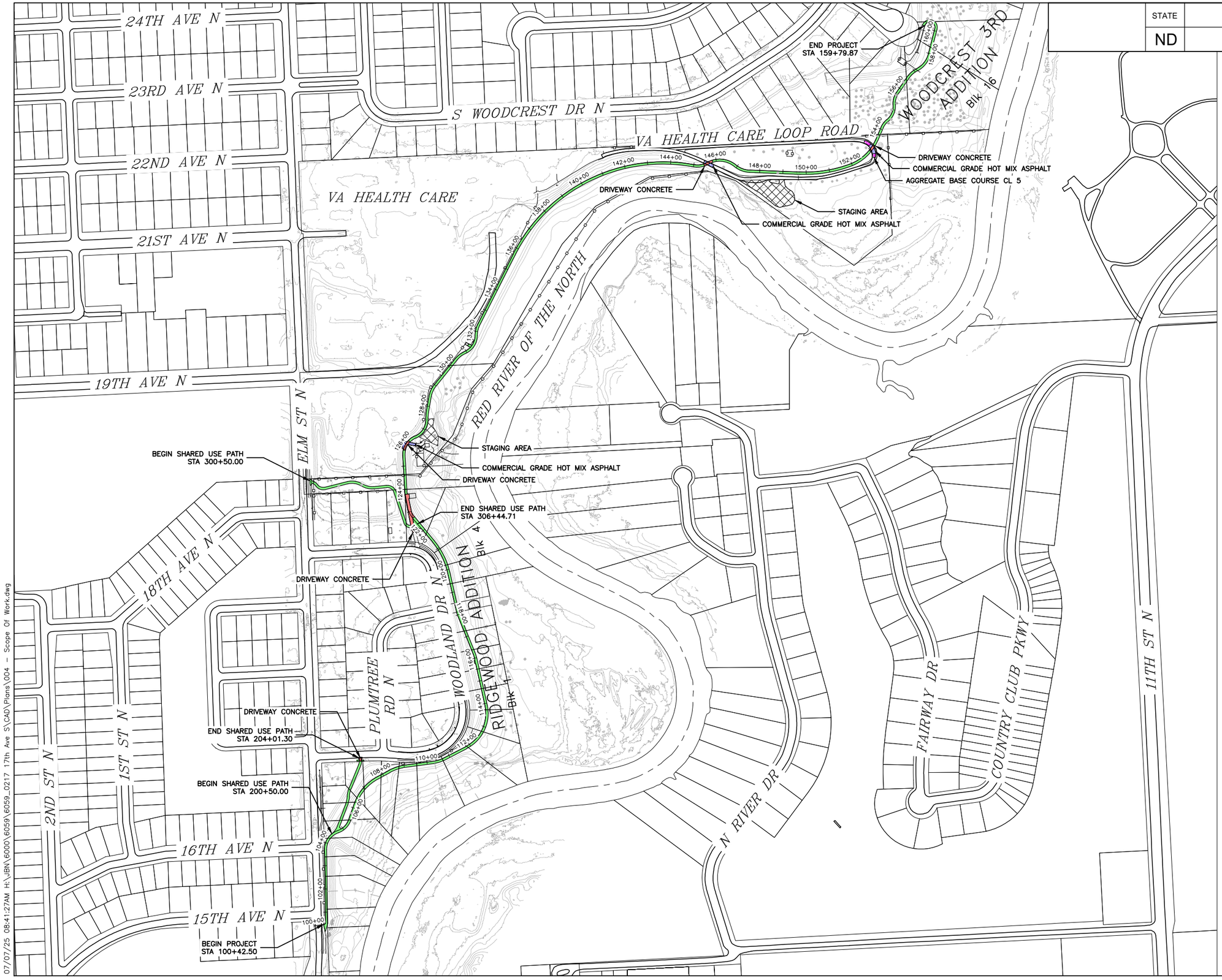

N

0 200' 400'

LEGEND:

- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT (ON 6" AGGREGATE BASE COURSE CL 5)
- SIDEWALK CONCRETE 5IN (ON 2" AGGREGATE BASE COURSE CL 5)
- 7" DRIVEWAY CONCRETE (ON 2" AGGREGATE BASE COURSE CL 5)
- STAGING AREA

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

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Scope of Work

Red River Trail

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NOTES

100-P01 PLAN SET VIEWING: These plans have been developed using a variety of colors in an effort to better delineate differing features and details. The Contractor is encouraged to print this plan set in full color or view the plan set digitally to ensure that the plan set can be interpreted with all intended detail.

100-P02 PROJECT COMPLETION: Phase and schedule construction activities to meet the following requirements:

Substantial Completion: Complete all work except turf establishment by September 11, 2026.

Final Completion: Complete all work by October 16, 2026.

100-P03 SITE ACCESS: Access the site from south of the existing floodwall off of Elm St. N at Sta. 100+40, from the levee crossing to be graded at Sta. 202+30, from the existing driveway off of Woodland Dr. N near Sta. 122+20, from the VA Health Care loop road near Sta. 145+60 to Sta. 153+10, and from the existing driveway off of Woodcrest Dr. S at Sta. 159+80. Do not access the site from the utility access road near Sta. 126+00. Coordinate all access through the VA Health Care property with the Fargo VA Health Care Engineering Department a minimum of one week prior to utilizing the area. Store equipment within the designated staging areas shown in Section 4 only. All staging areas shall be restored to match pre-project conditions.

Do not operate equipment on or impact the existing levees or floodwalls adjacent to the project except to construct the levee crossing to be graded at Sta. 202+30 and the grading on top and east of the levee from Sta. 116+00 to Sta. 127+25.

Concrete and hot mix asphalt may need to be buggied or pumped for the construction of the trail due to space constraints. Buggying or alternative means of concrete and asphalt placement are anticipated from Sta. 100+43 to Sta. 105+00, Sta. 108+00 to Sta. 112+50, Sta. 116+00 to Sta. 146+00, Sta. 153+50 to Sta. 159+80, Sta. 200+50 to Sta. 204+01, and Sta. 300+50 to Sta. 306+45.

Erosion control and topsoil quantities have been estimated based on these assumptions.

Alternative construction methods are acceptable provided no additional flood control features, environmental areas, wetlands, other waters, or trees will be impacted during construction. Alternative construction methods will not be allowed to further impact pedestrian or vehicle traffic beyond what is shown in the plans. Repair or replace any damage to existing infrastructure that results from construction operations.

100-P04 WEEKLY LOOK AHEAD SCHEDULE: Submit a Weekly Look Ahead Schedule at the end of each week or at such other time of the week as determined by the Engineer. Include those work activities that are scheduled to begin or are in progress for the next three weeks.

Pay estimates may be withheld if the required schedules are not received. Receipt of a pay estimate does not relieve the Contractor of the requirement to provide the schedules. Include all costs for the Weekly Look Ahead Schedule in the price bid for other items.

100-P05 PRECONSTRUCTION MEETING: Organize, schedule, and attend a meeting with private utility companies and subcontractors at least 7 days prior to the start of construction for coordination purposes.

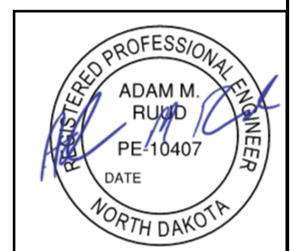
100-P06 CONTRACTOR'S PROJECT REPRESENTATIVE: Provide a project representative who is knowledgeable in construction operations, possesses written and verbal communication skills, can organize productive meetings, and can provide information necessary for media releases. Include all costs associated with the project representative's activities in the price bid for other items. The responsibilities of the project representative include:

- Organizing, scheduling, and conducting the weekly planning and reporting meetings, if required.
- Providing routine face to face communications with the public, property owners, and businesses affected by construction activities, including calling on businesses or residents along the corridor. The representative must have sufficient knowledge and authority to resolve property owner and business concerns regarding scheduling and construction activities.

100-P07 SPECIFICATIONS: Follow City of Fargo Standard Specifications for Construction for weekly look ahead schedule, public utilities, curb and gutter, sidewalks, driveways, benches, and tree protection and planting. See SP 375(24).

100-P08 WEEKLY MEETINGS: Weekly meetings are required.

100-P09 COORDINATION OF PROJECTS: Other projects in the vicinity of this project are under contract during the 2026 construction season through the VA Health Care. Coordinate with adjacent contractors for access through the VA Health Care Property as well as access and temporary closures of the VA Health Care loop road. Maintain access at all times.



7/18/2025

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NOTES

105-110 PAVEMENT SWEEPING: Sweep paved areas that were used by construction traffic before opening these areas to public traffic.

Sweep all newly constructed pavement no more than 24 hours before a scheduled final inspection.

Use a vacuum or pick-up type sweeper to perform this work.

105-P01 NOISE RESCTRICTIONS: Do not perform construction activities or moving of equipment between the hours of 10:00 pm and 7:00 am except for sawing of new concrete. Notify residents and landowners within ½ block of the work area by 7:30 pm when sawing is planned to occur during these hours.

202-P01 REMOVAL OF AGGREGATE BASE & SURFACING: Include all costs for removal of aggregate surfacing, concrete pavement, curb and gutter, bituminous pavement, and aggregate base in the price bid for “Remove Aggregate Base & Surfacing”.

203-010 SHRINKAGE: 15 percent additional volume is included for shrinkage in earth embankment.

203-385 AVERAGE HAUL: No average haul has been computed for this project.

203-P01 BORROW EXCAVATION: Provide contractor optioned borrow material from an offsite location. Payment for borrow material will be done based on the plan quantity. No measurement will be completed. If material underrun or overrun is encountered, no price adjustment will be considered.

203-P02 TOPSOIL: Payment for topsoil will be done based on the plan quantity. No measurement will be completed. If material underrun or overrun is encountered, no price adjustment will be considered.

251-P01 SEEDING CLASS III: Use the following seed mix for all permanent seeding.

Species	Percent by Weight	Purity	Germination
Perennial Ryegrass	40%	90%	85%
Creeping Red Fescue	30%	90%	85%
Annual Ryegrass	15%	90%	85%
Kentucky Bluegrass	15%	90%	85%

Rate of Seeding = 220 lbs/acre

Remove all stumps, brush, sticks, roots, stones larger than ½” in diameter, concrete chunks, rebar, wire or other material that may hinder seeding and maintenance operations. Dispose of any accumulated material at no additional cost to the City/State.

704-P01 TEMPORARY TRAFFIC CONTROL PHASING: The traffic control details, as indicated in the plans, have been developed based on the premise that this project will be constructed in three phases. The three phases must be constructed independently.

If electing to utilize a different phasing plan, submit a detailed traffic control plan to the Engineer for approval a minimum of 14 days prior to installing traffic control devices.

Phase 1:
Construct the shared use path from Sta. 108+32 to Sta. 159+80. Coordinate closure of the VA Health Care loop road with the Fargo VA Health Care Engineering Department. Close the VA Health Care loop road crossings for a maximum 14 consecutive calendar days. Both VA Health Care loop road crossings must be closed concurrently.

Phase 2:
Construct the shared use path from Sta. 300+50 to Sta. 303+97. Close the existing sidewalk east of Elm St. N from 18th Ave. N from 19th Ave. N. Detour pedestrian traffic as shown in the plans. Close the northbound lane of Elm St. N as necessary during construction. Utilize layouts as shown in Standard Drawing 704-25. Remove lane closure at the end of each working day.

Phase 3:
Construct the shared use path from Sta. 100+43 to Sta. 108+32, the shared use path from Sta. 200+50 to Sta. 204+01, and the sidewalk and driveway near Sta. 203+90. Close the existing shared use path and sidewalk east of Elm St. N from the El Zagal Golf Course driveway to Woodland Dr. N. Detour pedestrian traffic as shown in the plans. Close the northbound lane of Elm St. N as necessary during construction. Utilize layouts as shown in Standard Drawing 704-25. Remove lane closure at the end of each working day.

722-P01 ADJUST MANHOLE: Adjust existing manhole as shown in Section 55. Inspect the manhole to determine condition and size. Include all costs associated with raising the manhole and replacing the casting in the price bid for “Adjust Manhole”.

750-P01 SIDEWALK CONCRETE: Modify SP 375(24) with the following. Provide at least two employees with a current ACI concrete flatwork technician or flatwork finisher certification. At least one of those employees must be onsite performing quality control and guidance during all concrete forming, placement of reinforcement steel, dowel bars, and tie bars, pouring, finishing, and curing operations.

More information about the ACI Flatwork Finisher training schedule can be found by going to www.ndconcrete.com or by calling 701-223-2770.

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750-P02 SIDEWALK CONCRETE: Modify SP 375(24) with the following. Provide concrete materials with a maximum water to cementitious ratio of 0.42. Provide a concrete mix with a maximum of 620 lbs total cementitious concrete including fly ash and slag cement and a minimum 28-day compressive strength of 4,500 PSI. Provide a concrete mix with at least 20% of the cementitious content, by mass, as fly ash or slag cement.

750-P03 SIDEWALK CONCRETE: Provide ½" thick expansion material. Provide a minimum of ½" diameter reinforcement.

Expansion Joints – Coat the "free" end of the smooth dowel with an approved lubricant and covered with an approved metal or plastic dowel cap or sleeve.

Completely remove concrete to the nearest planned longitudinal and transverse joint if uncontrolled cracking occurs. Remove and replace the concrete sidewalk using a method approved by the Engineer at the Contractor's expense.

Match the existing elevation of all adjoining concrete within +/-⅛". Remove and replace any placed concrete not properly matching elevations as deemed by the Engineer at the Contractor's expense.

750-P04 SIDEWALK CONCRETE: Construct concrete landings separately prior to adjacent ramps and/or sidewalks/paths. Provide a minimum of 24 hours of cure time on the landings prior to placing adjacent concrete.

750-P05 SIDEWALK CONCRETE: The Engineer will mark the boundary locations of the ADA ramps and bottom of curb transitions in the field. Construct all ADA ramps in accordance with the plans, specifications, standard drawings, and current Federal ADA Standards. Use experienced personnel and suitable equipment.

This work includes placement of the following:

- Curb transitions
- Ramp flares
- Grade breaks
- Detectable warning panels
- Landing and ramp limits

Any ramp that does not comply with ADA requirements or agreed upon resolutions will be removed and replaced at the Contractor's expense.

752-P01 FENCE CHAIN LINK: Install fence posts from Sta. 124+60 to Sta. 127+58 with concrete foundations and sleeves as shown on Section 20 Sheet 8. Include all costs to install concrete foundations, sleeves, and fence in the price bid for "Fence Chain Link".

752-P02 VEHICLE GATE: Include all costs to provide and install vehicle gates, regardless of width, in the price bid for "Vehicle Gate".

752-P03 RESET VEHICLE GATE: Modify the existing vehicle gate at Sta. 124+60 to allow for 180° rotation. Include all cost to modify and reset the vehicle gate in the price bid for "Reset Vehicle Gate".

754-P01 FLAT SHEET FOR SIGNS–TYPE XI REFLECTIVE SHEETING: Include all costs for sign sheeting, perforated tube sign supports, reinforcement sleeves, anchors, stringers, and mounting hardware in the price bid for "Flat Sheet for Signs–Type XI Refl Sheeting".

770-P01 DESTINATION LIGHTING - SOLAR: Provide and install 100W ATHENS Solar Area Light by Beyond Solar, 100W eLEDing EE880W-SHRC100 or approved equal solar light. Install solar lights per the manufacturer's recommendation.

970-P01 BENCH: Provide and install Sitescapes Model #CV1-1101, Wausau Tile MF2205 or approved equal 6' long bench. Benches to be backless and include center and end armrests. Surface mount block powder coated benches. Include all costs to furnish and install benches in the unit price bid for "Bench".

970-P02 REPLANT TREES: Replant deciduous trees at locations determined by the Engineer in the field. See Section 40 for size and location of trees to be spaded and replanted. Protect all trees within the work area that are not noted in Section 40 for removal or replanting. Minimize damage to the critical root zone (CRZ). The CRZ is an area defined by the diameter of the tree as measured at a point 4.5 feet above the ground line. For every 1 inch of tree diameter, a 1 foot clear zone must be established to protect the CRZ. Establish and mark out the CRZ areas prior to construction or staging.

Submit a plan outlining tree damage minimization procedures to the Engineer for approval 7 days prior to beginning work within the CRZ. Contact the Engineer prior to cutting or damaging any branch or root over 4" diameter. Clean exposed roots and backfill as quickly as possible to avoid drying out.

If damage is caused to any existing tree due to failure to adhere to the tree protection requirements, damage will be assessed to determine if the damage can be repaired or if the tree must be removed. Use a certified arborist to complete any action plan to repair damaged trees, include in the cost for "Replant Trees".
If damage is severe and tree removal is necessary, the tree's appraised value, as determined by the Engineer utilizing the Guide for Plant Appraisal by the Council of Tree and Landscape Appraisers, will be deducted from the contract.

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NOTES

Complete spading and planting operations between May 1 and June 15 or between September 1 and October 15. Replant the tree immediately after spading and maintain, including but not limited to protection, watering and establishment, of all trees following the specifications in Section 7000 of the City of Fargo's Standard Specifications for Construction in SP 375(24) and in Section 20 of the plans.

Include all costs to spade, transport, replant, maintain and establish identified trees in the price bid for "Replant Trees".

980-P01 RELOCATE ROAD CLOSURE GATE: Remove the existing road closure gate on the driveway near Sta. 122+39 and reset as shown on Section 80 Sheet 1. Include all costs to remove and reset the road closure gate in the price bid for "Relocate Road Closure Gate".

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ENVIRONMENTAL NOTES

ENVIRONMENTAL NOTES (EN): The North Dakota Department of Transportation has made environmental commitments to secure approval of this project. The following environmental notes are requirements to comply with these commitments:

EN-1 SPAWNING RESTRICTION: Do not work within the Red River Channel from March 15 to June 30.

EN-2 TEMPORARY WETLAND IMPACT: Temporary impact areas within wetlands and/or other waters are incorporated into the plans for this project. Remove temporary fill placed and sedimentation in wetlands or other waters. Restore these wetlands to preconstruction contours.

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7/18/2025

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Estimated Quantities

SPEC	CODE	ITEM DESCRIPTION	UNIT	Trail Participating	Trail Non-Participating			TOTAL
103	0100	CONTRACT BOND	L SUM	1				1
201	0330	CLEARING & GRUBBING	L SUM	1				1
202	0021	REMOVE AGGREGATE BASE & SURFACING	TON	254				254
202	0310	REMOVAL OF CHAIN LINK FENCE	LF	121				121
203	0103	COMMON EXCAVATION-TYPE C	CY	553				553
203	0109	TOPSOIL	CY	4267				4267
203	0140	BORROW-EXCAVATION	CY	3054				3054
216	0100	WATER	M GAL	85				85
251	0300	SEEDING CLASS III	ACRE	3.727				3.727
251	2000	TEMPORARY COVER CROP	ACRE	3.727				3.727
253	0201	HYDRAULIC MULCH	ACRE	7.454				7.454
261	0112	FIBER ROLLS 12IN	LF	14128				14128
261	0113	REMOVE FIBER ROLLS 12IN	LF	7064				7064
302	0120	AGGREGATE BASE COURSE CL 5	TON	24				24
430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	64				64
702	0100	MOBILIZATION	L SUM	1				1
704	0100	FLAGGING	MHR	48				48
704	1000	TRAFFIC CONTROL SIGNS	UNIT	396				396
704	1052	TYPE III BARRICADE	EA	6				6
704	1054	SIDEWALK BARRICADE	EA	13				13
704	1060	DELINEATOR DRUMS	EA	4				4
704	1067	TUBULAR MARKERS	EA	11				11
708	1540	INLET PROTECTION-SPECIAL	EA	4				4
708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	4				4
714	0115	PIPE CONC REINF 12IN CL III-STORM DRAIN	LF	18				18
714	4095	PIPE CONDUIT 15IN	LF	20				20
722	0100	MANHOLE 48IN	EA	1				1
722	0315	MANHOLE CASTING	EA	2				2
722	3455	CASTING INLET-TYPE 1	EA	1				1
722	3499	INLET	EA	1				1
722	6200	ADJUST MANHOLE	EA	1				1
748	0140	CURB & GUTTER-TYPE I	LF	16				16
750	0125	SIDEWALK CONCRETE 5IN	SY	7473				7473
750	1000	DRIVEWAY CONCRETE	SY	420				420
752	0600	FENCE CHAIN LINK	LF	30	632			662
752	0920	FENCE REMOVE & RESET	L SUM	1				1
752	2100	VEHICLE GATE	EA	1	2			3
752	2110	RESET VEHICLE GATE	EA	1				1
752	2120	REMOVE VEHICLE GATE	EA	1				1
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	64	16			80
770	0009	DESTINATION LIGHTING - SOLAR	EA		3			3
970	0300	BENCH	EA	1				1
970	1025	REPLANT TREES	EA	2				2
980	0800	RELOCATE ROAD CLOSURE GATE	EA	1				1

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BASIS OF ESTIMATE

Commercial Grade Hot Mix Asphalt					
Station Range	Slough Length LF	Slough Area SF	Surface Area SF	Depth IN	Weight TON
Sta 125+74.32 to Sta 126+37.51	120.00	0.50	618.35	6	27
Sta 145+45.12 to Sta 145+85.71	56.55	0.50	415.58	6	17
Sta 152+93.22 to Sta 153+23.52	61.94	0.50	439.55	6	19
Sta 204+03.80 to Sta 204+04.80	-	-	16.00	6	1
				Total	**64**

Sidewalk Concrete 5IN					
Station Range	Length LF	Width LF	Surface Area SF	Depth IN	Area SY
Sta 100+42.50 to Sta 100+51.38	-	-	315.51	5	35
Sta 100+51.38 to Sta 122+69.40	2,218.02	10.00	-	5	2,464
Sta 115+74.71 to Sta 115+93.71 Lt	-	-	60.00	5	7
Sta 123+77.61 to Sta 125+69.65	192.04	10.00	-	5	213
Sta 126+17.46 to Sta 145+43.46	1,926.00	10.00	-	5	2,140
Sta 131+20.73 to Sta 131+35.36 Lt	-	-	154.55	5	17
Sta 145+83.69 to Sta 152+95.75	712.06	10.00	-	5	791
Sta 153+25.00 to Sta 159+72.43	647.43	10.00	-	5	719
Sta 159+72.43 to Sta 159+79.87	-	-	97.86	5	11
Sta 200+50.00 to Sta 200+90.20	-	-	325.10	5	36
Sta 200+90.20 to Sta 203+87.30	297.10	10.00	-	5	330
Sta 203+87.30 to Sta 203+92.30	-	-	100.00	5	11
Sta 300+50.00 to Sta 300+62.41	-	-	218.11	5	24
Sta 300+62.41 to Sta 306+15.48	553.07	10.00	-	5	615
Sta 306+29.48 to Sta 306+57.21	-	-	538.66	5	60
				Total	**7,473**

Driveway Concrete					
Station Range	Length LF	Width LF	Surface Area SF	Depth IN	Area SY
Sta 125+69.65 to Sta 126+17.46	47.81	10.00	-	7	53
Sta 145+43.46 to Sta 145+83.69	40.23	10.00	-	7	45
Sta 152+95.75 to Sta 153+25.00	29.25	10.00	-	7	33
Sta 203+87.30 to Sta 204+01.30	-	-	167.00	7	19
Sta 400+75.00 to Sta 400+98.57	-	-	327.63	7	36
Sta 400+98.57 to Sta 402+42.95	144.38	14.00	-	7	225
Sta 402+22.71 to Sta 402+42.95 Rt	-	-	79.64	7	9
				Total	**420**

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BASIS OF ESTIMATE

Aggregate Base Course CL 5					
Station Range	Slough Length LF	Slough Area SF	Surface Area SF	Depth IN	Weight TON
Sta 152+83.63 to Sta 153+25.07	87.06	0.50	602.68	6	24
				Total	**24**

Aggregate Base Course CL 5* Under Commercial Grade Hot Mix Asphalt					
Station Range	Slough Length LF	Slough Area SF	Surface Area SF	Depth IN	Volume CY
Sta 125+74.32 to Sta 126+37.51	120.00	1.50	618.35	6	18.12
Sta 145+42.04 to Sta 145+82.63	56.55	0.50	415.58	6	8.74
Sta 152+79.12 to Sta 153+09.42	61.94	0.50	439.55	6	9.29
Sta 204+03.80 to Sta 204+04.80	-	-	16.00	6	0.30
				Total	**36.45**

Aggregate Base Course CL 5* Under Curb & Gutter-Type I, Sidewalk Concrete 5IN, & Driveway Concrete					
Station Range	Length LF	Width LF	Surface Area SF	Depth IN	Volume CY
Sta 100+42.50 to Sta 100+51.38	-	-	337.53	2	2.08
Sta 100+51.38 to Sta 122+69.40	2,218.02	11.00	-	2	150.61
Sta 115+74.71 to Sta 115+93.71 Lt	-	-	61.66	2	0.38
Sta 123+77.61 to Sta 159+72.43	3,594.82	11.00	-	2	244.09
Sta 131+20.73 to Sta 131+35.36 Lt	-	-	158.24	2	0.98
Sta 159+72.43 to Sta 159+79.87	-	-	107.19	2	0.66
Sta 200+50.00 to Sta 200+90.20	-	-	327.02	2	2.02
Sta 200+90.20 to Sta 203+87.30	297.10	11.00	-	2	20.17
Sta 203+87.30 to Sta 204+01.30	-	-	295.38	2	1.82
Sta 204+01.30 to Sta 204+03.80	-	-	40.00	7	0.86
Sta 300+50.00 to Sta 300+62.41	-	-	233.24	2	1.44
Sta 300+62.41 to Sta 306+15.48	553.07	11.00	-	2	37.55
Sta 306+29.48 to Sta 306+57.21	-	-	506.96	2	3.13
Sta 400+75.00 to Sta 400+98.57	-	-	350.73	2	2.17
Sta 400+98.57 to Sta 402+42.95	144.38	15.00	-	2	13.37
Sta 402+22.71 to Sta 402+42.95 Rt	-	-	73.42	2	0.45
				Total	**481.78**

* Included in price bid for Commercial Grade Hot Mix Asphalt, Curb & Gutter-Type I, Sidewalk Concrete 5IN, and Driveway Concrete.

Water
25 MGal/Mile for Dust Palliative
20 Gal/Ton for Aggregates
10 Gal/CY for Embankment

Conversions
Commercial Grade Hot Mix Asphalt – 2 TON/CY
Aggregate Base Course CL 5 – 1.875 TON/CY

REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	11	1

Red River Trail								
		Common Excavation - Type C			Embankment			
Station	Distance (LF)	Area (SF)	Volume (CY)	Accumulated Volume (CY)	Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
100+42.50		3.32			0.00			
100+50.00	7.50	1.87	1	1	0.12	0	0	1
101+00.00	50.00	4.32	6	7	0.00	0	0	7
101+50.00	50.00	2.88	7	14	0.25	0	0	14
102+00.00	50.00	3.06	6	20	0.00	0	0	20
102+50.00	50.00	1.02	4	24	0.47	1	1	23
103+00.00	50.00	1.78	3	27	0.42	1	2	25
103+50.00	50.00	2.55	4	31	0.00	0	2	29
104+00.00	50.00	0.41	3	34	10.13	11	13	21
104+50.00	50.00	0.66	1	35	2.51	13	26	9
105+00.00	50.00	13.67	13	48	0.00	3	29	19
105+50.00	50.00	0.40	13	61	12.23	13	42	19
106+00.00	50.00	0.42	1	62	6.92	20	62	0
106+50.00	50.00	1.84	2	64	3.07	11	73	-9
107+00.00	50.00	1.07	3	67	0.08	3	76	-9
107+50.00	50.00	2.16	3	70	0.00	0	76	-6
108+00.00	50.00	2.44	4	74	2.35	3	79	-5
108+50.00	50.00	2.26	4	78	3.83	7	86	-8
109+00.00	50.00	1.95	4	82	0.51	5	91	-9
109+50.00	50.00	1.15	3	85	0.24	1	92	-7
110+00.00	50.00	3.32	4	89	0.01	0	92	-3
110+50.00	50.00	4.88	8	97	0.57	1	93	4
111+00.00	50.00	4.43	9	106	0.00	1	94	12
111+50.00	50.00	5.84	10	116	0.00	0	94	22
112+00.00	50.00	0.48	6	122	3.96	4	98	24
112+50.00	50.00	0.65	1	123	0.67	5	103	20
113+00.00	50.00	2.44	3	126	1.70	3	106	20
113+50.00	50.00	2.84	5	131	0.16	2	108	23
114+00.00	50.00	1.50	4	135	0.10	0	108	27
114+50.00	50.00	1.09	2	137	0.00	0	108	29
115+00.00	50.00	3.30	4	141	0.00	0	108	33
115+50.00	50.00	0.95	4	145	0.00	0	108	37
116+00.00	50.00	0.82	2	147	0.00	0	108	39
116+50.00	50.00	0.88	2	149	12.04	13	121	28
117+00.00	50.00	0.71	1	150	50.46	67	188	-38
117+50.00	50.00	0.85	1	151	57.61	115	303	-152
118+00.00	50.00	0.74	1	152	31.73	95	398	-246
118+50.00	50.00	0.98	2	154	25.19	61	459	-305
119+00.00	50.00	0.94	2	156	27.25	56	515	-359
119+50.00	50.00	0.93	2	158	15.16	45	560	-402
120+00.00	50.00	0.80	2	160	10.18	27	587	-427
120+50.00	50.00	0.75	1	161	15.56	27	614	-453

Red River Trail								
		Common Excavation - Type C			Embankment			
Station	Distance (LF)	Area (SF)	Volume (CY)	Accumulated Volume (CY)	Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
121+00.00	50.00	1.18	2	163	32.88	52	666	-503
121+50.00	50.00	0.70	2	165	26.64	63	729	-564
122+00.00	50.00	0.98	2	167	24.57	55	784	-617
122+50.00	50.00	1.17	2	169	10.08	37	821	-652
123+00.00	50.00	2.89	4	173	0.00	11	832	-659
123+50.00	50.00	2.60	5	178	0.00	0	832	-654
124+00.00	50.00	1.04	3	181	3.07	3	835	-654
124+50.00	50.00	1.21	2	183	0.99	4	839	-656
125+00.00	50.00	1.24	2	185	0.00	1	840	-655
125+50.00	50.00	1.05	2	187	0.04	0	840	-653
126+00.00	50.00	8.13	9	196	2.37	3	843	-647
126+50.00	50.00	1.44	9	205	50.86	57	900	-695
127+00.00	50.00	0.73	2	207	35.53	92	992	-785
127+50.00	50.00	0.91	2	209	7.72	46	1038	-829
128+00.00	50.00	3.65	4	213	1.47	10	1048	-835
128+50.00	50.00	9.17	12	225	0.05	2	1050	-825
129+00.00	50.00	0.45	9	234	21.63	23	1073	-839
129+50.00	50.00	0.46	1	235	22.85	47	1120	-885
130+00.00	50.00	1.14	1	236	4.69	29	1149	-913
130+50.00	50.00	2.99	4	240	0.09	5	1154	-914
131+00.00	50.00	2.61	5	245	0.74	1	1155	-910
131+50.00	50.00	4.03	6	251	6.62	8	1163	-912
132+00.00	50.00	1.48	5	256	0.85	8	1171	-915
132+50.00	50.00	0.92	2	258	2.91	4	1175	-917
133+00.00	50.00	0.64	1	259	2.51	6	1181	-922
133+50.00	50.00	0.70	1	260	2.62	5	1186	-926
134+00.00	50.00	1.04	2	262	2.77	6	1192	-930
134+50.00	50.00	1.34	2	264	2.00	5	1197	-933
135+00.00	50.00	0.65	2	266	2.47	5	1202	-936
135+50.00	50.00	0.75	1	267	2.15	5	1207	-940
136+00.00	50.00	1.16	2	269	3.67	6	1213	-944
136+50.00	50.00	2.51	3	272	7.28	12	1225	-953
137+00.00	50.00	1.50	4	276	37.93	48	1273	-997
137+50.00	50.00	1.34	3	279	39.23	82	1355	-1076
138+00.00	50.00	0.57	2	281	34.46	78	1433	-1152
138+50.00	50.00	1.43	2	283	23.53	62	1495	-1212
139+00.00	50.00	1.08	2	285	12.68	39	1534	-1249
139+50.00	50.00	0.81	2	287	8.39	22	1556	-1269
140+00.00	50.00	0.75	1	288	4.16	13	1569	-1281
140+50.00	50.00	1.62	2	290	7.30	12	1581	-1291

* An additional volume of 15% has been included to allow for shrinkage.

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Data Tables

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	11	2

Red River Trail

Station	Distance (LF)	Common Excavation - Type C Area (SF)	Volume (CY)	Accumulated Volume (CY)	Embankment Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
141+00.00	50.00	1.85	3	293	12.12	21	1602	-1309
141+50.00	50.00	1.69	3	296	18.24	32	1634	-1338
142+00.00	50.00	1.85	3	299	15.52	36	1670	-1371
142+50.00	50.00	1.51	3	302	10.23	27	1697	-1395
143+00.00	50.00	1.05	2	304	10.07	22	1719	-1415
143+50.00	50.00	0.88	2	306	6.05	17	1736	-1430
144+00.00	50.00	1.10	2	308	7.75	15	1751	-1443
144+50.00	50.00	1.02	2	310	29.81	40	1791	-1481
145+00.00	50.00	0.93	2	312	58.19	94	1885	-1573
145+50.00	50.00	7.76	8	320	0.24	62	1947	-1627
146+00.00	50.00	0.96	8	328	2.57	3	1950	-1622
146+50.00	50.00	0.89	2	330	1.76	5	1955	-1625
147+00.00	50.00	0.64	1	331	0.00	2	1957	-1626
147+50.00	50.00	0.82	1	332	0.00	0	1957	-1625
148+00.00	50.00	0.93	2	334	1.83	2	1959	-1625
148+50.00	50.00	1.08	2	336	0.00	2	1961	-1625
149+00.00	50.00	1.08	2	338	4.05	4	1965	-1627
149+50.00	50.00	0.82	2	340	4.08	9	1974	-1634
150+00.00	50.00	2.85	3	343	0.00	4	1978	-1635
150+50.00	50.00	3.00	5	348	0.00	0	1978	-1630
151+00.00	50.00	1.62	4	352	0.32	0	1978	-1626
151+50.00	50.00	0.56	2	354	0.23	1	1979	-1625
152+00.00	50.00	0.45	1	355	0.12	0	1979	-1624
152+50.00	50.00	0.67	1	356	0.87	1	1980	-1624
153+00.00	50.00	1.04	2	358	11.26	13	1993	-1635
153+50.00	50.00	0.80	2	360	1.12	13	2006	-1646
154+00.00	50.00	0.59	1	361	0.00	1	2007	-1646
154+50.00	50.00	1.03	2	363	3.64	4	2011	-1648
155+00.00	50.00	0.91	2	365	2.07	6	2017	-1652
155+50.00	50.00	17.43	17	382	0.00	2	2019	-1637
156+00.00	50.00	1.61	18	400	6.81	7	2026	-1626
156+50.00	50.00	8.11	9	409	0.00	7	2033	-1624
157+00.00	50.00	14.84	21	430	0.00	0	2033	-1603
157+50.00	50.00	1.22	15	445	0.11	0	2033	-1588
158+00.00	50.00	3.13	4	449	0.00	0	2033	-1584
158+50.00	50.00	1.68	4	453	0.12	0	2033	-1580
159+00.00	50.00	0.67	2	455	0.04	0	2033	-1578
159+50.00	50.00	3.82	4	459	0.00	0	2033	-1574
159+79.87	29.87	1.01	3	462	0.00	0	2033	-1571
			Total	462		Total	2033	

Elm Connection South

Station	Distance (LF)	Common Excavation - Type C Area (SF)	Volume (CY)	Accumulated Volume (CY)	Embankment Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
200+50.00		0.55			0.00			
201+00.00	50.00	3.33	4	4	16.38	17	17	-13
201+50.00	50.00	0.36	3	7	52.82	74	91	-84
202+00.00	50.00	1.41	2	9	46.89	106	197	-188
202+50.00	50.00	0.73	2	11	45.17	98	295	-284
203+00.00	50.00	0.47	1	12	28.21	78	373	-361
203+50.00	50.00	0.68	1	13	9.49	40	413	-400
204+00.00	50.00	8.59	9	22	0.00	10	423	-401
204+01.30	1.30	7.15	0	22	0.00	0	423	-401
			Total	22		Total	423	

Elm Connection North

Station	Distance (LF)	Common Excavation - Type C Area (SF)	Volume (CY)	Accumulated Volume (CY)	Embankment Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
300+50.00		1.70			0.00			
301+00.00	50.00	0.54	2	2	139.60	149	149	-147
301+50.00	50.00	0.77	1	3	59.74	212	361	-358
302+00.00	50.00	1.77	2	5	0.00	64	425	-420
302+50.00	50.00	2.03	4	9	0.00	0	425	-416
303+00.00	50.00	1.21	3	12	0.04	0	425	-413
303+50.00	50.00	0.89	2	14	3.85	4	429	-415
304+00.00	50.00	0.39	1	15	53.12	61	490	-475
304+50.00	50.00	0.67	1	16	67.69	129	619	-603
305+00.00	50.00	0.81	1	17	92.94	171	790	-773
305+50.00	50.00	0.61	1	18	90.06	195	985	-967
306+00.00	50.00	0.87	1	19	49.23	148	1133	-1114
306+15.48	15.48	58.45	17	36	0.00	16	1149	-1113
			Total	36		Total	1149	

Driveway Connection

Station	Distance (LF)	Common Excavation - Type C Area (SF)	Volume (CY)	Accumulated Volume (CY)	Embankment Area (SF)	Adjusted Volume (CY)*	Accumulated Volume (CY)	Mass Ordinate (CY)
400+75.00		3.36			0.00			
401+00.00	25.00	18.62	10	10	0.95	1	1	9
401+50.00	50.00	1.59	19	29	0.00	1	2	27
402+00.00	50.00	0.64	2	31	0.00	0	2	29
402+42.95	42.95	0.70	2	33	0.00	0	2	31
			Total	33		Total	2	

* An additional volume of 15% has been included to allow for shrinkage.

Earthwork Summary

Location	Excavation (CY)	Embankment (CY)	Common Excavation - Type C (CY) Pay Item	Borrow Excavation (CY) Pay Item	Topsoil Stripping (CY) Pay Item	Topsoil Placement (CY)
Red River Trail	553	3607	553	3054	4267	4267

Topsoil Stripping based on 6" depth.
Topsoil Placement based on 11.1" depth.

THE CITY OF Fargo FAR MORE

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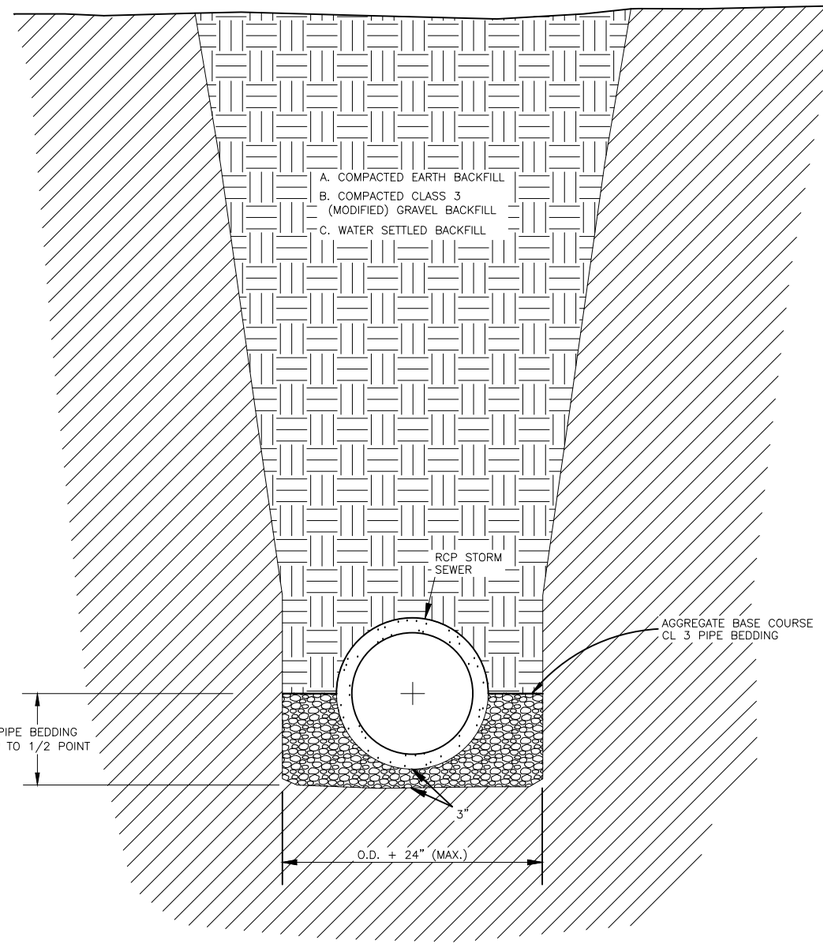
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Data Tables

Red River Trail

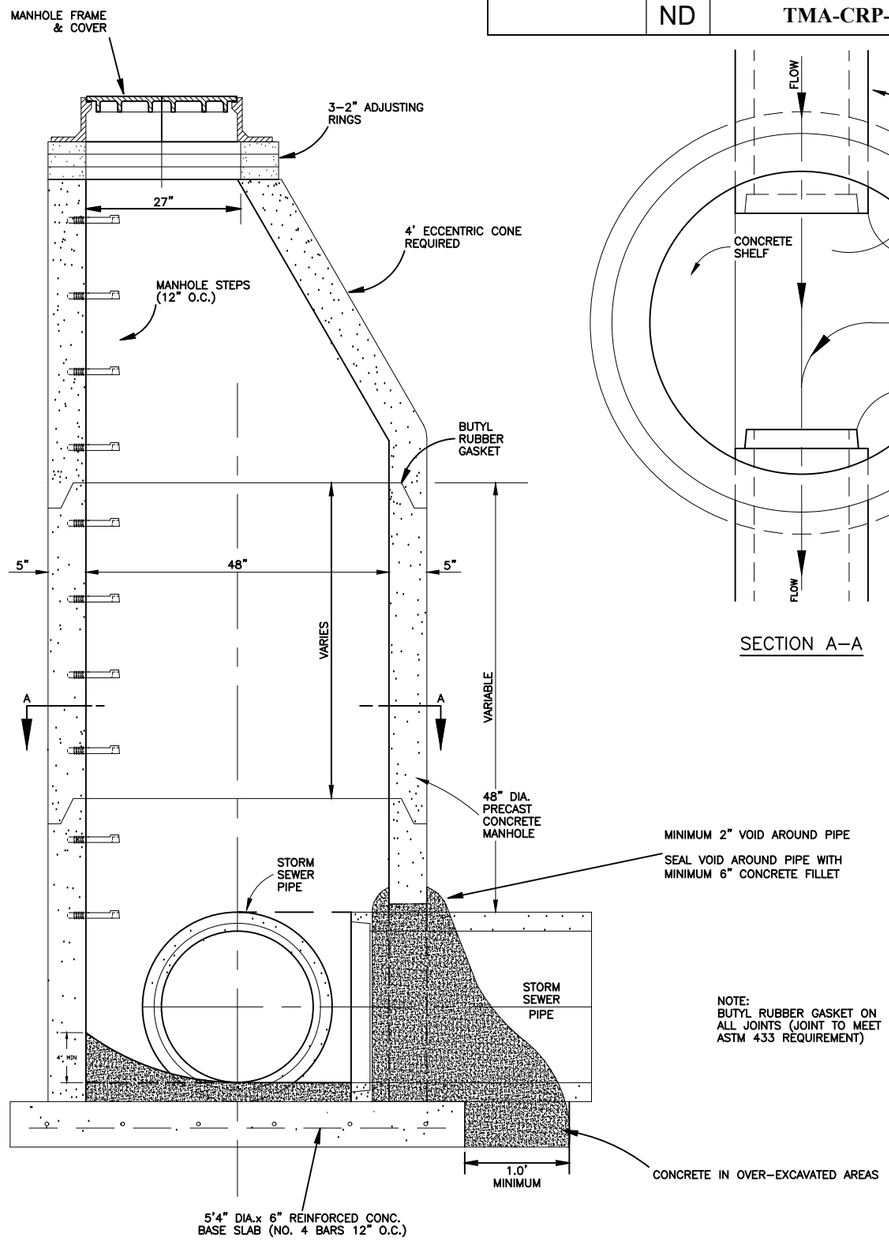
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	1



NOTES:

1. MAXIMUM TRENCH WIDTH FOR 60", 66" & 72" RCP NOT TO EXCEED OUTSIDE DIAMETER OF PIPE + 12" FROM BOTTOM OF TRENCH TO A POINT 2' ABOVE PIPE.
2. ALL LIFTING HOLES TO BE PLUGGED & MORTARED.
3. PVC PIPE – GRAVEL BEDDING/ENCASEMENT REQUIRED TO 3" ABOVE PIPE.

STORM SEWER TRENCH BACKFILL
NOT TO SCALE



NOTE:
BUTYL RUBBER GASKET ON ALL JOINTS (JOINT TO MEET ASTM 433 REQUIREMENT)

NOTES:
1. CASTING FRAME AND COVER AS SHOWN IN SECTION 55.
2. ALL JOINTS AND LIFTING HOLES SHALL BE MORTARED.

STORM SEWER STANDARD MANHOLE
NOT TO SCALE

SECTION A–A

THE CITY OF Fargo FAR MORE

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ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

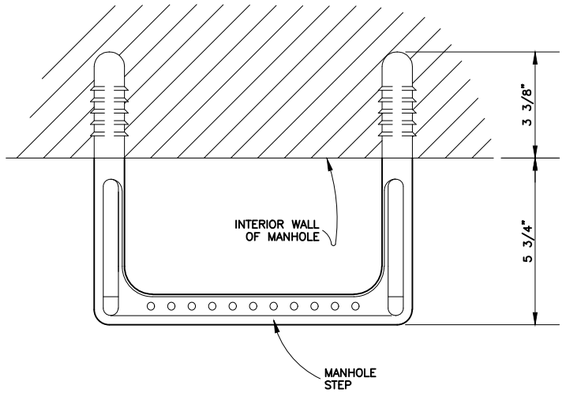
7/18/2025

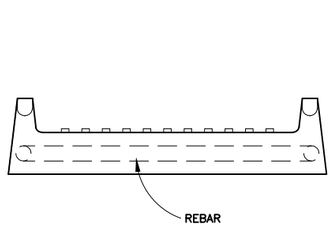
General Details

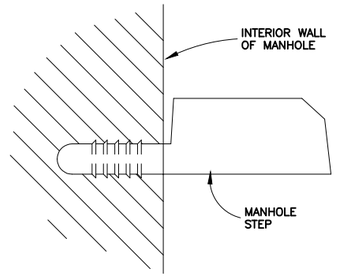
Red River Trail

07/07/25 08:41:33AM H:\JBN\6000\6059\6059_0217 17th Ave S\CAD\Plans\020 – General Details.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	2

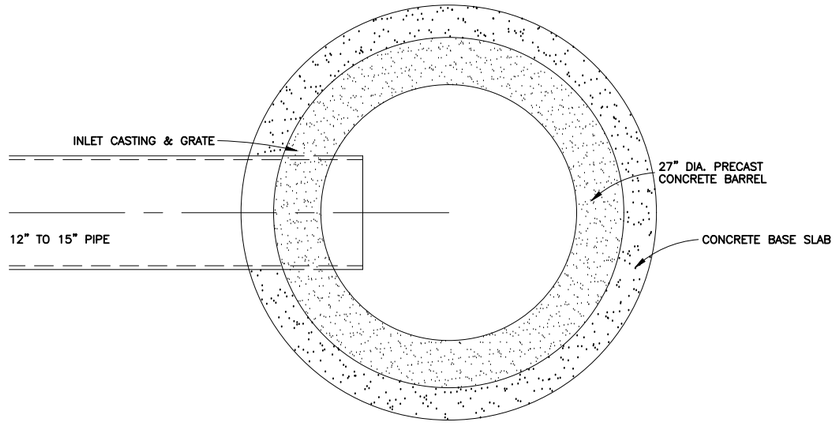


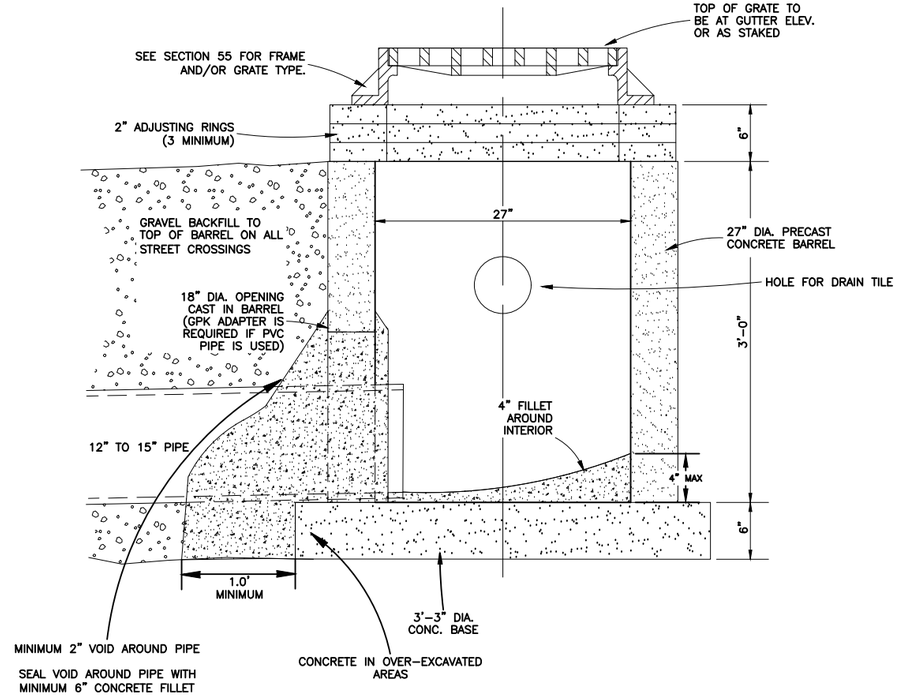




NOTE:
STEP SHALL BE CONSTRUCTED OF 1/2" REINFORCING ROD AND COMPLETELY ENCASED IN A CORROSION RESISTANT RUBBER OR POLYPROPYLENE PLASTIC, WHICH WILL RESIST DETERIORATION FROM HYDROGEN SULFIDE OR OTHER CHEMICALS AND GASES ENCOUNTERED IN MANHOLE APPLICATION. ALSO, STEP SHALL HAVE A VERTICAL RESISTANCE OF 400 LBS., AND A PULLOUT RESISTANCE OF 1000 LBS. SUCH AS: THE WEDG-LOC STEP BY DELTA PIPE PRODUCTS OR APPROVED EQUAL.

MANHOLE STEP DETAIL
NOT TO SCALE





STORM SEWER ROUND INLET (RDI)
NOT TO SCALE

THE CITY OF Fargo FAR MORE

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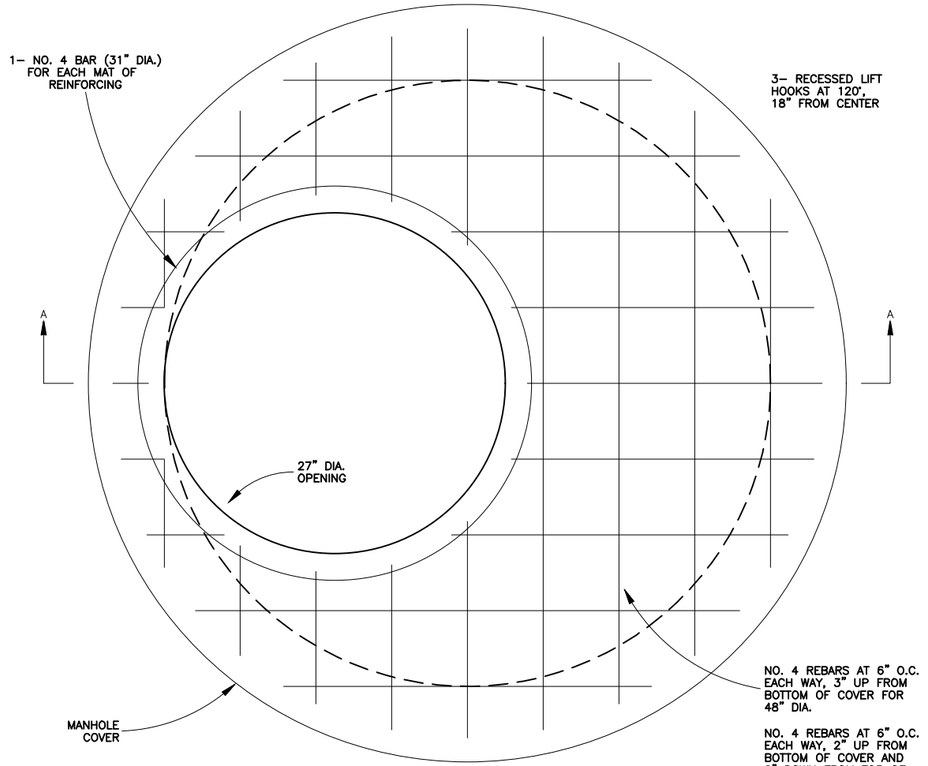
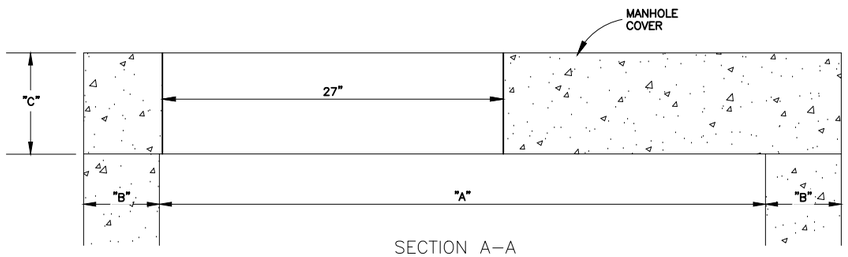
General Details

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	3





SECTION A–A

DIMENSION TABLE

A	B	C
48"	5"	6"
60"	6"	7"
72"	7"	8"
84"	8"	9"
96"	9"	9"

TO BE USED WHEN STRUCTURE IS LOCATED OUTSIDE GUTTER LINE

MANHOLE COVER DETAIL
NOT TO SCALE

THE CITY OF Fargo FAR MORE

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Houston Engineering Inc.
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ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

General Details

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	4

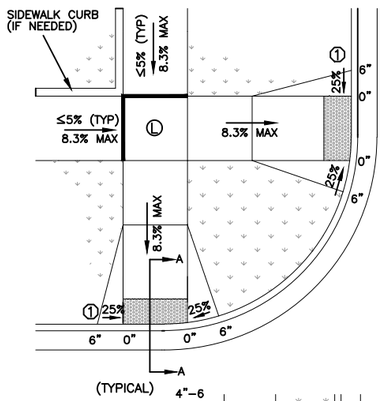
SIDEWALK RAMPS

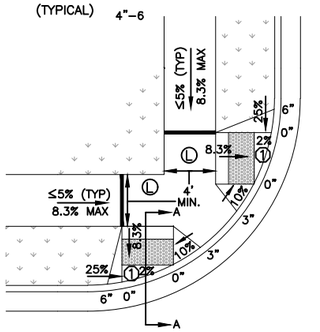
TYPE A

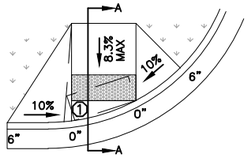
TYPE B : SIDEWALK ADJACENT TO STREET CURB

TYPE C : CONTINUOUS CONCRETE IN BOULEVARD (TYPICALLY DOWNTOWN AREA)

TYPE A





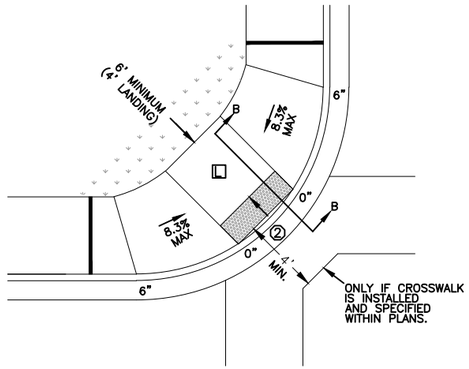


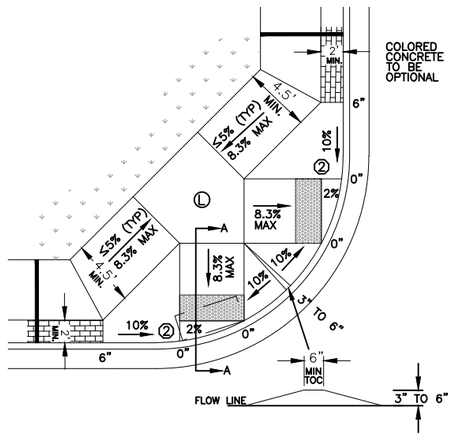
ALTERNATIVE DWP

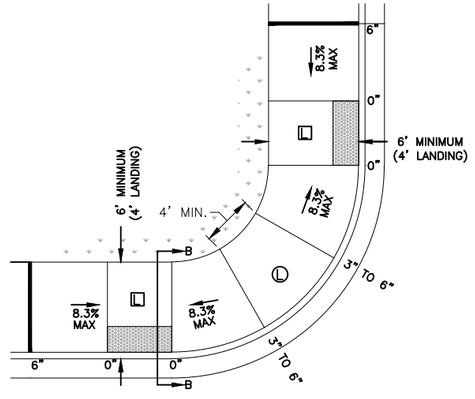
① 5' MAX, 3" MAX — NOT CONTINOUS WALK SURFACE IN BLVD (GRASS BLVD)

② 2' MAX, 3" MAX — CONTINOUS WALK SURFACE IN BLVD (CONCRETE BLVD)

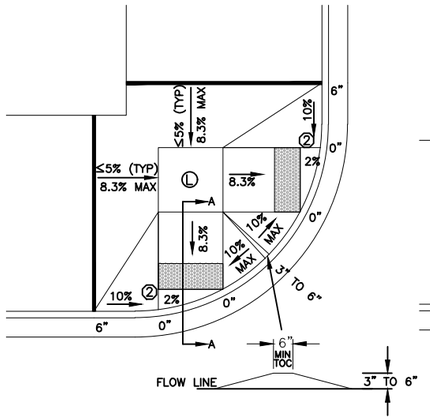
TYPE B

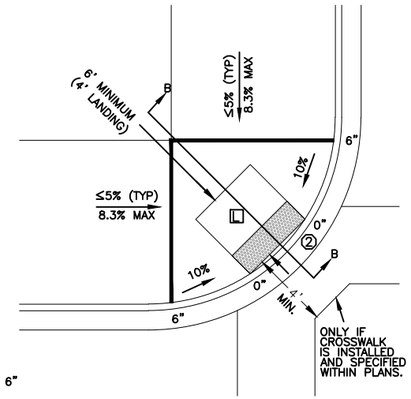


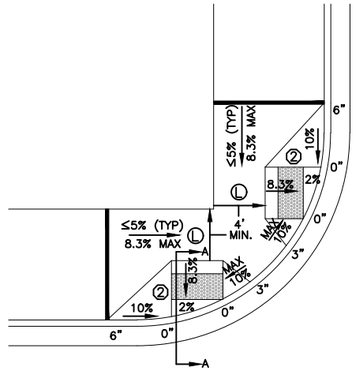


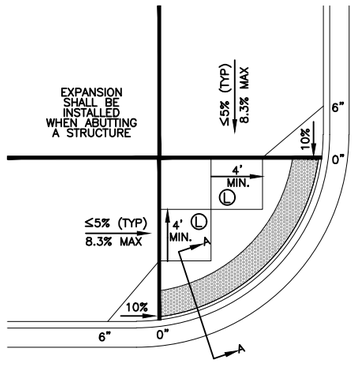


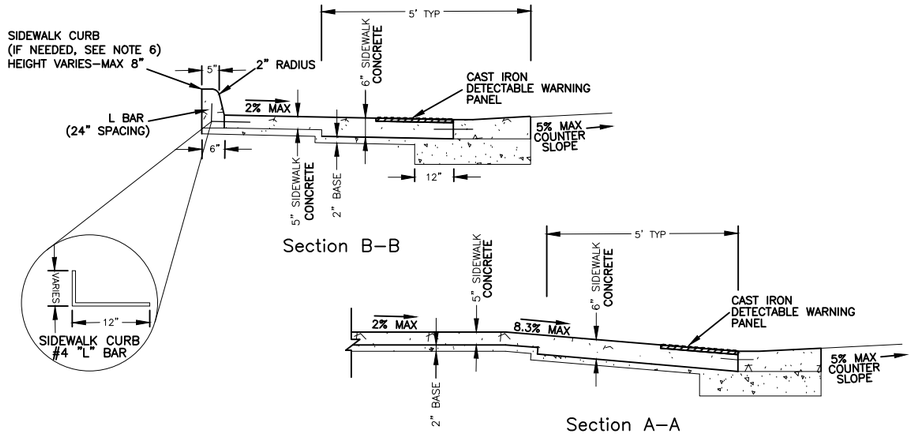
TYPE C











SIDEWALK RAMP CROSS–SECTIONS

LEGEND:

- DETECTABLE WARNING PANEL UNPAINTED CAST IRON
- GRASS
- COLORED BRICK CONCRETE (MIN 2')
- Ⓤ UPPER LANDING 2% MAX
- Ⓛ LOWER LANDING 2% MAX
- 0", 3", 4" OR 6" CURB HEIGHT
- 1/2" EXPANSION (ALL EXPANSION SHALL BE SEALED WITH HOT POUR)

20:1=5% 12:1=8.3% 10:1=10% 4:1=25%

NOTES:

1. RAMP WIDTH IS DEFINED AS THE USEABLE PORTION OF THE RAMP, EXCLUDING FLARES IF USED.

   CURB RAMP WIDTH SHOULD MATCH THE EXISTING SIDEWALK WIDTH. 4' WIDTH MINIMUM.

   RAMP WIDTH FOR SHARED–USE PATHS SHOULD MATCH THE EXISTING SHARED USE PATH WIDTH.
2. RAMP LENGTH SHALL BE MAXIMUM OF 15'.

   ANY PORTIONS OF SIDEWALK BETWEEN THE DETECTABLE WARNING PANELS AND THE CURB SHALL HAVE A MAX 2% LONGITUDINAL GRADE.
3. LANDINGS SHALL BE A MINIMUM OF 4' X 4' AND SHALL HAVE A MAX 2% SLOPE IN ANY DIRECTION. LANDINGS ARE DESIRABLY 5' X 5' OR LARGER.
4. DETECTABLE WARNING PANELS SHALL MATCH THE RAMP WIDTH. RADIAL PANELS MAY ALSO BE USED.THE DETECTABLE WARNING PANEL MAY BE LOCATED WITHIN THE LOWER LANDING.
5. THE PEDESTRIAN ACCESS ROUTE SHALL BE CONTINUOUS 4' MIN. WIDTH. MAX 2% CROSS SLOPE APPLIES TO ALL CONCRETE, EXCLUDING FLARES.
6. LANDSCAPING IS PREFERRED TO MODIFY EXISTING GROUND SLOPE CHANGES AS NEEDED. IF NOT POSSIBLE, SUCH AS ADJACENT BUILDINGS, A VERTICAL CURB MAY BE USED AS SHOWN IN THE DETAIL BELOW. THE CURB WILL BE PAID FOR AT THE UNIT PRICE BID FOR THE ITEM "CURB – TYPE SW" PER LINEAL FOOT.
7. THE MAJORITY OF LINES SHOWN ON DETAILS INDICATE POINT OF DIFFERING GRADE CHANGES. ACTUAL JOINT DIMENSIONS MAY VARY IN FIELD.
8. LONGITUDINAL SLOPE ON SIDEWALK SHALL NOT EXCEED 5%. GENERALLY SIDEWALK GRADE IS ESTABLISHED BY THE ROADWAY GRADE. SIDEWALK SHALL NOT EXCEED 2% CROSS SLOPE.
9. CONCRETE LANDINGS SHALL BE PLACED SEPARATELY AND INSTALLED PRIOR TO ADJACENT ADA RAMPS AND/OR SIDEWALKS. CONCRETE LANDINGS SHALL HAVE A MINIMUM OF 24 HOURS OF CURE TIME PRIOR TO ADJACENT CONCRETE PLACEMENT.

THE CITY OF Fargo FAR MORE

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PE-10407
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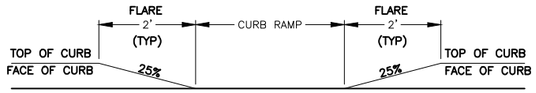
7/18/2025

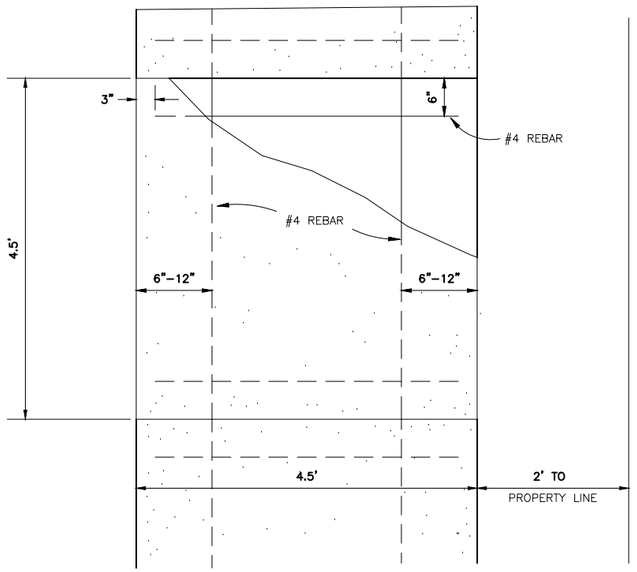
General Details

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	5



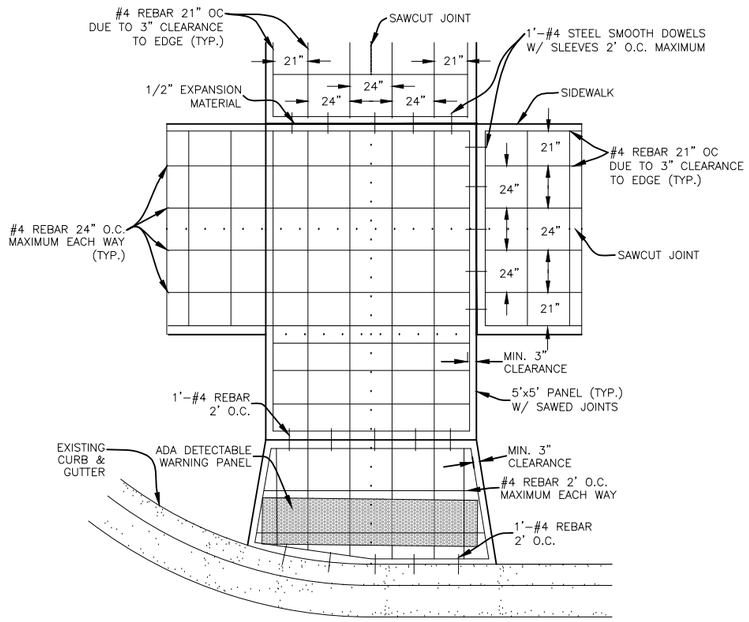
25% FLARES



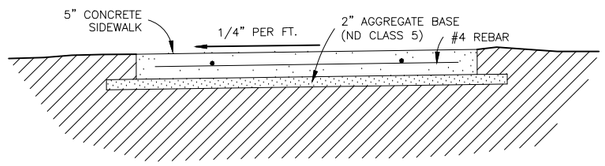
4.5' REINFORCEMENT

SIDEWALK WIDTH	PANELS (L'xW')
6'	5'x6'
8'	4.5'x4'
10'	5'x5'

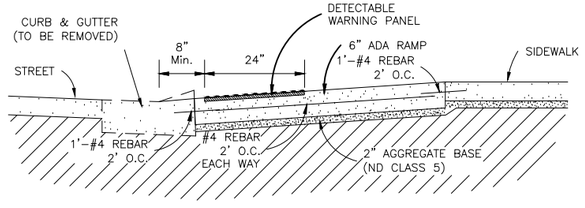
JOINT DIMENSION



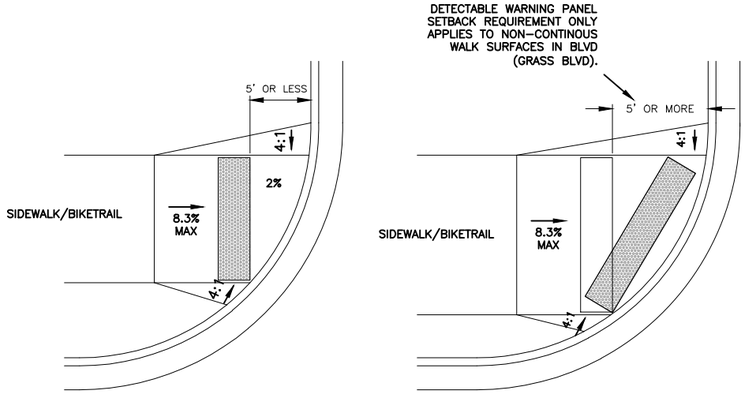
10' REINFORCEMENT



SIDEWALK CROSS SECTION



SIDEWALK REINFORCEMENT



CONCRETE APRON FOR SIDEWALK/BIKETRAIL

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Red River Trail

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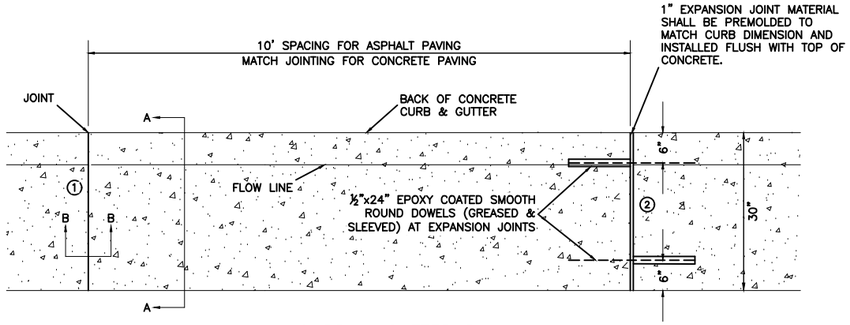
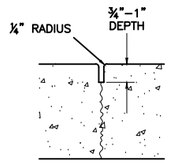
① ASPHALT PAVING: SAW CUT OR TOOLED JOINTS AT 10' SPACINGS.

CONCRETE PAVING: SAW CUT JOINTS TO MATCH CONCRETE PAVEMENT JOINT SPACINGS. SEE SAW JOINT DETAIL 2100–5.7.

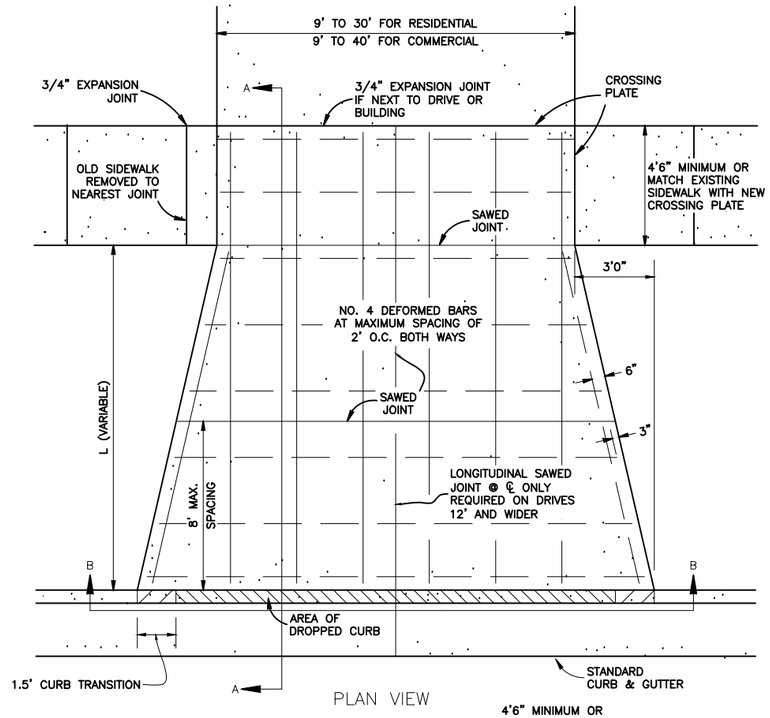
② PLACE 1" EXPANSION JOINTS AT P.C.'S AND AT 250' MAX. SPACINGS FOR ASPHALT PAVING



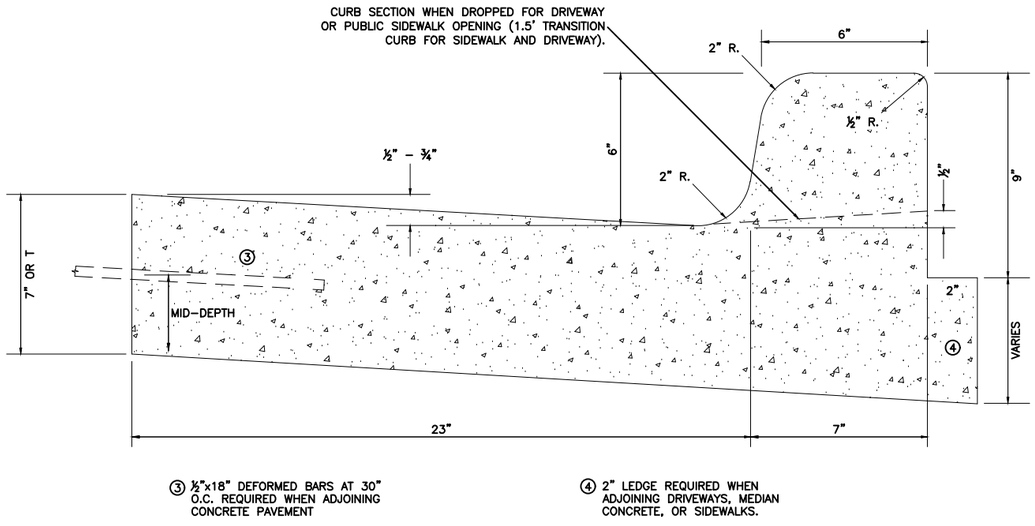
CURB & GUTTER PLAN



TOOLED JOINT DETAIL
SECTION B–B



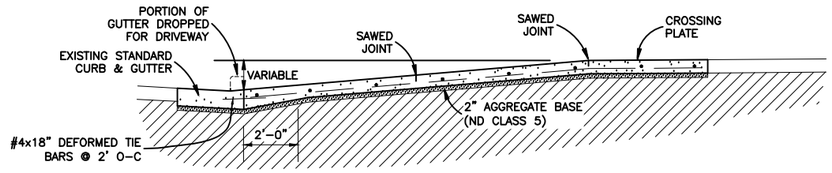
PLAN VIEW



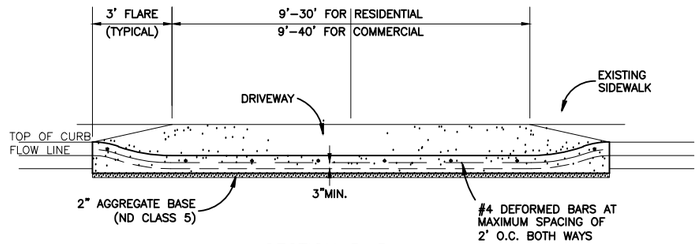
③ ½"x18" DEFORMED BARS AT 30" O.C. REQUIRED WHEN ADJOINING CONCRETE PAVEMENT

④ 2" LEDGE REQUIRED WHEN ADJOINING DRIVEWAYS, MEDIAN CONCRETE, OR SIDEWALKS.

SECTION A–A



SECTION A–A



SECTION B–B

NOTES:
1. MIN. THICKNESS OF DRIVEWAYS SHALL BE: 6" FOR RESIDENTIAL
7" FOR COMMERCIAL AND INDUSTRIAL

2. JOINT SPACINGS: THE DRIVEWAY LONGITUDINAL JOINT SPACING SHALL MATCH CURB AND GUTTER OR CONCRETE PAVEMENT JOINT SPACING. THE DRIVEWAY TRANSVERSE JOINT SPACING SHALL BE EVENLY SPACED BETWEEN THE CROSSING PLATE AND CURB, NOT TO EXCEED 8' SPACING.

3. SAW DEPTH: THICKNESS/4 + ¼"

NOTES:
1. DIMENSION "T" SHALL MATCH THE THICKNESS OF THE ADJOINING CONCRETE PAVEMENT

2. WHEN OUTFLOW CURB IS SPECIFIED SLOPE SHALL BE ¼" PER FOOT

THE CITY OF Fargo FAR MORE

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Red River Trail

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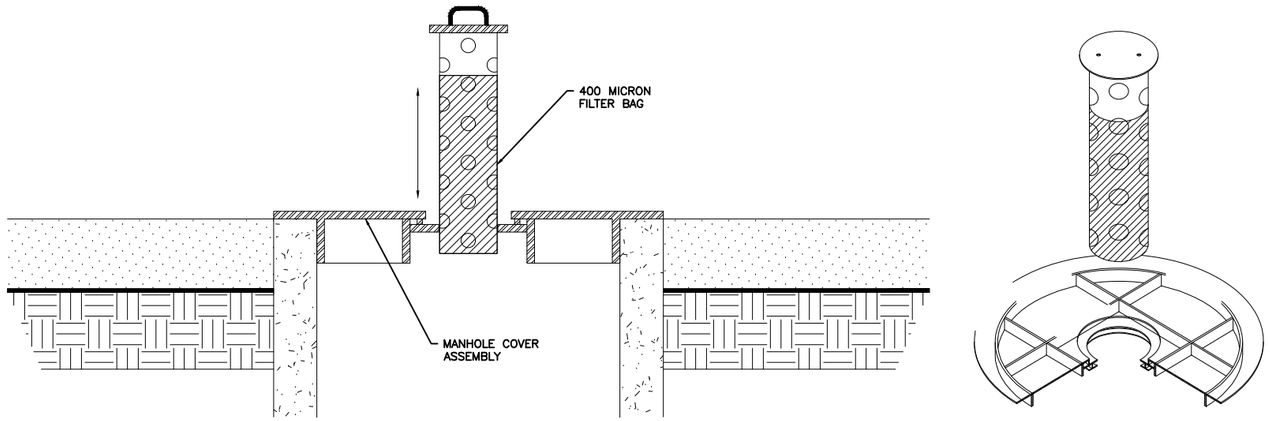
	ND	TMA-CRP-8-984(182)	20	7

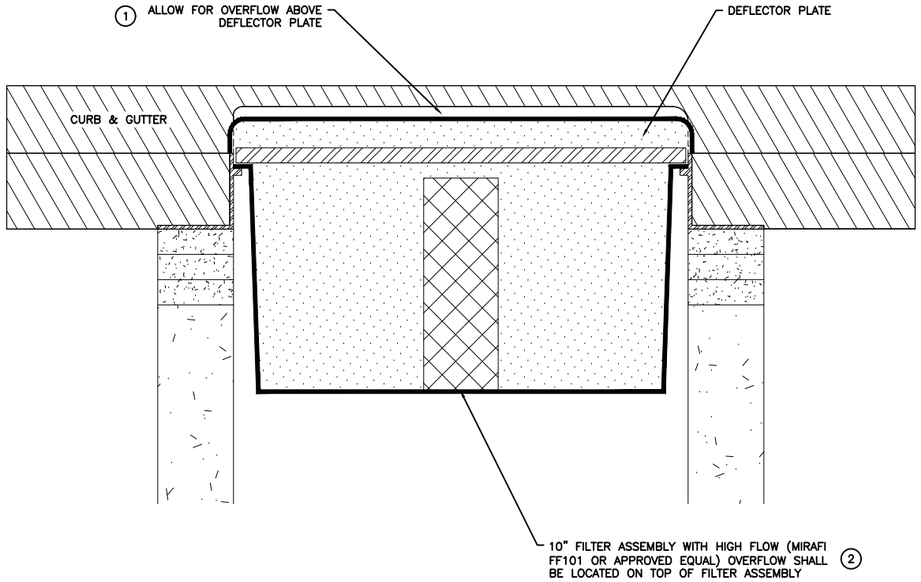


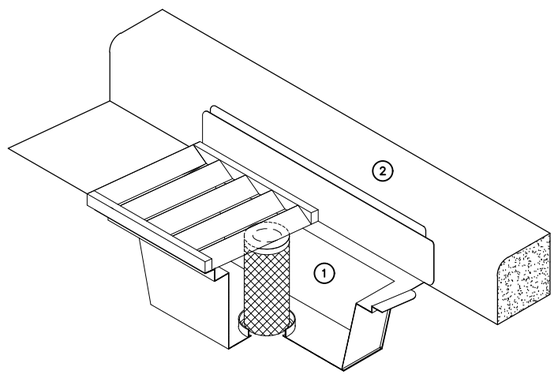
INLET PROTECTION FOR INLETS WITHIN PAVING SECTION TO BE INSTALLED BEFORE PAVING

(TYPE C)

NOTES:

1. INSTALL DEVICES CONSISTING OF A REUSABLE, OPEN TOPPED RECEPTACLE THAT RESTS INSIDE A STORM SEWER INLET CASTING ALLOWING THE GRATING TO BE REINSTALLED IN THE CASTING. INCORPORATE A REBAR DEFLECTOR PLATE INTO THE UNIT TO PROTECT OPEN BACK CASTINGS FROM SEDIMENT, IF NEEDED. PROVIDE A FILTRATION SYSTEM TO FILTER STORM WATER. PROVIDE AN OVERFLOW LARGE ENOUGH TO MINIMIZE/ELIMINATE STREET FLOODING DURING RAIN EVENTS. APPROVED MANUFACTURERS ARE WIMCO, LANGE IPD, FLEXSTORM, OR APPROVED EQUAL.
2. INSTALL A PREFABRICATED DROP-IN INLET PROTECTION DEVICE. INSTALL THE DEVICE BY INSERTING THE DEVICE INTO THE CASTING AND REPLACING THE GRATE INTO THE FRAME. THIS DEVICE IS REQUIRED IN ALL INLETS THAT RECEIVE WATER FROM THE PROJECT AREA THAT ARE IN A STREET SECTION.
3. KEEP THIS DEVICE ON SITE FOR THE DURATION OF PROJECT. PERFORM MAINTENANCE THROUGHOUT THE DURATION OF THE PROJECT. MAINTENANCE BECOMES THE RESPONSIBILITY OF THE DEVELOPER/PROPERTY OWNER UPON FINAL COMPLETION OF THE PROJECT.
4. INCLUDE ALL COSTS TO FURNISH AND INSTALL IN THE PRICE BID FOR INLET PROTECTION SPECIAL





OVERFLOW ① – CENTER OF FILTER ASSEMBLY

OVERFLOW ② – TOP OF CURB BOX

NOTES:

1. TYPE C-2 INLET PROTECTION CONSISTS OF A SEDIMENT COLLECTION PLATE MEETING H2O LOADING PER OSHA 1910.23. PAINT THE ¼" STEEL PLATE YELLOW WITH A PERFORATED STEEL LID. PROVIDE A TWO POSITION HDPE BASKET THAT IS ABLE TO BE FIXED IN THE UP OR DOWN POSITION. ATTACH A 400 MICRON FILTER BAG TO FILTER SEDIMENT.
2. THIS WORK CONSISTS OF INSTALLING A PREFABRICATED PLATE THAT WILL FIT INTO THE TOP OF THE CONE SECTION OF A CATCH BASIN OR MANHOLE. INSTALL A 400 MICRO FILTER BAG AROUND THE COLLECTION BASKET TO FURTHER PROTECT THE STORM SEWER FROM FINE MATERIALS.
3. THIS DEVICE IS INTENDED TO PROTECT INLETS WITHIN THE FUTURE PAVING SECTION. THE DEVICE IS REUSEABLE AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
4. INCLUDE ALL COSTS TO FURNISH AND INSTALL IN THE PRICE BID FOR INLET PROTECTION SPECIAL

INLET PROTECTION FOR INLETS WITHIN PAVING SECTION TO BE INSTALLED AFTER FINAL PAVING

(TYPE C-2)

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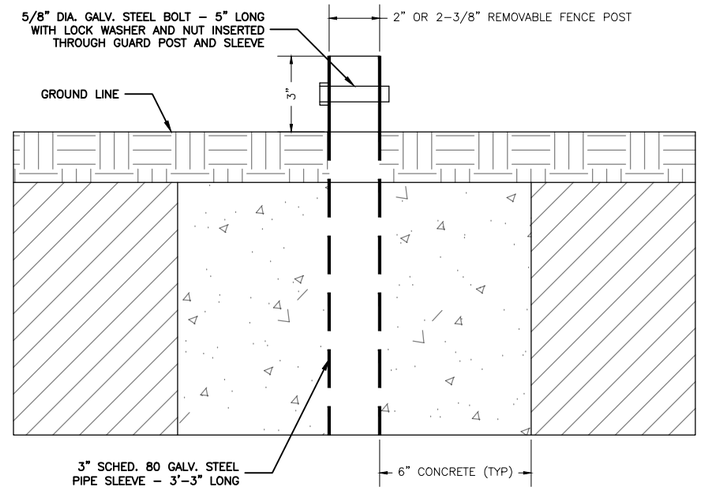
7/18/2025

General Details

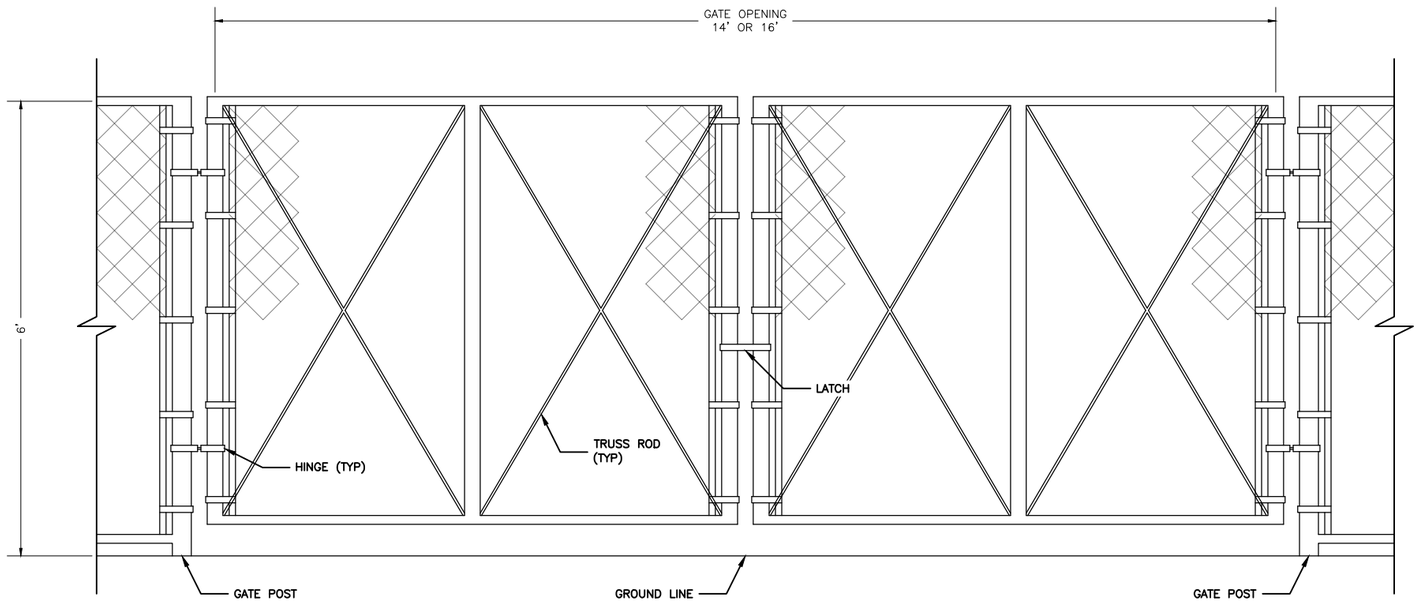
Red River Trail

07/07/25 08:41:35AM H:\JBN\6000\6059\6059_0217 17th Ave S\CAD\Plans\020 - General Details.dwg

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	**TMA-CRP-8-984(182)**	**20**	**8**



CONCRETE FOUNDATION AND SLEEVE FOR REMOVABLE FENCE POST
NOT TO SCALE



VEHICLE GATE
NOT TO SCALE

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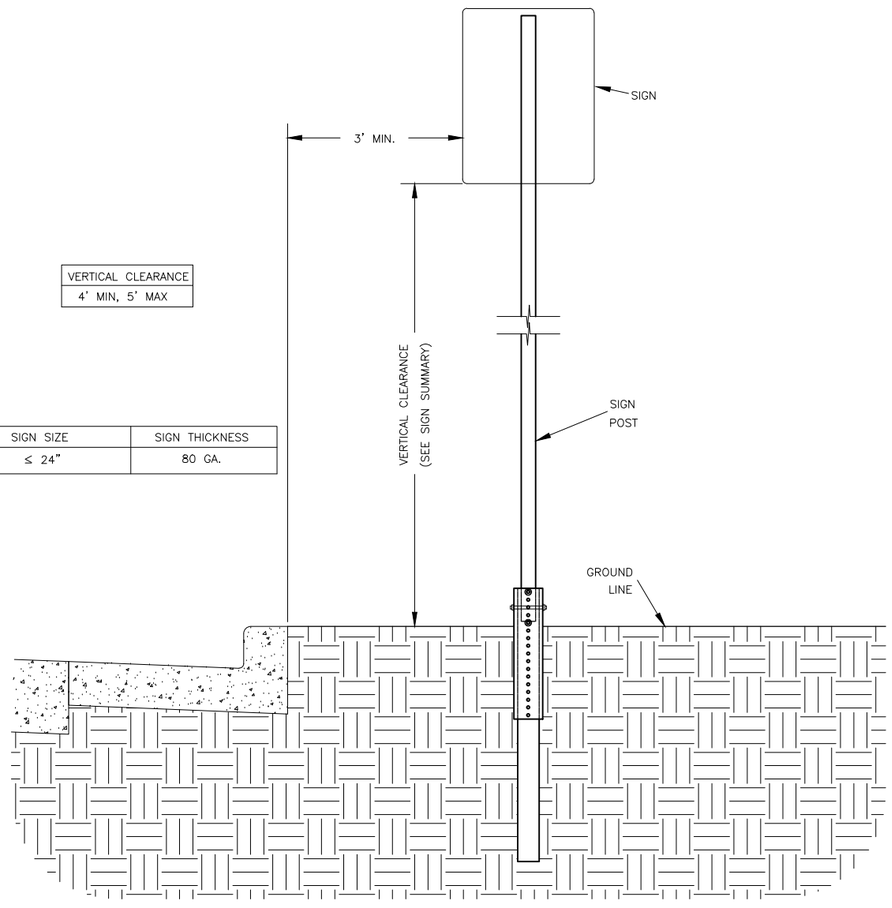
	ND	TMA-CRP-8-984(182)	20	9

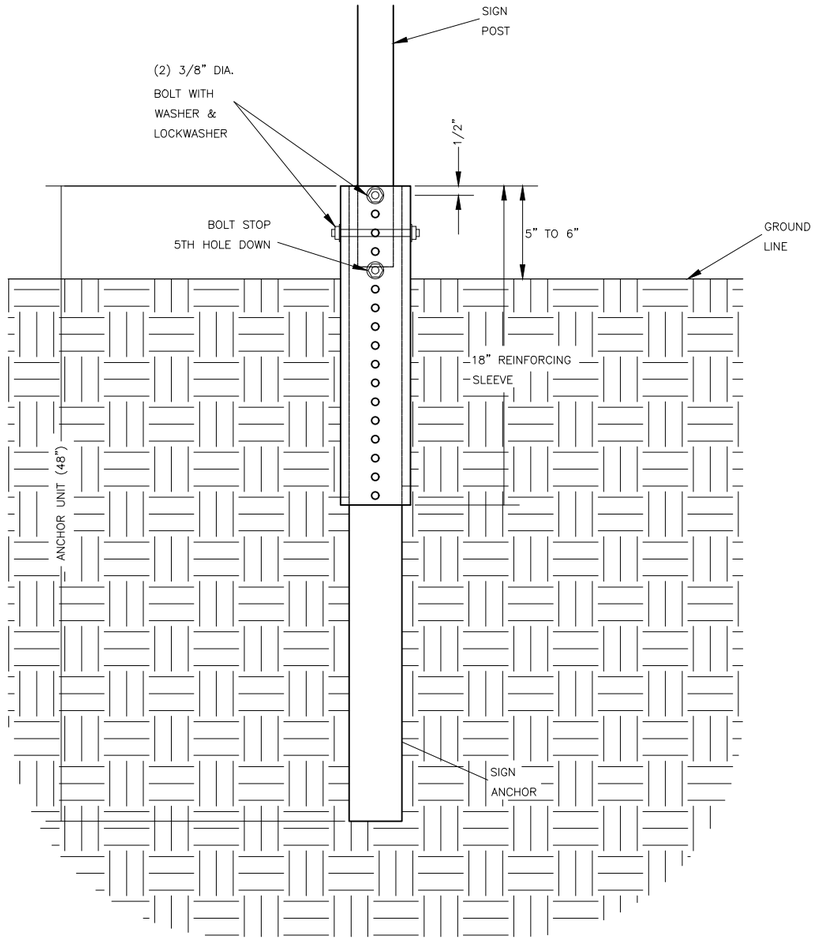
VERTICAL CLEARANCE
4' MIN, 5' MAX

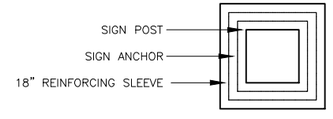
SIGN SIZE	SIGN THICKNESS
≤ 24"	80 GA.



DATED SIGN TAGS ALL NEW SIGNS THAT ARE INSTALLED SHALL HAVE A DATED TAG INSTALLED ON THE BACK OF THE SIGN, SHOWING THE CONTRACTORS LOGO, MONTH AND THE YEAR THAT THE SIGN WAS INSTALLED. THE DATE SHALL BE SHOWN BY REMOVING THE CORRECT MONTH AND YEAR WITH A HOLE PUNCHER. THIS SHALL BE INCIDENTAL TO THE COST OF THE SIGN.

SIGN ASSEMBLY





SIGN SIZE	POST	ANCHOR	SLEEVE
18" WIDTH SIGNS & 24"x24" SIGNS	2.00"	2.25"	2.50"

SIGN ANCHOR
BLVD INSTALLATION

NOTE: REINFORCING SLEEVE TO BE USED ON ALL SIGNS

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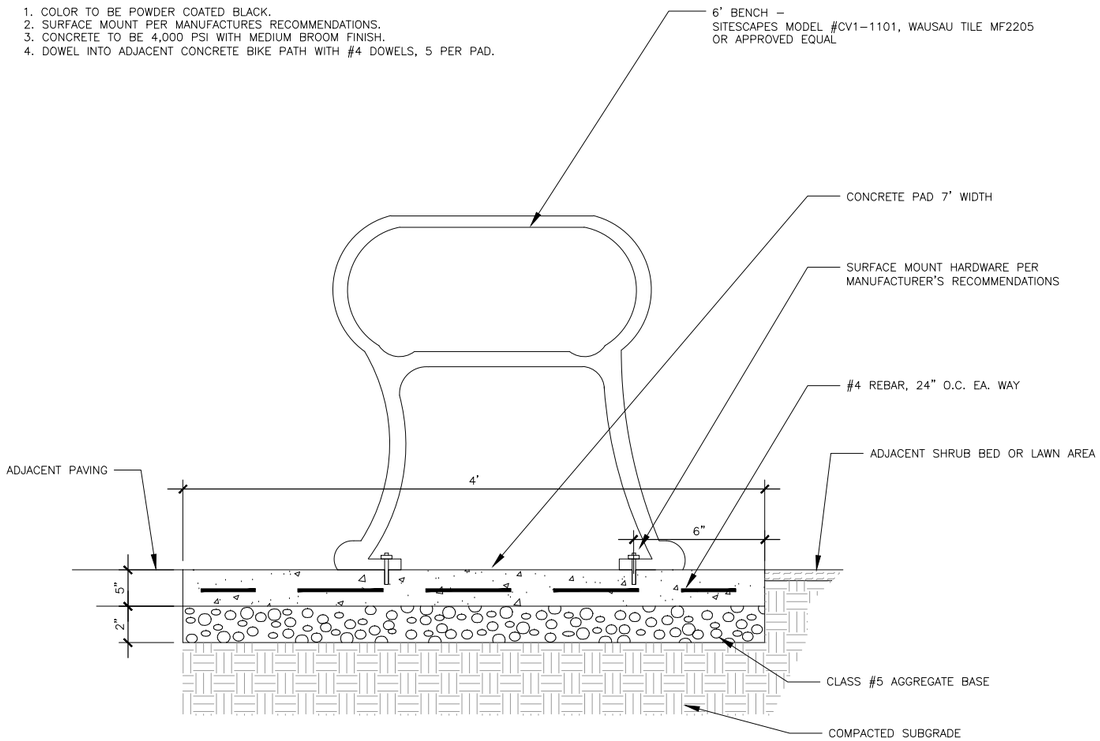
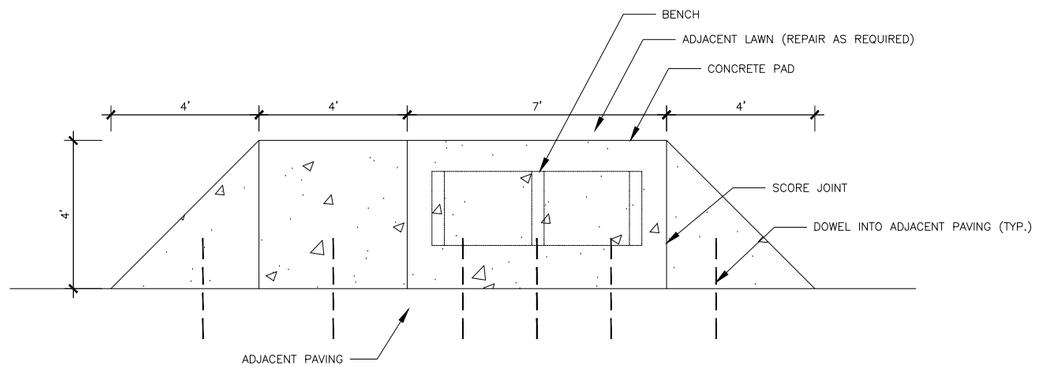
NOTES:

1. COLOR TO BE POWDER COATED BLACK.
2. SURFACE MOUNT PER MANUFACTURES RECOMMENDATIONS.
3. CONCRETE TO BE 4,000 PSI WITH MEDIUM BROOM FINISH.
4. DOWEL INTO ADJACENT CONCRETE BIKE PATH WITH #4 DOWELS, 5 PER PAD.



BENCH AND CONCRETE PAD DETAIL
NOT TO SCALE



PLAN VIEW
N.T.S.

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PE-10407
DATE
NORTH DAKOTA

7/18/2025

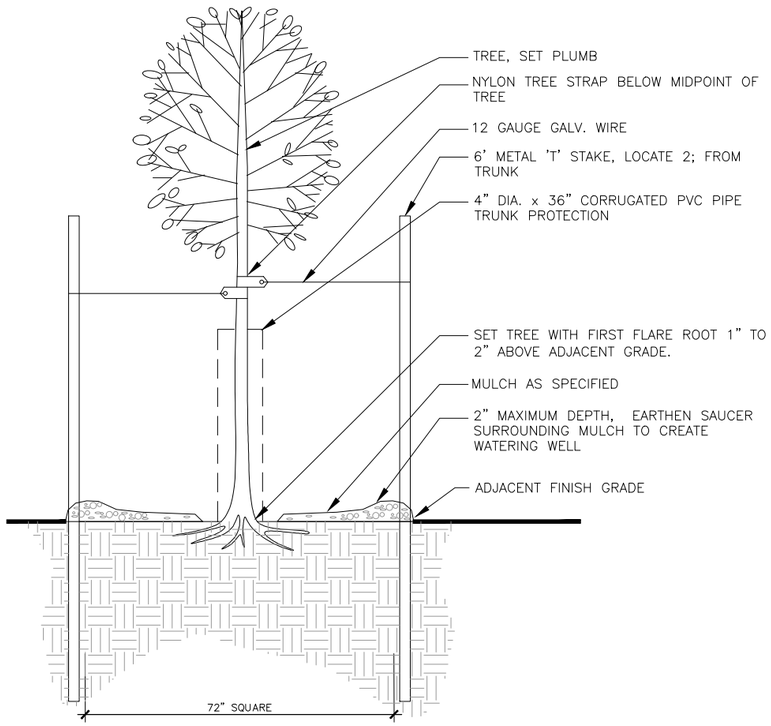
General Details

Red River Trail

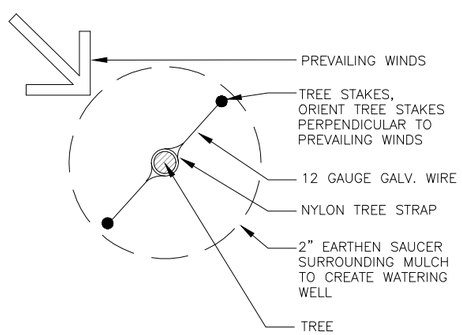
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	11

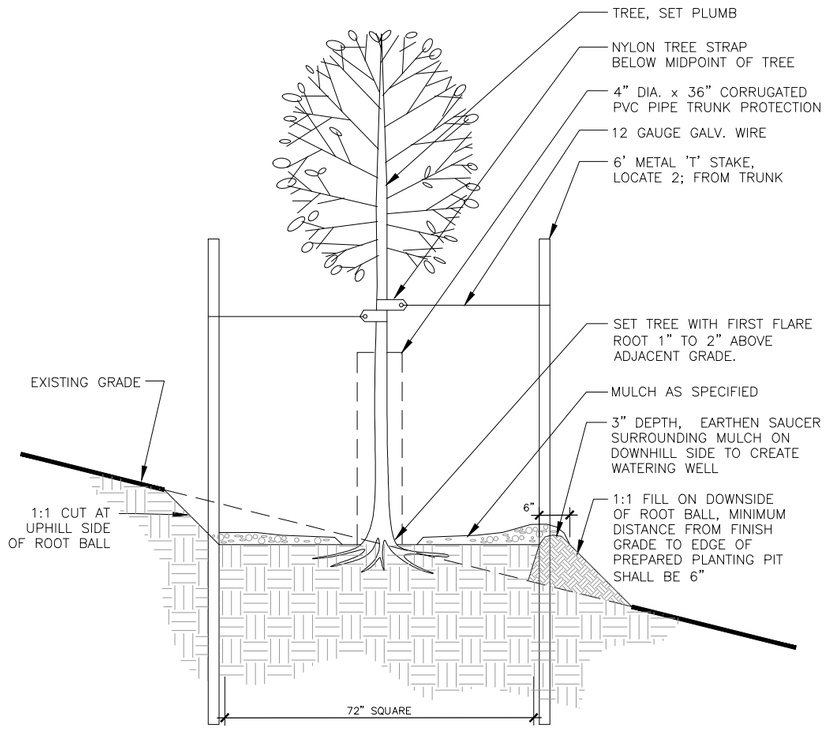
NOTES:

1. REFER TO CITY OF FARGO SECTION 7000 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PLANT FIRST FLAIR ROOT 1" to 2" ABOVE SURROUNDING GRADE.
3. TREES LOCATED IN LAWN TO HAVE 4" DEPTH BY 6' DIAMETER WOOD MULCH, UNLESS OTHERWISE NOTED.
4. KEEP MULCH 6" AWAY FROM TRUNK.



TREE PLANTING DETAIL
NOT TO SCALE





ON SLOPE TREE PLANTING DETAIL
NOT TO SCALE

THE CITY OF Fargo
FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

General Details

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	12

LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

NOTES:

1. INCLUDE ALL COSTS FOR THE REMOVAL OF IRON FENCE AND 18"x18" CONCRETE POSTS, MODIFICATION OF IRON FENCE, AND RESETTING OF IRON FENCE IN THE PRICE BID FOR "FENCE REMOVE & RESET".

THE CITY OF Fargo FAR MORE

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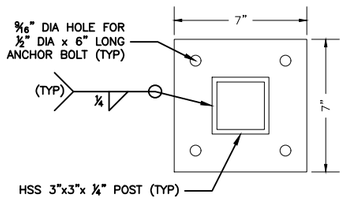
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUDD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

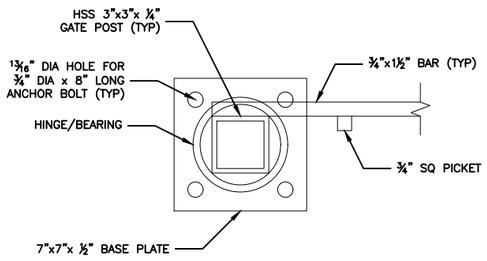
General Details

Red River Trail

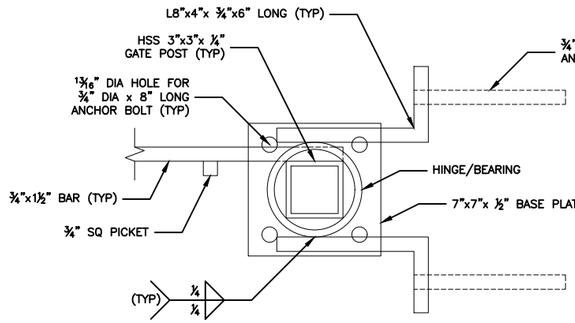
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	20	13



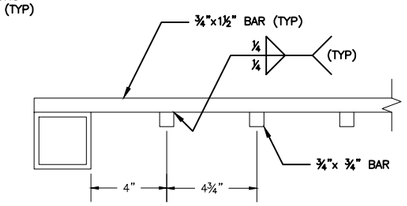
SECTION A–A
BASE PLATE



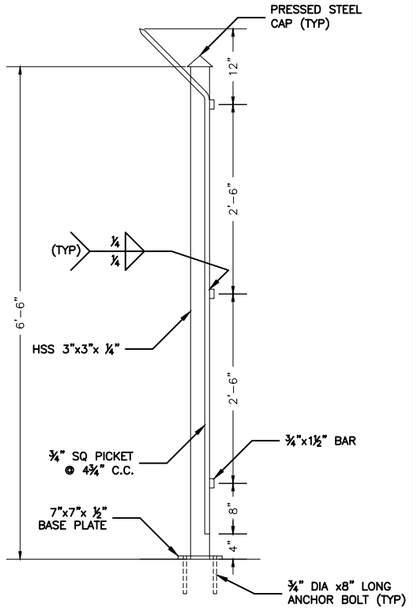
SECTION B–B
HINGE FOR IRON SWING GATE



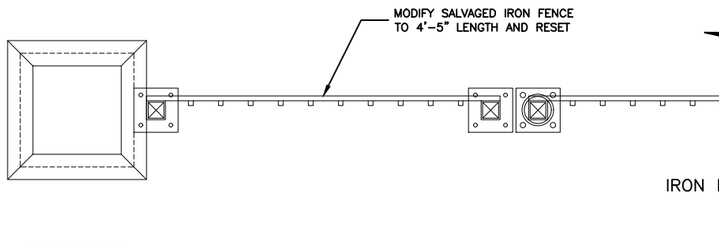
SECTION C–C
HINGE FOR IRON SWING GATE



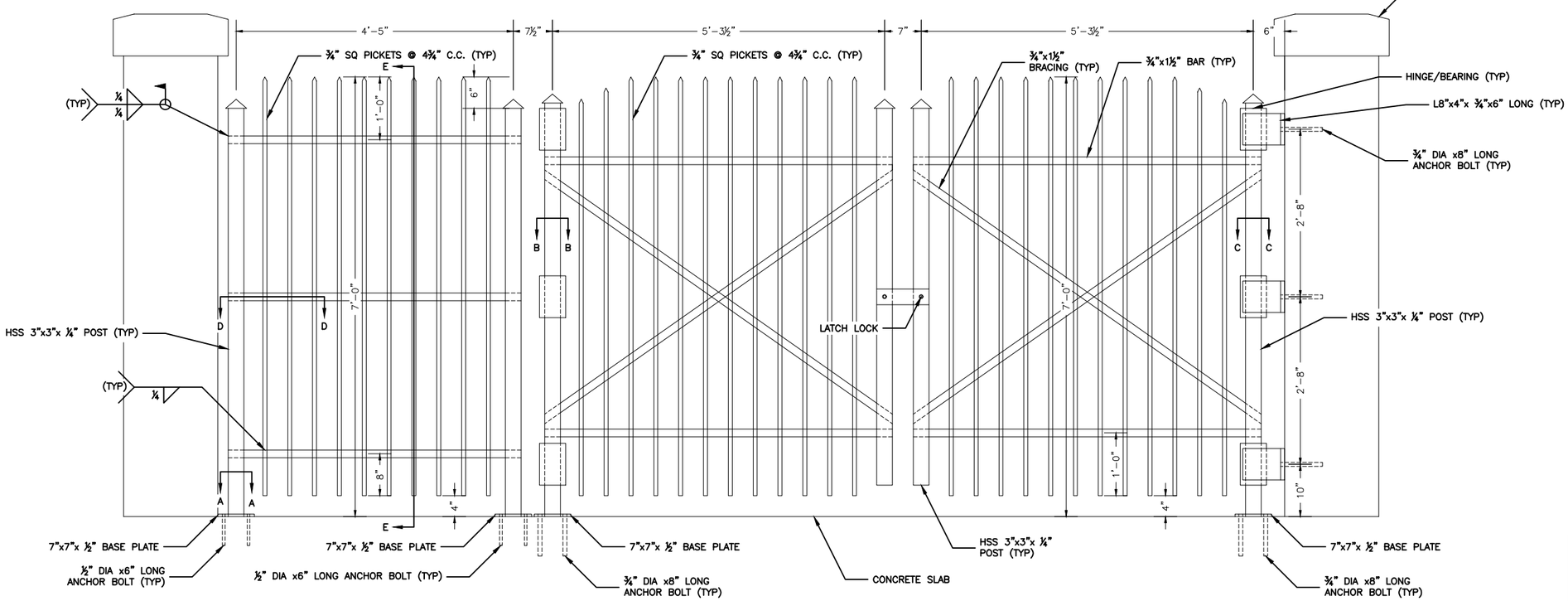
SECTION D–D
CONNECTION



SECTION E–E
FENCE POST AND PICKET BAR



IRON FENCE PLAN DETAIL



IRON FENCE ELEVATION DETAIL

THE CITY OF Fargo
FAR MORE

Proj. No. 6059-0217
Houston
Engineering Inc.
Ph: 701.237.5065

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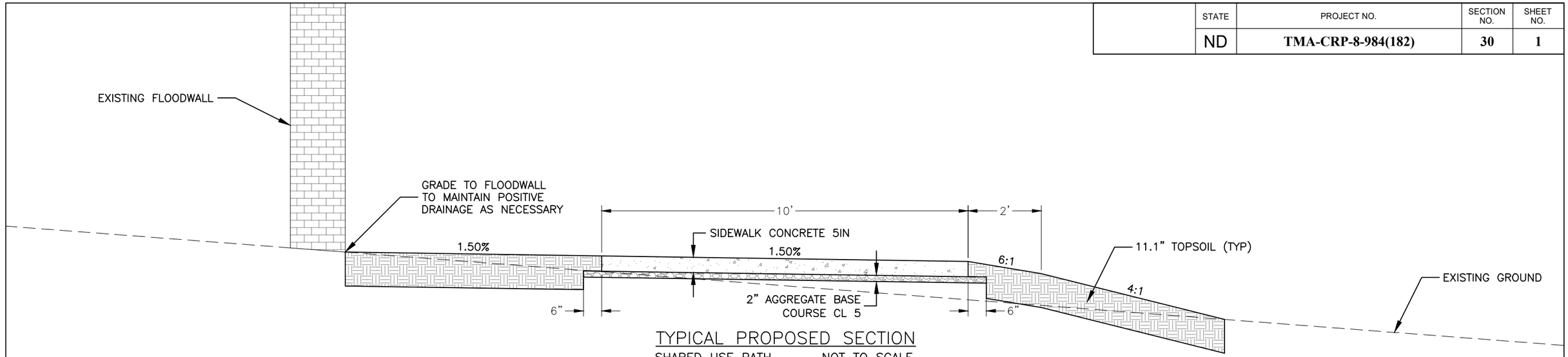
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA
7/18/2025

General Details

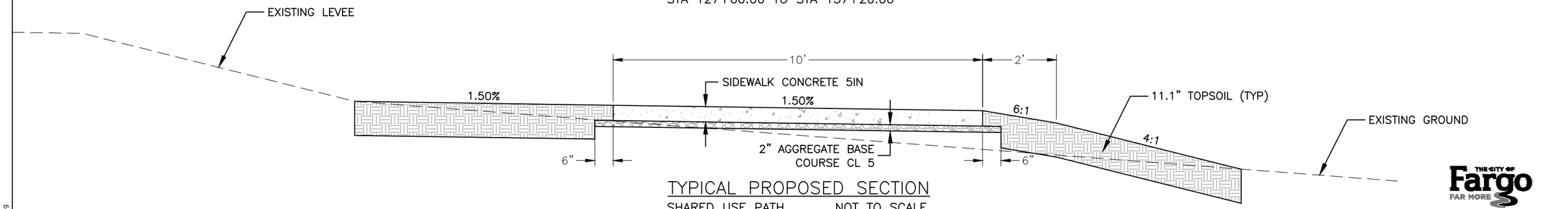
Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	30	1



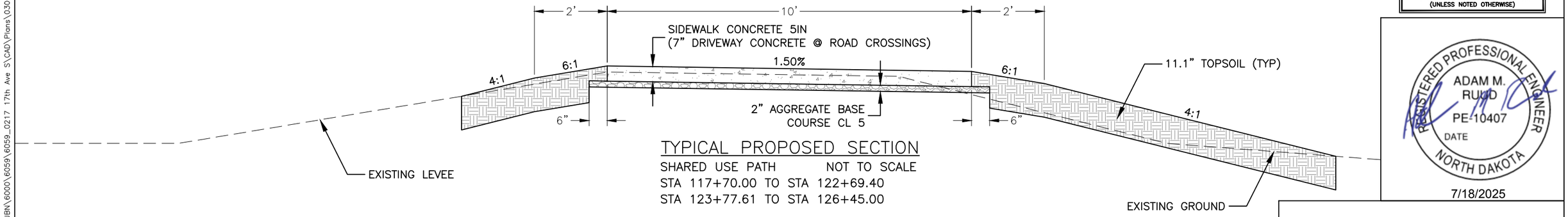
TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 100+42.50 TO STA 104+25.00
STA 108+55.00 TO STA 112+25.00
STA 127+60.00 TO STA 137+20.00



TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 104+25.00 TO STA 108+55.00
STA 112+25.00 TO STA 117+70.00
STA 126+45.00 TO STA 127+60.00
STA 200+50.00 TO STA 202+30.00
STA 304+45.00 TO STA 306+17.09



TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 117+70.00 TO STA 122+69.40
STA 123+77.61 TO STA 126+45.00

THE CITY OF Fargo FAR MORE

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Typical Sections

Red River Trail

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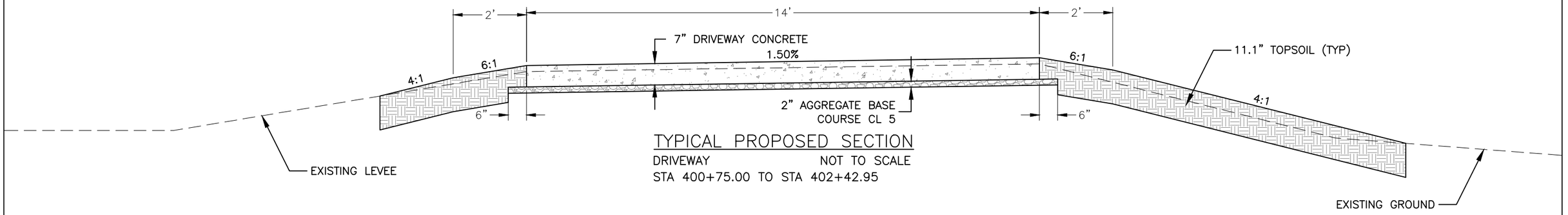
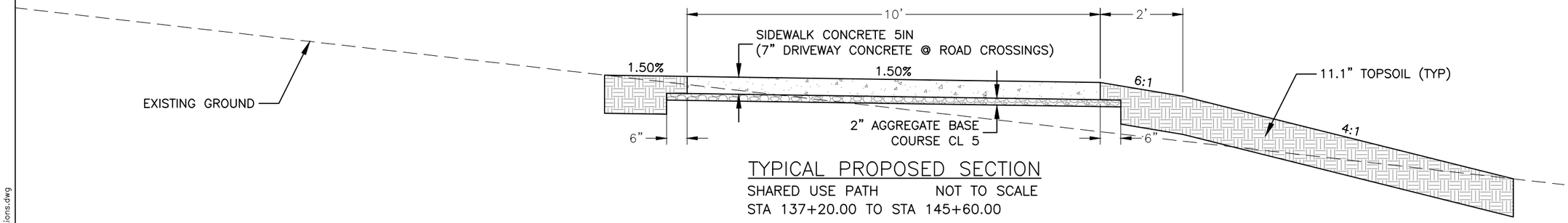
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	30	2



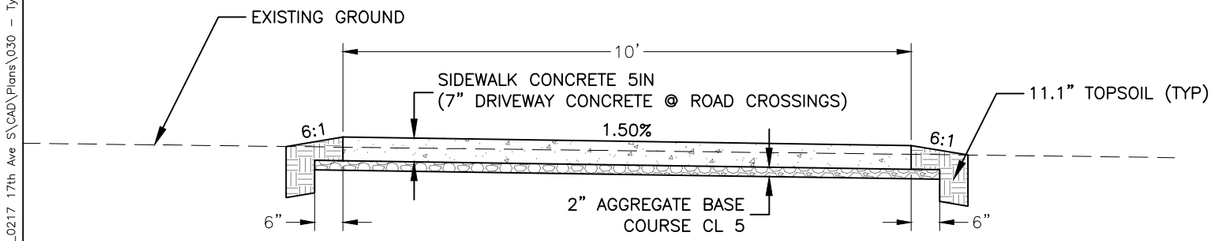
TYPICAL PROPOSED SECTION

DRIVEWAY NOT TO SCALE
STA 400+75.00 TO STA 402+42.95



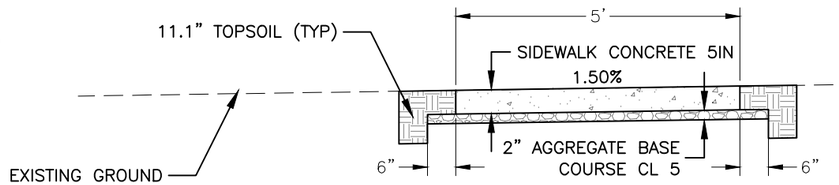
TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 137+20.00 TO STA 145+60.00



TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 145+60.00 TO STA 159+79.87
STA 301+00.00 TO STA 304+45.00



TYPICAL PROPOSED SECTION

SIDEWALK NOT TO SCALE
NEAR STA 203+90.00

THE CITY OF Fargo FAR MORE

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Typical Sections

Red River Trail

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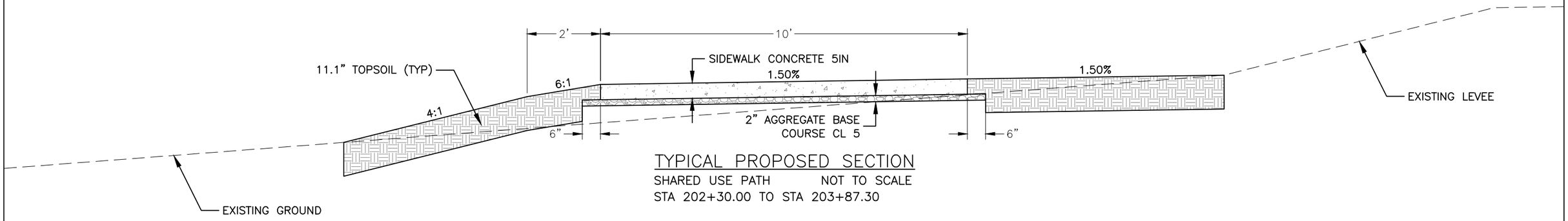
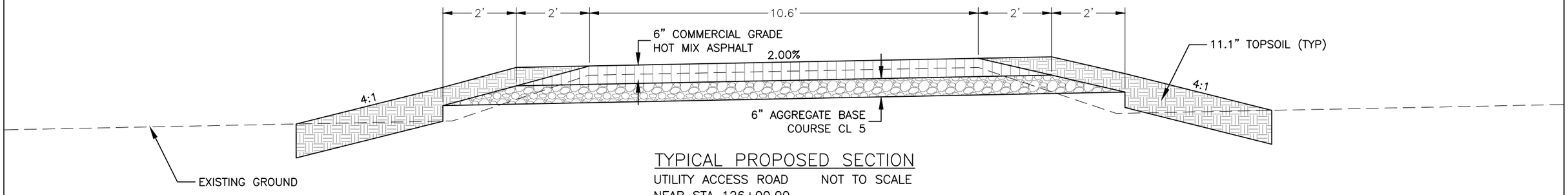
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	30	3



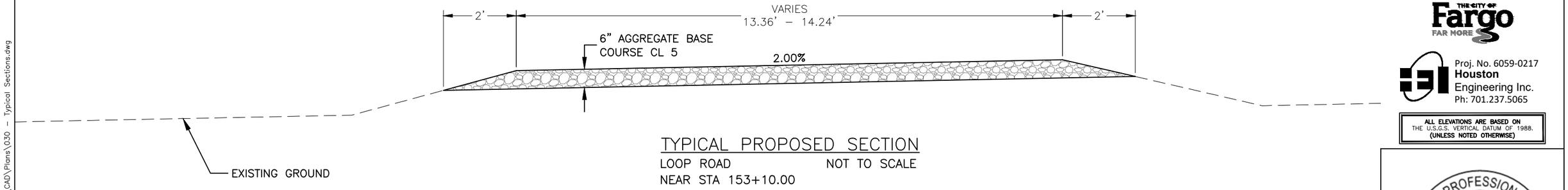
TYPICAL PROPOSED SECTION

SHARED USE PATH NOT TO SCALE
STA 202+30.00 TO STA 203+87.30



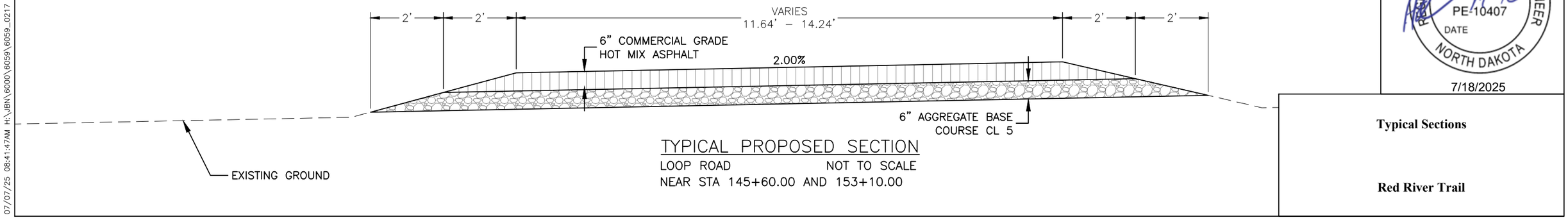
TYPICAL PROPOSED SECTION

UTILITY ACCESS ROAD NOT TO SCALE
NEAR STA 126+00.00



TYPICAL PROPOSED SECTION

LOOP ROAD NOT TO SCALE
NEAR STA 153+10.00



TYPICAL PROPOSED SECTION

LOOP ROAD NOT TO SCALE
NEAR STA 145+60.00 AND 153+10.00

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ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Typical Sections

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	40	1

SPEC	CODE	BID ITEM		QTY	UNIT
201	0330	CLEARING & GRUBBING			
		STA 104+00 TO STA 110+00		1	L SUM
202	0021	REMOVE AGGREGATE BASE & SURFACING			
		STA 122+14 TO STA 123+79		134	TON
		STA 125+74 TO STA 126+38		36	TON
			TOTAL	170	TON
202	0312	FENCE REMOVE & RESET			
		STA 123+57 TO STA 123+78		1	L SUM
752	2120	REMOVE VEHICLE GATE			
		STA 124+60		1	EA
980	0800	RELOCATE ROAD CLOSURE GATE			
		STA 122+39		1	EA

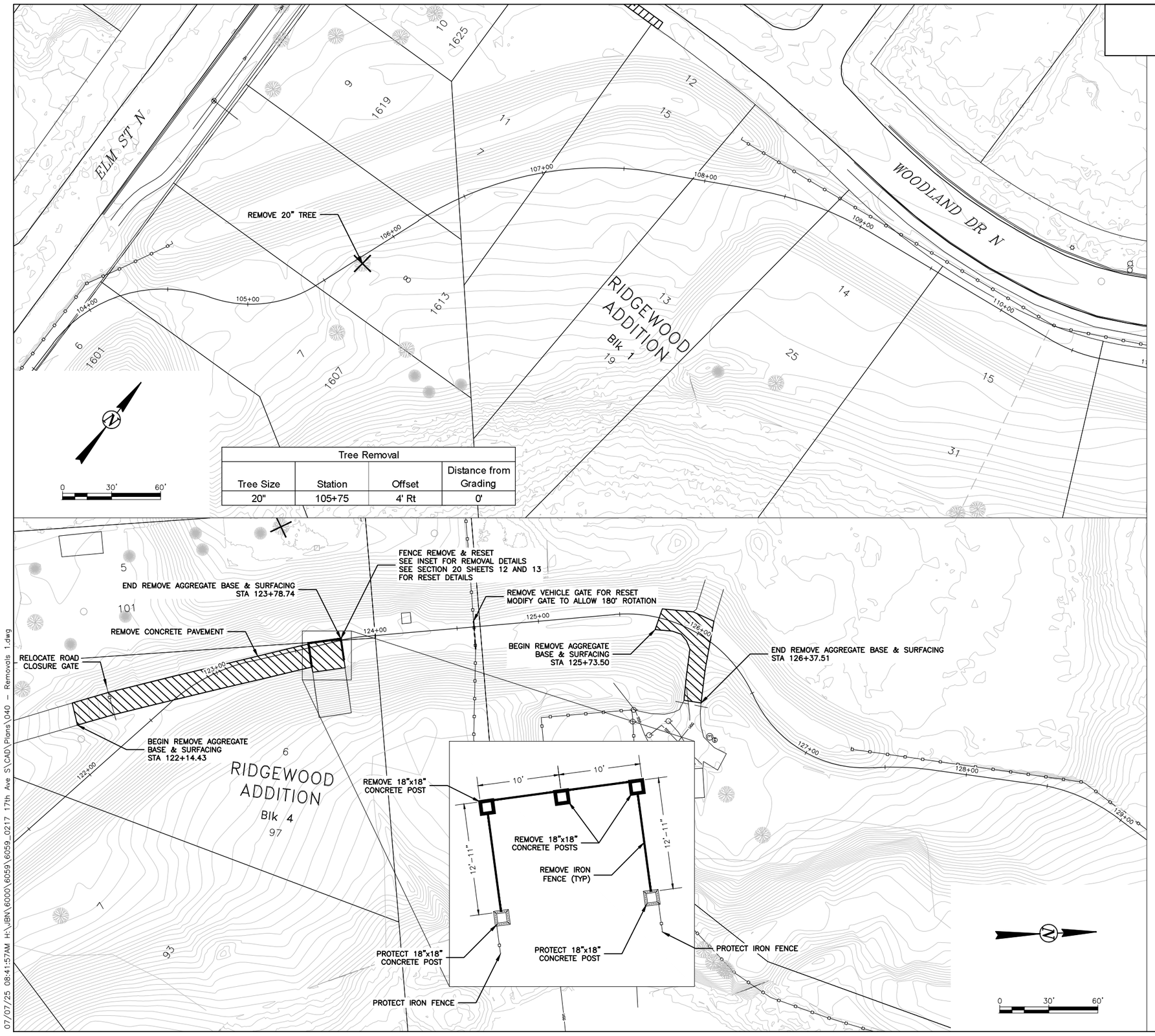
LEGEND:

- CLEARING & GRUBBING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVE VEHICLE GATE
- REMOVE EXISTING FENCE

NOTES:

1. INCLUDE ALL COSTS FOR THE REMOVAL OF TREES, REGARDLESS OF SIZE, IN THE PRICE BID FOR "CLEARING & GRUBBING".
2. INCLUDE ALL COSTS FOR THE REMOVAL OF AGGREGATE SURFACING, CONCRETE PAVEMENT, CURB & GUTTER, BITUMINOUS PAVEMENT, AND AGGREGATE BASE IN THE PRICE BID FOR "REMOVE AGGREGATE BASE & SURFACING".
3. INCLUDE ALL COSTS FOR THE REMOVAL OF IRON FENCE AND 18"x18" CONCRETE POSTS, MODIFICATION OF IRON FENCE, AND RESETTING OF IRON FENCE IN THE PRICE BID FOR "FENCE REMOVE & RESET".

Tree Removal			
Tree Size	Station	Offset	Distance from Grading
20"	105+75	4' Rt	0'



THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
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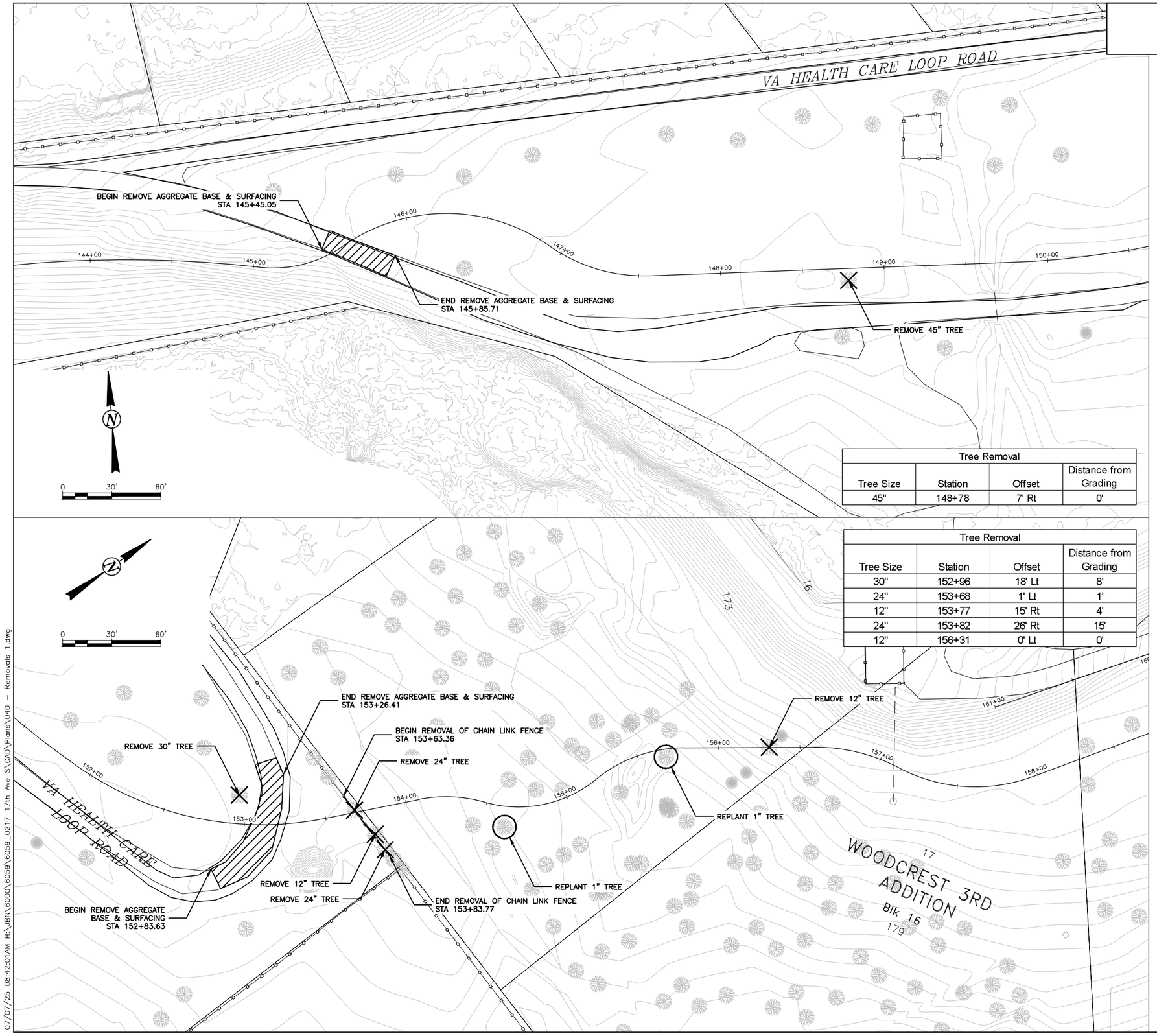
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Removals

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	40	2



Tree Removal

Tree Size	Station	Offset	Distance from Grading
45"	148+78	7' Rt	0'

Tree Removal

Tree Size	Station	Offset	Distance from Grading
30"	152+96	18' Lt	8'
24"	153+68	1' Lt	1'
12"	153+77	15' Rt	4'
24"	153+82	26' Rt	15'
12"	156+31	0' Lt	0'

SPEC	CODE	BID ITEM		QTY	UNIT
201	0330	CLEARING & GRUBBING			
		STA 144+00 TO STA 150+00		1	L SUM
		STA 152+00 TO STA 158+00		1	L SUM
202	0021	REMOVE AGGREGATE BASE & SURFACING			
		STA 145+45 TO STA 145+86		22	TON
		STA 152+84 TO STA 153+26		51	TON
			TOTAL	73	TON
202	0312	REMOVAL OF CHAIN LINK FENCE			
		STA 153+63 TO STA 153+84		46	LF
970	1025	REPLANT TREES			
		STA 152+00 TO STA 158+00		2	EA

LEGEND:

- CLEARING & GRUBBING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVAL OF CHAIN LINK FENCE
- REPLANT TREES

NOTES:

1. INCLUDE ALL COSTS FOR THE REMOVAL OF TREES, REGARDLESS OF SIZE, IN THE PRICE BID FOR "CLEARING & GRUBBING".

THE CITY OF Fargo FAR MORE

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Removals

Red River Trail

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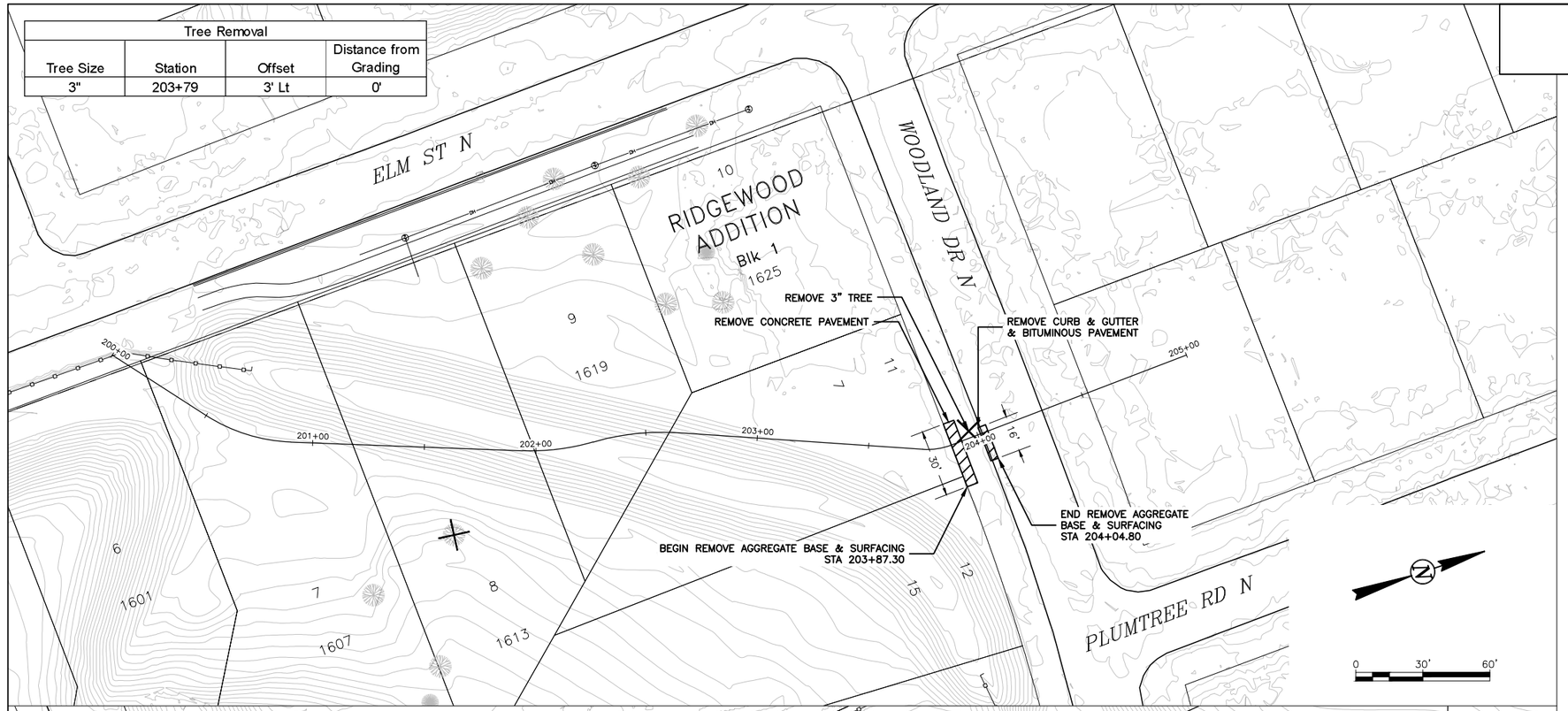
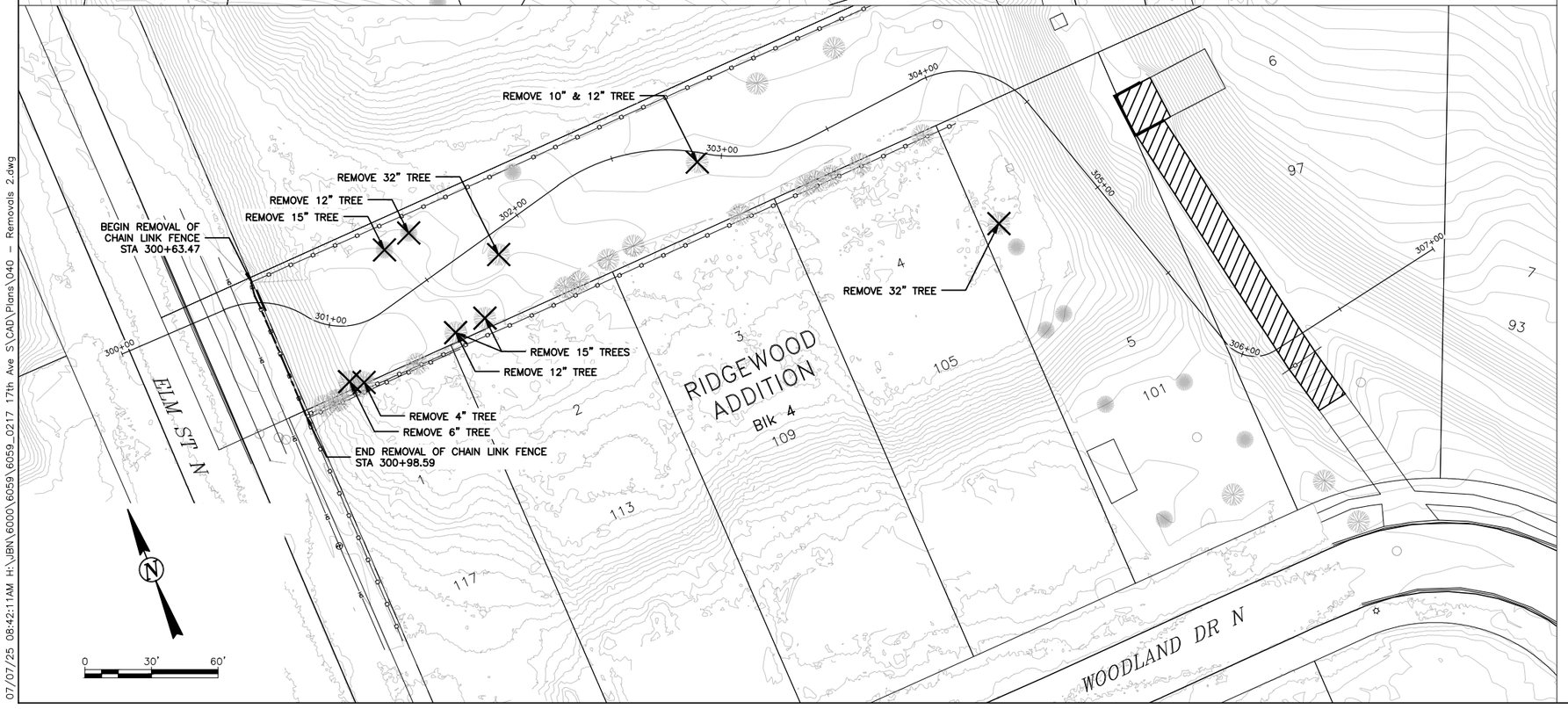
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	40	3

SPEC	CODE	BID ITEM	QTY	UNIT
201	0330	CLEARING & GRUBBING STA 300+50 TO STA 306+00	1	L SUM
202	0021	REMOVE AGGREGATE BASE & SURFACING STA 203+87 TO STA 204+05	11	TON
202	0312	REMOVAL OF CHAIN LINK FENCE STA 300+63 TO STA 300+99	75	LF

Tree Removal			
Tree Size	Station	Offset	Distance from Grading
3"	203+79	3' Lt	0'

Tree Removal			
Tree Size	Station	Offset	Distance from Grading
6"	301+07	25' Rt	0'
4"	301+11	26' Rt	0'
15"	301+42	22' Lt	7'
12", 15", & 15"	301+47	27' Rt	2'
12"	301+56	22' Lt	11'
15"	301+61	29' Rt	8'
32"	301+83	10' Rt	0'
10" & 12"	302+90	4' Rt	0'
32"	304+84	45' Rt	6'





NOTES:

1. INCLUDE ALL COSTS FOR THE REMOVAL OF TREES, REGARDLESS OF SIZE, IN THE PRICE BID FOR "CLEARING & GRUBBING".
2. INCLUDE ALL COSTS FOR THE REMOVAL OF AGGREGATE SURFACING, CONCRETE PAVEMENT, CURB & GUTTER, BITUMINOUS PAVEMENT, AND AGGREGATE BASE IN THE PRICE BID FOR "REMOVE AGGREGATE BASE & SURFACING".

LEGEND:

- CLEARING & GRUBBING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVAL OF CHAIN LINK FENCE

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

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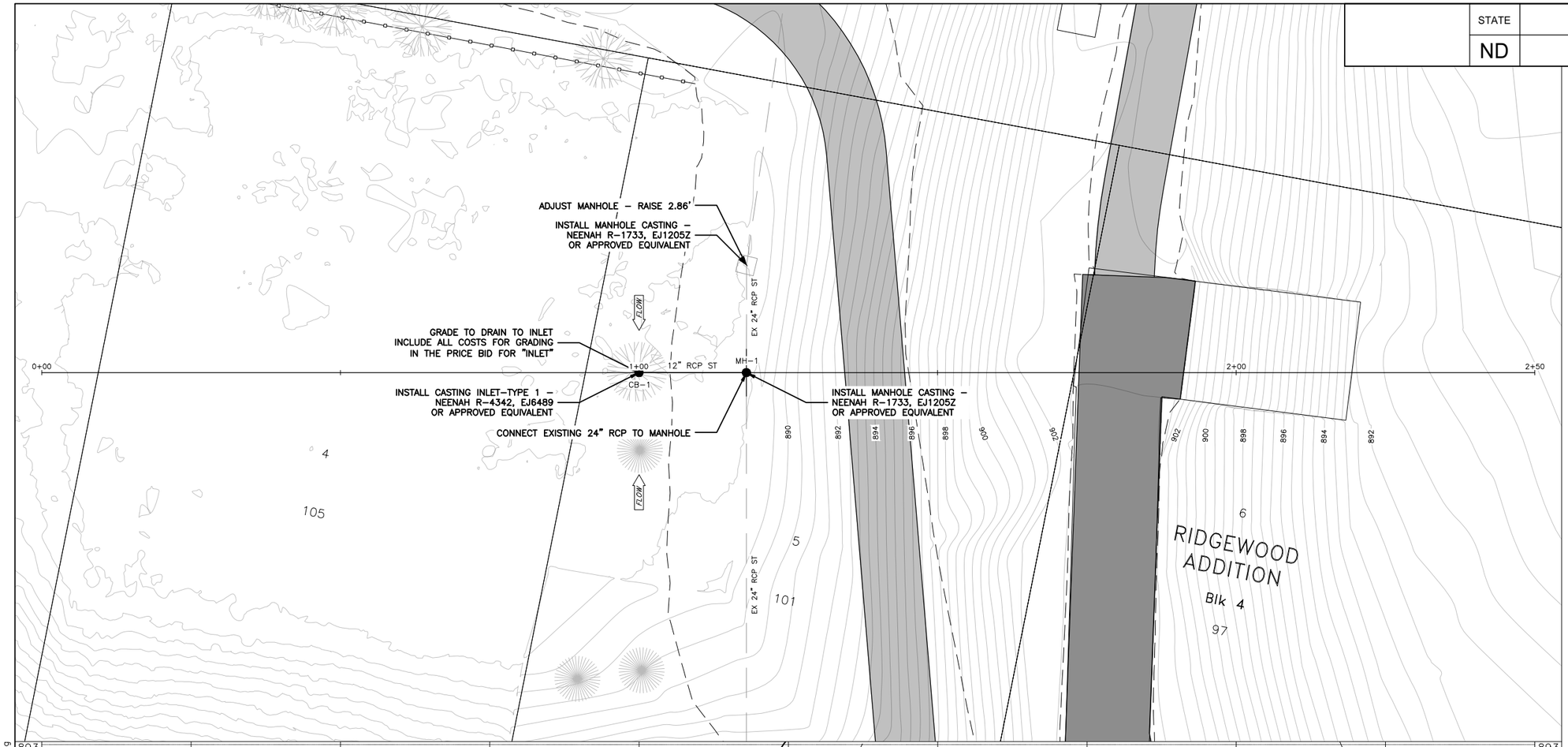
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

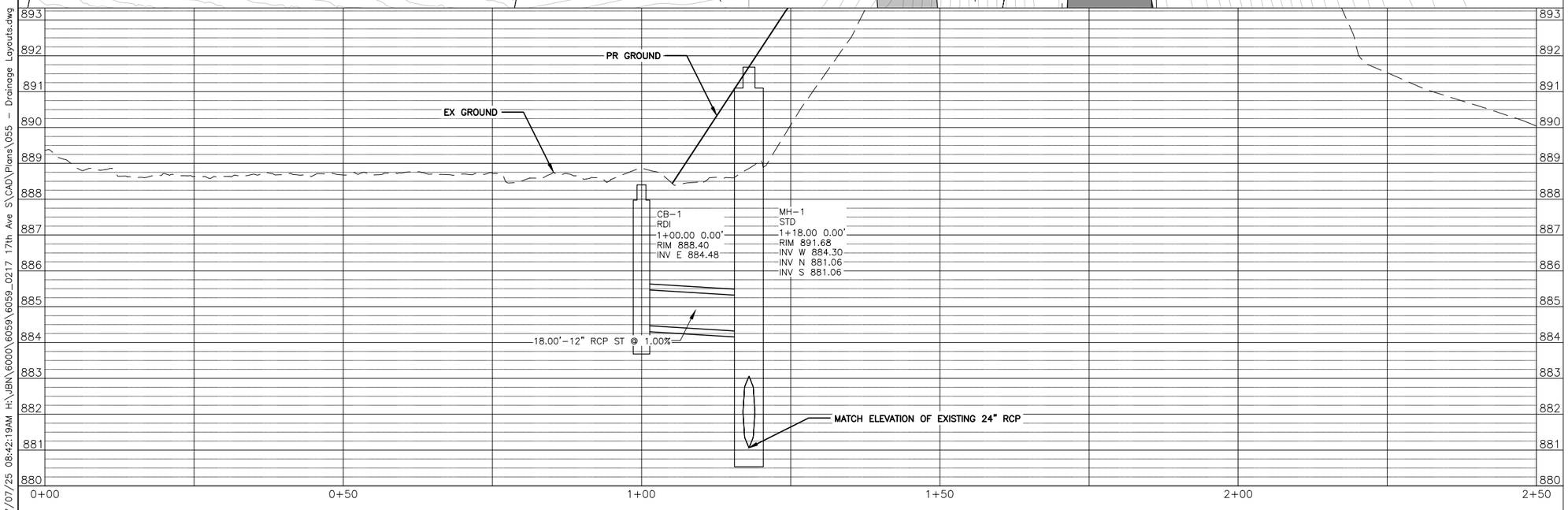
7/18/2025

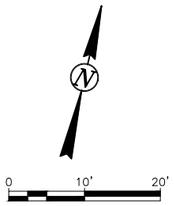
Removals

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	55	1







LEGEND:

FLOW / FLOW — FLOW DIRECTION

SIDEWALK CONCRETE 5IN

7" DRIVEWAY CONCRETE

SPEC	CODE	BID ITEM	QTY	UNIT
714	0115	PIPE CONC REINF 12IN CL III–STRM DRN		
		STA 1+00 TO STA 1+18	18	LF
722	0100	MANHOLE 48IN		
		STA 1+18	1	EA
722	0315	MANHOLE CASTING		
		STA 1+18 LT	1	EA
		STA 1+18	1	EA
		TOTAL	2	EA
722	3455	CASTING INLET–TYPE 1		
		STA 1+00	1	EA
722	3499	INLET		
		STA 1+00	1	EA
722	6200	ADJUST MANHOLE		
		STA 1+18 LT	1	EA

THE CITY OF Fargo FAR MORE

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DATE
NORTH DAKOTA

7/18/2025

Drainage Layouts

Red River Trail

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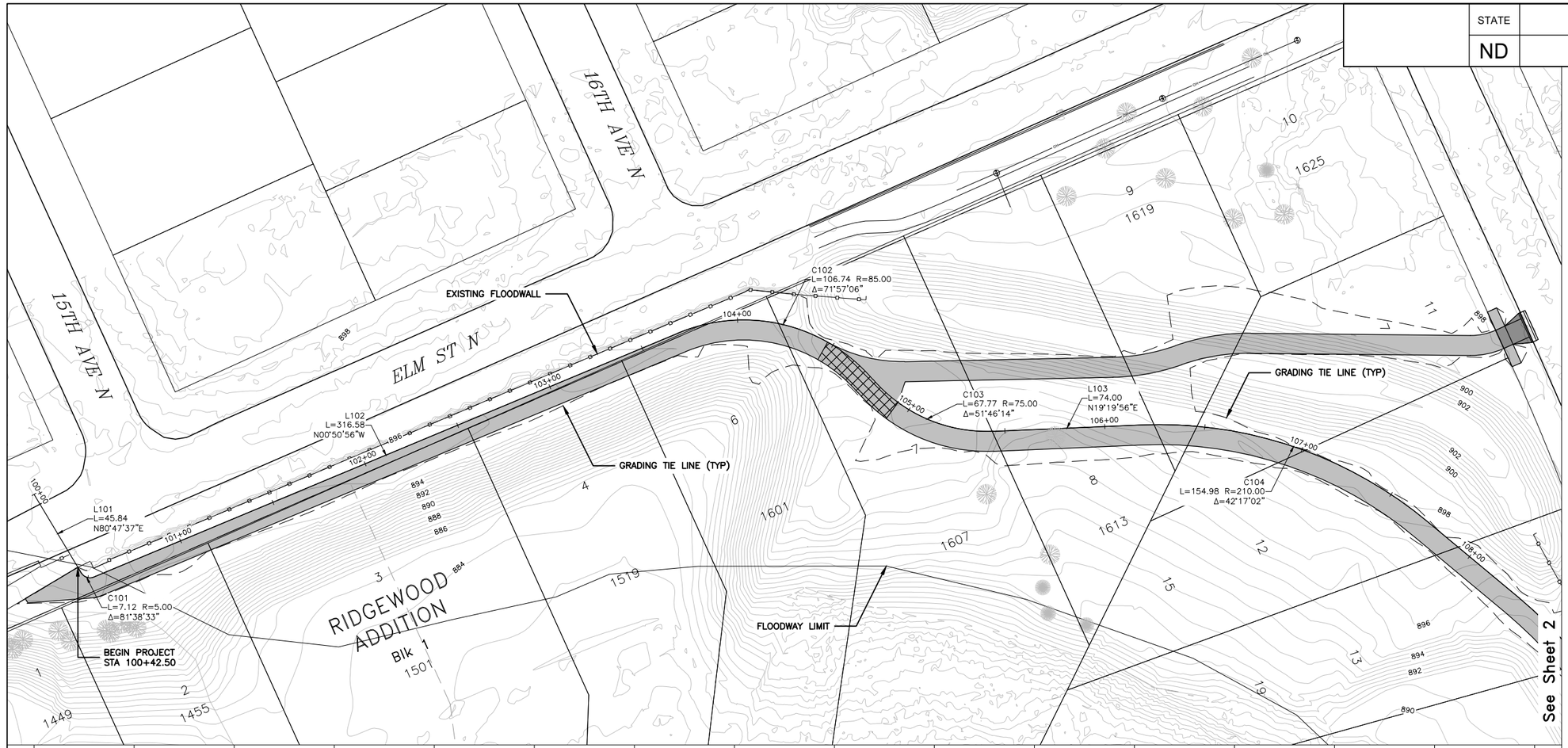
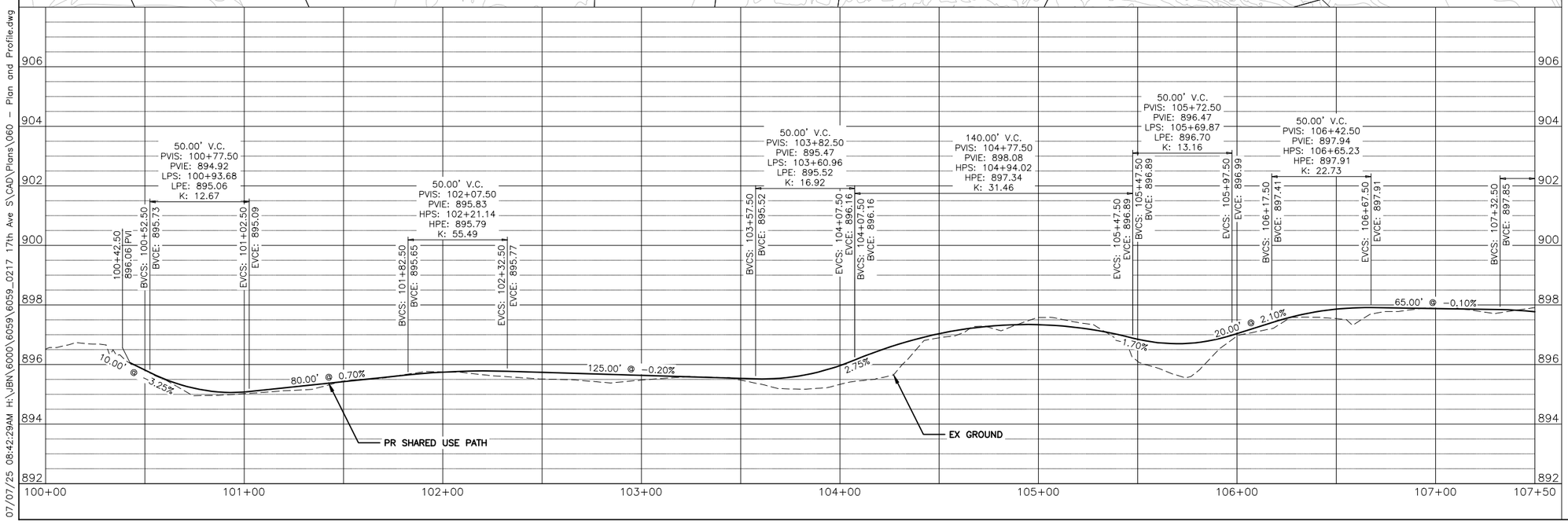
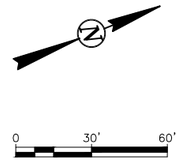
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	60	1







LEGEND:

SIDEWALK CONCRETE 5IN

LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

THE CITY OF Fargo FAR MORE

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Houston Engineering Inc.
Ph: 701.237.5065

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ADAM M. RUUD
PE-10407
DATE
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7/18/2025

Plan & Profile

Red River Trail

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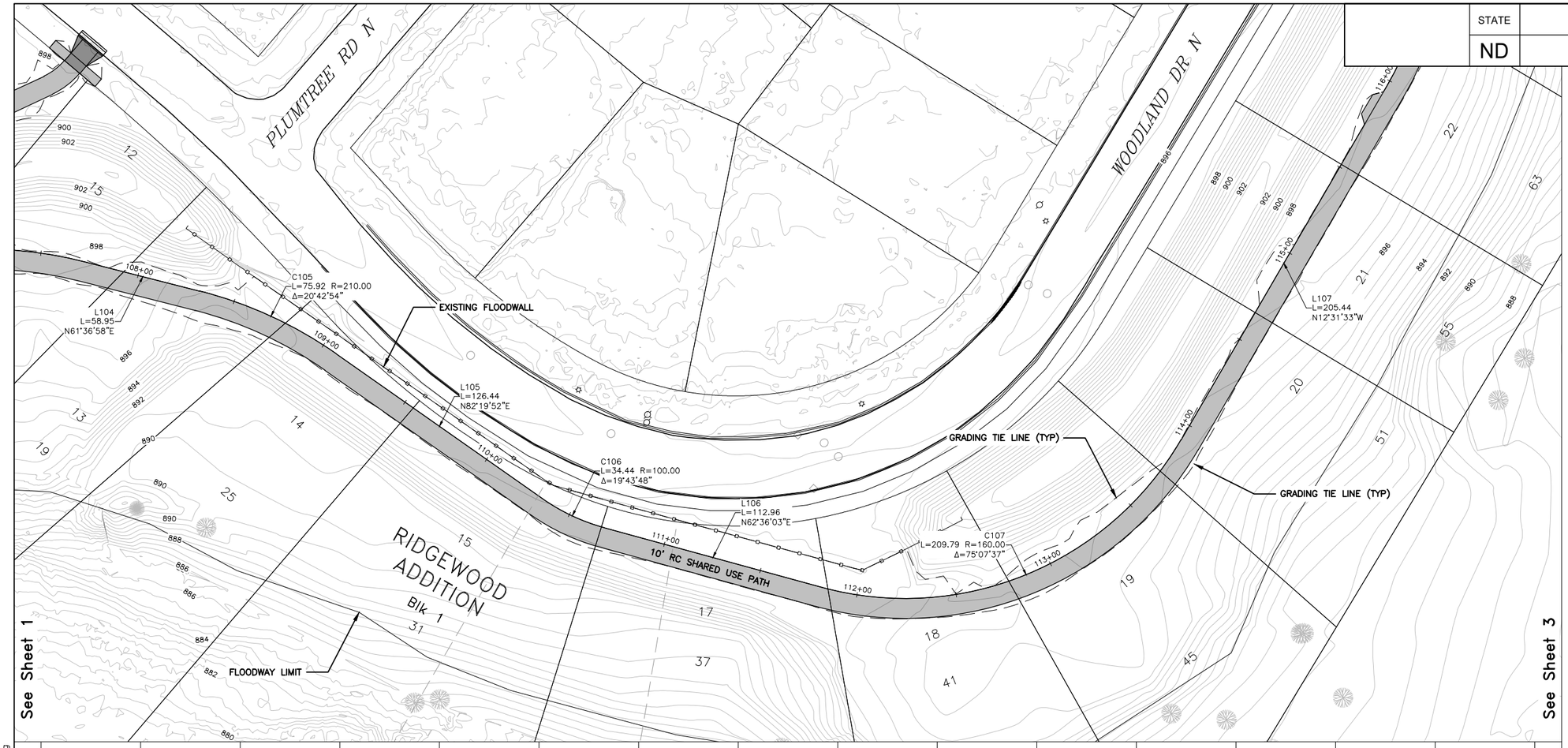
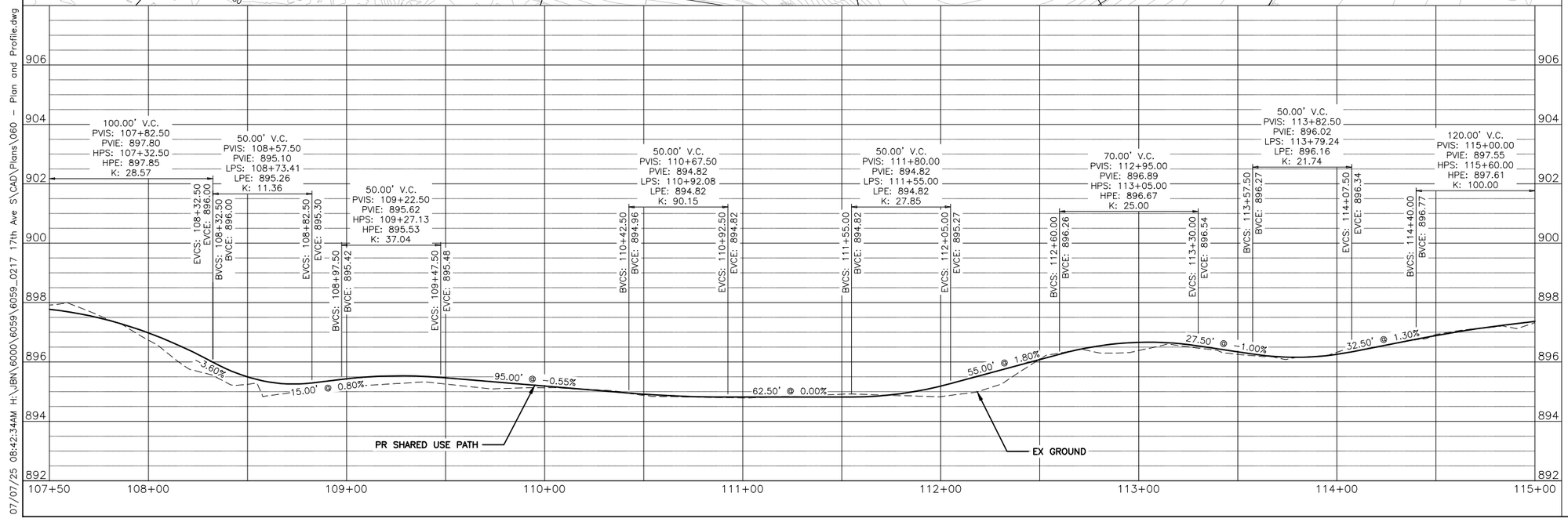
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	2





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LEGEND:

SIDEWALK CONCRETE 5IN

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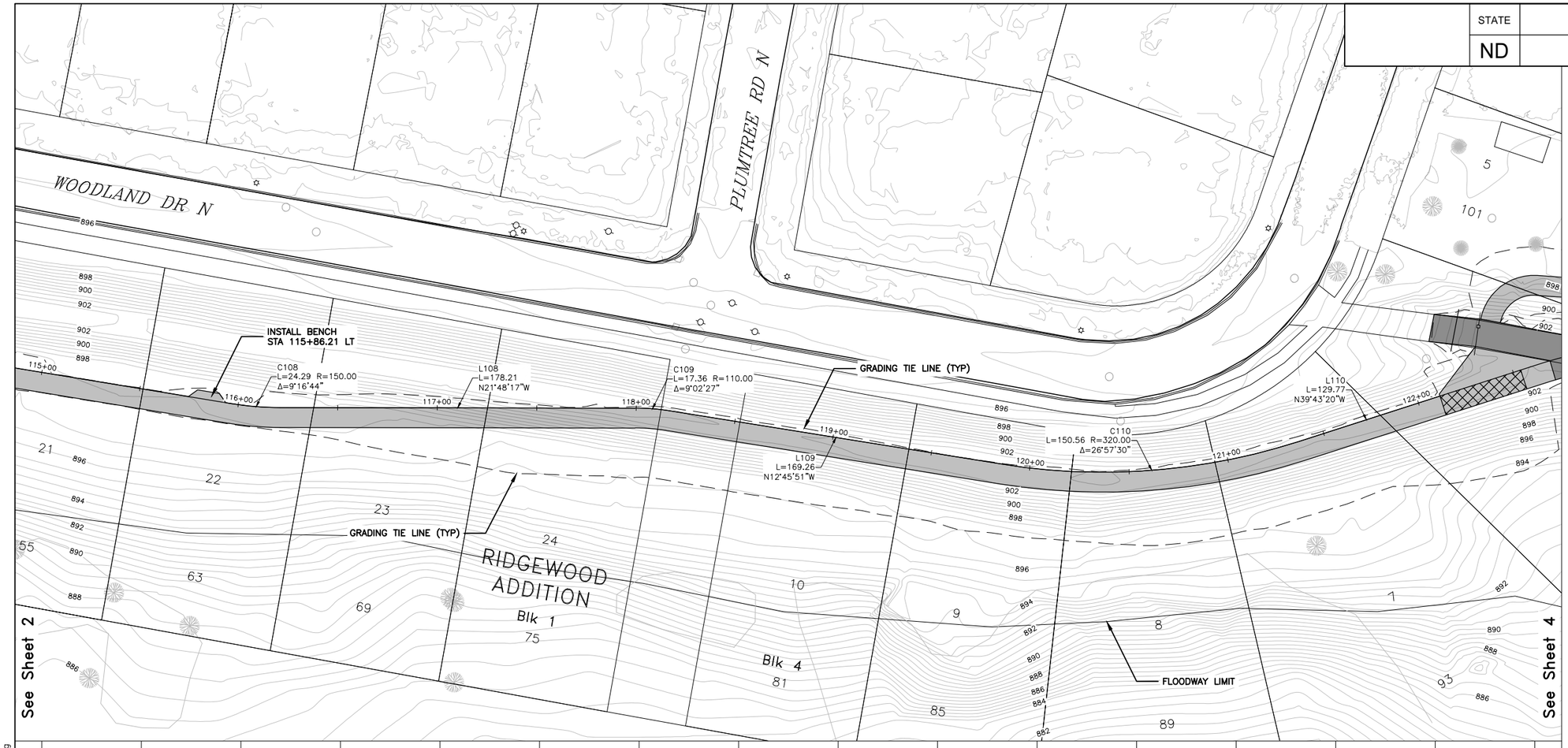
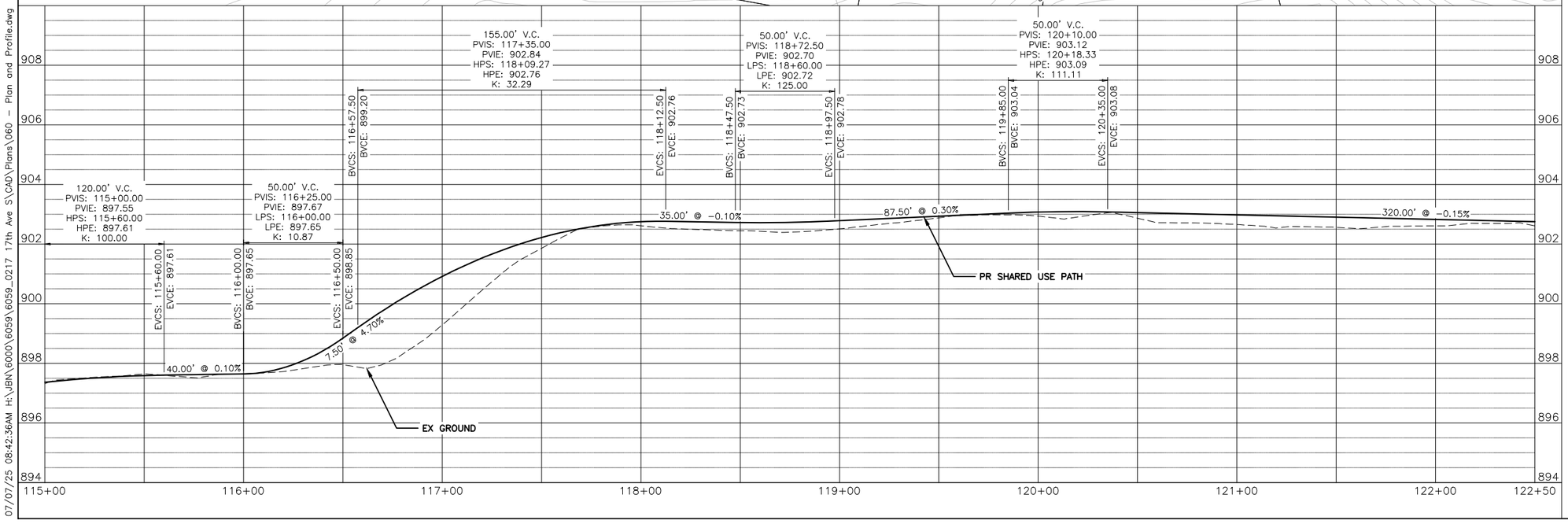
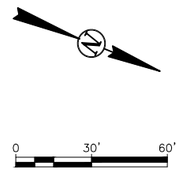
Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	3







LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

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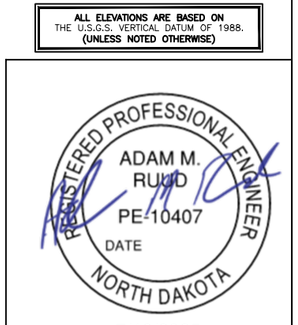

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Red River Trail

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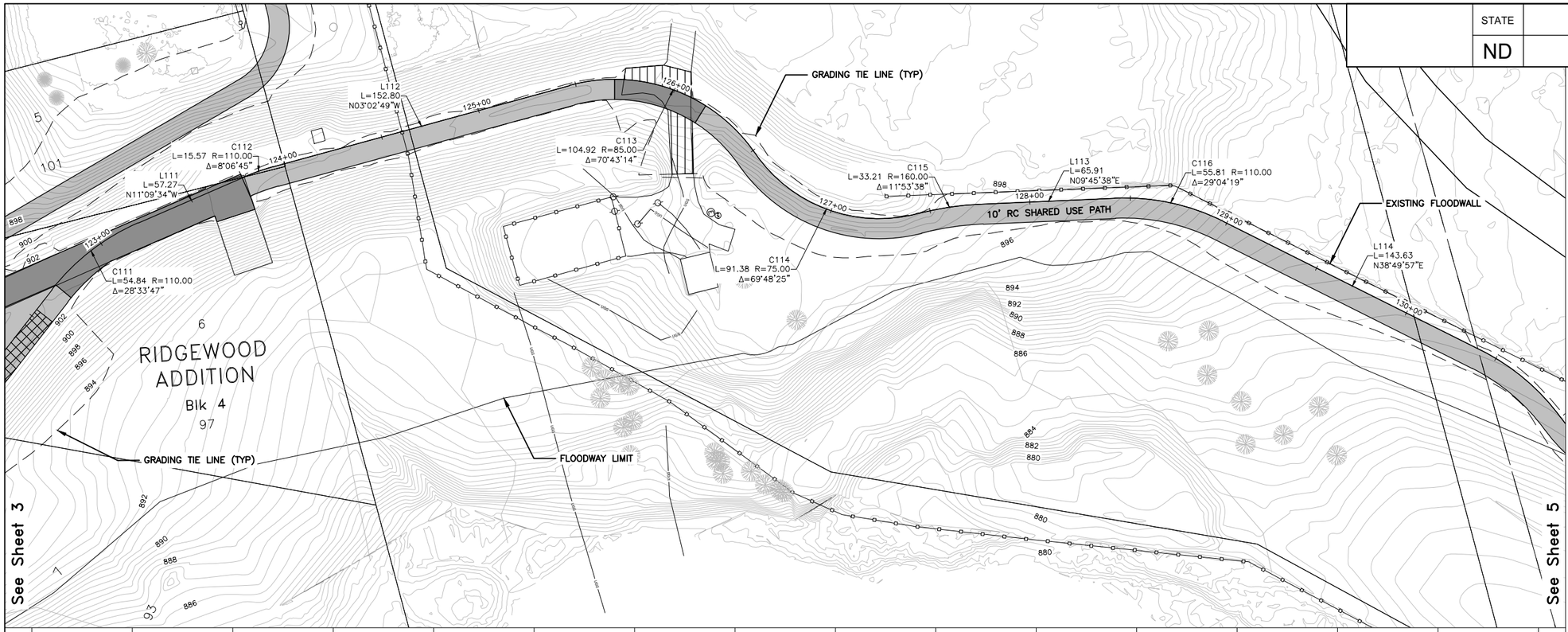
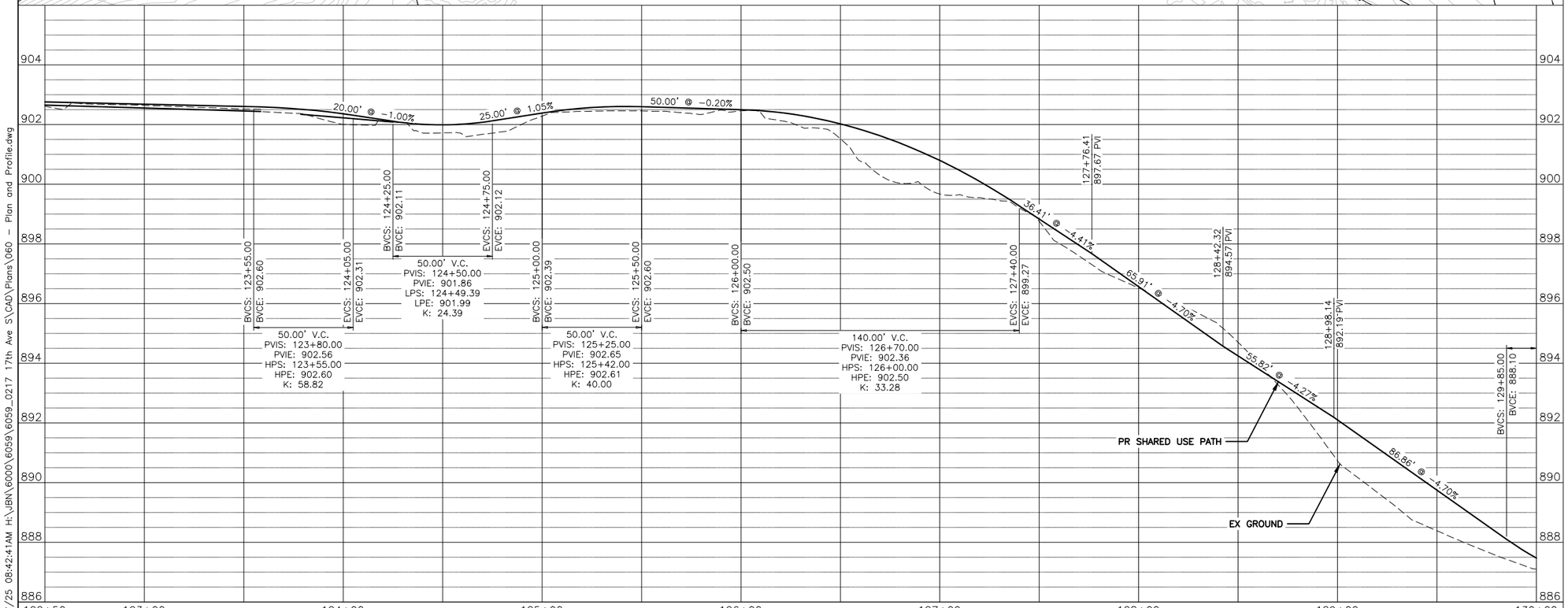
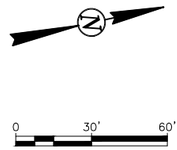
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	60	4







LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

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ADAM M. RUUD
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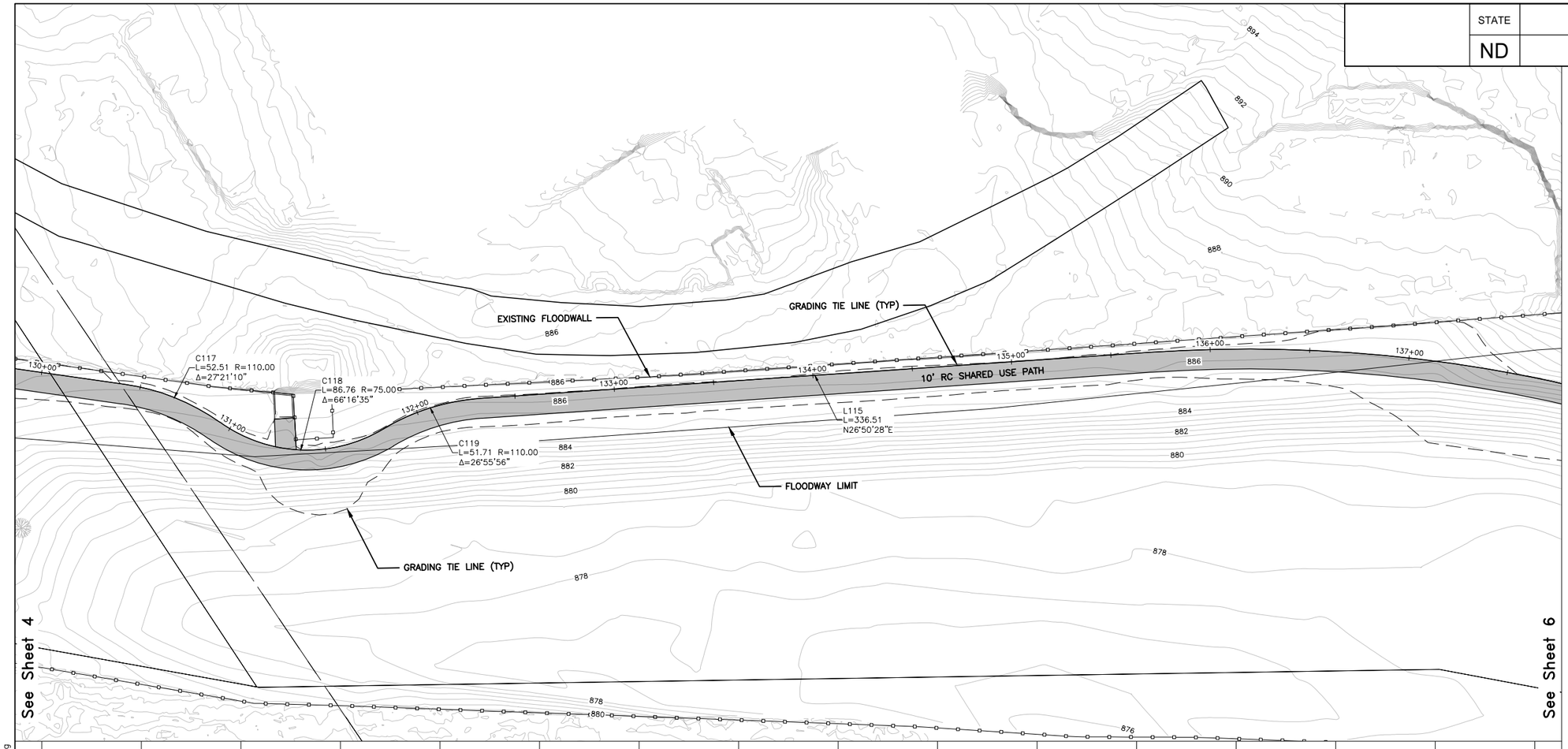
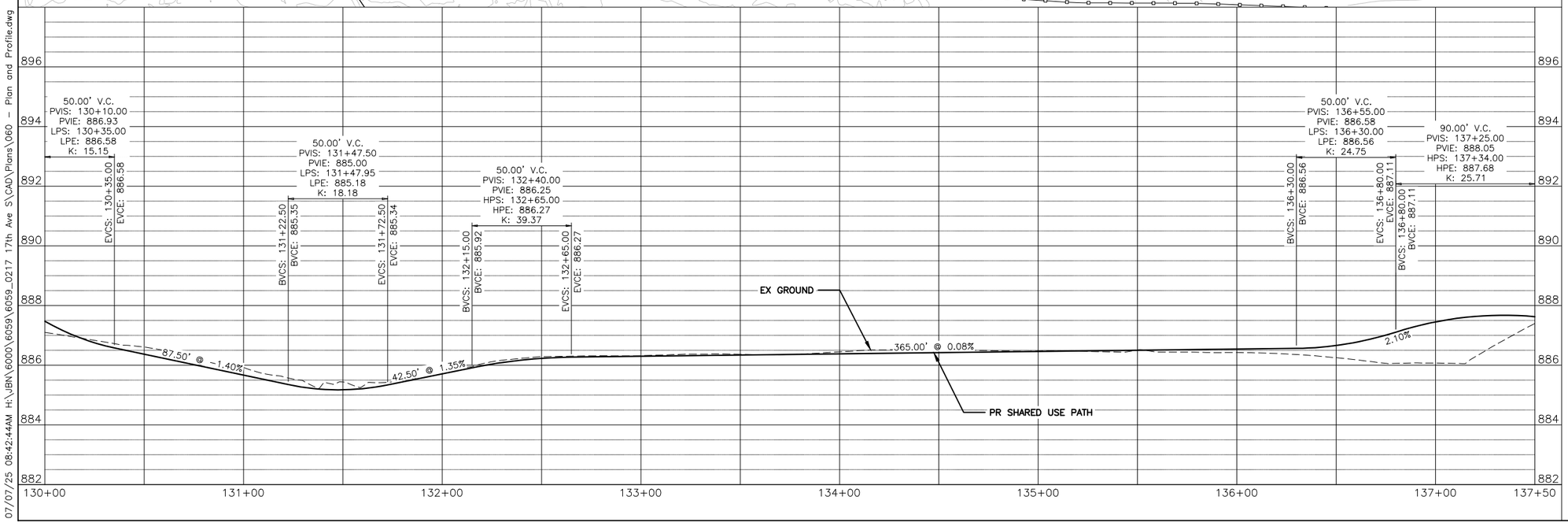
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	5





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LEGEND:

SIDEWALK CONCRETE 5IN

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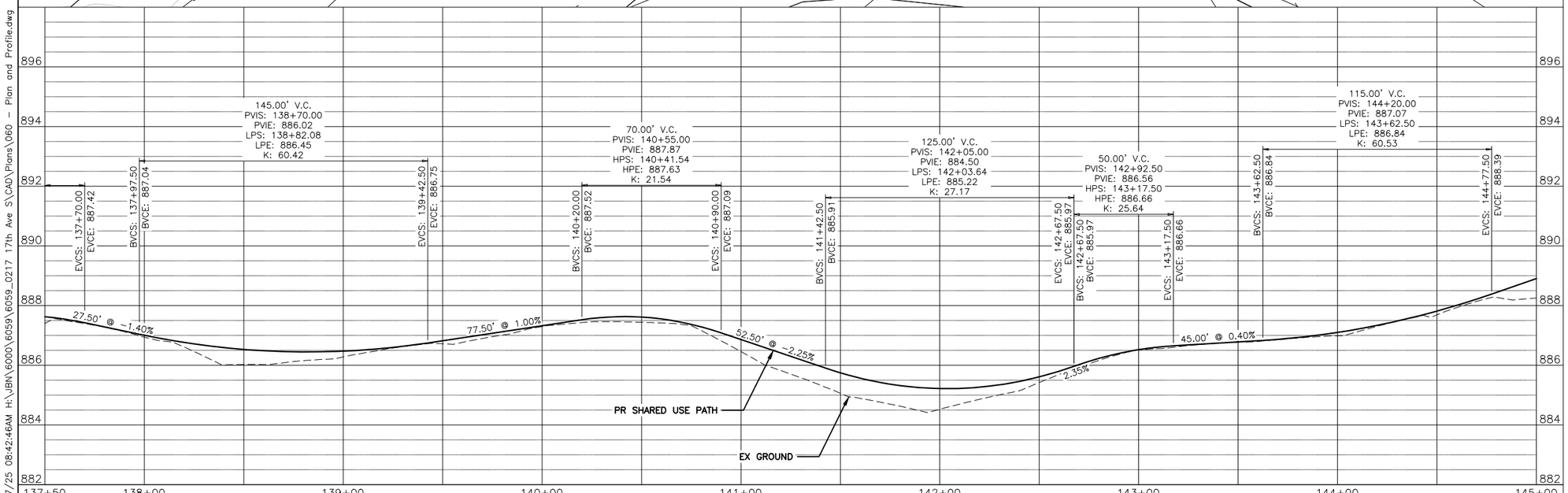
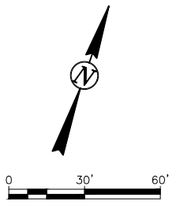
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	6





LEGEND:

SIDEWALK CONCRETE 5IN

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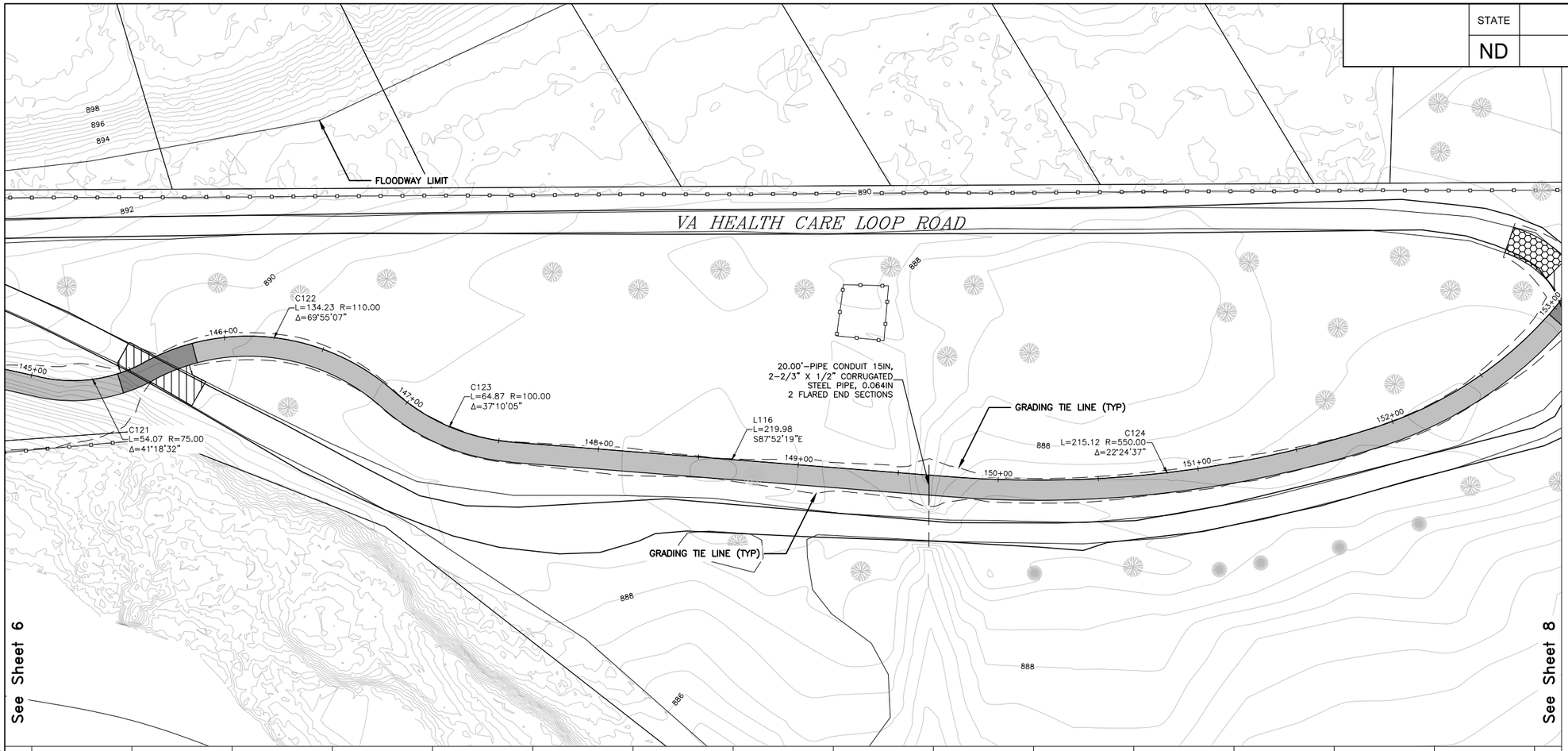
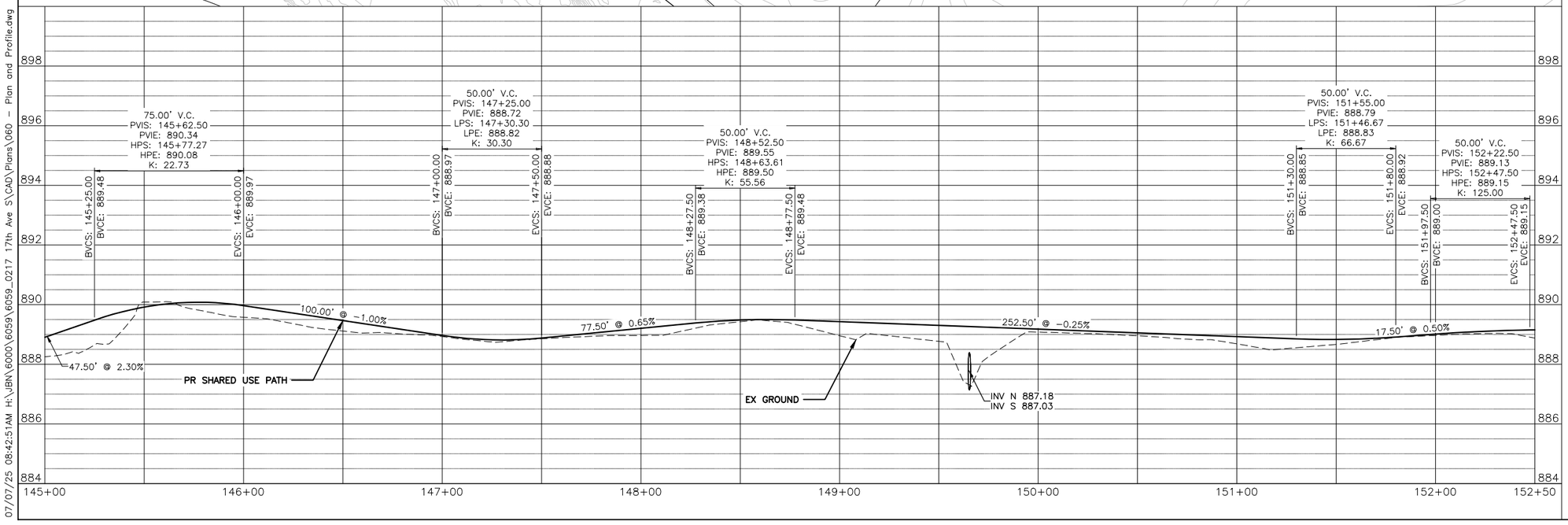
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	60	7





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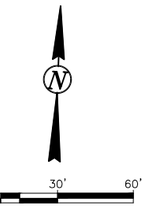

LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

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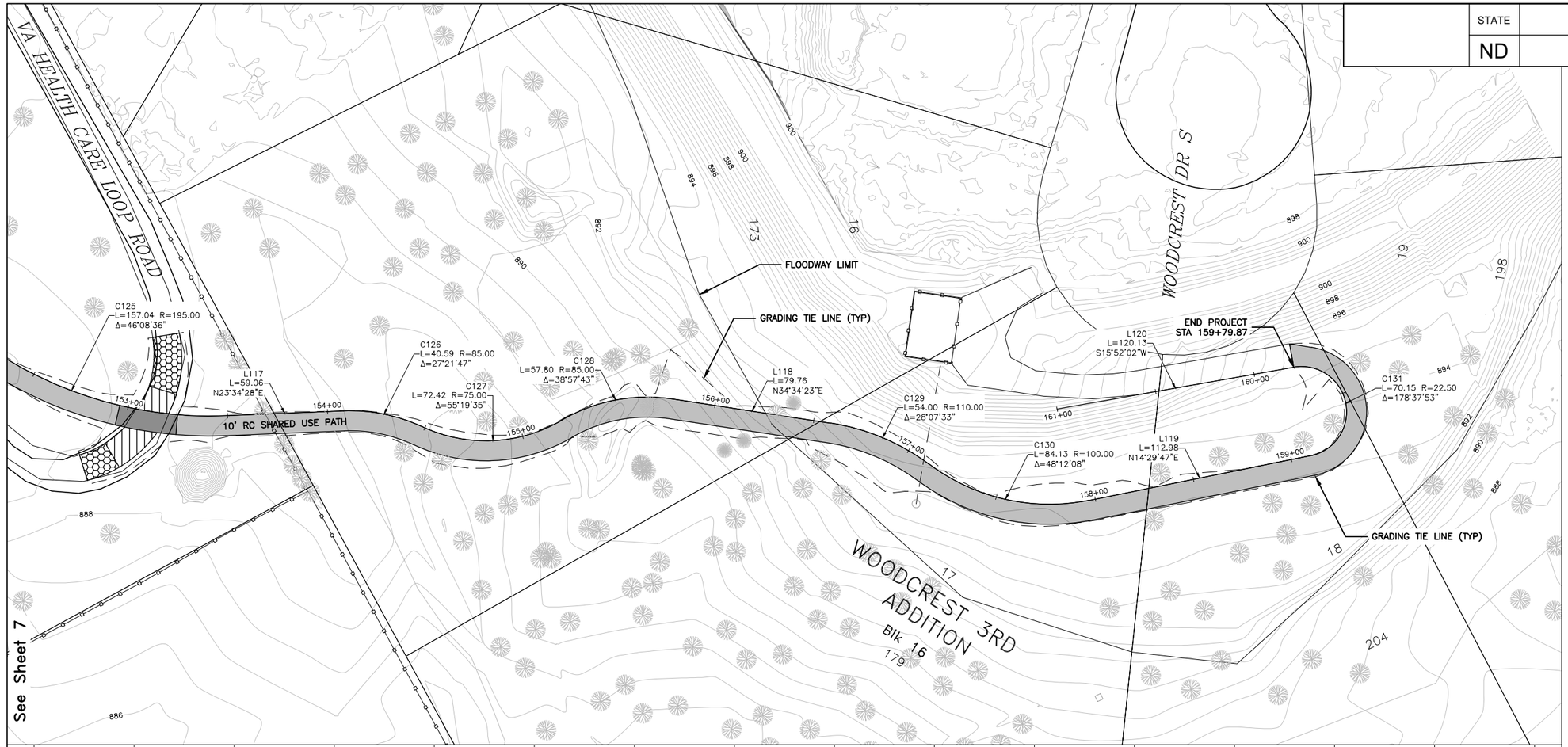
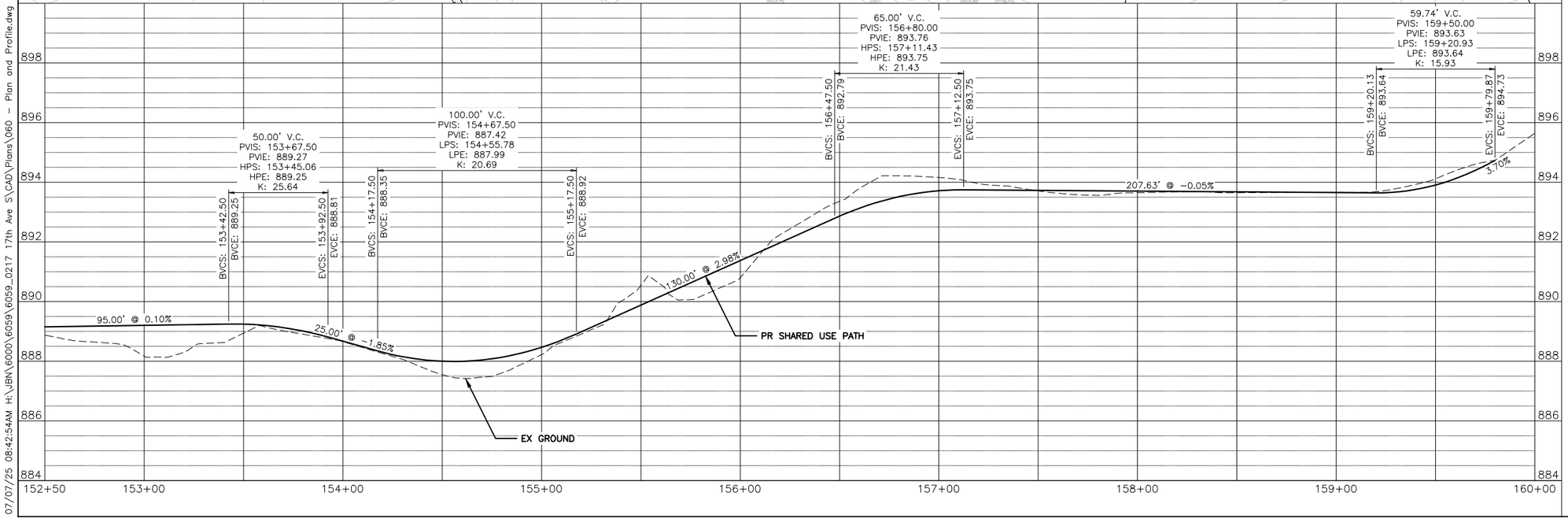
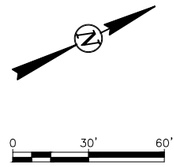
Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	8







LEGEND:

- 6" AGGREGATE SURFACE COURSE CL 13
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

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Red River Trail

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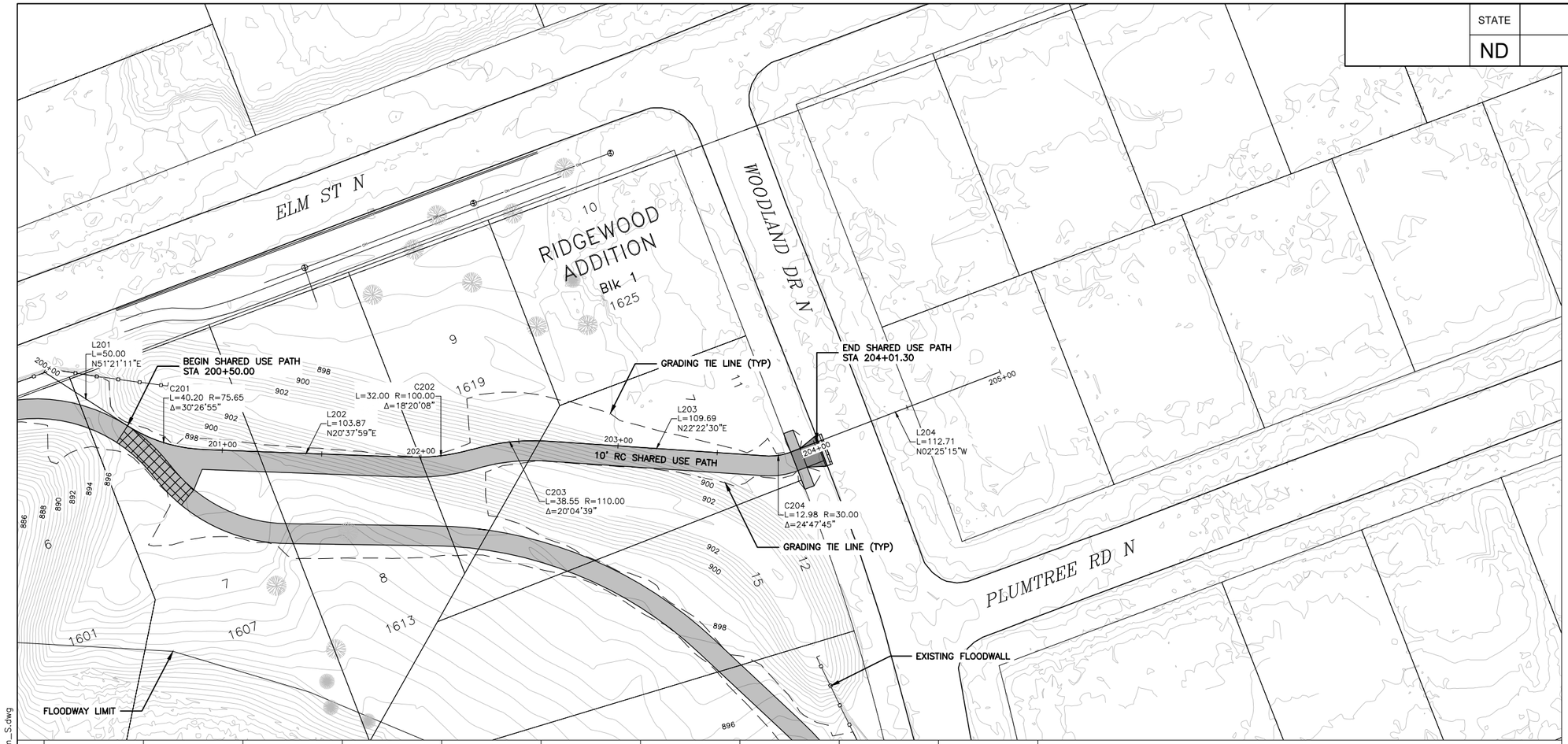
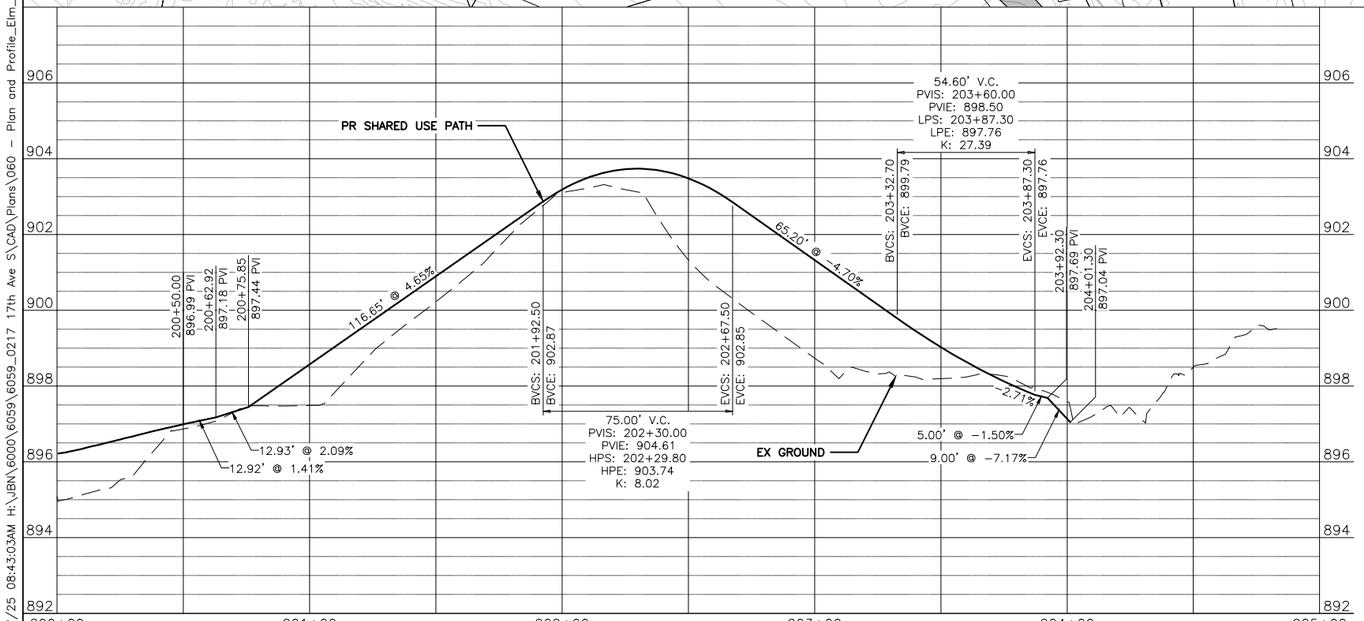
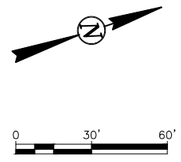
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	9







LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

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Plan & Profile

Red River Trail

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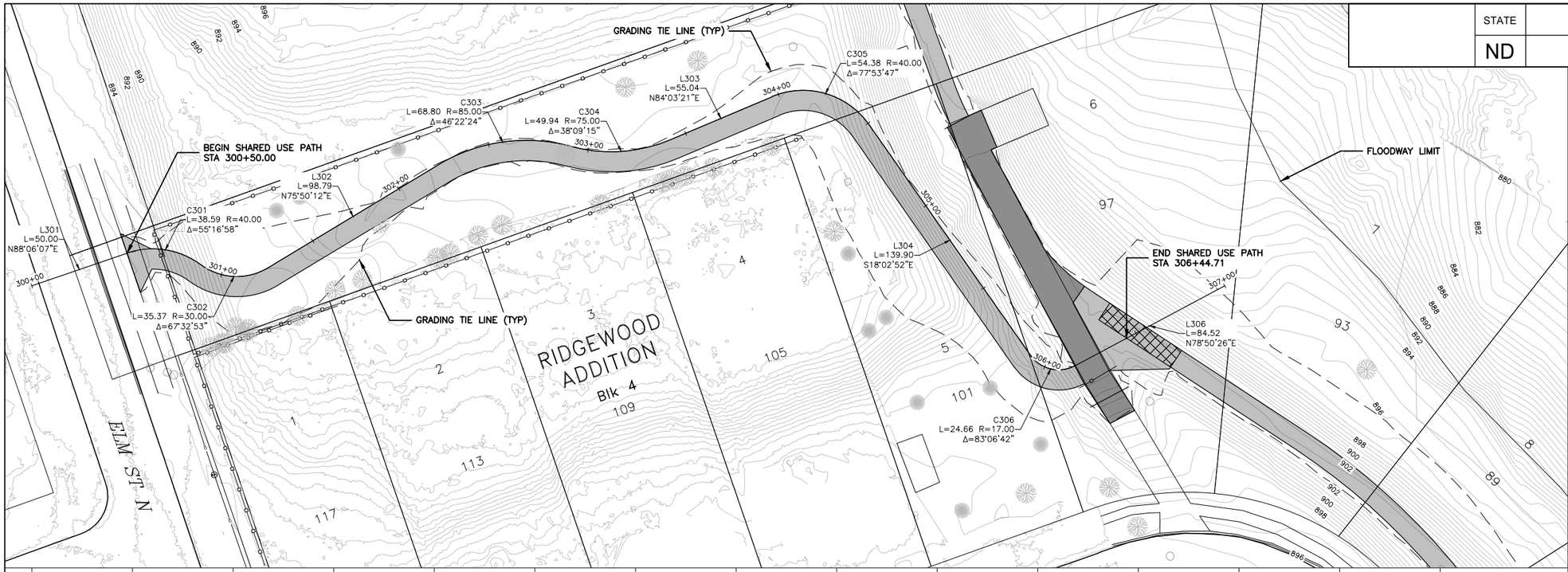
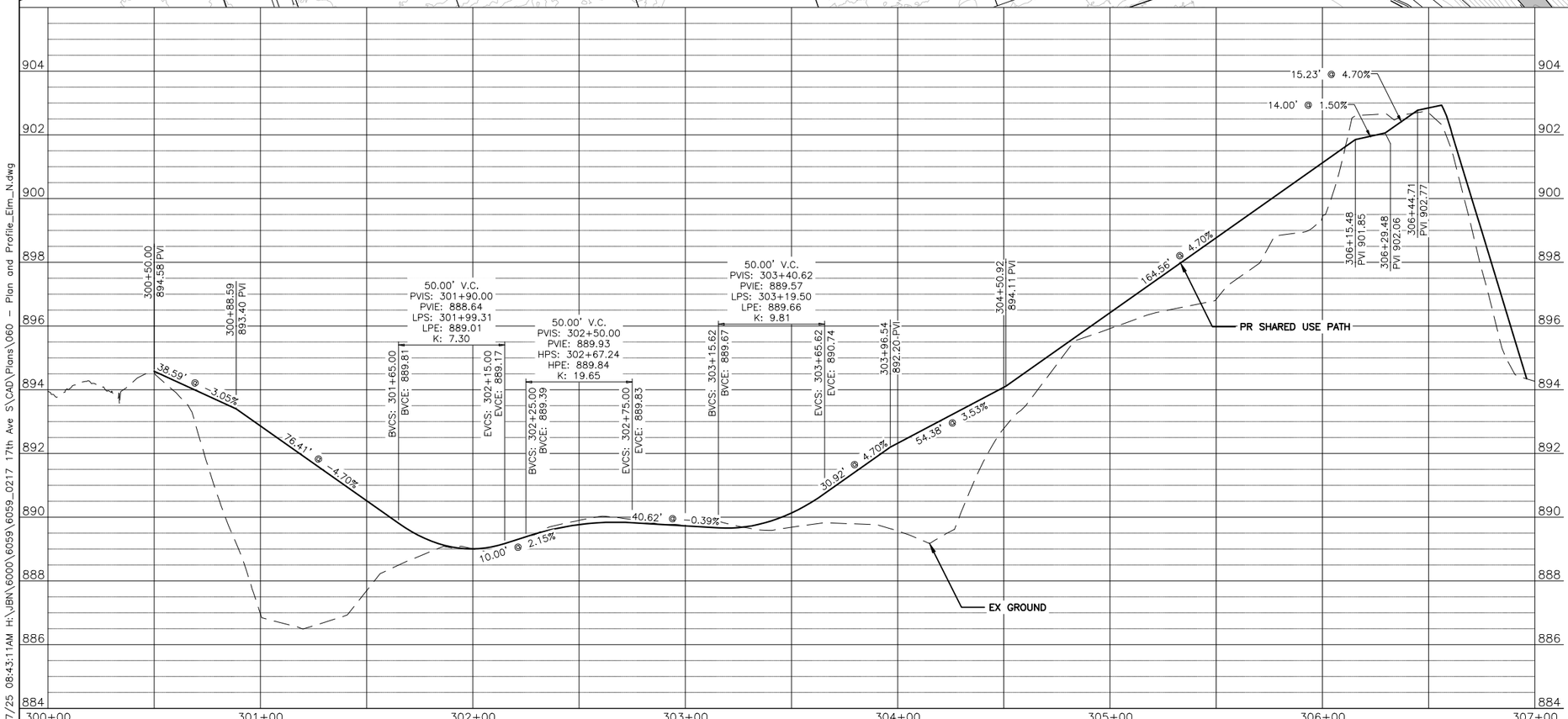
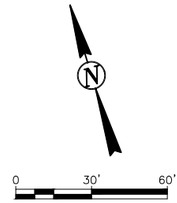
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	10







LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

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Red River Trail

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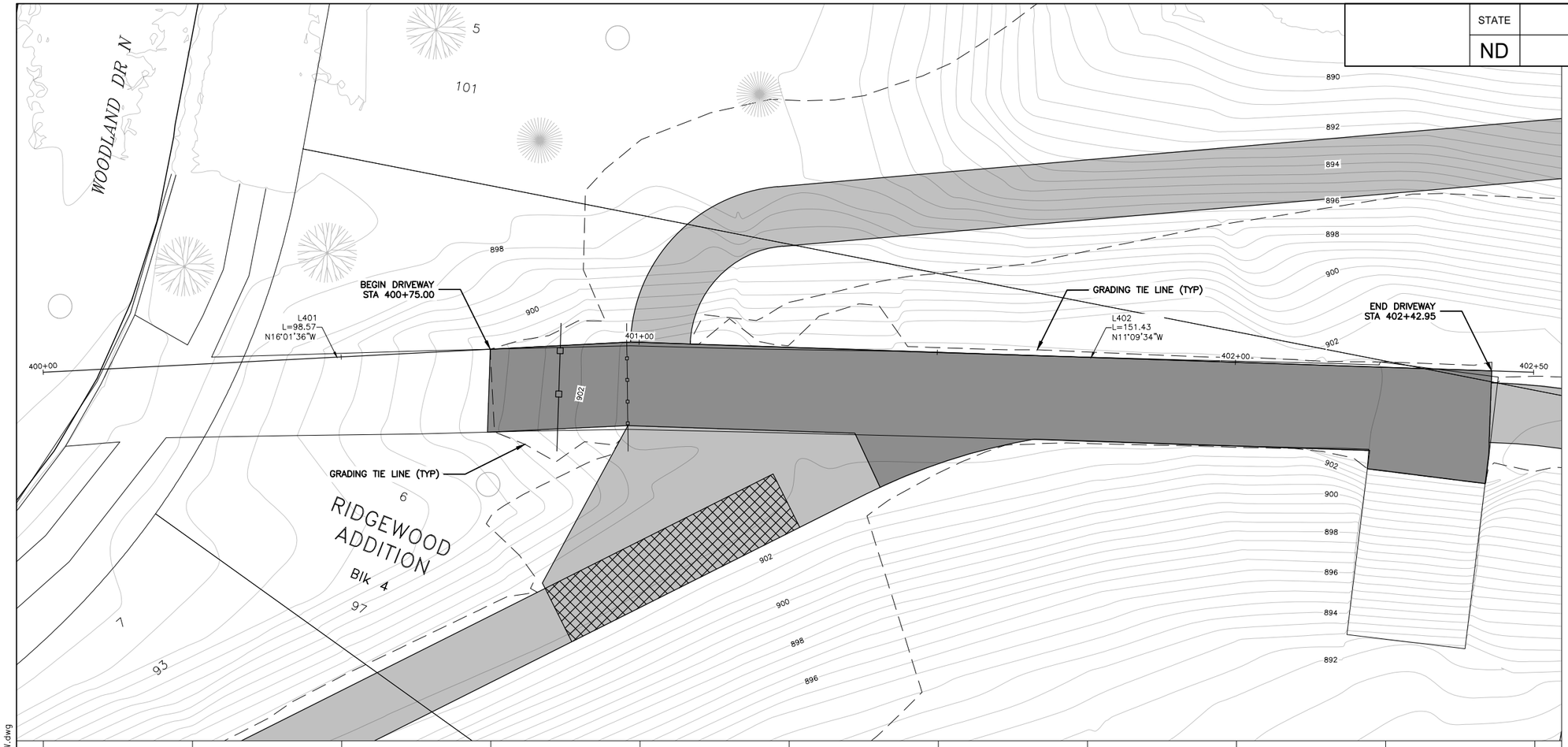
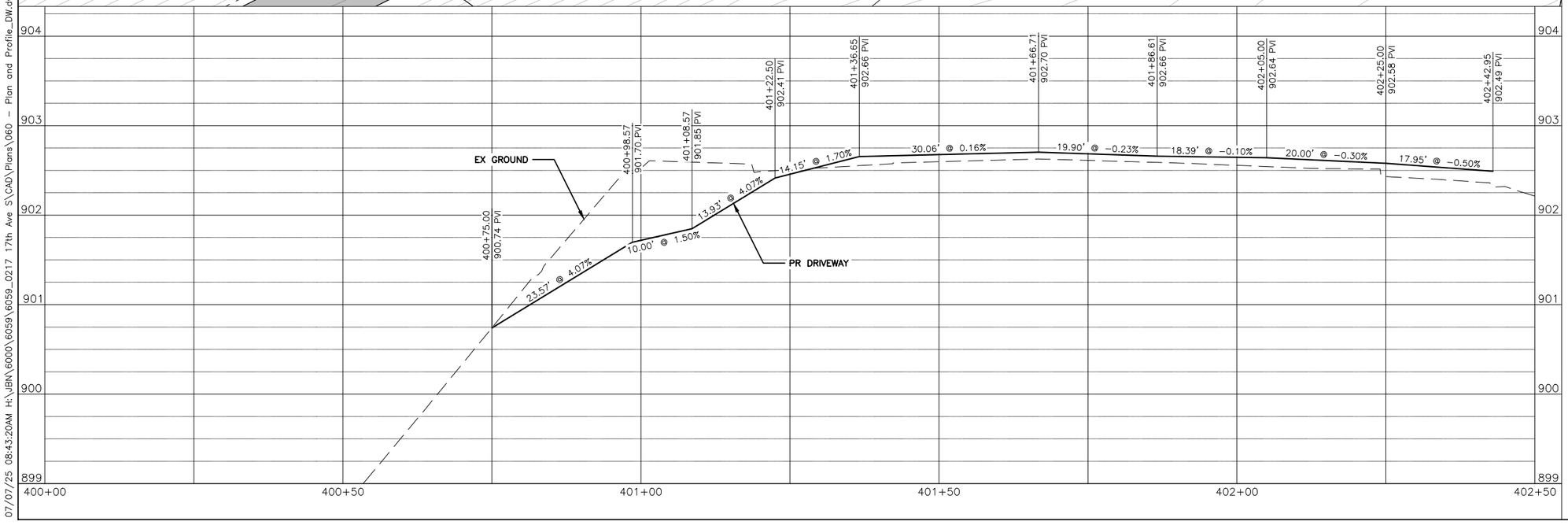
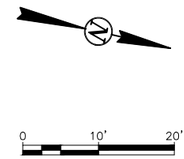
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	60	11







LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- LANDING: 1.5% PREFERRED SLOPE (2% MAXIMUM) ALL DIRECTIONS

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	75	1

Wetland Impact Table

Wetland Number	Location	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation						
								Mitigation Required			USACE/11990 Bank		11990 Bank	
				Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)	Location	Acre(s)
1a	Sec 29, T140N, R48W	Natural	Y					N	N	N				
1c	Sec 29, T140N, R48W	Natural	Y					N	N	N				
2	Sec 29 & 32, T140N, R48W	Natural	Y					N	N	N				
3	Sec 32, T140N, R48W	Natural	Y					N	N	N				
4	Sec 32, T140N, R48W	Natural	Y					N	N	N				
5	Sec 32, T140N, R48W	Natural	Y	0.002	0.052			Y	N	N			Ducks Unlimited	0.052
6	Sec 32, T140N, R48W	Natural	Y					N	N	N				
7	Sec 32, T140N, R48W	Natural	Y					N	N	N				
8	Sec 32, T140N, R48W	Natural	Y					N	N	N				
				0.002	**0.052**	**0.000**	**0.000**							**0.052**

Other Waters Impact Table

Other Waters											Other Water Mitigation				
			Size				Impacts to Other Waters				Mitigation Required			USACE Mitigation Bank	
							Acre(s)		Linear Feet						
Number	Location	Type	Acre(s)	Linear Feet	Feature	USACE Jurisdictional[1]	Temp	Perm	Temp	Perm	EO 11990	USACE	USFWS	Location	Acre(s)
OW 1b	Sec 29, T140N, R48W	Modified River	0.097	106.58	Natural	Y					N	N	N		
		Totals	**0.097**	**106.58**			**0.000**	**0.000**	**0.00**	**0.00**					**0.000**

[1] A wetland Jurisdictional Determination has not been issued by the USACE. All wetlands are assumed to be Jurisdictional.

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Wetland Impacts

Red River Trail

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	75	2

Impact Summary Table

Permanent Impact Summary		Temporary Impacts and additional information	
Wetland Type	**Total (Acres)**	**Wetland Type**	**Total (Acres / Lf)**
Natural/JD	0.052	**Temporary JD**	0.002
Natural/Non-JD	0.000	**Non-JD Temporary**	0.000
Artificial/JD	0.000	**Permanent JD > 0.10**	0.000
Artificial /Non-JD	0.000	**Permanent OW**	0.000 / 0.00
Total	**0.052**	**Temporary OW**	0.000 / 0.00

Mitigation Summary Table

	Location	Onsite Acre(s)	11990 Bank Acre(s)	USACE/11990 Bank Acre(s)	USFWS Bank Acre(s)
USACE Only					
EO 11990 Only	Ducks Unlimited		0.052		
USACE/11990					
USFWS					
	Total		**0.052**		

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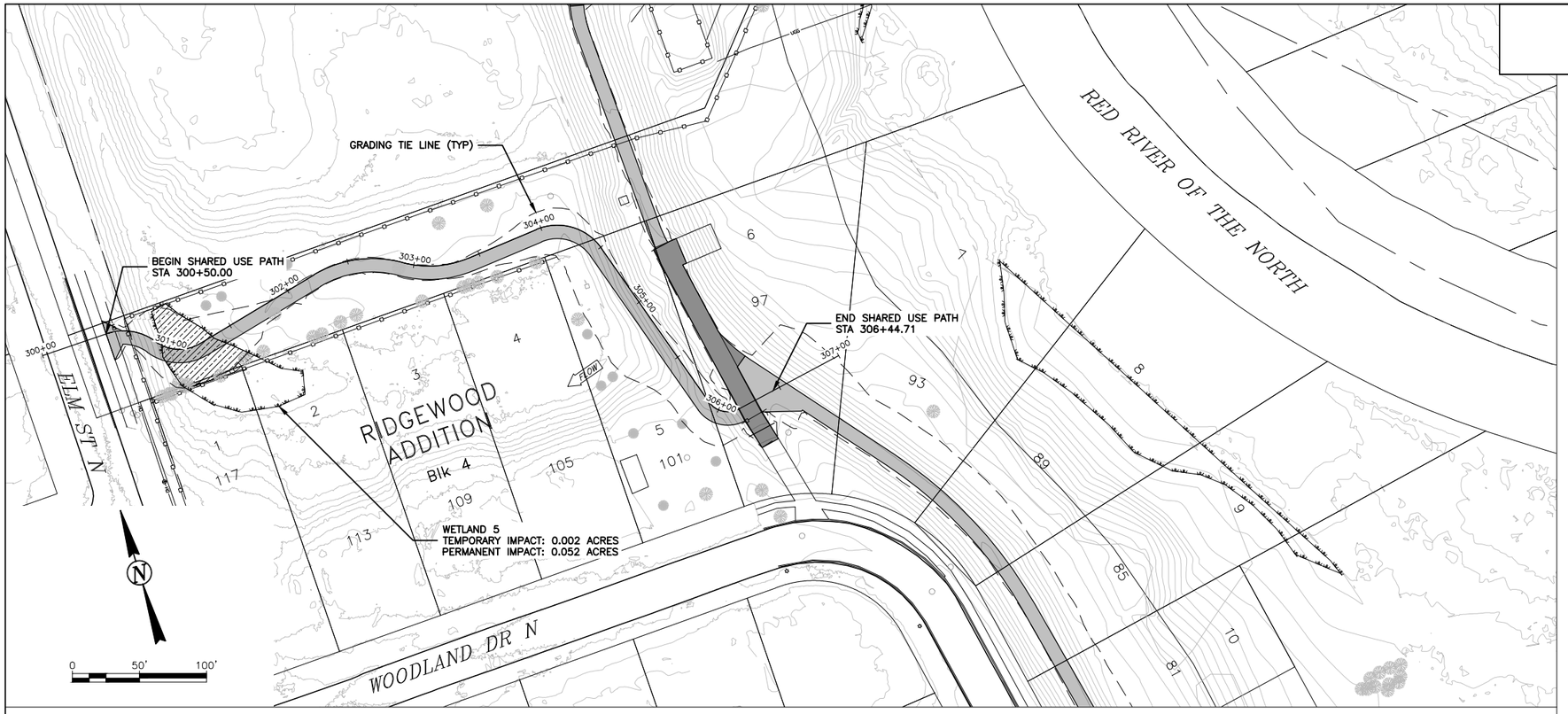
Wetland Impacts

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	75	3



LEGEND:

- FLOW / FLOW — FLOW DIRECTION
- WETLAND TEMPORARY IMPACT
- WETLAND PERMANENT IMPACT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo
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Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Wetland Impacts

Red River Trail

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	76	1

SPEC	CODE	BID ITEM		QTY	UNIT
251	2000	TEMPORARY COVER CROP			
		STA 100+43 TO STA 111+00		0.628	ACRE
		STA 111+00 TO STA 122+00		0.736	ACRE
			TOTAL	1.364	ACRE
253	0201	HYDRAULIC MULCH			
		STA 100+43 TO STA 111+00		0.628	ACRE
		STA 111+00 TO STA 122+00		0.736	ACRE
			TOTAL	1.364	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 100+43 TO STA 111+00		1297	LF
		STA 111+00 TO STA 122+00		1586	LF
			TOTAL	2530	LF
261	0113	REMOVE FIBER ROLLS 12IN			
		STA 100+43 TO STA 111+00		1297	LF
		STA 111+00 TO STA 122+00		1586	LF
			TOTAL	2530	LF
708	1540	INLET PROTECTION–SPECIAL			
		STA 100+43 TO STA 111+00		1	EA
		STA 111+00 TO STA 122+00		1	EA
			TOTAL	2	EA
261	1541	REMOVE INLET PROTECTION–SPECIAL			
		STA 100+43 TO STA 111+00		1	EA
		STA 111+00 TO STA 122+00		1	EA
			TOTAL	2	EA

LEGEND:

- FLOW / FLOW — FLOW DIRECTION
- TEMPORARY COVER CROP HYDRAULIC MULCH
- FIBER ROLLS 12IN
- INLET PROTECTION–SPECIAL
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo FAR MORE

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Temporary Erosion Control

Red River Trail

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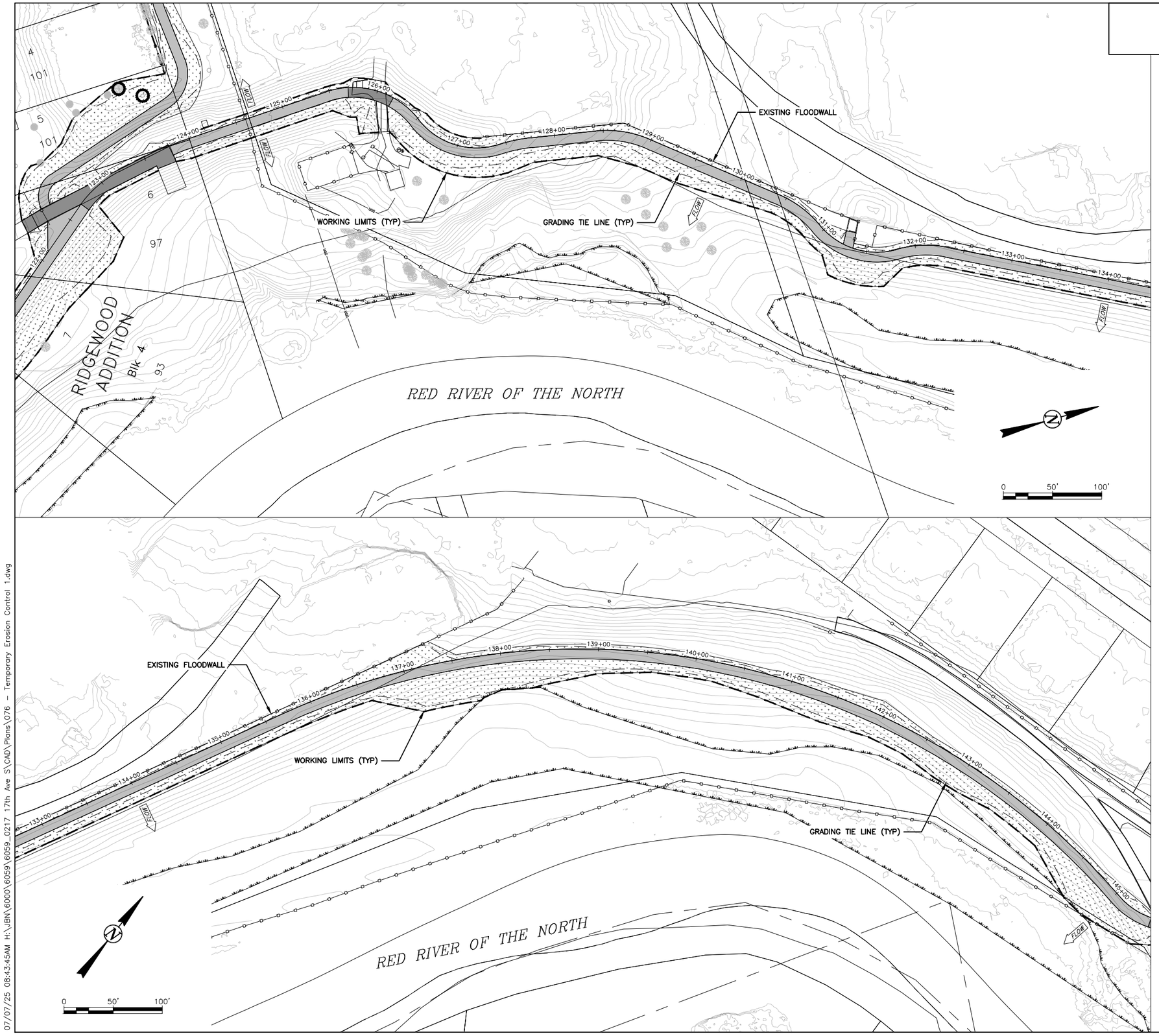
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	76	2

SPEC	CODE	BID ITEM		QTY	UNIT
251	2000	TEMPORARY COVER CROP			
		STA 122+00 TO STA 133+00		0.551	ACRE
		STA 133+00 TO STA 144+00		0.573	ACRE
			TOTAL	1.124	ACRE
253	0201	HYDRAULIC MULCH			
		STA 122+00 TO STA 133+00		0.551	ACRE
		STA 133+00 TO STA 144+00		0.573	ACRE
			TOTAL	1.124	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 122+00 TO STA 133+00		1453	LF
		STA 133+00 TO STA 144+00		1078	LF
			TOTAL	2531	LF
261	0113	REMOVE FIBER ROLLS 12IN			
		STA 122+00 TO STA 122+00		1453	LF
		STA 133+00 TO STA 144+00		1078	LF
			TOTAL	2531	LF



LEGEND:

- FLOW DIRECTION
- TEMPORARY COVER CROP / HYDRAULIC MULCH
- FIBER ROLLS 12IN
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
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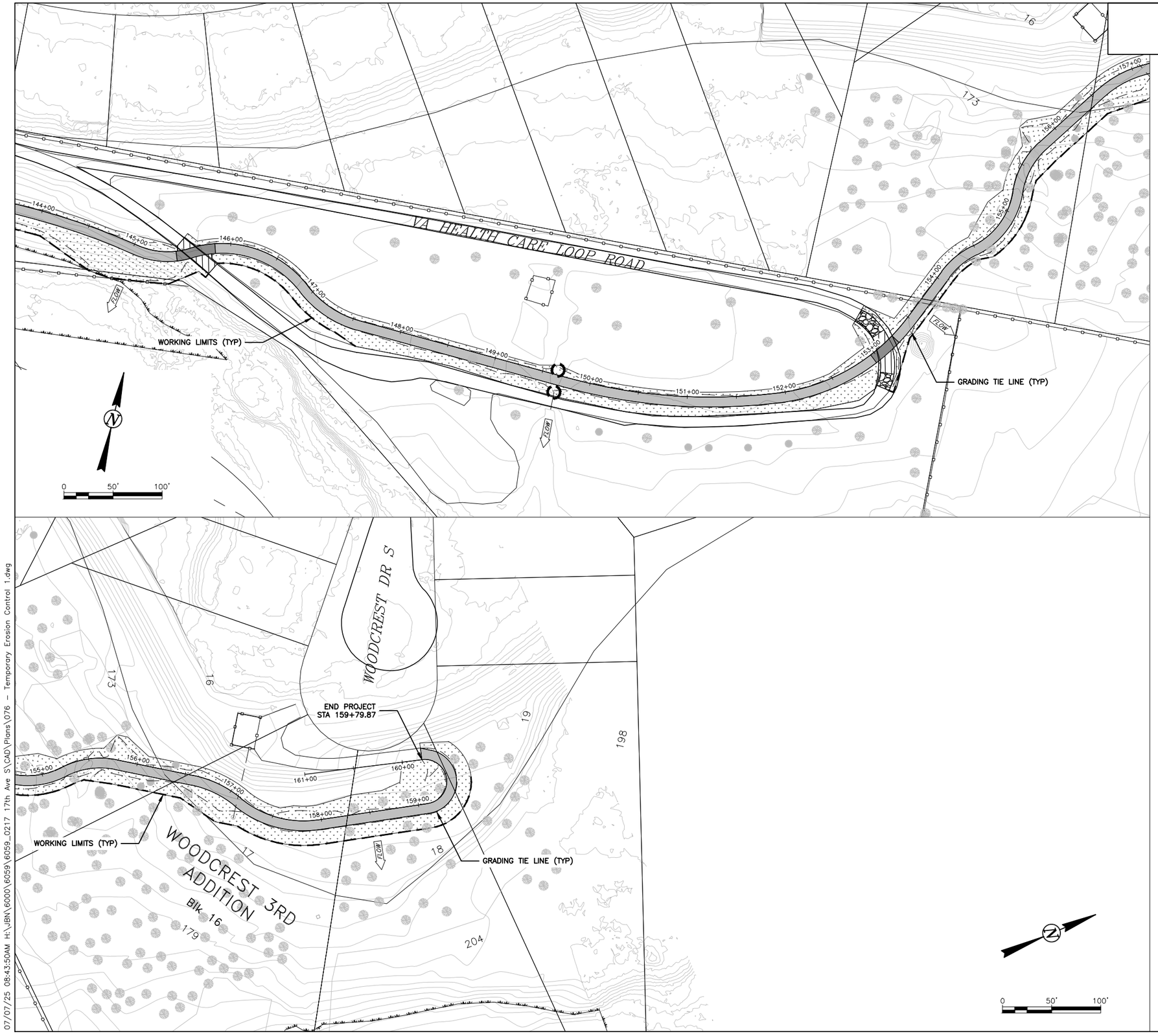
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Temporary Erosion Control

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	76	3



SPEC	CODE	BID ITEM		QTY	UNIT
251	2000	TEMPORARY COVER CROP			
		STA 144+00 TO STA 155+00		0.506	ACRE
		STA 155+00 TO STA 159+80		0.350	ACRE
			TOTAL	0.856	ACRE
253	0201	HYDRAULIC MULCH			
		STA 144+00 TO STA 155+00		0.506	ACRE
		STA 155+00 TO STA 159+80		0.350	ACRE
			TOTAL	0.856	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 144+00 TO STA 155+00		630	LF
		STA 155+00 TO STA 159+80		483	LF
			TOTAL	1113	LF
261	0113	REMOVE FIBER ROLLS 12IN			
		STA 144+00 TO STA 155+00		630	LF
		STA 155+00 TO STA 159+66		483	LF
			TOTAL	1113	LF

LEGEND:

- FLOW DIRECTION
- TEMPORARY COVER CROP / HYDRAULIC MULCH
- FIBER ROLLS 12IN
- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo
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Proj. No. 6059-0217
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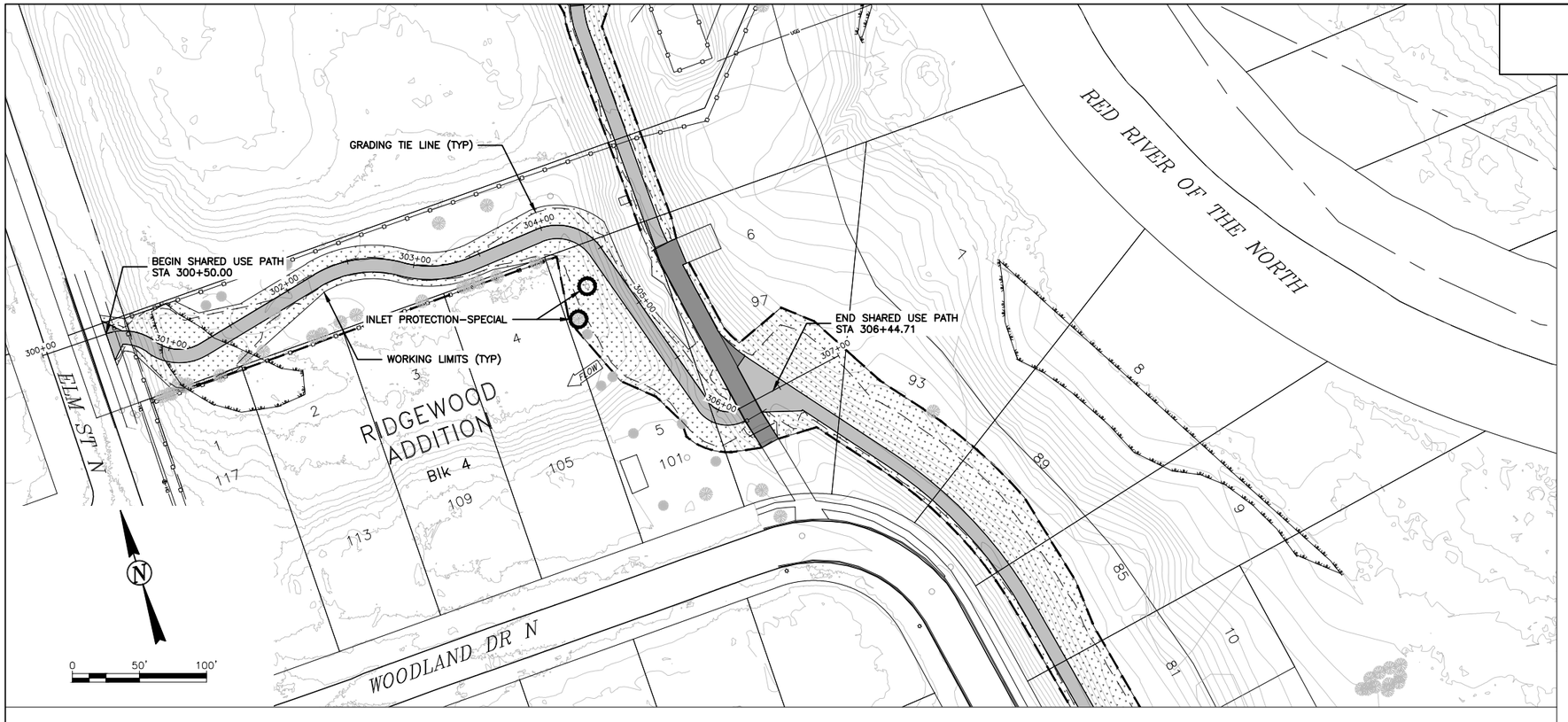
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Temporary Erosion Control

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	76	4



SPEC	CODE	BID ITEM	QTY	UNIT
251	2000	TEMPORARY COVER CROP STA 300+50 TO STA 306+17	0.383	ACRE
253	0201	HYDRAULIC MULCH STA 300+50 TO STA 306+17	0.383	ACRE
261	0112	FIBER ROLLS 12IN STA 300+50 TO STA 306+17	537	LF
261	0113	REMOVE FIBER ROLLS 12IN STA 300+50 TO STA 306+17	537	LF
708	1540	INLET PROTECTION–SPECIAL STA 300+50 TO STA 306+17	2	EA
708	1541	REMOVE INLET PROTECTION–SPECIAL STA 300+50 TO STA 306+17	2	EA

LEGEND:

- FLOW DIRECTION
- TEMPORARY COVER CROP HYDRAULIC MULCH
- FIBER ROLLS 12IN
- INLET PROTECTION–SPECIAL
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo FAR MORE

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NORTH DAKOTA

7/18/2025

Temporary Erosion Control

Red River Trail

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	77	1

SPEC	CODE	BID ITEM		QTY	UNIT
251	0300	SEEDING CLASS III			
		STA 100+43 TO STA 111+00		0.628	ACRE
		STA 111+00 TO STA 122+00		0.736	ACRE
			TOTAL	1.364	ACRE
253	0201	HYDRAULIC MULCH			
		STA 100+43 TO STA 111+00		0.628	ACRE
		STA 111+00 TO STA 122+00		0.736	ACRE
			TOTAL	1.364	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 100+43 TO STA 111+00		1297	LF
		STA 111+00 TO STA 122+00		1586	LF
			TOTAL	2883	LF

LEGEND:

- FLOW / FLOW — FLOW DIRECTION
- SEEDING CLASS III HYDRAULIC MULCH
- FIBER ROLLS 12IN
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Permanent Erosion Control

Red River Trail

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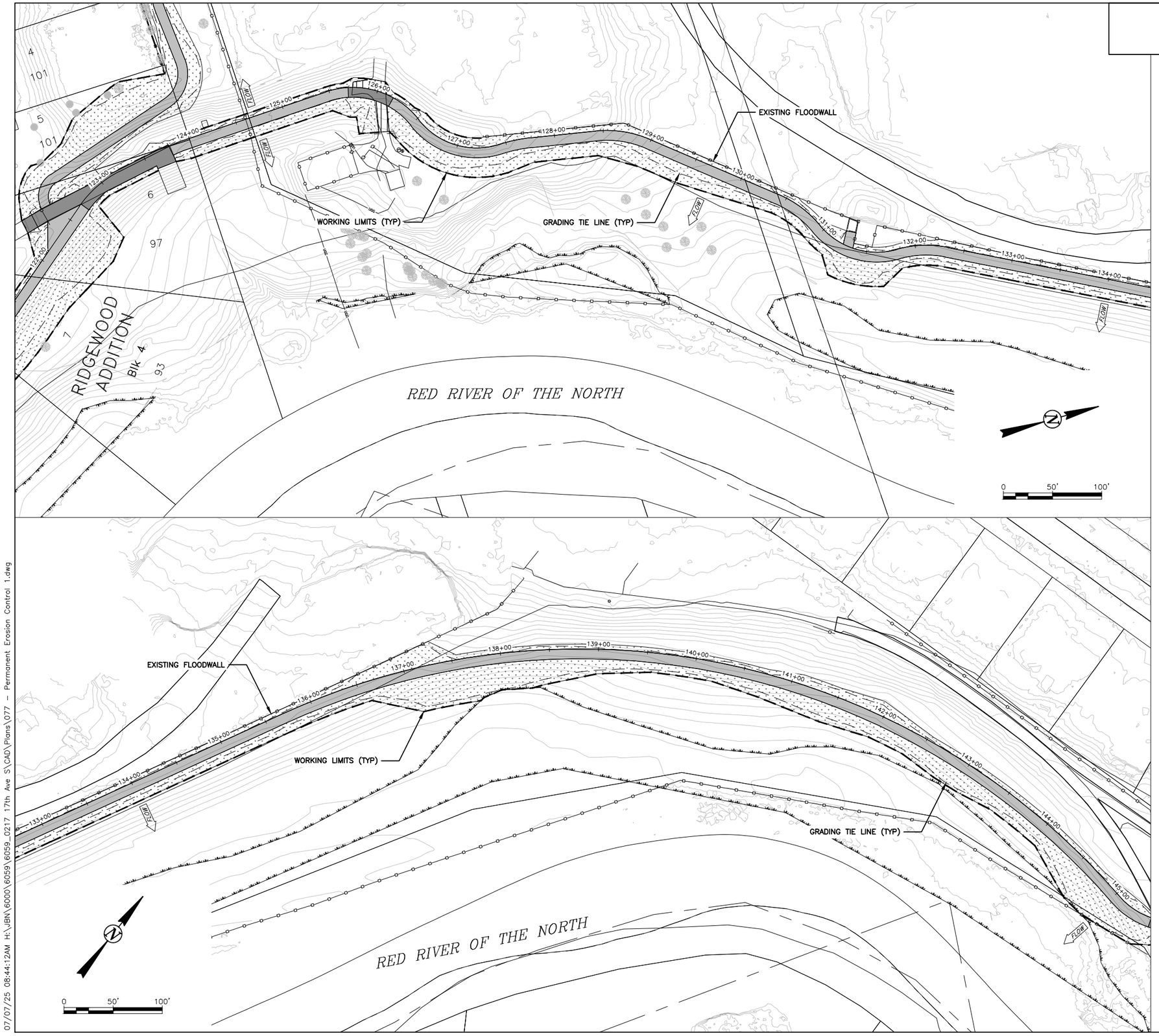
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	77	2



SPEC	CODE	BID ITEM		QTY	UNIT
251	0300	SEEDING CLASS III			
		STA 122+00 TO STA 133+00		0.551	ACRE
		STA 133+00 TO STA 144+00		0.573	ACRE
			TOTAL	1.124	ACRE
253	0201	HYDRAULIC MULCH			
		STA 122+00 TO STA 133+00		0.551	ACRE
		STA 133+00 TO STA 144+00		0.573	ACRE
			TOTAL	1.124	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 122+00 TO STA 133+00		1453	LF
		STA 133+00 TO STA 144+00		1078	LF
			TOTAL	2531	LF

LEGEND:

- FLOW / FLOW — FLOW DIRECTION
- SEEDING CLASS III HYDRAULIC MULCH
- FIBER ROLLS 12IN
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

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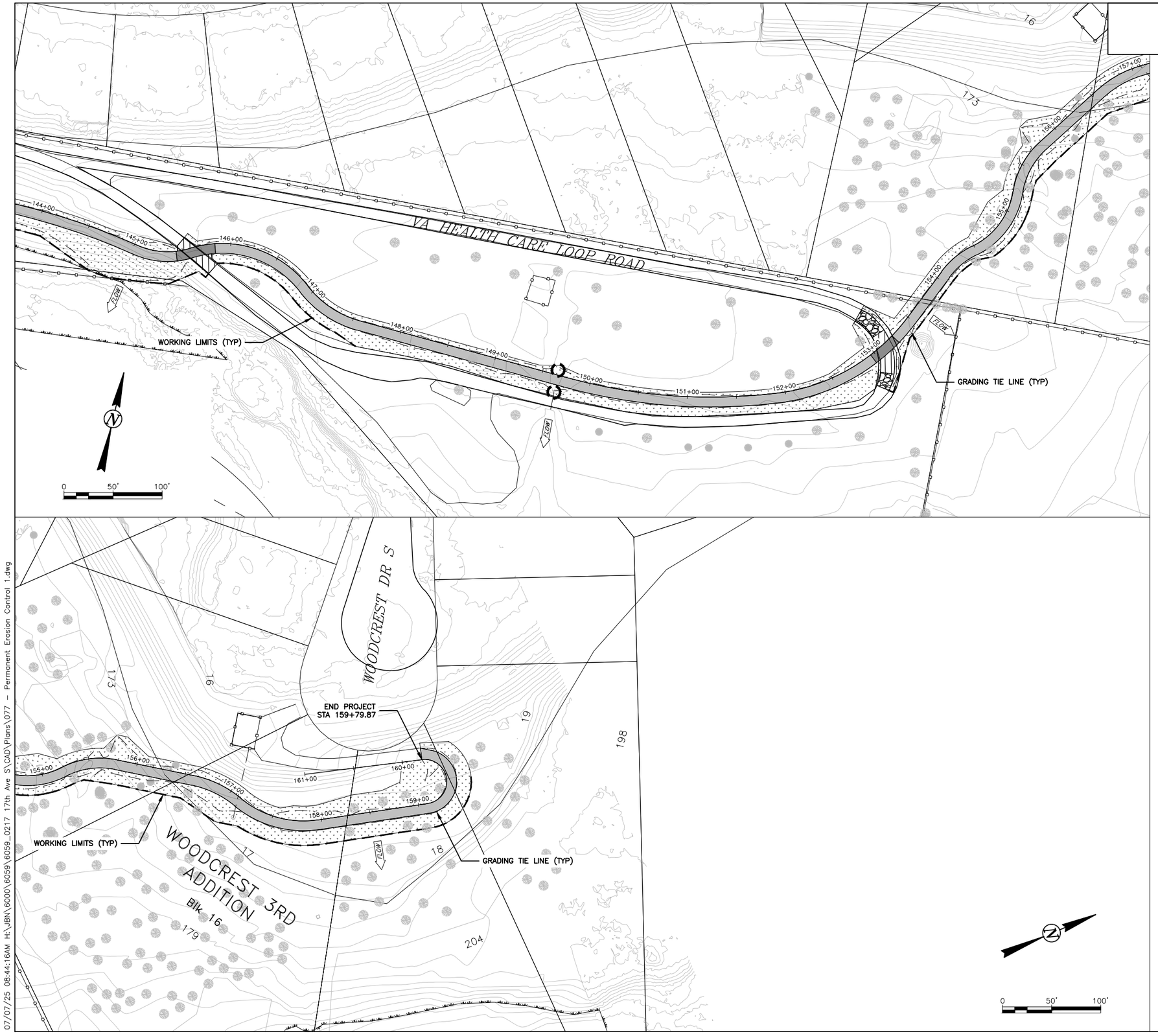
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Permanent Erosion Control

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	77	3



SPEC	CODE	BID ITEM		QTY	UNIT
251	0300	SEEDING CLASS III			
		STA 144+00 TO STA 155+00		0.506	ACRE
		STA 155+00 TO STA 159+80		0.350	ACRE
			TOTAL	0.856	ACRE
253	0201	HYDRAULIC MULCH			
		STA 144+00 TO STA 155+00		0.506	ACRE
		STA 155+00 TO STA 159+80		0.350	ACRE
			TOTAL	0.856	ACRE
261	0112	FIBER ROLLS 12IN			
		STA 144+00 TO STA 155+00		630	LF
		STA 155+00 TO STA 159+80		483	LF
			TOTAL	1113	LF

LEGEND:

- FLOW DIRECTION
- SEEDING CLASS III HYDRAULIC MULCH
- FIBER ROLLS 12IN
- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

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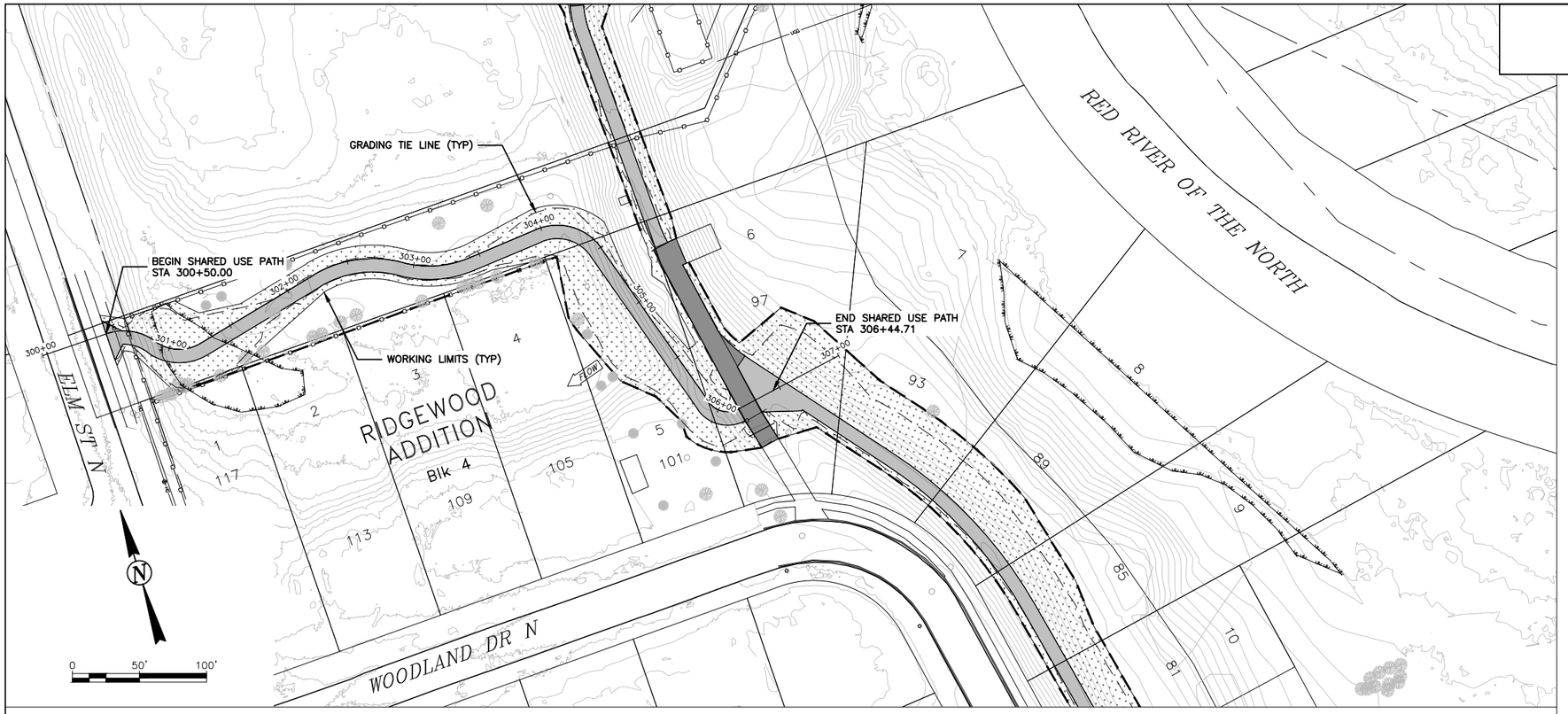
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Permanent Erosion Control

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	77	4



SPEC	CODE	BID ITEM	QTY	UNIT
251	0300	SEEDING CLASS III STA 300+50 TO STA 306+17	0.383	ACRE
253	0201	HYDRAULIC MULCH STA 300+50 TO STA 306+17	0.383	ACRE
261	0112	FIBER ROLLS 12IN STA 300+50 TO STA 306+17	537	LF

LEGEND:

- FLOW / FLOW — FLOW DIRECTION
- SEEDING CLASS III HYDRAULIC MULCH
- FIBER ROLLS 12IN
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE

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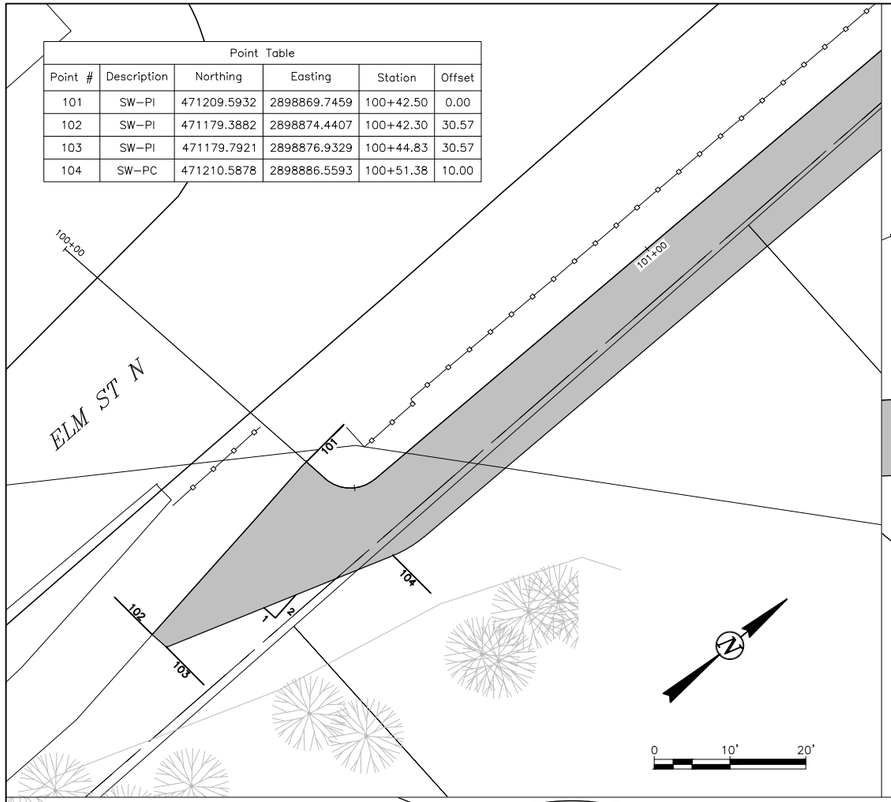
PE-10407
DATE
NORTH DAKOTA

7/18/2025

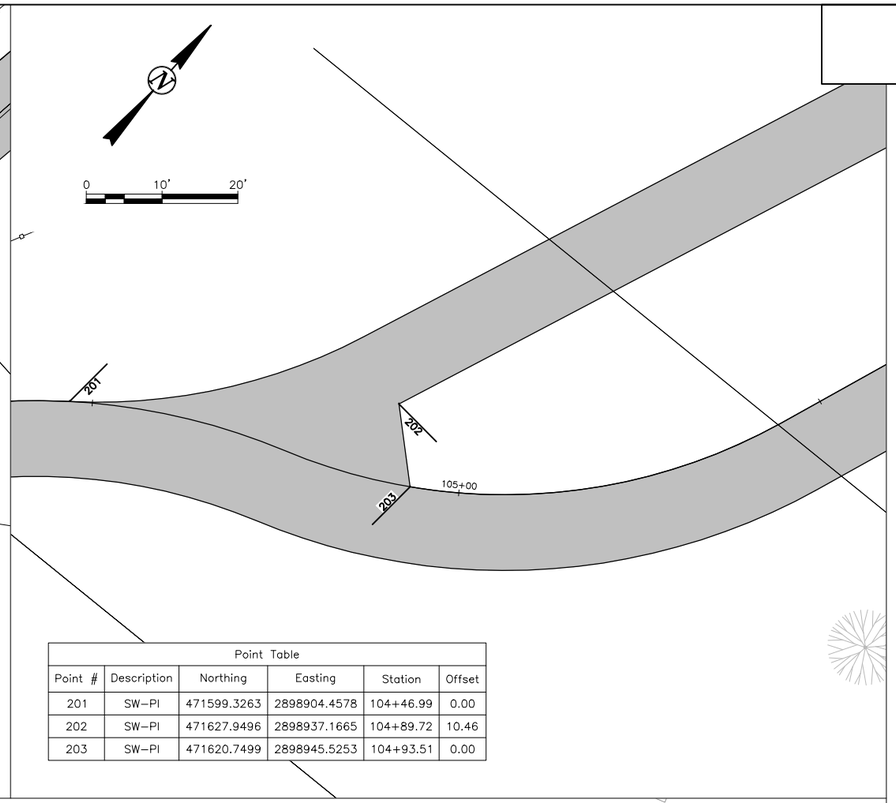
Permanent Erosion Control

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	80	1



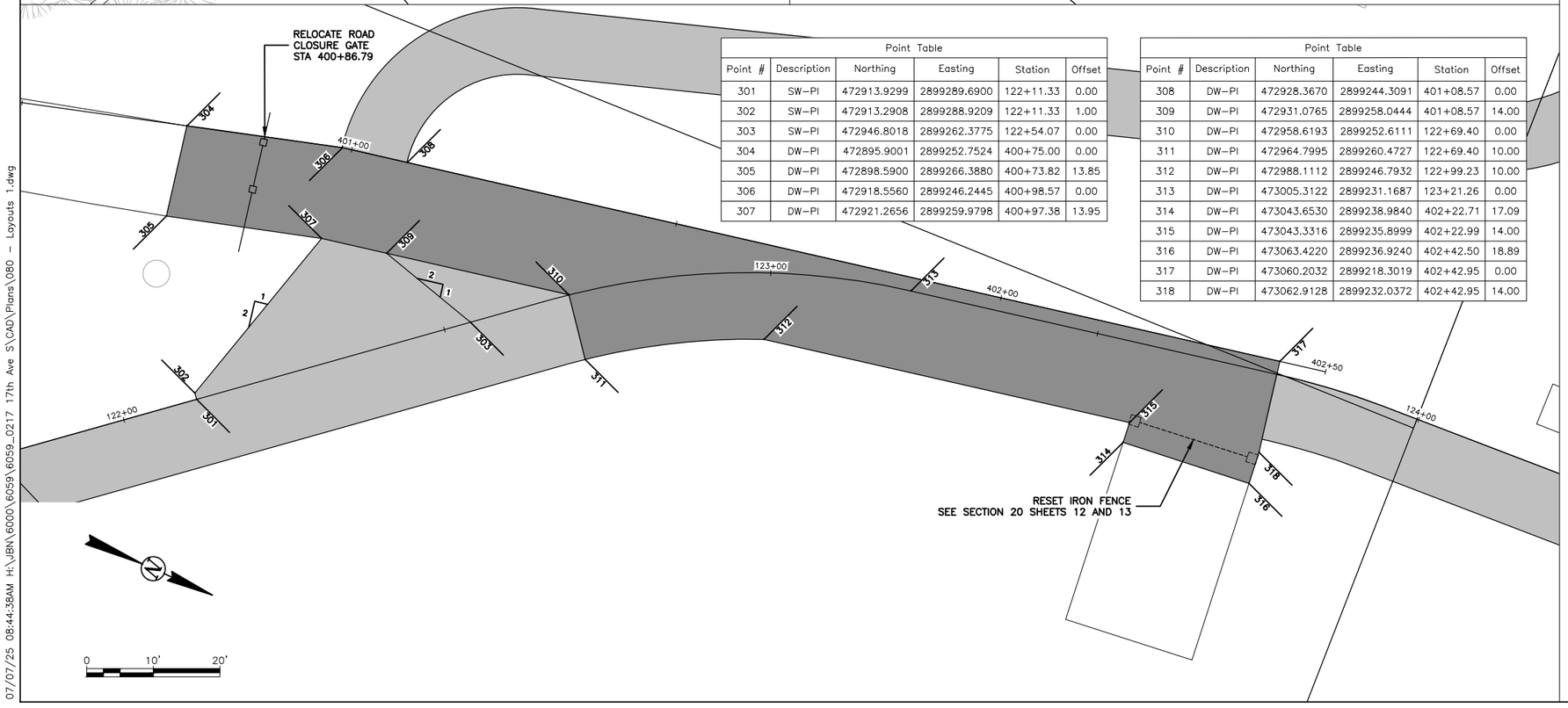
Point Table					
Point #	Description	Northing	Easting	Station	Offset
101	SW–PI	471209.5932	2898869.7459	100+42.50	0.00
102	SW–PI	471179.3882	2898874.4407	100+42.30	30.57
103	SW–PI	471179.7921	2898876.9329	100+44.83	30.57
104	SW–PC	471210.5878	2898886.5593	100+51.38	10.00



Point Table					
Point #	Description	Northing	Easting	Station	Offset
201	SW–PI	471599.3263	2898904.4578	104+46.99	0.00
202	SW–PI	471627.9496	2898937.1665	104+89.72	10.46
203	SW–PI	471620.7499	2898945.5253	105+93.51	0.00

LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE



Point Table					
Point #	Description	Northing	Easting	Station	Offset
301	SW–PI	472913.9299	2899289.6900	122+11.33	0.00
302	SW–PI	472913.2908	2899288.9209	122+11.33	1.00
303	SW–PI	472946.8018	2899262.3775	122+54.07	0.00
304	DW–PI	472895.9001	2899252.7524	400+75.00	0.00
305	DW–PI	472898.5900	2899266.3880	400+73.82	13.85
306	DW–PI	472918.5560	2899246.2445	400+98.57	0.00
307	DW–PI	472921.2656	2899259.9798	400+97.38	13.95

Point Table					
Point #	Description	Northing	Easting	Station	Offset
308	DW–PI	472928.3670	2899244.3091	401+08.57	0.00
309	DW–PI	472931.0765	2899258.0444	401+08.57	14.00
310	DW–PI	472958.6193	2899252.6111	122+69.40	0.00
311	DW–PI	472964.7995	2899260.4727	122+69.40	10.00
312	DW–PI	472988.1112	2899246.7932	122+99.23	10.00
313	DW–PI	473005.3122	2899231.1687	123+21.26	0.00
314	DW–PI	473043.6530	2899238.9840	402+22.71	17.09
315	DW–PI	473043.3316	2899235.8999	402+22.99	14.00
316	DW–PI	473063.4220	2899236.9240	402+42.50	18.89
317	DW–PI	473060.2032	2899218.3019	402+42.95	0.00
318	DW–PI	473062.9128	2899232.0372	402+42.95	14.00

THE CITY OF Fargo
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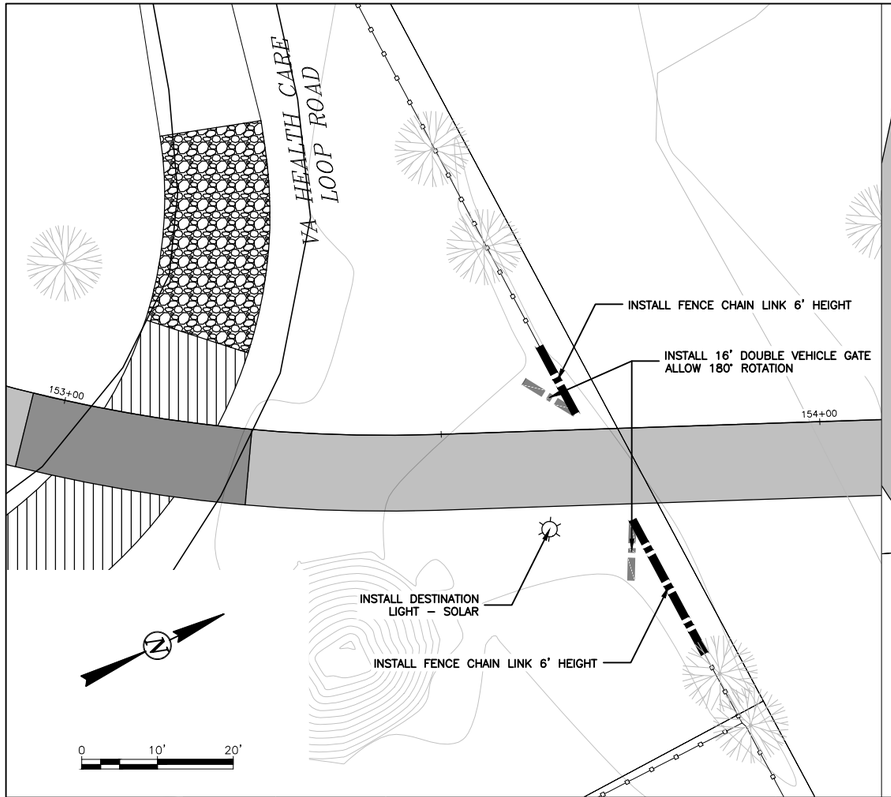
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

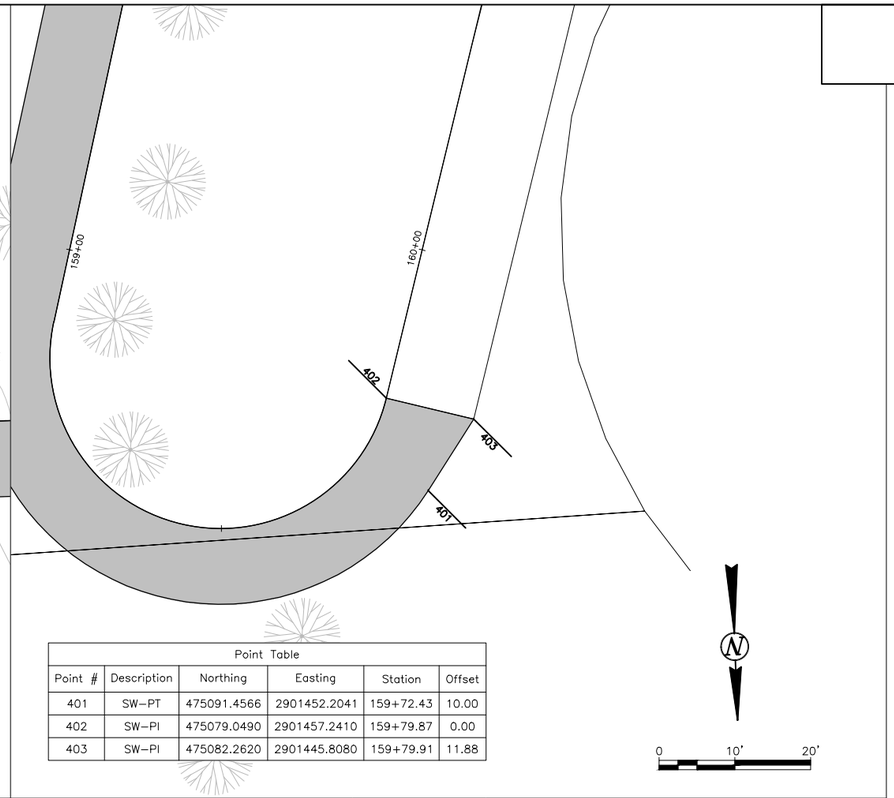
7/18/2025

Layouts

Red River Trail

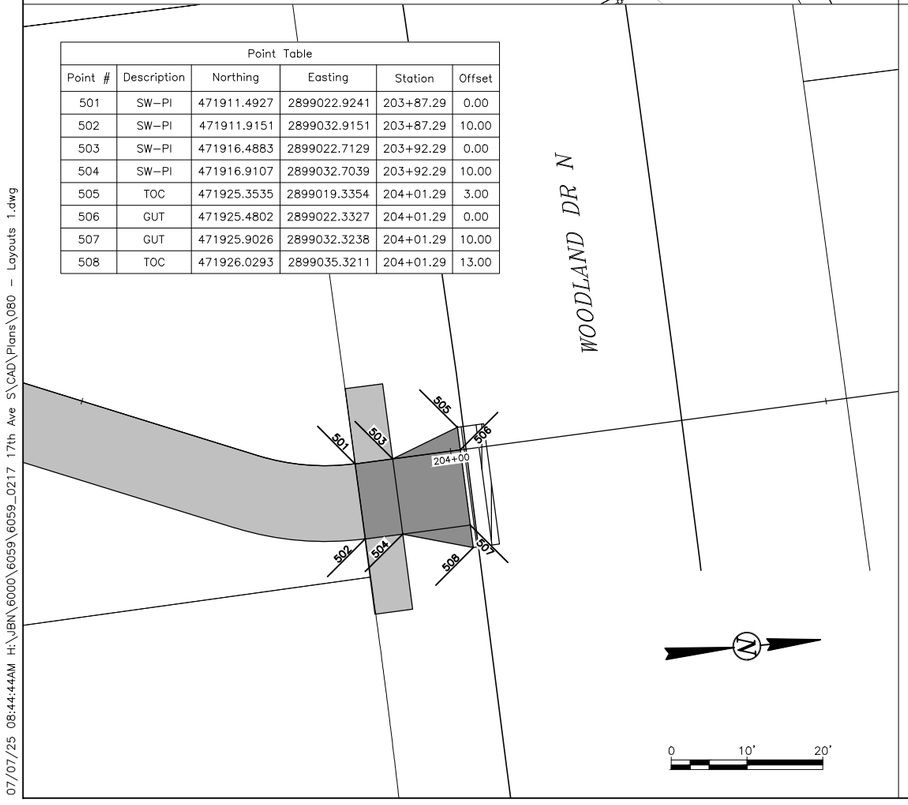
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	80	2

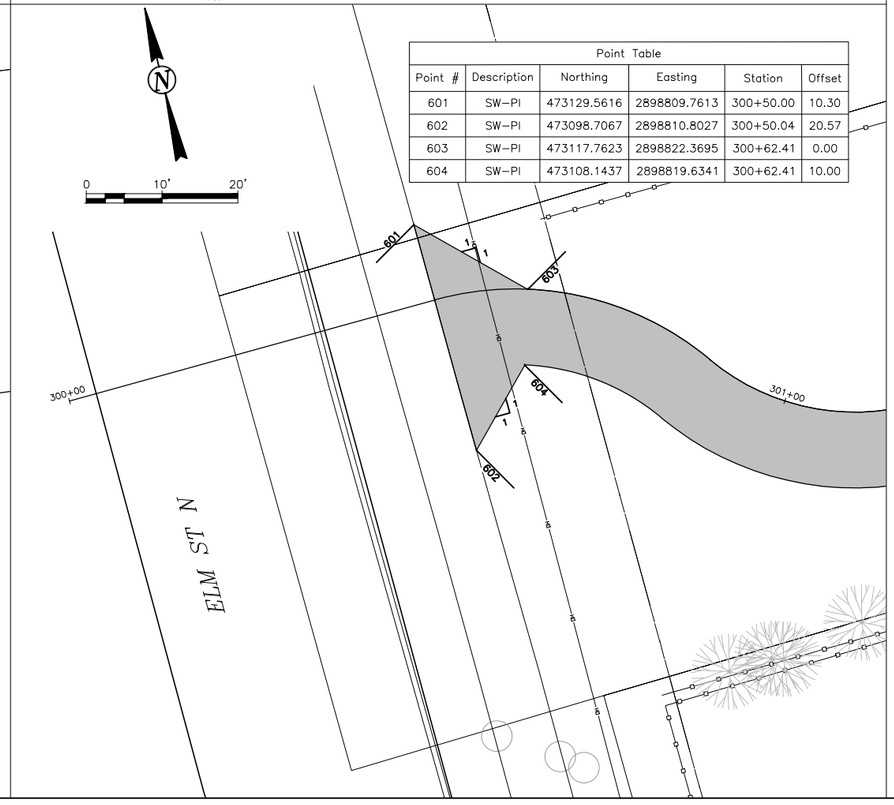




Point Table					
Point #	Description	Northing	Easting	Station	Offset
401	SW–PT	475091.4566	2901452.2041	159+72.43	10.00
402	SW–PI	475079.0490	2901457.2410	159+79.87	0.00
403	SW–PI	475082.2620	2901445.8080	159+79.91	11.88

Point Table					
Point #	Description	Northing	Easting	Station	Offset
501	SW–PI	471911.4927	2899022.9241	203+87.29	0.00
502	SW–PI	471911.9151	2899032.9151	203+87.29	10.00
503	SW–PI	471916.4883	2899022.7129	203+92.29	0.00
504	SW–PI	471916.9107	2899032.7039	203+92.29	10.00
505	TOC	471925.3535	2899019.3354	204+01.29	3.00
506	GUT	471925.4802	2899022.3327	204+01.29	0.00
507	GUT	471925.9026	2899032.3238	204+01.29	10.00
508	TOC	471926.0293	2899035.3211	204+01.29	13.00





Point Table					
Point #	Description	Northing	Easting	Station	Offset
601	SW–PI	473129.5616	2898809.7613	300+50.00	10.30
602	SW–PI	473098.7067	2898810.8027	300+50.04	20.57
603	SW–PI	473117.7623	2898822.3695	300+62.41	0.00
604	SW–PI	473108.1437	2898819.6341	300+62.41	10.00

SPEC	CODE	BID ITEM	QTY	UNIT
752	0600	FENCE CHAIN LINK STA 153+63 TO STA 153+84	30	LF
752	2100	VEHICLE GATE STA 153+68 TO STA 153+75	1	EA
770	0009	DESTINATION LIGHTING – SOLAR STA 153+64	1	EA

LEGEND:

- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- FENCE CHAIN LINK
- DESTINATION LIGHTING – SOLAR

THE CITY OF Fargo FAR MORE

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REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Layouts

Red River Trail

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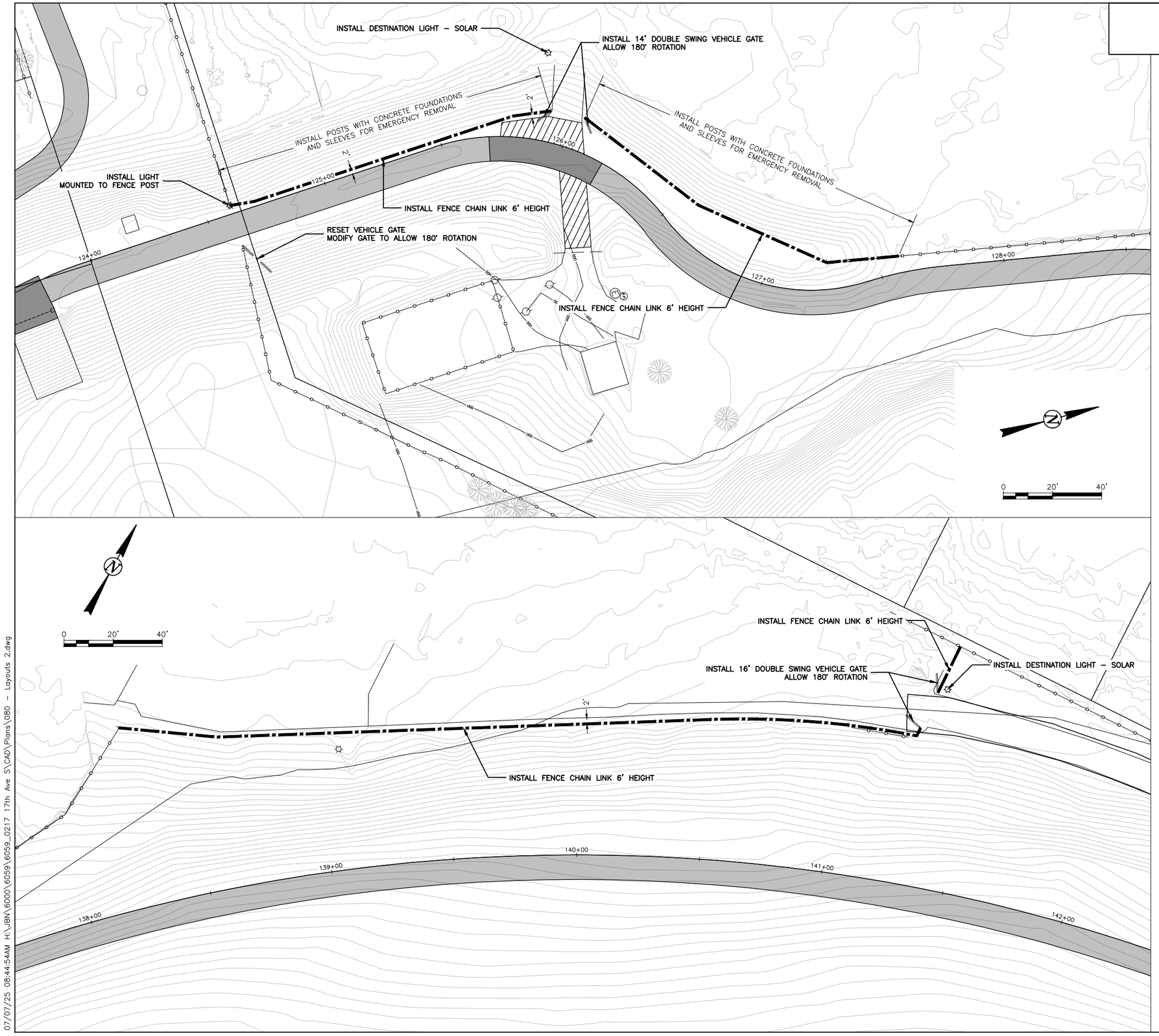
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	80	3



SPEC	CODE	BID ITEM		QTY	UNIT
752	0600	FENCE CHAIN LINK			
		STA 124+60 TO STA 127+58		282	LF
		STA 138+29 TO STA 141+38		350	LF
			TOTAL	632	LF
752	2100	VEHICLE GATE			
		STA 125+92 TO STA 126+04		1	EA
		STA 141+29 TO STA 141+33		1	EA
			TOTAL	2	EA
752	2110	RESET VEHICLE GATE			
		STA 124+60		1	EA
770	0009	DESTINATION LIGHT – SOLAR			
		STA 125+88		1	EA
		STA 141+37		1	EA
			TOTAL	2	EA

LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- FENCE CHAIN LINK
- ☼ DESTINATION LIGHT – SOLAR

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

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REGISTERED PROFESSIONAL ENGINEER
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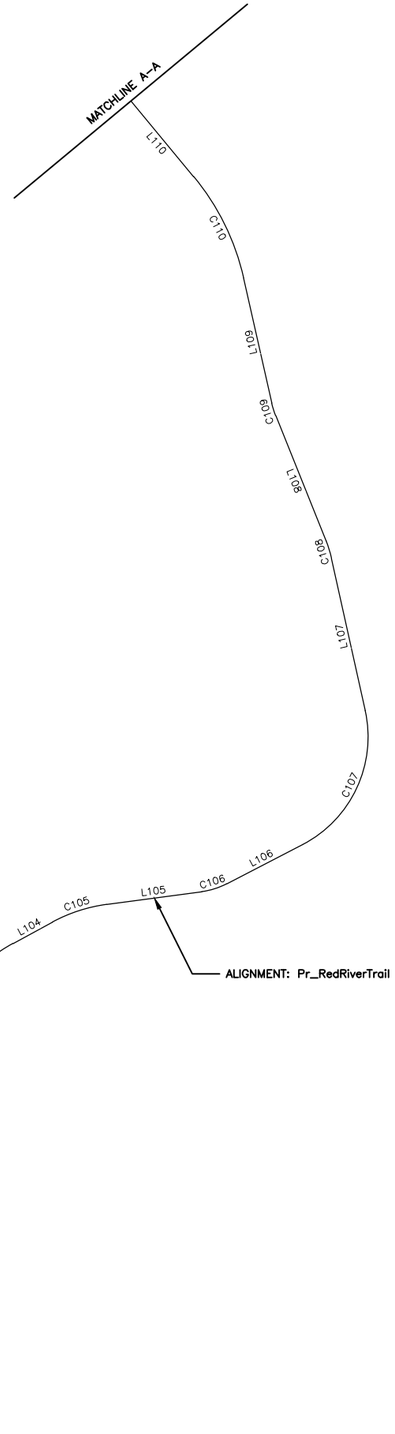
PE-10407
DATE
NORTH DAKOTA

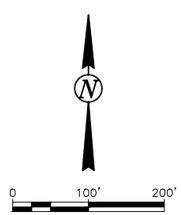
7/18/2025

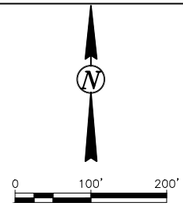
Layouts

Red River Trail

Line Table: Alignments – Pr_RedRiverTrail					
Number	PI Station	Northing	Easting	Distance	Direction
L101	100+00.00	471202.7931	2898827.7905	45.84	N80°47'36.77"E
C101	100+50.16	471210.8185	2898877.3059	7.12	N00°50'56.16"W
L102	100+52.97	471215.1372	2898877.2419	316.58	N00°50'56.16"W
C102	104+31.25	471593.3760	2898871.6372	106.74	N71°06'10.28"E
C103	105+12.68	471625.1463	2898964.4458	67.77	N19°19'56.05"E
L103	105+44.06	471659.4885	2898976.4940	74.00	N19°19'56.05"E
C104	106+99.26	471805.9453	2899027.8749	154.98	N61°36'58.14"E
L104	107+73.03	471844.5502	2899099.3212	58.95	N61°36'58.14"E
C105	108+70.37	471890.8204	2899184.9540	75.92	N82°19'51.85"E
L105	109+07.91	471895.9424	2899222.9918	126.44	N82°19'51.85"E
C106	110+51.75	471915.1369	2899365.5401	34.44	N62°36'03.36"E
L106	110+68.79	471923.1396	2899380.9793	112.96	N62°36'03.36"E
C107	113+04.81	472031.7515	2899590.5213	209.79	N12°31'33.49"W
L107	113+91.55	472151.8766	2899563.8331	205.44	N12°31'33.49"W
C108	116+09.16	472364.3050	2899516.6378	24.29	N21°48'17.37"W
L108	116+21.28	472375.6067	2899512.1163	178.21	N21°48'17.37"W
C109	118+08.18	472549.1376	2899442.6920	17.36	N12°45'50.62"W
L109	118+16.84	472557.6192	2899440.7706	169.26	N12°45'50.62"W
C110	120+62.80	472797.4992	2899386.4294	150.56	N39°43'20.48"W
L110	121+36.66	472856.4946	2899337.4116	129.77	N39°43'20.48"W







Line Table: Alignments – Pr_RedRiverTrail					
Number	PI Station	Northing	Easting	Distance	Direction
C111	122+94.43	472977.8408	2899236.5880	54.84	N11°09'33.86"W
L111	123+21.26	473005.3122	2899231.1687	57.27	N11°09'33.86"W
C112	123+86.33	473069.1516	2899218.5752	15.57	N03°02'48.88"W
L112	123+94.11	473076.9411	2899218.1606	152.80	N03°02'48.88"W
C113	126+07.22	473289.7567	2899206.8326	104.92	N67°40'24.72"E
C114	127+04.15	473332.5486	2899311.0331	91.38	N02°07'59.83"W
C115	127+59.87	473401.4949	2899308.4648	33.21	N09°45'37.85"E
L113	127+76.41	473417.9205	2899311.2904	65.91	N09°45'37.85"E
C116	128+70.84	473510.9841	2899327.2992	55.81	N38°49'57.20"E
L114	128+98.14	473533.2020	2899345.1836	143.63	N38°49'57.20"E
C117	130+68.53	473665.9350	2899452.0280	52.51	N66°11'07.19"E
C118	131+43.24	473696.5134	2899521.3103	86.76	N00°05'28.28"W
C119	132+07.37	473771.8164	2899521.1905	51.71	N26°50'27.61"E
L115	132+32.74	473795.3185	2899533.0833	336.51	N26°50'27.61"E
C120	141+14.04	474581.6761	2899931.0078	934.41	S79°18'48.68"E

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	82	1

THE CITY OF Fargo FAR MORE

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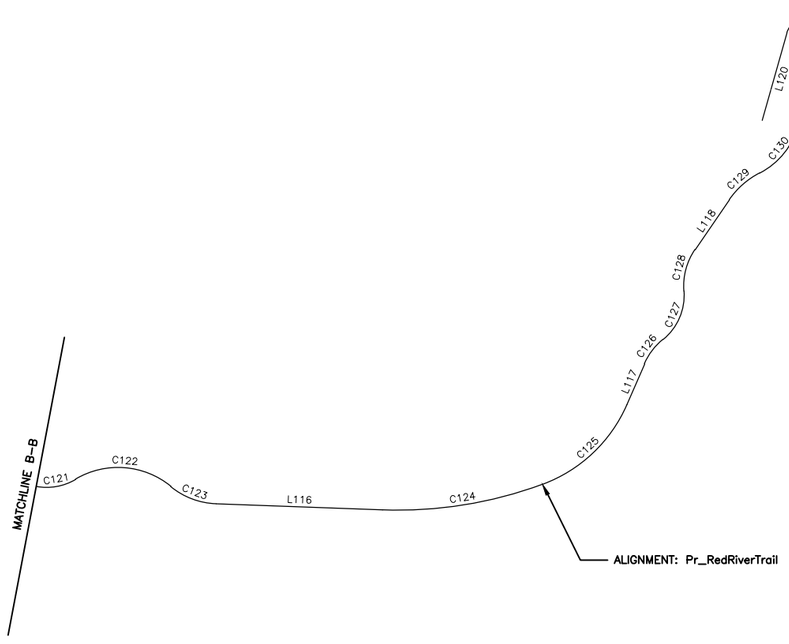
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Alignment Definition

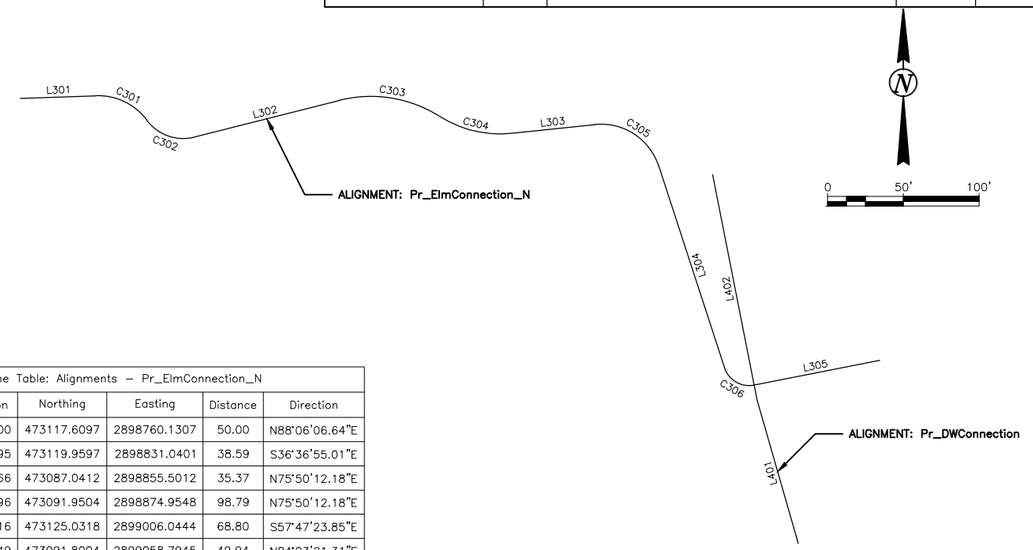
Red River Trail

Line Table: Alignments – Pr_RedRiverTrail					
Number	PI Station	Northing	Easting	Distance	Direction
C121	145+31.93	474475.4095	2900494.1362	54.07	N59°22'39.78"E
C122	146+34.64	474528.9849	2900584.6467	134.23	S50°42'13.35"E
C123	147+25.59	474458.9833	2900670.1832	64.87	S87°52'18.65"E
L116	147+56.84	474457.7348	2900703.7828	219.98	S87°52'18.65"E
C124	150+85.77	474445.5200	2901032.4864	215.12	N69°43'04.65"E
C125	152+75.00	474512.0802	2901212.5955	157.04	N23°34'28.49"E
L117	153+48.98	474588.2087	2901245.8150	59.06	N23°34'28.49"E
C126	154+28.73	474661.3038	2901277.7109	40.59	N50°56'15.39"E
C127	154+87.95	474699.1177	2901324.3034	72.42	N04°23'20.09"W
C128	155+51.13	474768.2972	2901318.9938	57.80	N34°34'23.37"E
L118	155+78.86	474793.0556	2901336.0563	79.76	N34°34'23.37"E
C129	156+86.17	474881.4178	2901396.9522	54.00	N62°41'55.94"E
C130	157+57.35	474914.5743	2901461.1887	84.13	N14°29'47.48"E
L119	157+96.75	474957.8847	2901472.3868	112.98	N14°29'47.48"E
C131	177+93.40	476890.9519	2901972.2560	70.15	S15°52'02.15"W
L120	159+79.87	475079.0498	2901457.2412	120.13	S15°52'02.15"W

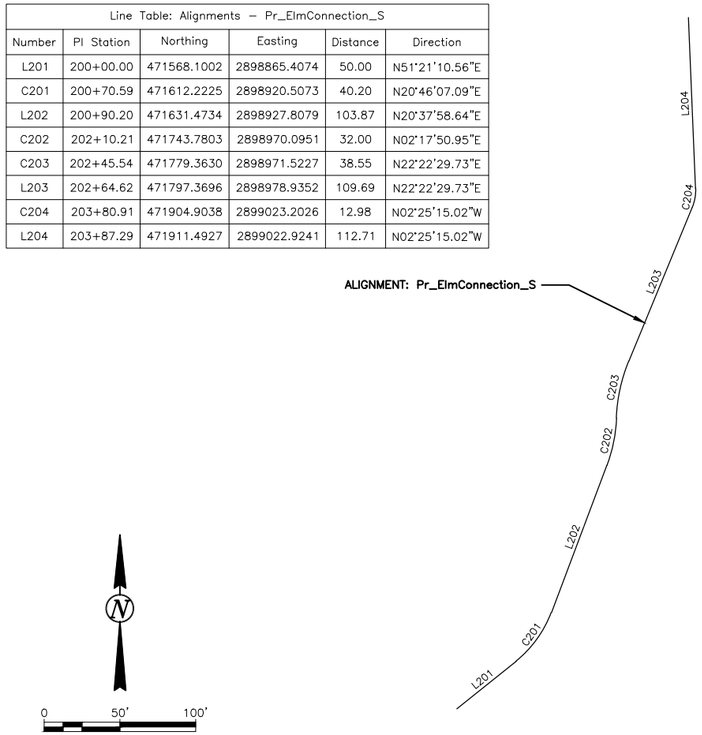


Line Table: Alignments – Pr_ElmConnection_N					
Number	PI Station	Northing	Easting	Distance	Direction
L301	300+00.00	473117.6097	2898760.1307	50.00	N88°06'06.64"E
C301	300+70.95	473119.9597	2898831.0401	38.59	S36°36'55.01"E
C302	301+08.66	473087.0412	2898855.5012	35.37	N75°50'12.18"E
L302	301+23.96	473091.9504	2898874.9548	98.79	N75°50'12.18"E
C303	302+59.16	473125.0318	2899006.0444	68.80	S57°47'23.85"E
C304	303+17.49	473091.8004	2899058.7945	49.94	N84°03'21.31"E
L303	303+41.49	473094.4864	2899084.5925	55.04	N84°03'21.31"E
C305	304+28.87	473103.5347	2899171.4970	54.38	S18°02'51.87"E
L304	304+50.92	473072.7939	2899181.5136	139.90	S18°02'51.87"E
C306	306+05.89	472925.4504	2899229.5242	24.66	N78°50'26.14"E
L305	306+15.48	472928.3670	2899244.3091	84.52	N78°50'26.14"E

Line Table: Alignments – Pr_DWConnection					
Number	PI Station	Northing	Easting	Distance	Direction
L401	400+00.00	472823.8150	2899273.4586	98.57	N16°01'35.66"W
L402	400+98.57	472918.5560	2899246.2445	151.43	N11°09'33.86"W



Line Table: Alignments – Pr_ElmConnection_S					
Number	PI Station	Northing	Easting	Distance	Direction
L201	200+00.00	471568.1002	2898865.4074	50.00	N51°21'10.56"E
C201	200+70.59	471612.2225	2898920.5073	40.20	N20°46'07.09"E
L202	200+90.20	471631.4734	2898927.8079	103.87	N20°37'58.64"E
C202	202+10.21	471743.7803	2898970.0951	32.00	N02°17'50.95"E
C203	202+45.54	471779.3630	2898971.5227	38.55	N22°22'29.73"E
L203	202+64.62	471797.3696	2898978.9352	109.69	N22°22'29.73"E
C204	203+80.91	471904.9038	2899023.2026	12.98	N02°25'15.02"W
L204	203+87.29	471911.4927	2899022.9241	112.71	N02°25'15.02"W



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	82	2

THE CITY OF Fargo FAR MORE

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PE-10407
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NORTH DAKOTA

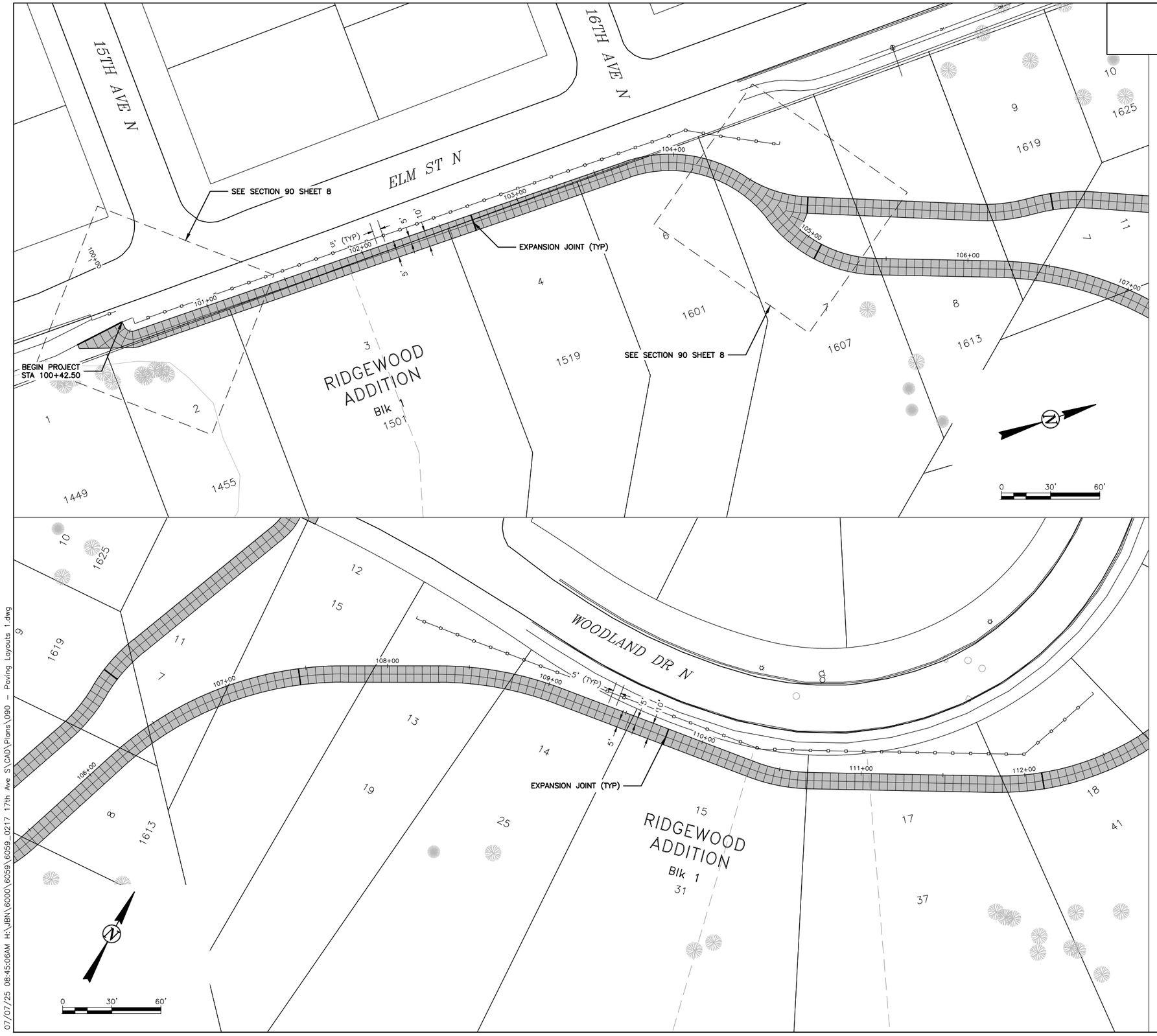
7/18/2025

Alignment Definition

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	90	1

SPEC	CODE	BID ITEM	QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN		
		STA 100+43 TO STA 106+00	645	SY
		STA 106+00 TO STA 112+00	667	SY
		TOTAL	1312	SY



LEGEND:

- SIDEWALK CONCRETE 5IN
- CONTRACTION JOINT
- EXPANSION JOINT

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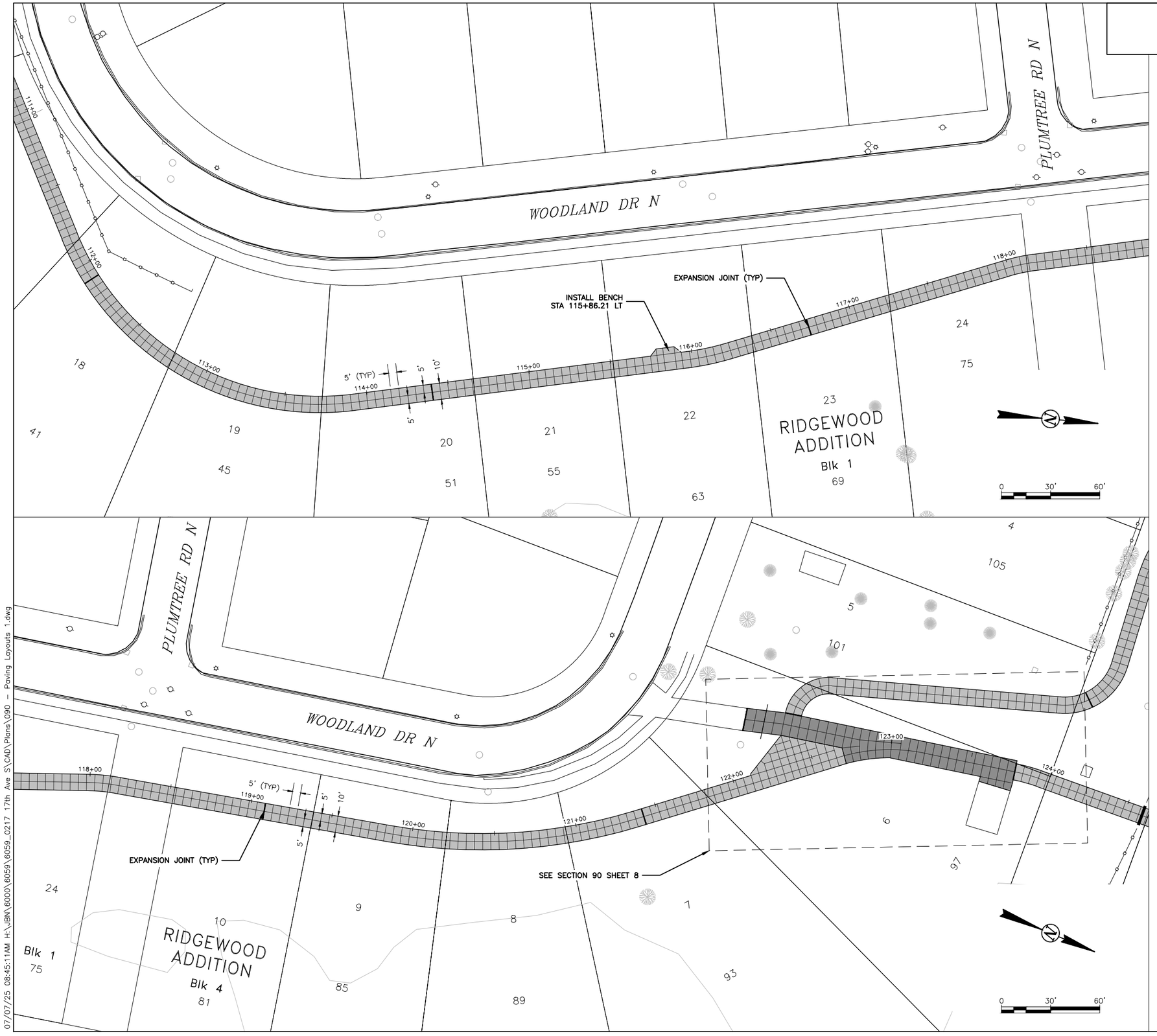
Paving Layouts

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	90	2

SPEC	CODE	BID ITEM		QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN			
		STA 112+00 TO STA 118+00		674	SY
		STA 118+00 TO STA 124+00		546	SY
			TOTAL	1220	SY
750	1000	DRIVEWAY CONCRETE			
		STA 122+14 TO STA 123+78		270	SY
970	0300	BENCH			
		STA 115+86		1	EA



LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- CONTRACTION JOINT
- EXPANSION JOINT

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Paving Layouts

Red River Trail

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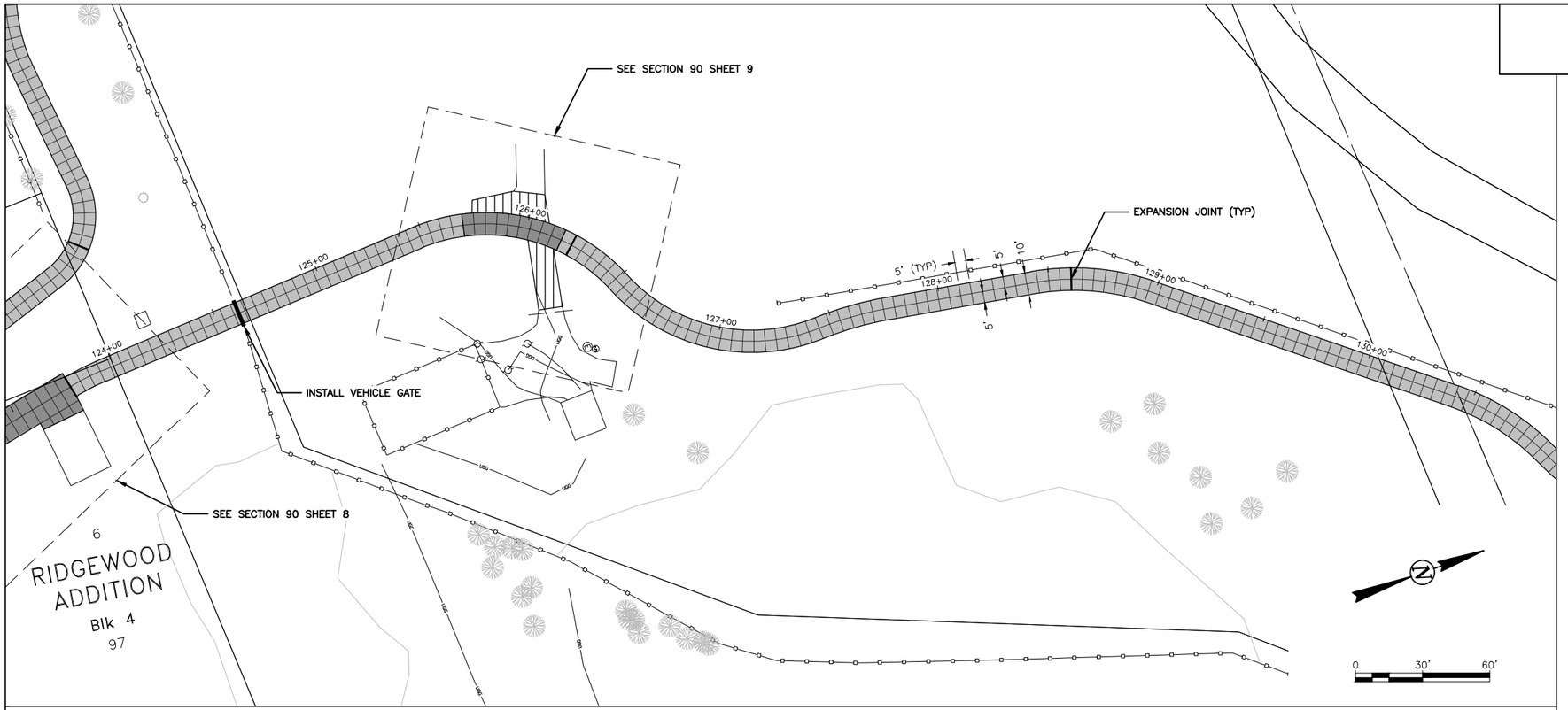
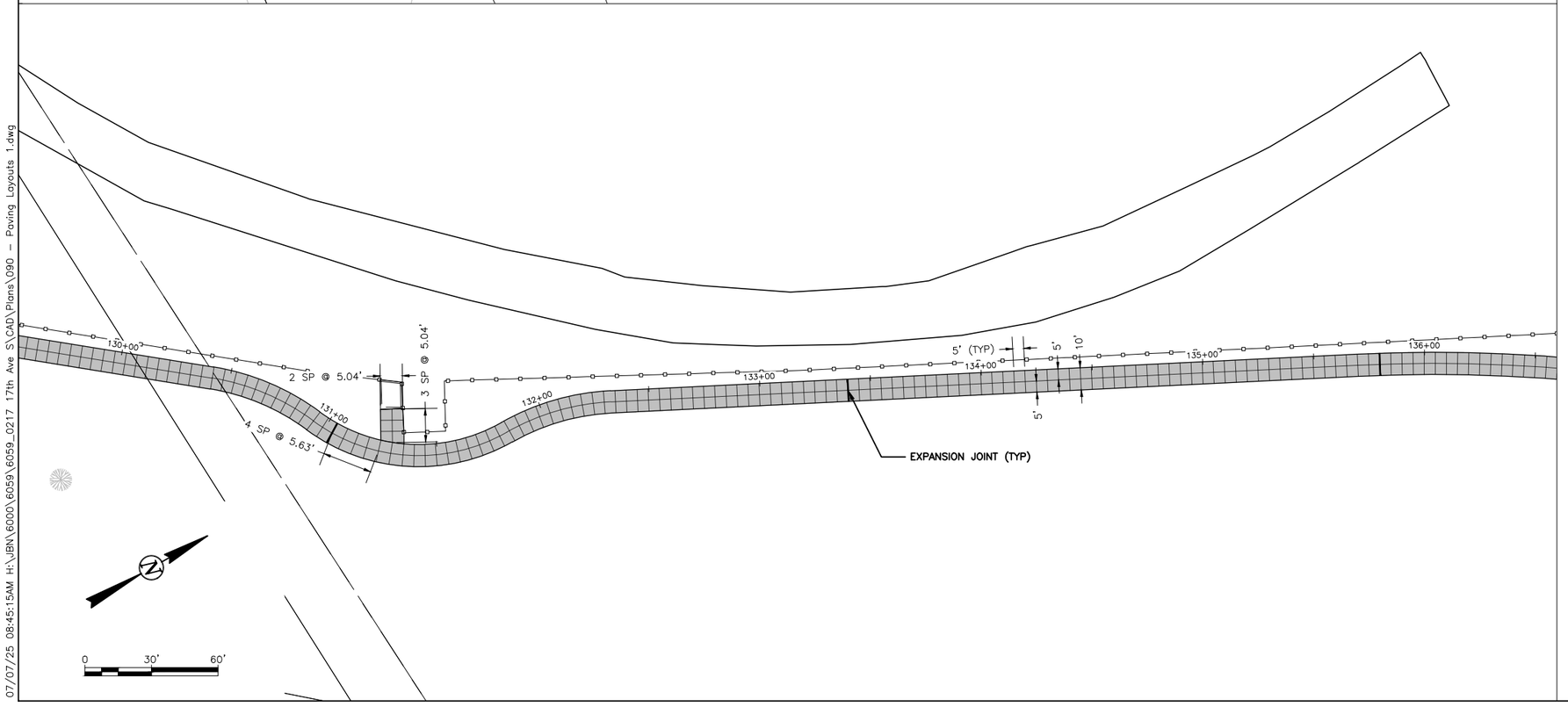
	ND	TMA-CRP-8-984(182)	90	3





SPEC	CODE	BID ITEM		QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN			
		STA 124+00 TO STA 130+00		614	SY
		STA 130+00 TO STA 136+00		684	SY
			TOTAL	1298	SY
750	1000	DRIVEWAY CONCRETE			
		STA 125+70 TO STA 126+17		53	SY

LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- FENCE CHAIN LINK AND VEHICLE GATE
- CONTRACTION JOINT
- EXPANSION JOINT

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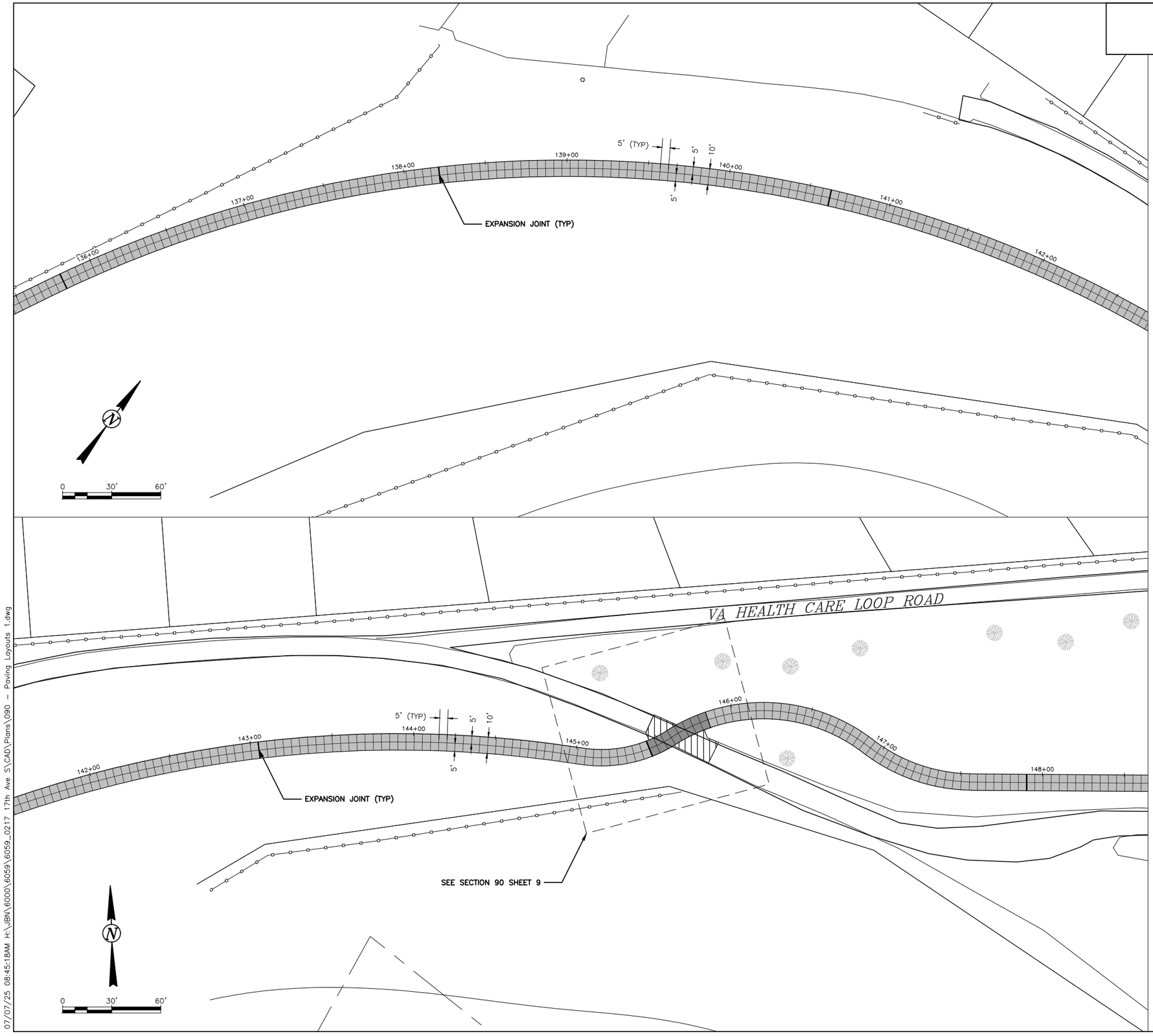
Paving Layouts

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	90	4



SPEC	CODE	BID ITEM		QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN			
		STA 136+00 TO STA 142+00		667	SY
		STA 142+00 TO STA 148+00		622	SY
			TOTAL	1289	SY
750	1000	DRIVEWAY CONCRETE			
		STA 145+43 TO STA 145+84		45	SY

LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- CONTRACTION JOINT
- EXPANSION JOINT

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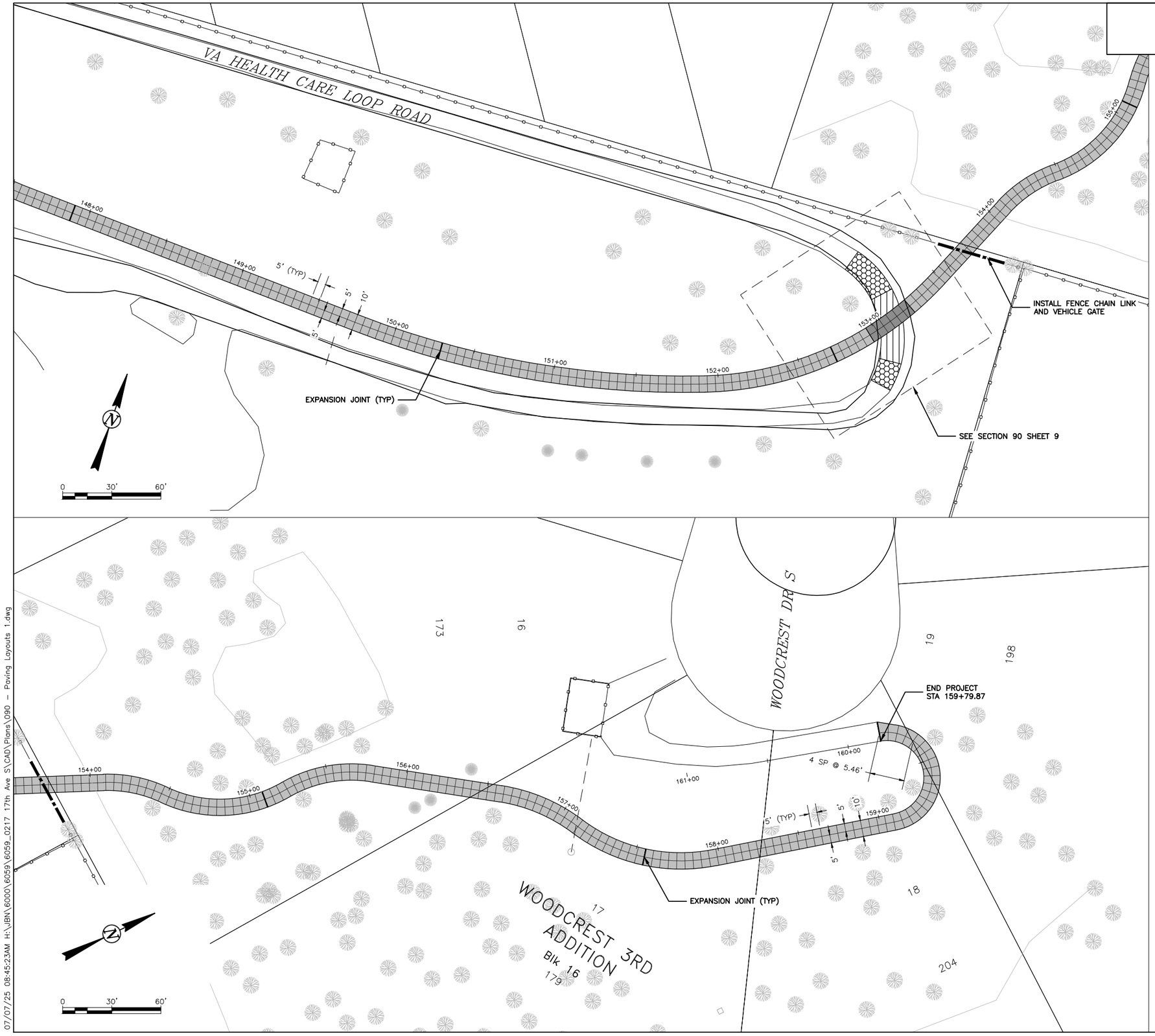
	ND	TMA-CRP-8-984(182)	90	5



SPEC	CODE	BID ITEM		QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN			
		STA 148+00 TO STA 154+00		634	SY
		STA 154+00 TO STA 159+80		644	SY
			TOTAL	1278	SY
750	1000	DRIVEWAY CONCRETE			
		STA 152+96 TO STA 153+25		33	SY

LEGEND:

- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- FENCE CHAIN LINK AND VEHICLE GATE
- CONTRACTION JOINT
- EXPANSION JOINT

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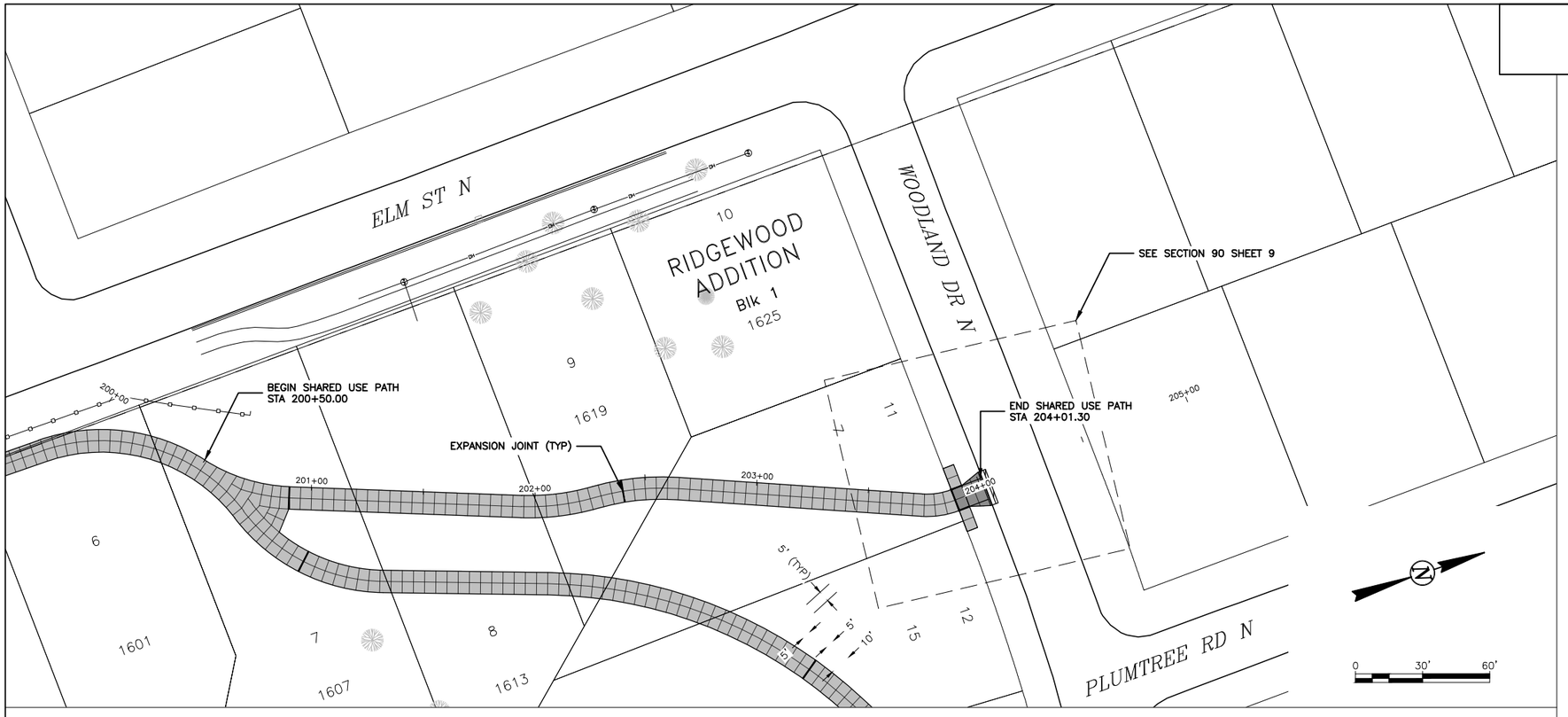
	ND	TMA-CRP-8-984(182)	90	6



SPEC	CODE	BID ITEM	QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN STA 200+50 TO STA 203+92	377	SY
750	1000	DRIVEWAY CONCRETE STA 203+87 TO STA 204+01	19	SY

LEGEND:

- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- CONTRACTION JOINT
- EXPANSION JOINT

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Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	90	7

SPEC	CODE	BID ITEM	QTY	UNIT
750	0125	SIDEWALK CONCRETE 5IN		
		STA 300+50 TO STA 306+00	622	SY
		STA 306+00 TO STA 306+58	77	SY
		TOTAL	699	SY

LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- CONTRACTION JOINT
- EXPANSION JOINT

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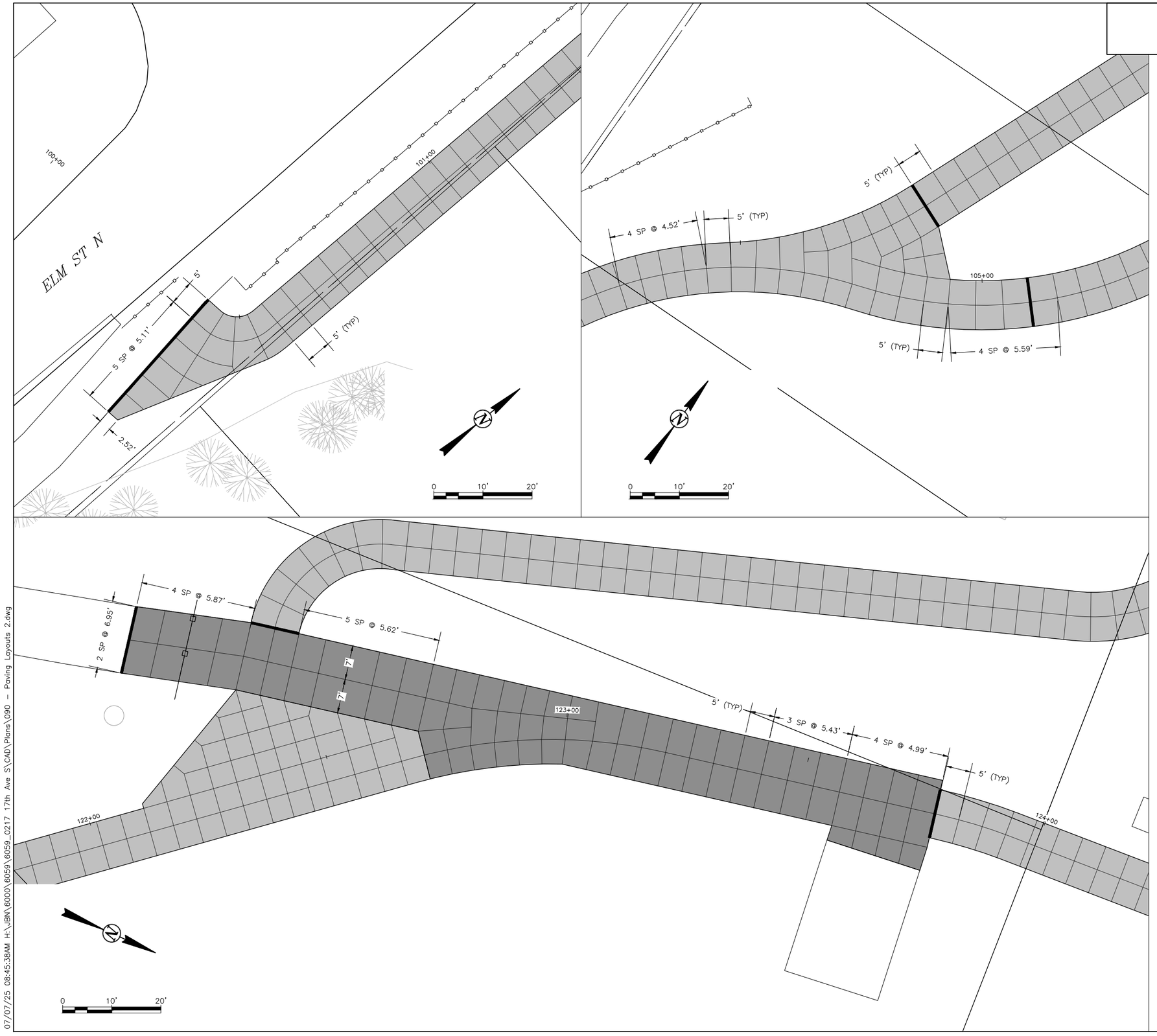

LEGEND:

- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- CONTRACTION JOINT
- EXPANSION JOINT

THE CITY OF Fargo
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Houston Engineering Inc.
Ph: 701.237.5065

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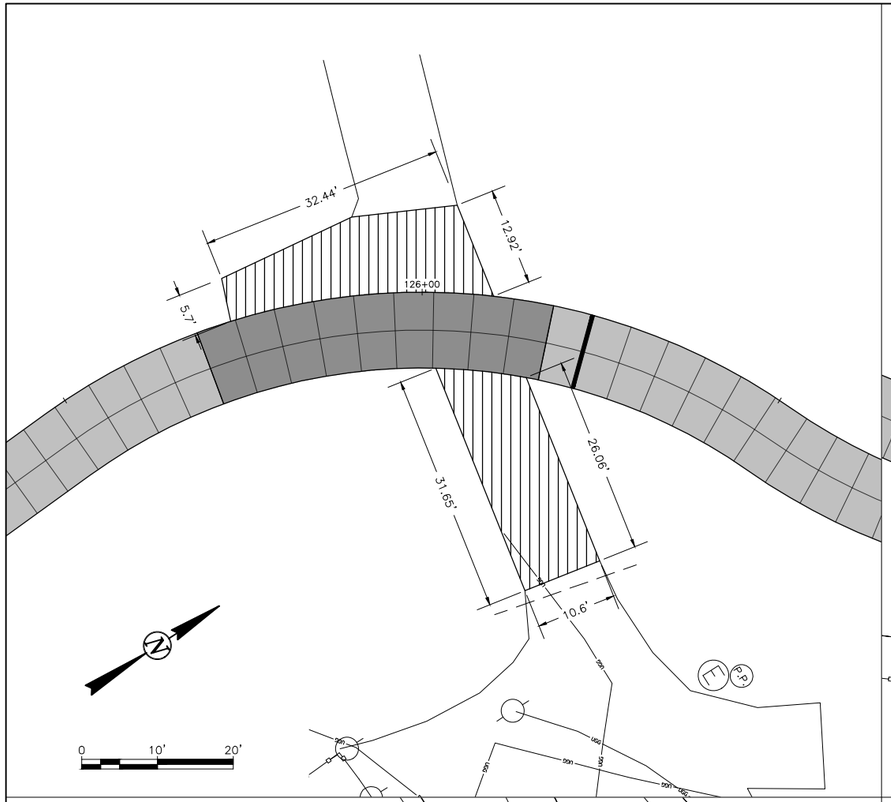
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

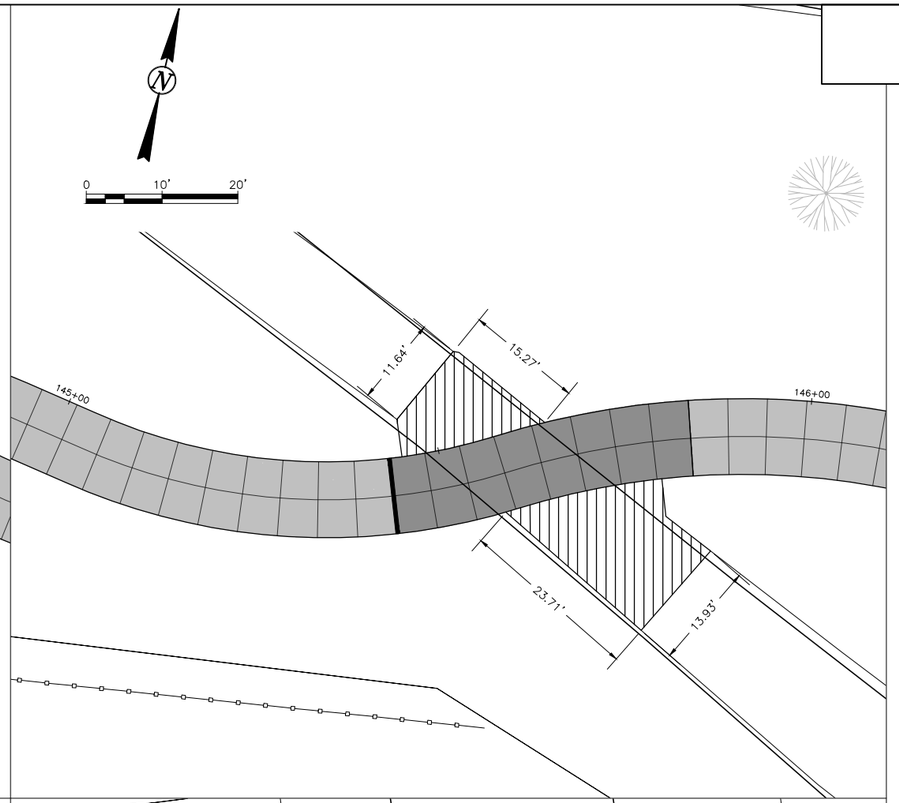
7/18/2025

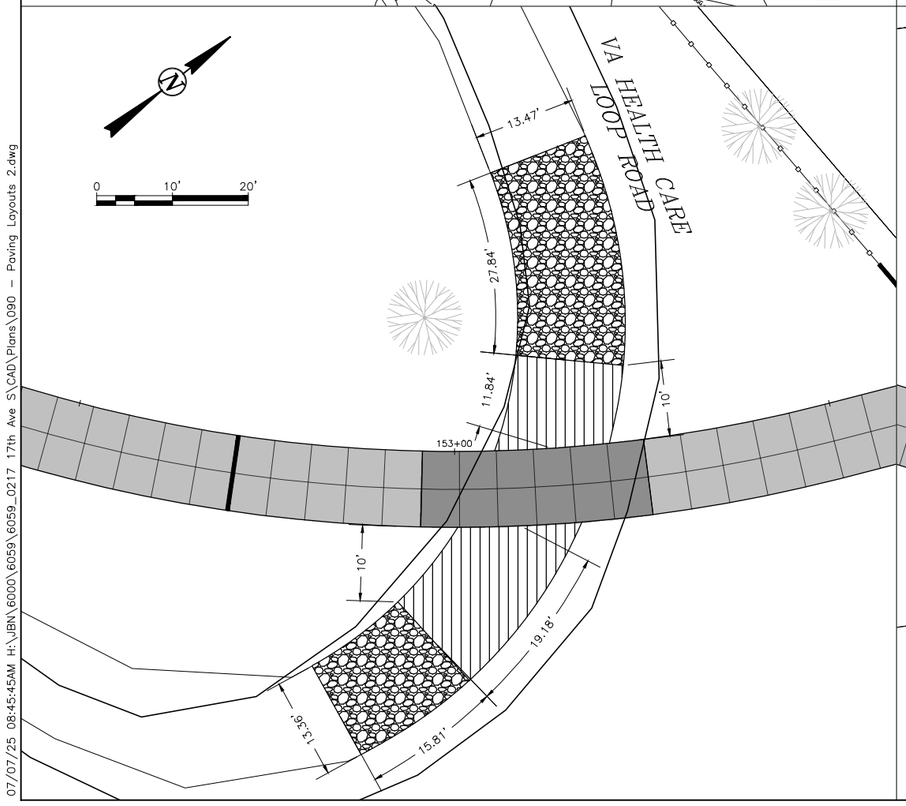
Paving Layouts

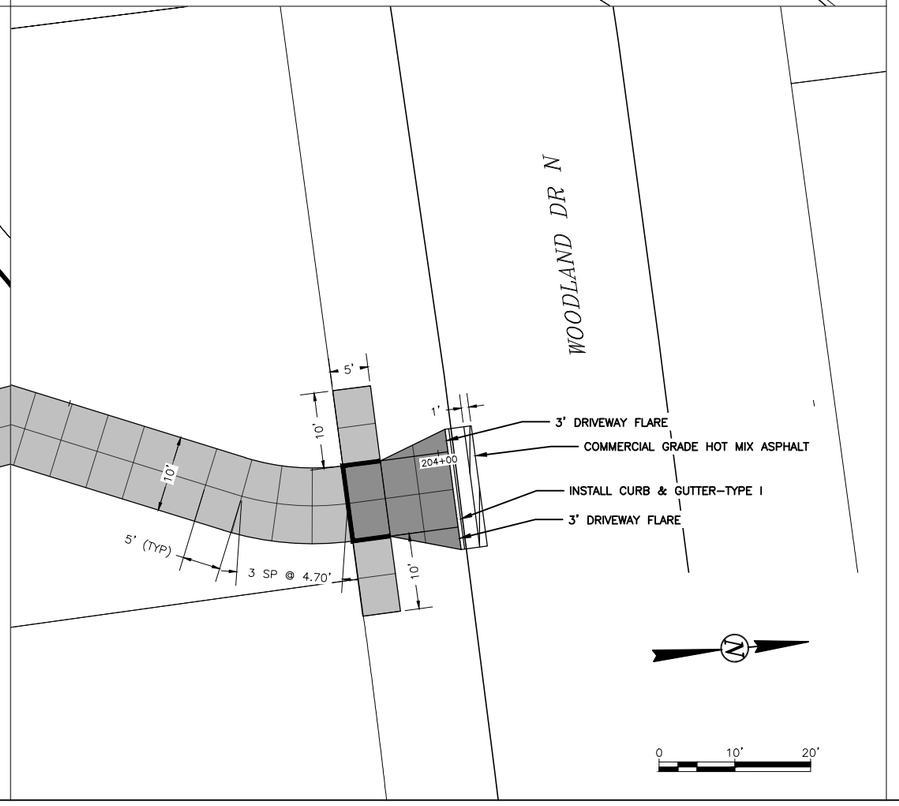
Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	90	9









SPEC	CODE	BID ITEM		QTY	UNIT
302	0120	AGGREGATE BASE COURSE CL 5			
		STA 152+84 TO STA 153+25		24	TON
430	0500	COMMERCIAL GRADE HOT MIX ASPHALT			
		STA 125+74 TO STA 126+38		27	TON
		STA 145+45 TO STA 145+86		17	TON
		STA 152+93 TO STA 153+24		19	TON
		STA 204+03 TO STA 204+04		1	TON
			TOTAL	64	TON
748	0140	CURB & GUTTER-TYPE I			
		STA 204+02		16	LF

LEGEND:

- 6" AGGREGATE BASE COURSE CL 5
- 6" COMMERCIAL GRADE HOT MIX ASPHALT
- SIDEWALK CONCRETE 5IN
- 7" DRIVEWAY CONCRETE
- FENCE CHAIN LINK
- CONTRACTION JOINT
- EXPANSION JOINT

THE CITY OF Fargo FAR MORE

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Paving Layouts

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	100	1

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED BY PHASE NO. 1	2	3		TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
E5-1-48	48"x48"	EXIT GORE						35	
G20-1-60	60"x24"	ROAD WORK NEXT __ MILES						28	
G20-1b-60	60"x24"	NO WORK IN PROGRESS (Sign and installation only)						18	
G20-2-48	48"x24"	END ROAD WORK						26	
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)						18	
G20-4b-36	36"x30"	WAIT FOR PILOT CAR						18	
G20-50a-72	72"x36"	ROAD WORK NEXT __ MILES RT & LT ARROWS						43	
G20-52a-72	72"x24"	ROAD WORK NEXT __ MILES RT or LT ARROW						36	
G20-55-96	96"x48"	SPEED LIMIT ENFORCED - MINIMUM FEE $80 WHEN WORKERS PRESENT						59	
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)						11	
M1-4-24	24"x24"	U.S. ROUTE MARKER (Post and installation only)						10	
M1-5-24	24"x24"	STATE ROUTE MARKER (Post and installation only)						10	
M3-1-24	24"x12"	NORTH (Mounted on route marker post)						7	
M3-2-24	24"x12"	EAST (Mounted on route marker post)						7	
M3-3-24	24"x12"	SOUTH (Mounted on route marker post)						7	
M3-4-24	24"x12"	WEST (Mounted on route marker post)						7	
M4-8-24	24"x12"	DETOUR (Mounted on route marker post)						7	
M4-9-30	**30"x24"**	**DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT**		**2**	**4**		**4**	**15**	**60**
M4-10-48	48"x18"	DETOUR (INSIDE ARROW) RIGHT or LEFT (Mounted on barricade)						7	
M5-1-21	21"x15"	ADVANCE TURN ARROW RT or LT(Mounted on route marker post)						7	
M5-1-30	30"x21"	ADVANCE TURN ARROW RT or LT(Mounted on route marker post)						9	
M6-1-21	21"x15"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)						7	
M6-1-30	30"x21"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)						9	
M6-3-21	21"x15"	DIRECTIONAL ARROW UP (Mounted on route marker post)						7	
R1-1-48	48"x48"	STOP						32	
R1-2-60	60"x60"	YIELD						29	
R2-1-36	**36"x48"**	**SPEED LIMIT __ (Portable only)**		**4**	**4**		**4**	**30**	**120**
R2-1-48	48"x60"	SPEED LIMIT __						39	
R2-1aP-24	24"x18"	MINIMUM FEE $80 (Mounted on Speed Limit post)						10	
R3-2-48	48"x48"	NO LEFT TURN						35	
R4-1-48	48"x60"	DO NOT PASS						39	
R4-7-48	48"x60"	KEEP RIGHT						39	
R5-1-48	48"x48"	DO NOT ENTER						35	
R6-1-54	54"x18"	ONE WAY RIGHT or LEFT (Mounted on STOP or DO NOT ENTER post)						14	
R7-1-12	12"x18"	NO PARKING ANY TIME						11	
R9-9-24	**24"x12"**	**SIDEWALK CLOSED (Mounted on barricade)**			**6**		**6**	**3**	**18**
R9-11-24	**24"x12"**	**SIDEWALK CLOSED AHEAD CROSS HERE (Mounted on barricade)**			**1**		**1**	**3**	**3**
R9-11a-24	**24"x12"**	**SIDEWALK CLOSED CROSS HERE (Mounted on barricade)**		**2**	**3**		**3**	**3**	**9**
R10-6-24	24"x36"	STOP HERE ON RED						16	
R11-2-48	**48"x30"**	**ROAD CLOSED (Mounted on barricade)**	**3**	**2**	**2**		**3**	**12**	**36**
R11-2a-48	48"x30"	STREET CLOSED (Mounted on barricade)						12	
R11-3a-60	60"x30"	ROAD CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)						15	
R11-3c-60	60"x30"	STREET CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)						15	
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC (Mounted on barricade)						15	
W1-3-48	48"x48"	REVERSE TURN RIGHT or LEFT						35	
W1-4-48	48"x48"	REVERSE CURVE RIGHT or LEFT						35	
W1-4b-48	48"x48"	TWO LANE REVERSE CURVE RIGHT or LEFT						35	
W1-6-48	48"x24"	ONE DIRECTION LARGE ARROW						26	
W3-1-48	48"x48"	STOP AHEAD						35	
W3-3-48	48"x48"	SIGNAL AHEAD						35	
W3-4-48	48"x48"	BE PREPARED TO STOP						35	
W3-5-48	48"x48"	SPEED REDUCTION AHEAD						35	
W4-2-48	48"x48"	LANE ENDS RIGHT or LEFT						35	
W5-1-48	48"x48"	ROAD NARROWS						35	
W5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE						35	
W5-9-48	48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW						35	
W6-3-48	48"x48"	TWO WAY TRAFFIC						35	
W8-1-48	48"x48"	BUMP						35	
W8-3-48	48"x48"	PAVEMENT ENDS						35	
W8-7-48	48"x48"	LOOSE GRAVEL						35	
W8-11-48	48"x48"	UNEVEN LANES						35	
W8-12-48	48"x48"	NO CENTER LINE						35	
W8-17-48	48"x48"	SHOULDER DROP-OFF SYMBOL						35	
W8-53-48	48"x48"	TRUCKS ENTERING HIGHWAY						35	
W8-54-48	48"x48"	TRUCKS ENTERING AHEAD or __ FT or _ MILE						35	
W8-55-48	48"x48"	TRUCKS CROSSING AHEAD or __ FT or _ MILE						35	
W8-56-48	48"x48"	TRUCKS EXITING HIGHWAY						35	
W9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL						35	
W13-1P-30	30"x30"	__ MPH ADVISORY SPEED PLAQUE (Mounted on warning sign post)						14	
W14-3-64	64"x48"	NO PASSING ZONE						28	
W16-2P-30	30"x24"	__ FEET PLAQUE (Mounted on warning sign post)						10	
W20-1-48	48"x48"	ROAD WORK AHEAD or _FT or _ MILE						35	
W20-2-48	48"x48"	DETOUR AHEAD or __ FT or _ MILE						35	
W20-3-48	48"x48"	ROAD or STREET CLOSED AHEAD or __ FT or _ MILE						35	
W20-4-48	48"x48"	ONE LANE ROAD AHEAD or __ FT or _ MILE						35	
W20-5-48	48"x48"	RIGHT or CENTER or LEFT LANE CLOSED AHEAD or __ FT or _ MILE						35	
W20-7-48	**48"x48"**	**FLAGGER**		**2**	**2**		**2**	**35**	**70**
W20-8-18	**18"x18"**	**STOP - SLOW PADDLE Back to Back**		**2**	**2**		**2**	**5**	**10**
W20-52P-54	54"x12"	NEXT __ MILES (Mounted on warning sign post)						12	
W21-1-48	**48"x48"**	**WORKERS**		**2**	**2**		**2**	**35**	**70**
W21-2-48	48"x48"	FRESH OIL						35	
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or __ FT or _ MILE						35	

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED BY PHASE NO. 1	2	3		TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
W21-5-48	48"x48"	SHOULDER WORK						35	
W21-5a-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED						35	
W21-5b-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED AHEAD or __ FT or _ MILE						35	
W21-6-48	48"x48"	SURVEY CREW						35	
W21-50-48	48"x48"	BRIDGE PAINTING AHEAD or __ FT						35	
W21-51-48	48"x48"	MATERIAL ON ROADWAY						35	
W21-52-48	48"x48"	PAVEMENT BREAKS						35	
W21-53-48	48"x48"	RUMBLE STRIPS AHEAD						35	
W22-8-48	48"x48"	FRESH OIL LOOSE ROCK						35	
W24-1-48	48"x48"	DOUBLE REVERSE CURVE						35	

SPECIAL SIGNS

SPEC & CODE

SPEC & CODE		TOTAL UNITS
704-1000	TRAFFIC CONTROL SIGNS	396

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY BY PHASE NO. 1	2	3		TOTAL QUANTITY
704-0100	**FLAGGING**	MHR		**16**	**32**		**48**
704-1048	PORTABLE RUMBLE STRIPS	EACH					
704-1050	TYPE I BARRICADES	EACH					
704-1052	**TYPE III BARRICADES**	EACH	**6**	**4**	**4**		**6**
704-1054	**SIDEWALK BARRICADE**	EA		**2**	**13**		**13**
704-1060	**DELINEATOR DRUMS**	EACH		**4**	**4**		**4**
704-1065	TRAFFIC CONES	EACH					
704-1067	**TUBULAR MARKERS**	EACH		**11**	**11**		**11**
704-1070	DELINEATOR	EACH					
704-1072	FLEXIBLE DELINEATORS	EACH					
704-1080	STACKABLE VERTICAL PANELS	EACH					
704-1081	VERTICAL PANELS - BACK TO BACK	EACH					
704-1085	SEQUENCING ARROW PANEL - TYPE A	EACH					
704-1086	SEQUENCING ARROW PANEL - TYPE B	EACH					
704-1087	SEQUENCING ARROW PANEL - TYPE C	EACH					
704-1500	OBLITERATION OF PVMT MK	SF					
704-3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF					
704-3510	PRECAST CONCRETE MED BARRIER - STATE FURNISHED	EACH					
762-0200	RAISED PAVEMENT MARKERS	EACH					
762-0420	SHORT TERM 4IN LINE - TYPE R	LF					
762-0430	SHORT TERM 4IN LINE - TYPE NR	LF					

NOTE:
If additional signs are required, units will be calculated using the formula from Section III-18.06 of the Design Manual.
http://www.dot.nd.gov/

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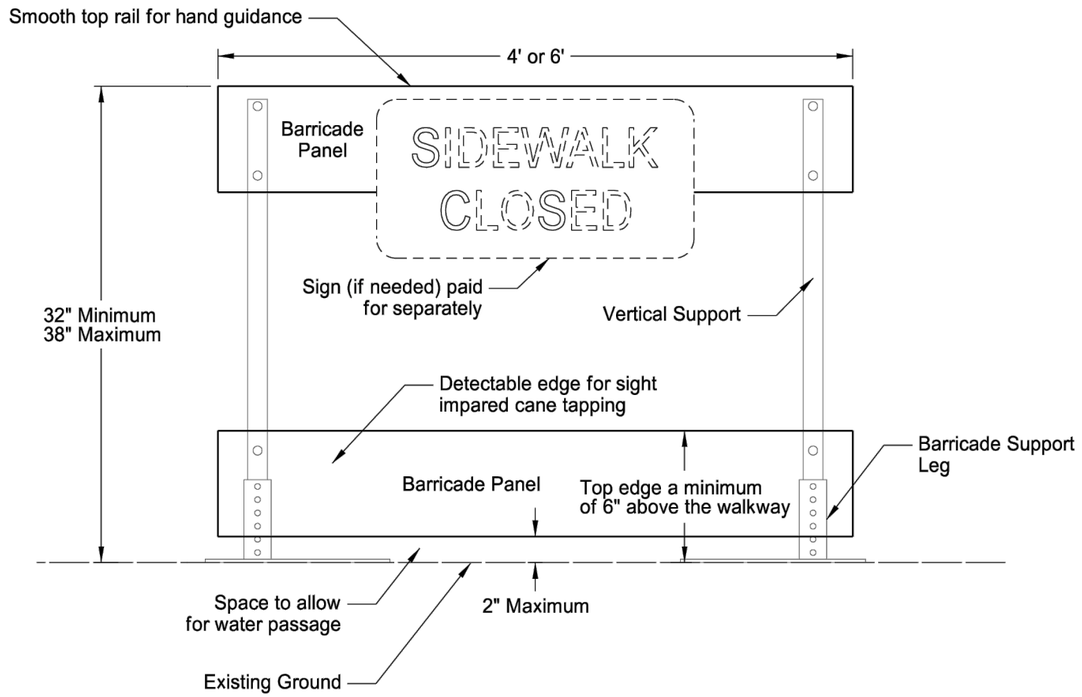
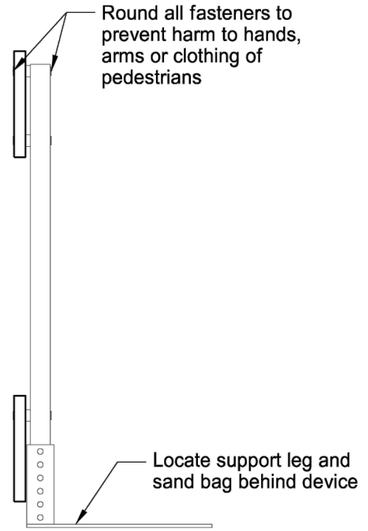
Traffic Control Devices List

Red River Trail

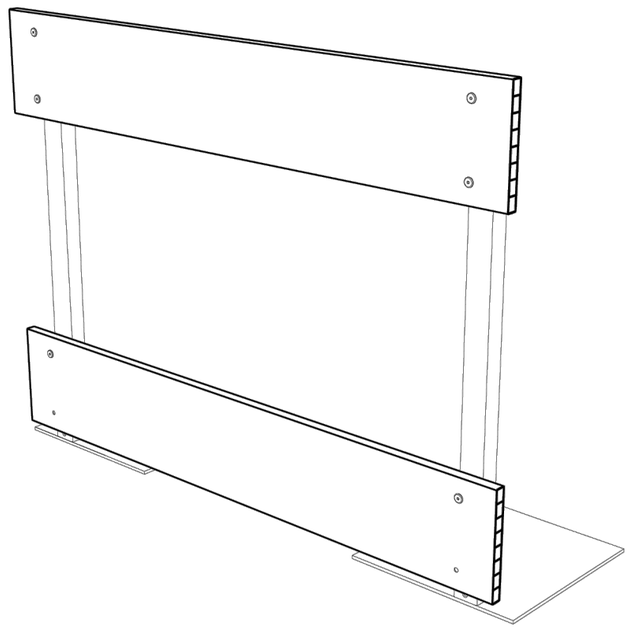
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	100	2



Front View



End View



Perspective View

NOTES:

Sidewalk Barricades

1. Provide self standing sidewalk barricade with no supports extending into the pedestrians path.
2. Use orange or orange and white diagonal striped barricade panels contrasting with the walkway surface.
3. Provide ADA compliant and NCHRP 350 or Mash Test Level 3 (TL3) approved sidewalk barricades.
4. Include all costs to furnish, maintain and remove sidewalk barricades in the price bid for "Sidewalk Barricade".

THE CITY OF Fargo FAR MORE

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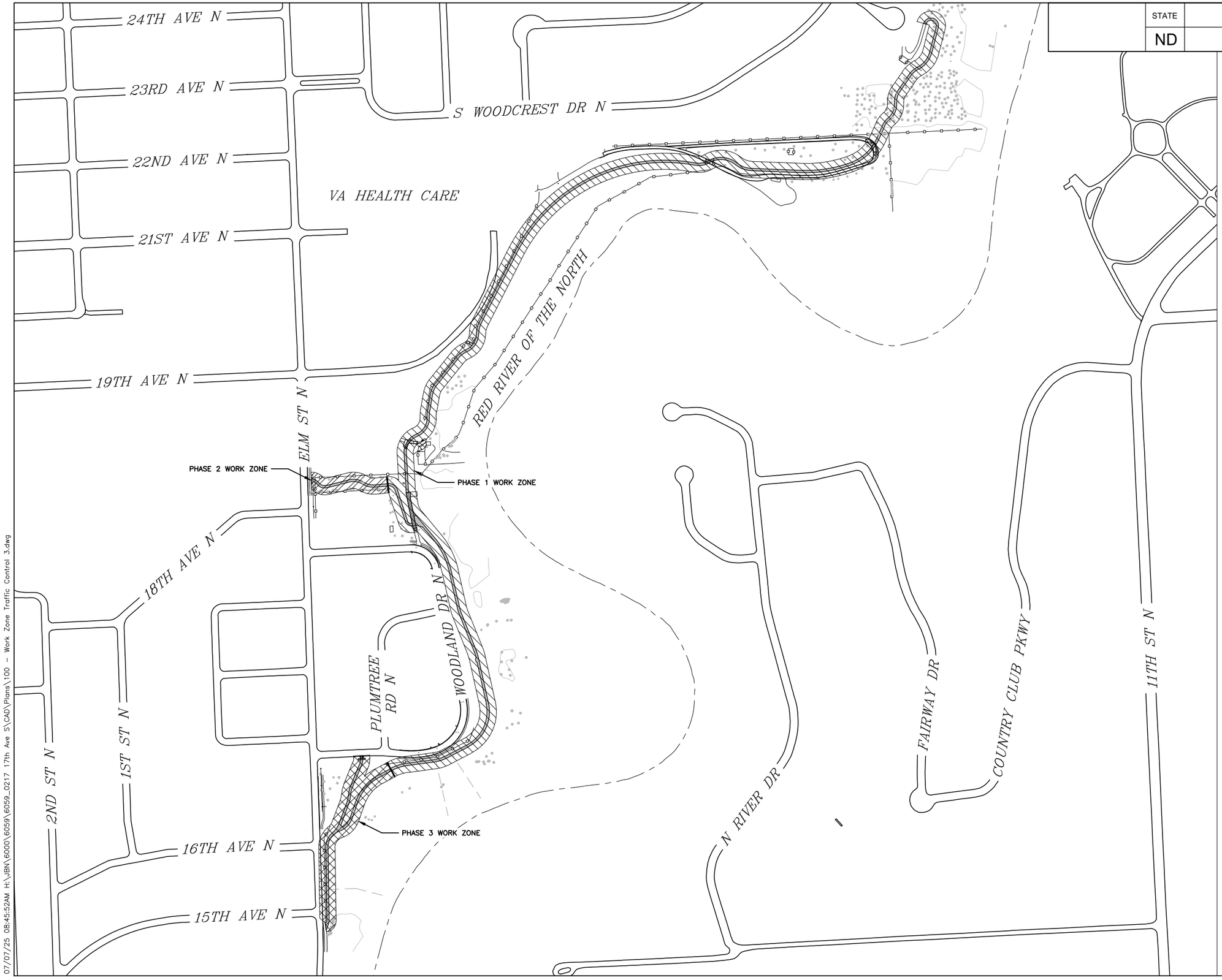
Sidewalk Barricade

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	100	3



N

0 200' 400'

LEGEND:

- PHASE 1 WORK ZONE
- PHASE 2 WORK ZONE
- PHASE 3 WORK ZONE

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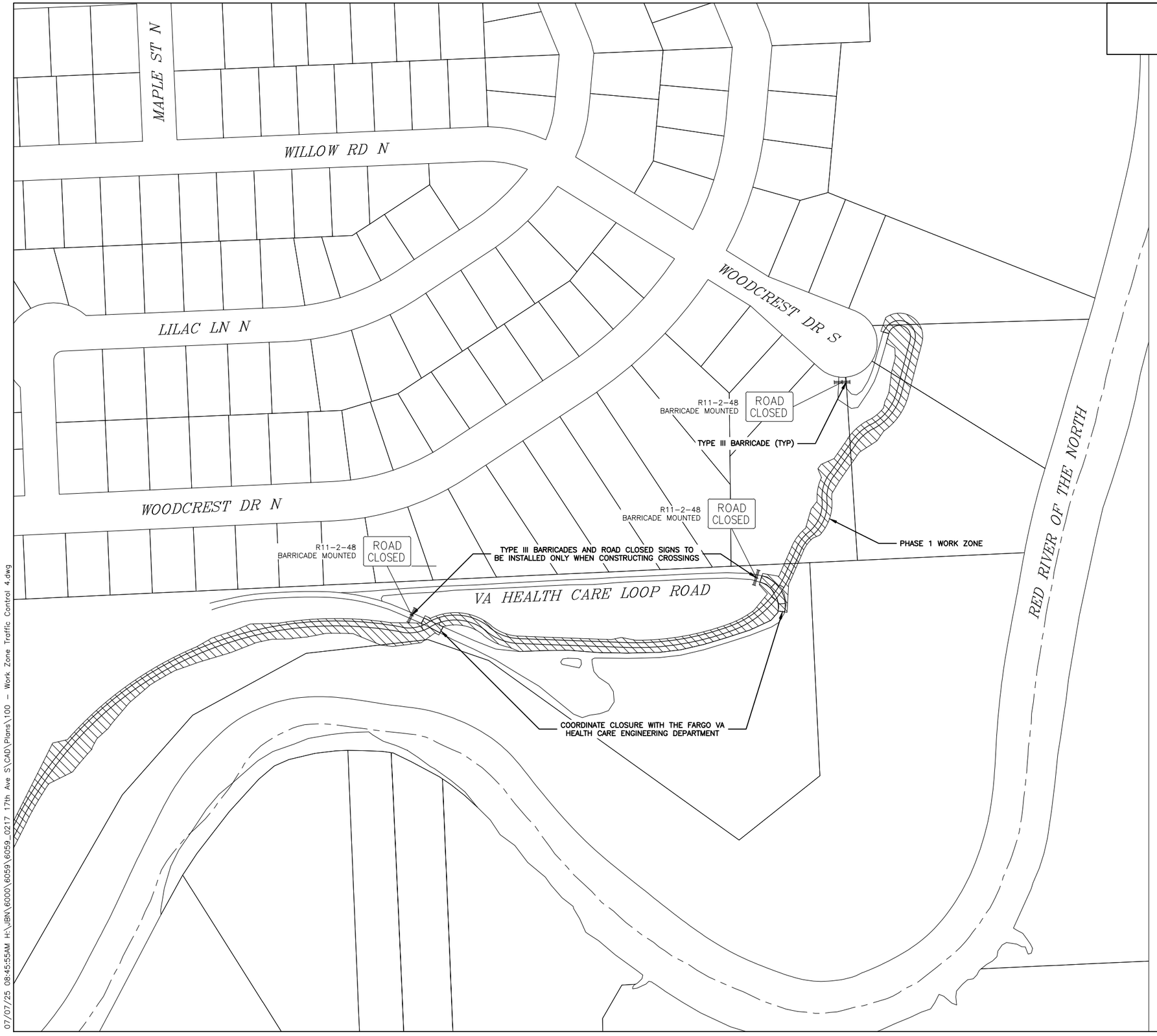
Traffic Control Phasing

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	100	4



N

0 100' 200'

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7/18/2025

Phase 1 Traffic Control

Red River Trail

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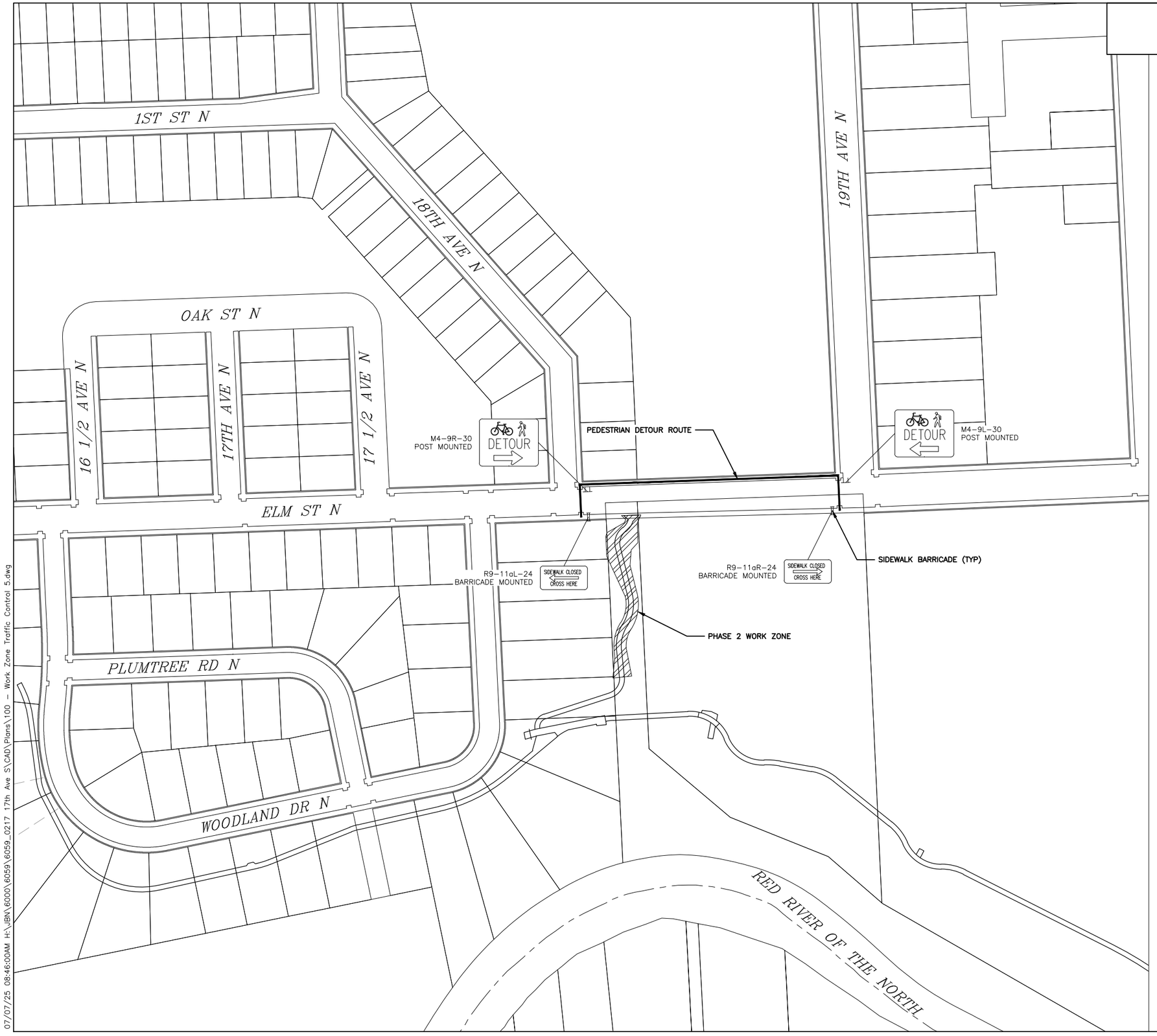
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	100	5



0 100' 200'

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PE-10407
DATE
NORTH DAKOTA

7/18/2025

Phase 2 Traffic Control

Red River Trail

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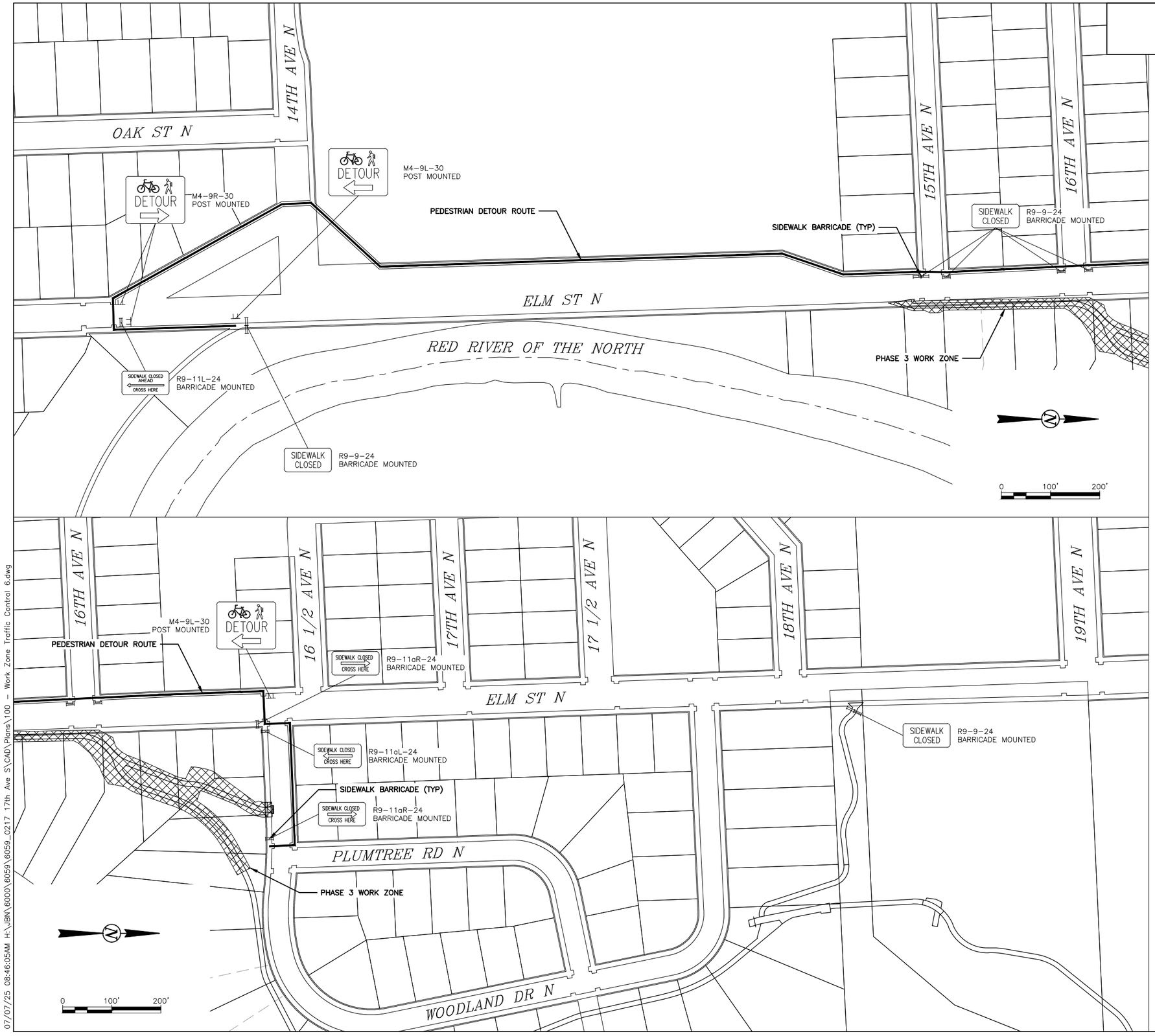
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	100	6



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7/18/2025

Phase 3 Traffic Control

Red River Trail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-CRP-8-984(182)	110	1

Station / RP	Sign No.	Assembly No.	Flat Sheet For Signs IV SF	Flat Sheet For Signs XI SF	Sign Support Length 1st LF	2nd LF	3rd LF	4th LF	Vert Clear-ance FT	Support Size	Max Post Len LF	Sleeve Length 1st LF	2nd LF	3rd LF	4th LF	Sleeve Size	Anchor EA	Anchor LF	Anchor Size	Reset Sign Panel EA	Reset Sign Support EA	Break-Away EA	Comments
Shared Use Path																							
124+44 Rt				4.0	7.0				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
124+60 Rt	IN-02.12 /13			3.8																			Mount on Existing Supports
124+60 Lt	IN-02.16			1.5																			Mount on Existing Supports
125+60 Lt				4.0	7.0				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
126+12 Lt	IN-02.12 /13/16			5.3	7.6				4.0	2 x 2 12 ga	10.3						1	4	2.25 x 2.25 12 ga				
126+30 Rt				4.0	7.0				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
127+25 Rt				4.5	8.6				4.0	2 x 2 12 ga	13.2						1	4	2.25 x 2.25 12 ga				
141+39 Lt	IN-02.12 /13/16			5.3	7.6				4.0	2 x 2 12 ga	10.3						1	4	2.25 x 2.25 12 ga				
145+30 Lt				4.0	4.7				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
145+95 Rt				4.0	6.3				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
152+85 Lt				4.0	6.3				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
153+35 Rt				4.0	6.3				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
153+56 Lt	IN-02.12 /13/16			5.3	6.8				4.0	2 x 2 12 ga	10.3						1	4	2.25 x 2.25 12 ga				
160+96 Rt				8.5	9.9				4.0	2.25 x 2.25 12 ga	10.8						1	4	2.5 x 2.5 12 ga				
202+50 Lt				4.5	8.1				4.0	2 x 2 12 ga	13.2						1	4	2.25 x 2.25 12 ga				
202+90 Rt				4.5	7.7				4.0	2 x 2 12 ga	13.2						1	4	2.25 x 2.25 12 ga				
203+80 Lt				4.0	7.0				4.0	2 x 2 12 ga	13.0						1	4	2.25 x 2.25 12 ga				
305+91 Lt				4.5	7.7				4.0	2 x 2 12 ga	13.2						1	4	2.25 x 2.25 12 ga				
Sub Total			0.0	79.7	**Total**	115.6											**Total**	64.0		0	0	0	
Grand Total			**0.0**	**79.7**	**Total**	**115.6**											**Total**	**64**	**0**	**0**	**0**	**0**	

NOTES:

1. SIGN SUMMARY PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
2. ALL COSTS FOR SIGN SHEETING, PERFORATED TUBE SIGN SUPPORTS, REINFORCEMENT SLEEVES, ANCHORS, STRINGERS, AND MOUNTING HARDWARE IS INCLUDED IN THE PRICE BID FOR "FLAT SHEET FOR SIGNS – TYPE XI REFL SHEETING".

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DATE
NORTH DAKOTA

7/18/2025

Sign Summary

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	110	2

STA 124+60 – 4.0' LT
FENCE MOUNTED
NOTICE
IN–02.16

STA 126+12 – 4.0' LT
NEW SIGN & SUPPORT
NOTICE
NO FIREARMS OR WEAPONS ALLOWED ON THIS PROPERTY
IN–02.12
IN–02.13
NOTICE
IN–02.16

R5–3–24 NO MOTOR VEHICLES
STA 125+60 – 14.0' RT
STA 126+30 – 14.0' RT
NEW SIGN & SUPPORT

R5–3–24 NO MOTOR VEHICLES
STA 124+44 – 14.0' RT
NEW SIGN & SUPPORT

NOTICE
NO FIREARMS OR WEAPONS ALLOWED ON THIS PROPERTY
IN–02.12
IN–02.13
STA 124+60 – 14.0' RT
FENCE MOUNTED

W7–5–18
W13–1P–18 10 MPH
STA 127+25 – 14.0' RT
NEW SIGN & SUPPORT

0 30' 60'

NOTICE
NO FIREARMS OR WEAPONS ALLOWED ON THIS PROPERTY
IN–02.12
IN–02.13
NOTICE
IN–02.16
STA 141+39 – 61.0' LT
NEW SIGN & SUPPORT

R5–3–24 NO MOTOR VEHICLES
STA 145+30 – 4.0' LT
STA 145+95 – 14.0' RT
NEW SIGN & SUPPORT

0 30' 60'

07/07/25 08:46:12AM H:\JBN\6000\6059\6059_0217 17th Ave S\CAD\Plans\110 – Signing.dwg

NOTES:

1. INSTALL SIGNS WITH A 4' MINIMUM AND 5' MAXIMUM VERTICAL CLEARANCE MEASURED FROM SHARED USE PATH FINISHED GRADE TO BOTTOM OF SIGN.
2. FURNISH TYPE XI REFLECTIVE SHEETING FOR ALL SIGNING.
3. FURNISH TELESPAR 12 GAUGE SQUARE PERFORATED TUBE FOR ALL POSTS AND ANCHORS.
4. REFER TO SECTION 20 FOR SIGN INSTALLATION DETAILS.

THE CITY OF Fargo FAR MORE

Proj. No. 6059-0217
Houston Engineering Inc.
Ph: 701.237.5065

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

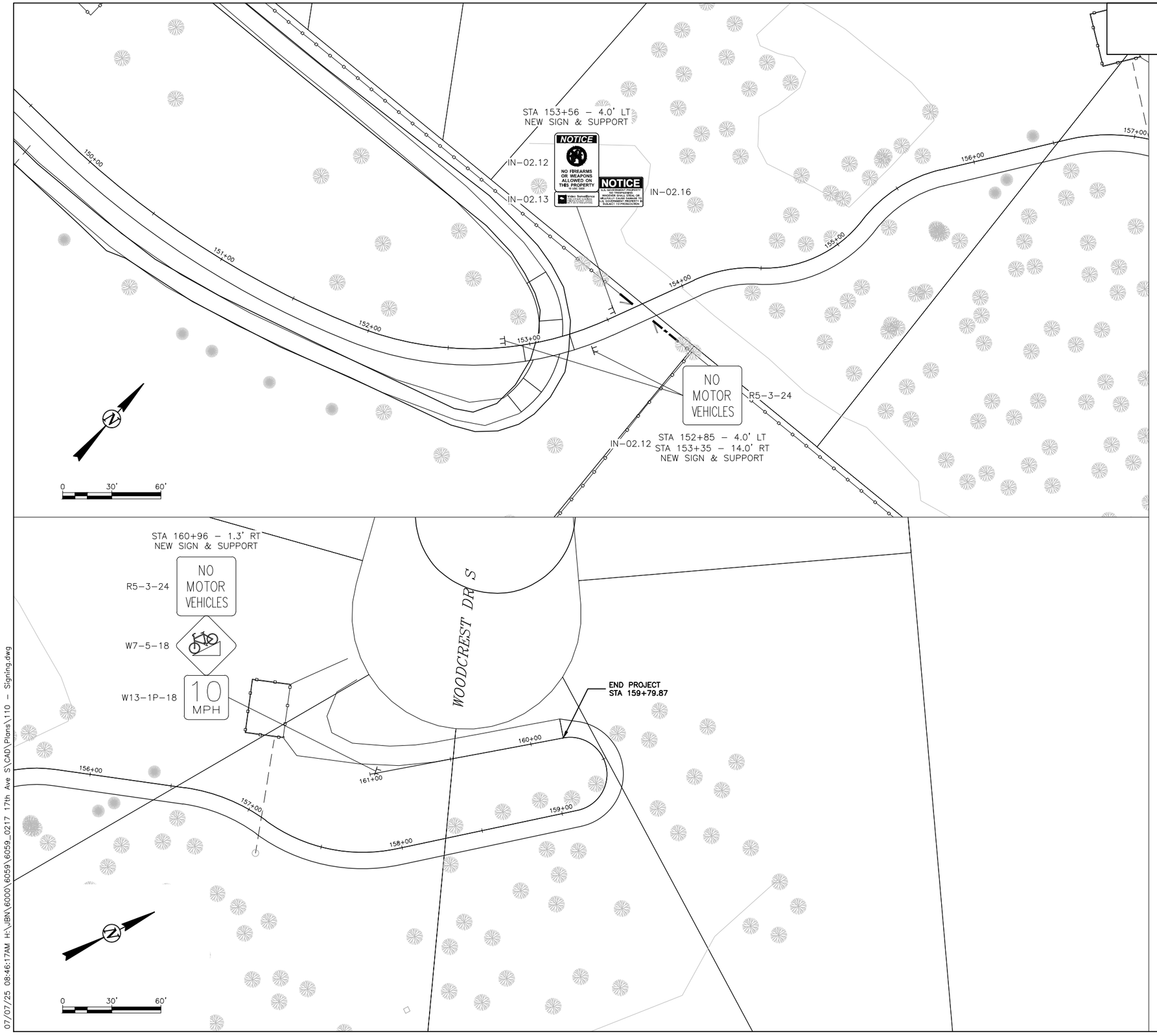
REGISTERED PROFESSIONAL ENGINEER
ADAM M. RUUD
PE-10407
DATE
NORTH DAKOTA

7/18/2025

Signing

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	**TMA-CRP-8-984(182)**	**110**	**3**



NOTES:

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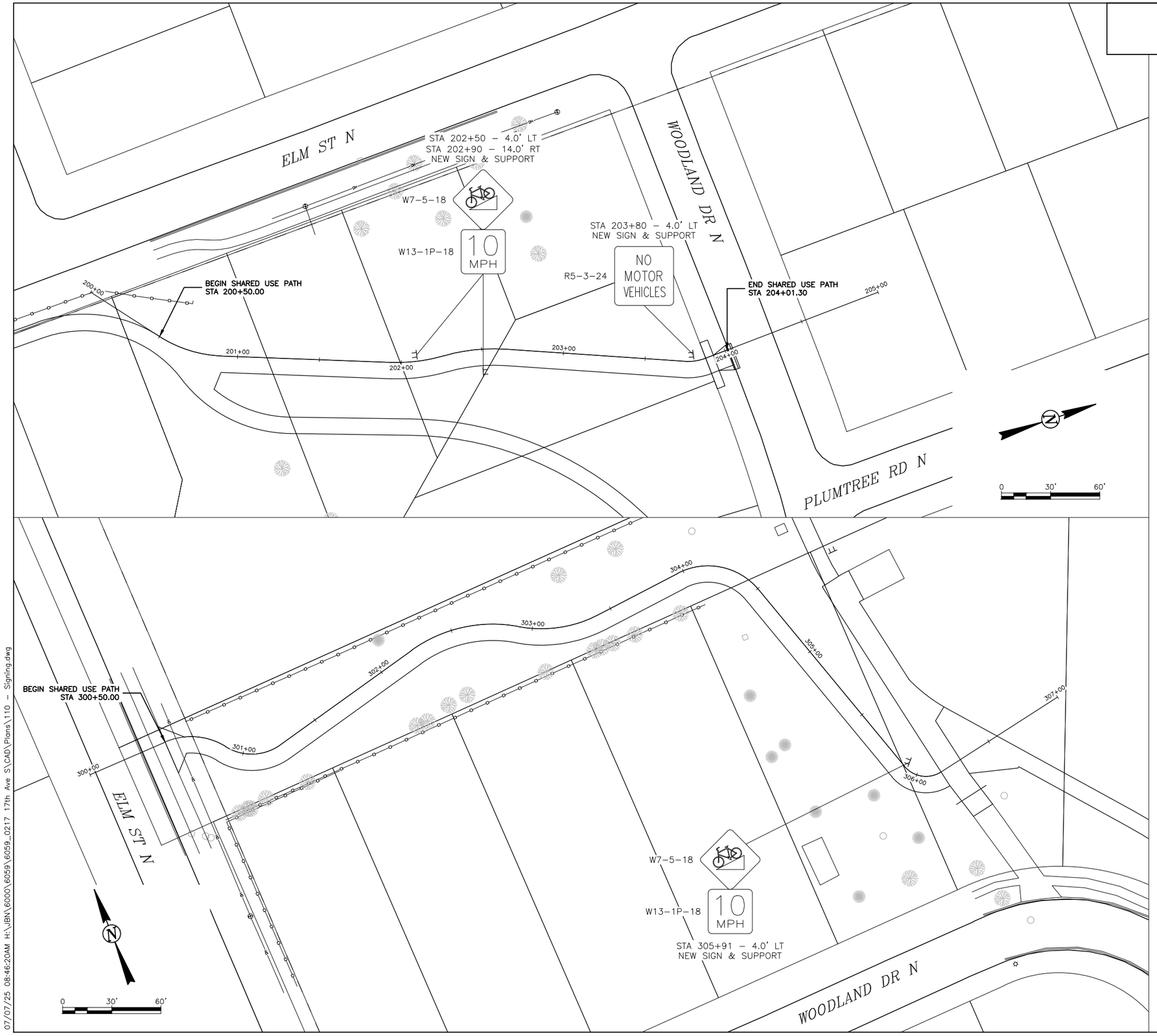
Signing

Red River Trail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	110	4



NOTES:

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Red River Trail

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-CRP-8-984(182)	110	5

SIGN DETAIL

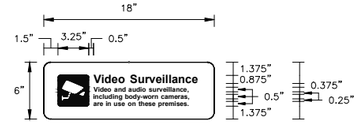
SIGN NUMBER	IN–02.12
WIDTH x HGHT.	1'–6" x 2'–0"
BORDER WIDTH	0"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black, Blue, Red, White

SYMBOL	ROT	X	Y	WID	HT

Dimensions are in inches.tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
N	O	T	I	C	E											
2.39	5.06	7.89	9.72	10.9	13.24										13.23	Helvetica Bold 2.5
N	O	F	I	R	E	A	R	M	S							
2.84	4.04	6.26	7.31	7.81	9.07	10.11	11.5	12.75	14.15						12.33	Helvetica Bold 1.25
O	R	W	E	A	P	O	N	S								
2.77	4.18	6.3	8.07	9.11	10.5	11.61	13.02	14.22							12.47	Helvetica Bold 1.25
A	L	L	O	W	E	D	O	N								
2.93	4.32	5.39	6.4	7.69	9.46	10.62	12.67	14.08							12.14	Helvetica Bold 1.25
T	H	I	S	P	R	O	P	E	R	T	Y					
1.83	2.99	4.24	4.67	6.69	7.85	9.06	10.47	11.64	12.8	13.97	15				14.34	Helvetica Bold 1.25
1	8	U	S	C												
5.69	6.23	7.23	7.95	8.66											3.62	Helvetica Bold 0.75
9	3	0														
10.45	11.04	11.63													1.66	Helvetica Bold 0.75

SIGN DETAIL



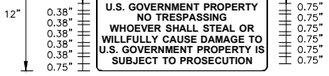
SIGN NUMBER	IN–02.13
WIDTH x HGHT.	1'–6" x 0'–6"
BORDER WIDTH	0"
CORNER RADIUS	0.75"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black, Blue

SYMBOL	ROT	X	Y	WID	HT

Panel Style:
Dimensions are in inches.tenths

LETTER POSITIONS (X)																													LENGTH	SERIES/SIZE
V	i	d	e	o	S	u	r	v	e	i	l	l	a	n	c	e														
5.25	6.15	6.46	7.19	7.88	9.14	9.99	10.73	11.14	11.85	12.58	12.92	13.26	13.55	14.27	14.98	15.65													11	Helvetica Bold 0.88/0.63
a	r	e	i	n	u	s	e	o	n	t	h	e	s	e	p	r	e	m	i	s	e	s	.							
5.25	5.66	5.91	6.58	6.77	7.44	7.83	8.23	8.9	9.35	10.01	10.28	10.68	11.06	11.46	12.13	12.56	12.81	13.22	13.84	14	14.4	14.78	15.2						10.05	Helvetica Bold 0.5/0.36
V	i	d	e	o	a	n	d	a	u	d	i	o	s	u	r	v	e	i	l	l	a	n	c	e	,					
5.25	5.77	5.94	6.36	6.75	7.46	7.87	8.28	8.97	9.38	9.79	10.23	10.41	11.11	11.53	11.96	12.19	12.59	13.01	13.2	13.4	13.57	13.98	14.39	14.77	15.17				10.03	Helvetica Bold 0.5/0.36
i	n	c	l	u	d	i	n	g	b	o	d	y	_	w	o	r	n	c	a	m	e	r	a	s	,				
5.25	5.44	5.85	6.26	6.45	6.86	7.31	7.5	7.91	8.59	9	9.43	9.83	10.25	10.45	11.02	11.46	11.74	12.4	12.79	13.19	13.79	14.21	14.46	14.84	15.25				10.1	Helvetica Bold 0.5/0.36

SIGN DETAIL



SIGN NUMBER	IN–02.16
WIDTH x HGHT.	1'–6" x 1'–0"
BORDER WIDTH	0"
CORNER RADIUS	0.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black, Blue

SYMBOL	ROT	X	Y	WID	HT

Panel Style:
Dimensions are in inches.tenths

LETTER POSITIONS (X)																													LENGTH	SERIES/SIZE
N	O	T	I	C	E																									
1.34	4.24	7.41	10.17	11.24	14.37																								15.31	Helvetica Bold 3
U	.	S	.	G	O	V	E	R	N	M	E	N	T	P	R	O	P	E	R	T	Y									
0.99	1.75	2	2.74	3.38	4.19	4.96	5.74	6.44	7.19	7.95	8.82	9.52	10.22	11.32	12.02	12.74	13.59	14.29	14.99	15.69	16.31								16.02	Helvetica Bold 0.75
N	O	T	R	E	S	P	A	S	S	I	N	G																		
4.31	5.04	6.26	6.96	7.71	8.37	9.11	9.73	10.53	11.23	11.96	12.26	12.99																	9.38	Helvetica Bold 0.75
W	H	O	E	V	E	R	S	H	A	L	L	S	T	E	A	L	O	R												
1.39	2.46	3.18	4.03	4.65	5.42	6.12	7.3	8.04	8.72	9.55	10.19	11.22	11.9	12.6	13.22	14.06	15.09	15.93											15.21	Helvetica Bold 0.75
W	I	L	L	F	U	L	L	Y	C	A	U	S	E	D	A	M	A	G	E	T	O									
0.54	1.6	1.9	2.54	3.17	3.81	4.57	5.21	5.77	6.97	7.68	8.51	9.23	9.97	11.04	11.72	12.55	13.35	14.16	15	16.07	16.73								16.92	Helvetica Bold 0.75
U	.	S	.	G	O	V	E	R	N	M	E	N	T	P	R	O	P	E	R	T	Y	I	S							
0.31	1.06	1.32	2.05	2.7	3.51	4.28	5.05	5.75	6.51	7.26	8.14	8.84	9.54	10.64	11.34	12.06	12.91	13.61	14.3	15.01	15.62	16.82	17.08						17.38	Helvetica Bold 0.75
S	U	B	J	E	C	T	T	O	P	R	O	S	E	C	U	T	I	O	N											
1.63	2.36	3.12	3.82	4.46	5.13	5.86	6.96	7.62	8.85	9.55	10.27	11.08	11.82	12.49	13.27	13.98	14.67	14.93	15.78										14.75	Helvetica Bold 0.75

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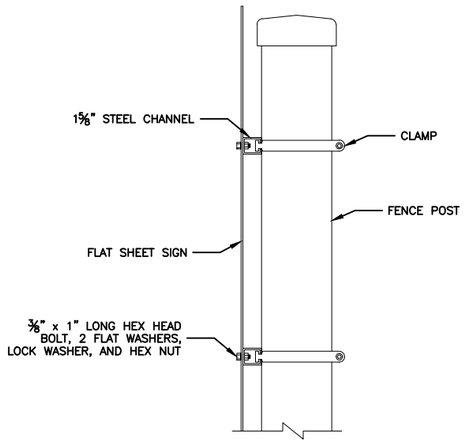
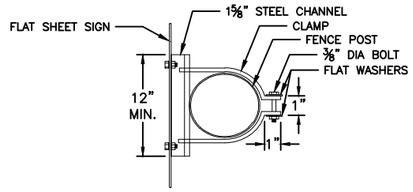
	ND	TMA-CRP-8-984(182)	110	6

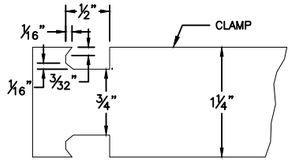


SIDE VIEW

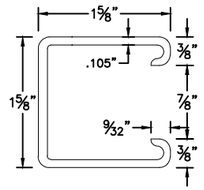


TOP VIEW

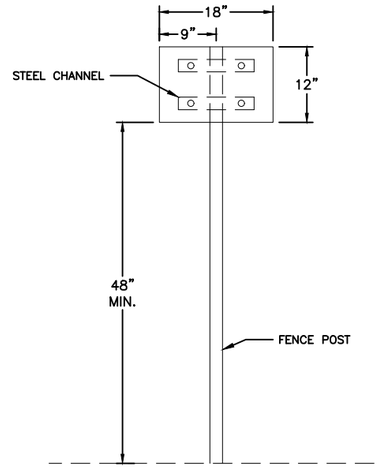
FLAT SHEET SIGN CLAMP MOUNTING DETAIL



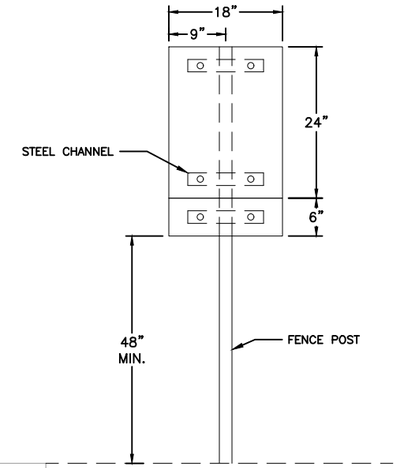
CLAMP DETAIL



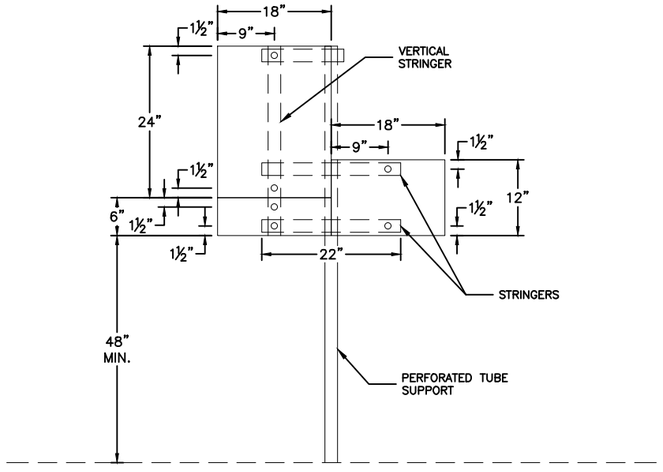
STEEL CHANNEL DETAIL



IN–02.16
FENCE POST MOUNTING DETAIL



IN–02.12 & IN–02.13
FENCE POST MOUNTING DETAIL



IN–02.12, IN–02.13, & IN–02.16
PERFORATED TUBE MOUNTING DETAIL

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